The Art of Music Composition:

An Introduction to Basic Elements, Methods, and the Importance of Modeling as a Compositional Process

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Introduction

What is the art of music composition? Is it knowledge of music theory and effective orchestration techniques? Is it knowledge of other composer's works and the understanding behind their music? Does one practice the art of composition by writing a simple melody? These are not questions that can be answered in simple terms, but I believe that a good composer embodies each of these qualities to some degree.

Practicing the art of composition comes from years of writing experience.[1] It often begins with a desire to write music for instruments or voices, with the study of music theory and orchestration providing good methods of how to do so. It grows as a result of listening to previous composer's works and studying their music. The art of composition develops as the composer realizes that he has the ability to utilize instruments to recreate the very sounds that he hears being played by his own mind's symphony.

What makes a good composer? What is good music? These questions are truly subjective and will almost always receive a subjective answer. However, a short definition of a good composer could be as follows: a good composer is one who has the technical knowledge and the experience of writing for instruments so that he can effectively communicate his musical ideas to the audience. Many individuals who have wonderful musical ideas will one day become good composers since they simply lack the experience that comes with time. As Norman Demuth puts it, "it is a gradual process."[2] Composers who practice their craft and constantly learn from others quickly become good composers.

This paper will deal mainly with composing for band, orchestra, or choral music. A wide variety of other genres exist, but I will only focus on these three genres. Through the course of this paper, I will present what I believe to be the key elements in becoming a good composer and

the basic requirements of good music. This involves the knowledge of theory, instrumentation and orchestration and the understanding of the modeling process. These qualities are not all-inclusive, but serve as a framework for young composers as they grow in their knowledge of the art of composition.

In order to compose, one must first have a grasp of the numerous technical aspects of music and music composition. A certain degree of knowledge must be attained in several areas of music including theory, style and form as well as instrumentation and orchestration. Without such knowledge, the composer will certainly drown in a sea of technical and theoretical questions, all of which will prevent him from ever truly realizing his musical thoughts and ideas.

Secondly, a composer must be extremely familiar with the instruments that are used in today's band and orchestral music. Without this basic knowledge, a composer with great ideas can have them lost in a bad orchestration, an occurrence that happens all too often. A basic understanding of each instrument's characteristics and purpose within the ensemble gives the composer enough information to begin writing.

The third section of this paper presents a few methods to use when beginning to compose a piece. Writers, whether composers of authors, often face difficulties when starting a new work. They get stuck between the vision of the work and the reality of the creative process. This section provides ways to begin a new work, such as working with one motive or experimenting with a particular sound. Starting small can create big successes over time.

In the fourth part, I discuss three composers and one main characteristic of their writing style that I believe to be very important to the study of composition, especially by young composers. In this section, I explain the importance of modeling works after other composer's works and the importance of learning from others. This is a key to becoming a good composer and to writing good music.

The final section of this paper is an analysis of two of my most recent works and how the idea of modeling was implemented during the creative process. I explain what pieces influenced my works and why I modeled my works after them. Excerpts from each work are presented to show the similarities between them. The discussion explains how I modeled my pieces from these other works, and it becomes evident how useful the idea of modeling can be when trying to create a new piece of music.

The first three sections of this paper are in no way meant to be an exhaustive discussion of any of the subjects mentioned. They serve merely to provide basic information in order to make the reader aware of the many areas of music that need to be studied in order to become a well-educated composer. I make reference to other study materials and listening examples that would make excellent tools to learn more about the topics discussed.

I. The Foundations of Music

A composer must have a clear understanding of the basic theoretical and structural concepts of music. These fundamental areas include the knowledge of all the various keys, clefs, time signatures, scales and their variations, chords and harmony, melody and accompaniment, and form. The good composer has thoroughly studied each of these concepts and understands their role in the composition of music. I believe that one can posses a wealth of knowledge regarding music theory without being a great composer, but that the reverse cannot be so.

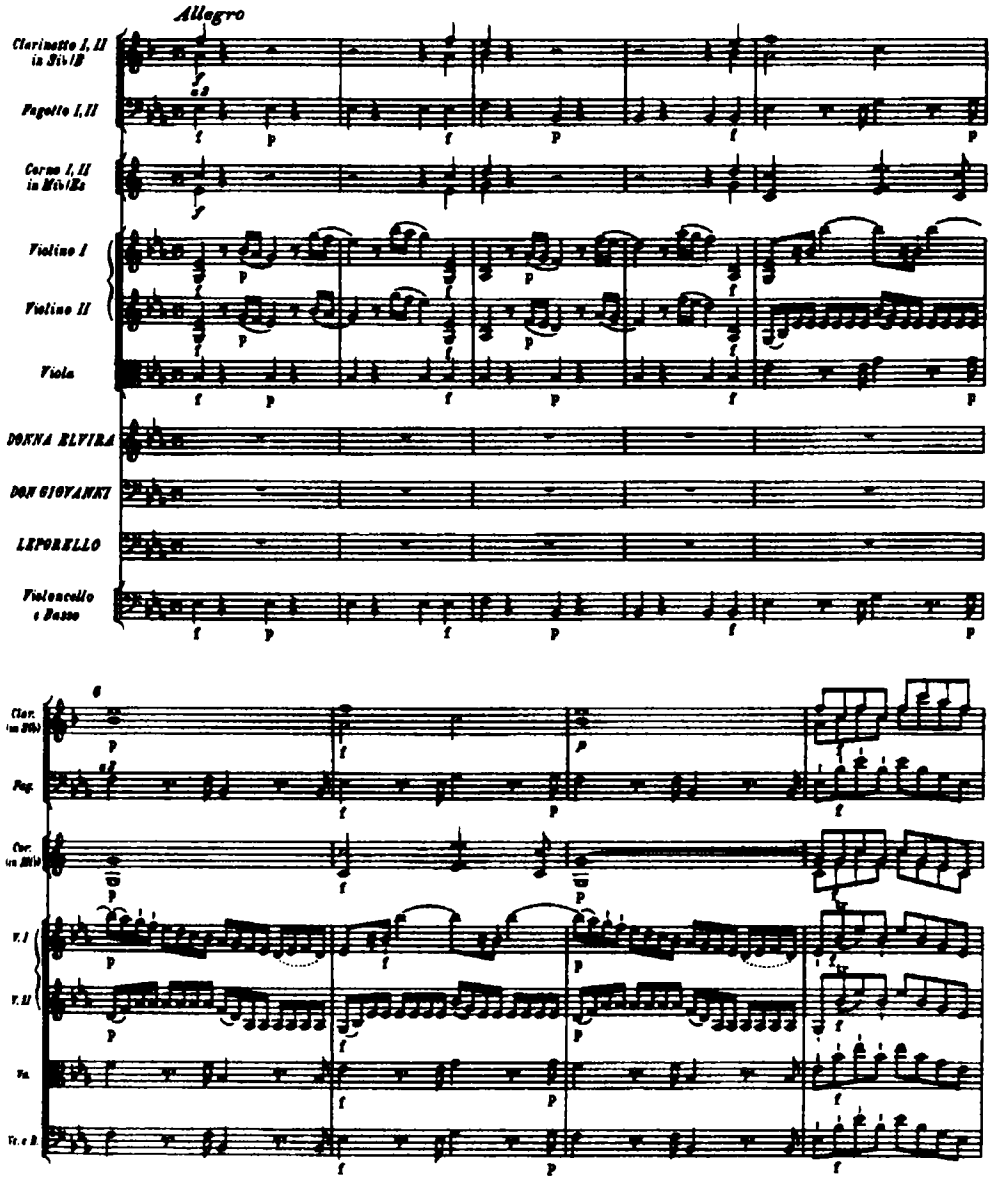
It is necessary to briefly discuss each of the aspects listed above in order to show their importance to the composer. I will not go into great detail regarding any of these subjects as so many books have already done so. A short discussion and an explanation of how each concept is important to a good composer will be adequate.

1. Scales: The Building Blocks of Music

The fundamental aspect of tonal music is the scale. The traditional scale is comprised of seven pitches arranged in a certain progression of half steps and whole-steps. There are 36 scales, twelve of them major and the other 24 making up the three types of minor scales (natural, harmonic and melodic). I use the term traditional because, in the last century, scales have been developed based on other arrangements of half and whole steps, including the octatonic scale and the whole-tone scale (a six-tone scale comprised entirely of whole-steps). These scales, often referred to as synthetic scales, are very common in music of the 20th century.

Major and minor scales served as the basis for much of the music of the 18th and 19th centuries, as seen in the music of Mozart, Haydn, Beethoven and others. The composers of these time periods often used scales, or portions of them, as part of melodies, accompaniment figures, or as cadential devices. The opening melody in *Ah, chi mi dice mai/Chi e la* from Mozart's *Don Giovanni* is a good example of how a melody can be constructed by using portions of a scale. The melody, played by the first violins, is comprised of three-note groups that all come from the Eb major scale. The melody utilizes the entire scale twice at the end of the phrase.

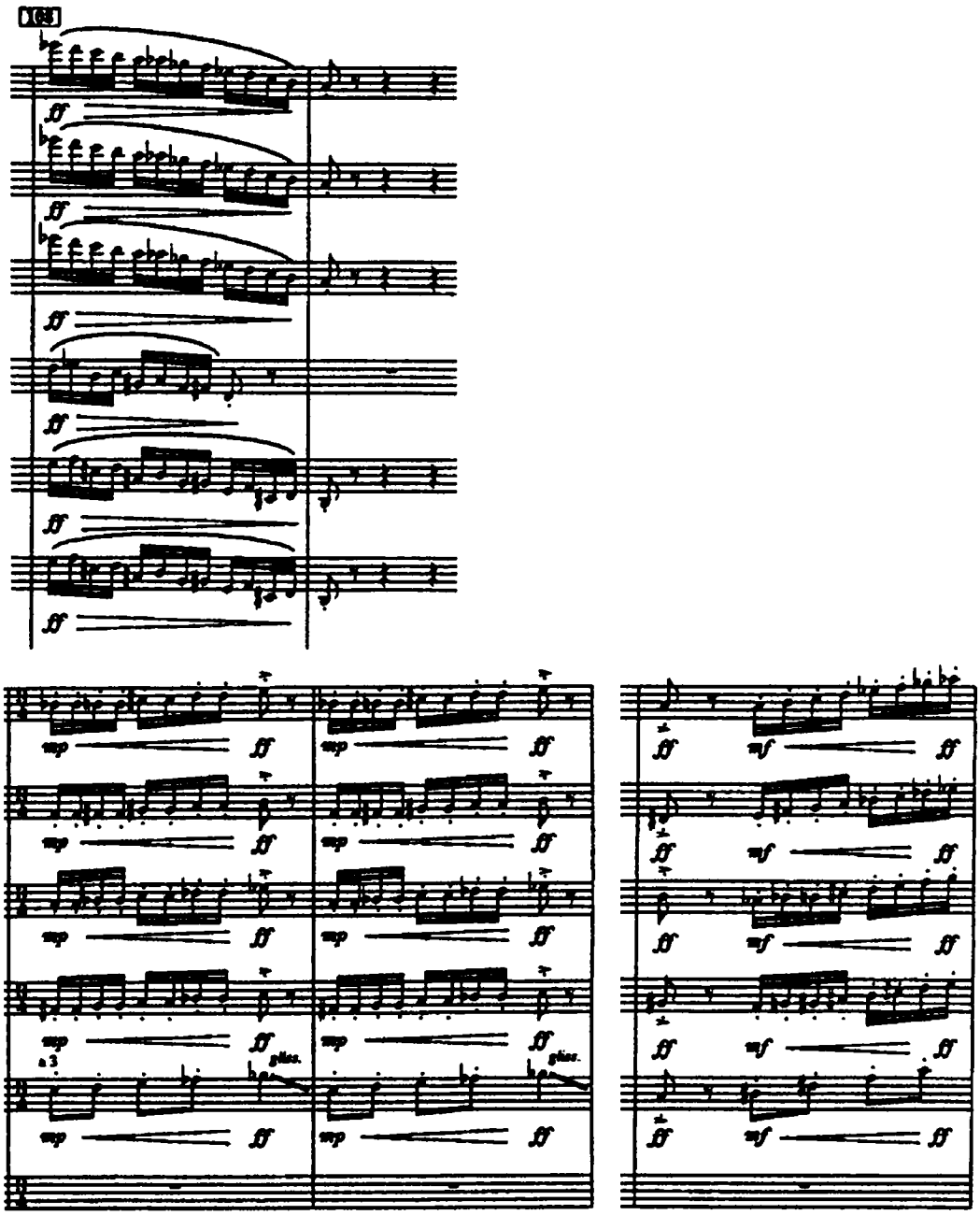
Example 1.1 Mozart, *Don Giovanni* "Ah, chi mi dice mai/Chi e la"



Composers of the 20th century have employed both traditional and synthetic scales in their music. The whole-tone scale is a common element in the works of Claude Debussy and other composers who characterize the French impressionistic genre. One contemporary composer, Cindy McTee, uses several synthetic scales, including the octatonic scale, in many of

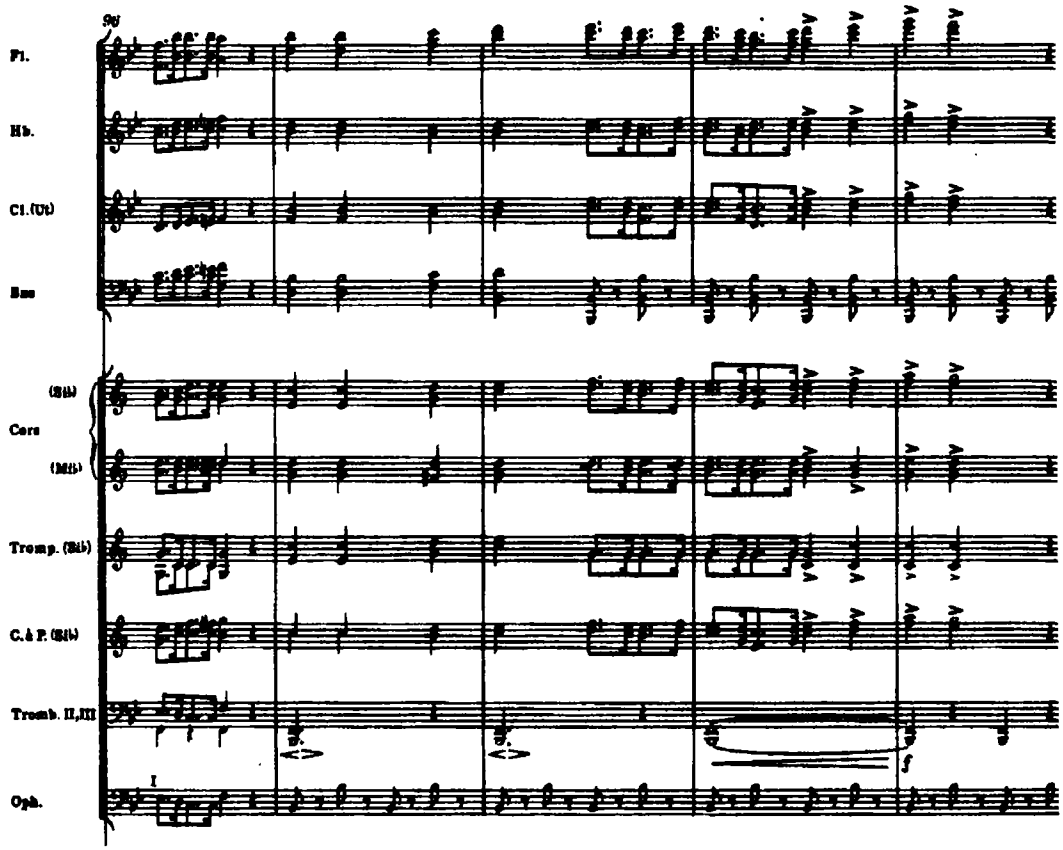
her works. The octatonic scale is used many times throughout her 1992 orchestral work *Circuits* as part of woodwind flourishes and brass section riffs.

Example 1.2 McTee, *Circuits*



The knowledge of scales is of the utmost importance to a good composer. If scales are the backbone of music, then it would be very unwise to have an incomplete understanding of the nature of scales. Countless melodies can be constructed by using portions of scales in various patterns, as shown by the Mozart excerpt. The march idea from Berlioz's *Symphonie Fantastique*, movement IV, serves as another example of how a very energetic and memorable melody can be created by using six notes of the Bb major scale.

Example 1.3 Berlioz, *Symphonie Fantastique*, "March to the Scaffold"



The more familiar a composer is with all of the available scales, the more flexible he is when trying to compose a melody. Though a melody does not have to be a recognizable portion of a scale, the progression of notes inside a scale serve as good melodic and harmonic ideas for a melody.

2. The Key Signature

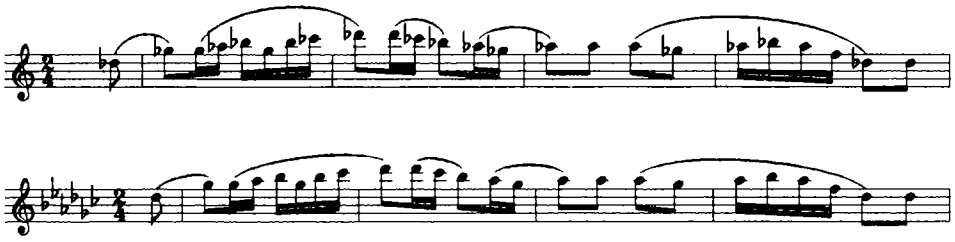
Closely associated with the scale is the key signature. It is a shorthand notation placing sharps or flats at the beginning of each staff system which results in the proper internal structure of the particular scale. The sharp or flat at the beginning of each staff system symbolizes that the corresponding note on that line or space always receives that chromatic alteration unless otherwise noted. There are twelve major and twelve minor keys. Each key has a different number of sharps or flats in its key signature, ranging from zero up to seven.

It is important for a composer to be familiar with all of the major and minor keys and to know how to write in every key. Being unfamiliar with keys and their functions within the context of a piece prohibits a composer from writing music that is harmonically interesting. Good music is written in such a way that it covers different key centers, keeping the music from becoming stale by sitting in one key area for too long.

When writing without a key signature, composers are forced to use sharps or flats numerous times with a melody, which clutters the music with accidentals. Music with an endless amount of accidentals becomes confusing and hard to read by performers and conductors. Therefore, if a melody seems to outline a certain key, then it would usually be wise for a composer to use the key signature that corresponds with that key.

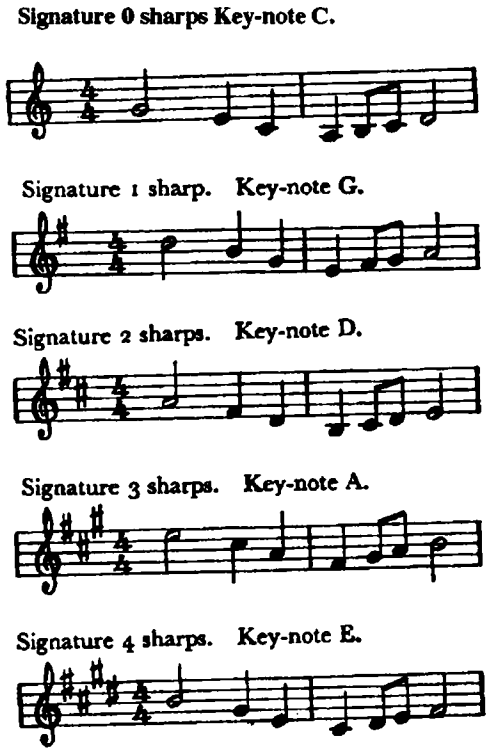
Below is a melody written without a key signature and then rewritten with the proper key signature. The difference in the number of markings necessary to write the melody shows the effectiveness of using the key signature.

Example 1.4 Aaron Copland, *Appalachian Spring*



Example 1.5 shows how a melody looks when written in five different keys.

Example 1.5



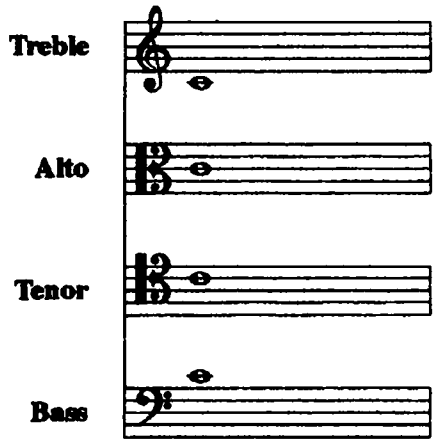
3. Clefs

Clefs are the signs displayed at the left of each staff designed to show where middle c is located. The most well-known clefs are the treble and bass clefs. However, two other clefs are commonly used in orchestral writing: the alto and tenor clefs. Non-pitched percussion

instruments are often notated with no clef or with a symbol representing that a clef is not necessary.

Each clef assigns middle c to a different place on the staff. The treble clef places middle c as the line beneath the lowest line on the staff. This is because most music in the treble clef is played much above middle c and this design allows for many notes to be visible that are even two octaves above middle c. The bass clef places middle c as the line above the highest line on the staff. This situation is the reverse of the treble clef, and allows instruments that play notes below middle c to see their notes well inside the staff.

Example 1.6 The clefs and the placement of middle c on each staff

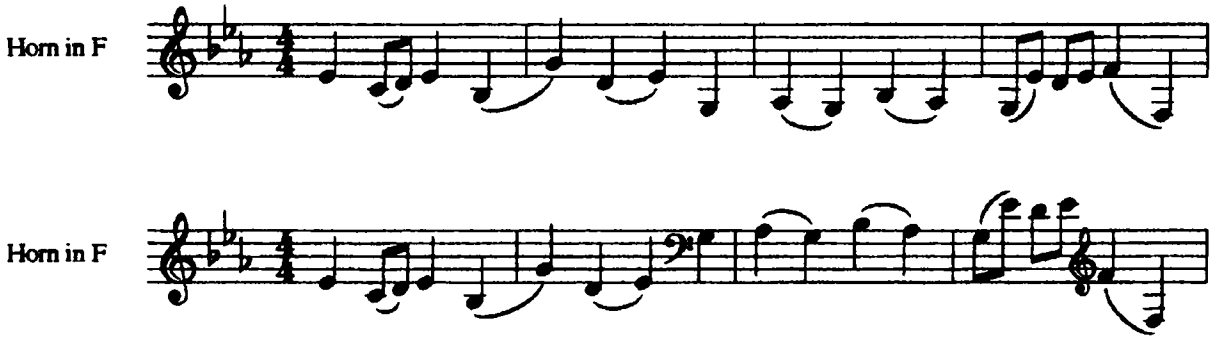


A composer needs to know when it is appropriate to use clefs other than what is considered standard for an instrument. The bassoon, the French horn, and the viola are just a few of the instruments that read multiple clefs. The bassoon sometimes reads up to three clefs during the course of one piece! A good composer knows both when and why it would be wise to change the clef of an instrument.

As an example, composers who are just beginning to learn orchestration often write French horn parts in the bass clef as soon as they go below middle c when, in fact, most players prefer not to read bass clef unless the part is absolutely too low for the treble clef. Example 1.7

shows how switching to another clef for part of a passage can make it even harder to play than necessary.

Example 1.7



4. Rhythm, Tempo, and Time Signatures

"Rhythm by itself is the most primitive form of expression".[3] Rhythm consists of the various patterns of beats and rests that are used in creating a melody and accompaniment. Determining the duration of each note in a melody is the basic concept of rhythm. Music without a clear rhythmic profile or without rhythmic development will lack energy or intensity.

When it comes to writing a melody, choosing the rhythm that will go with the pitches is a key element. Melodic rhythm is a key factor in creating the character of a melody. A melody written without any variety in note length has no shape. Rhythm does for music what punctuation does for words in a sentence. Consider the following sentence written without any punctuation—

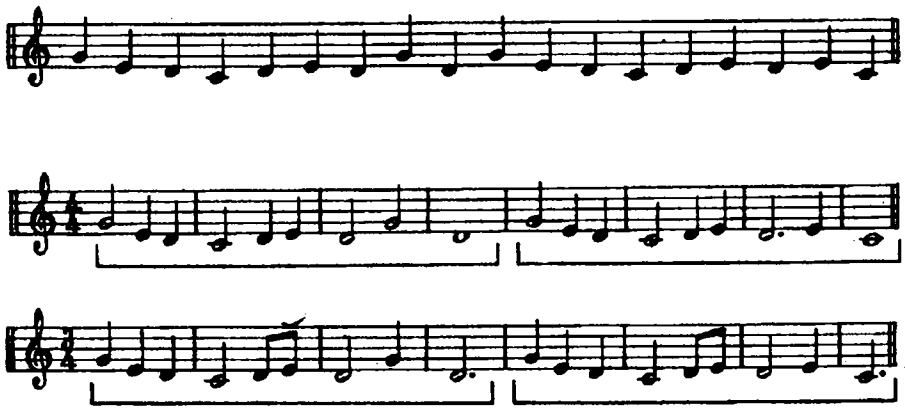
"That that is is that that is not is not is not that it it is."

Adding punctuation gives meaning to the words—

"That that is, is; that that is not, is not. Is not that it? It is!"[4]

The same is true for music. Example 1.8 shows a simple melody written with no variation in rhythm. Two possible ways to rewrite the same series of notes are shown, using two different time signatures and note values.

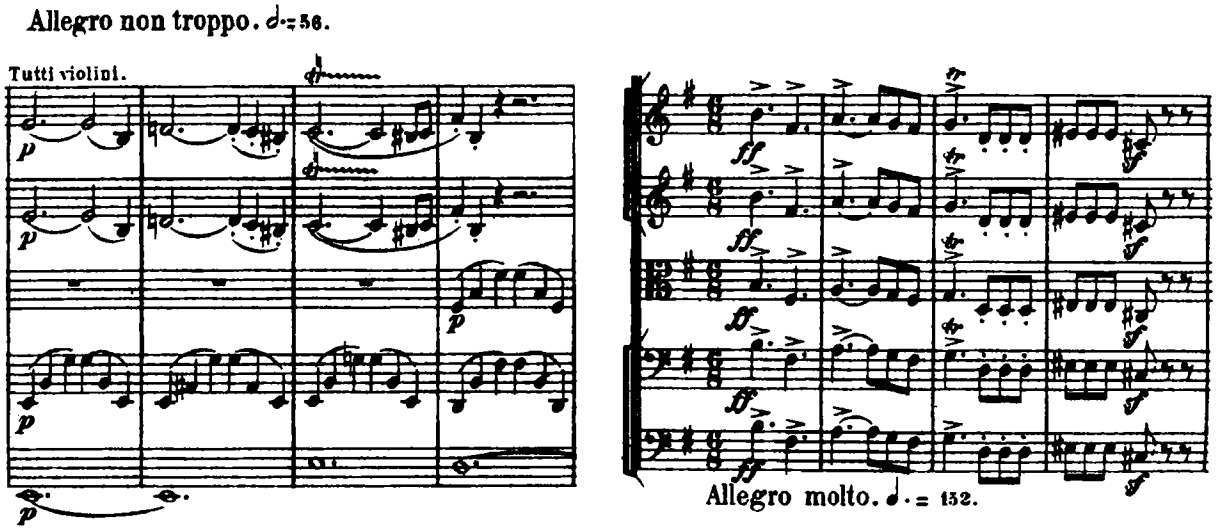
Example 1.8



Tempo, the speed at which the music is played, is a very important factor in the composition of a piece of music. The tempo of a melody determines its style just as much as its rhythms. Slower tempos allow for music to be expressive or even broad and grandiose. Music with quick tempos is often much more energetic and full of excitement and forward momentum. A single melody can be used in both situations and can take on a completely different sound as a result of the variation in tempo.

Take, for example, one of the key melodic ideas from Nicolai Rimsky-Korsakov's orchestral masterpiece, *Scheherazade*. When quoted during the first movement, it takes on a lush and romantic nature. In the fourth movement where the tempo is much quicker, it has an intense and driving quality. Of course the dynamic shaping of both excerpts plays a part as well, but I feel that much is owed to the change in tempo.

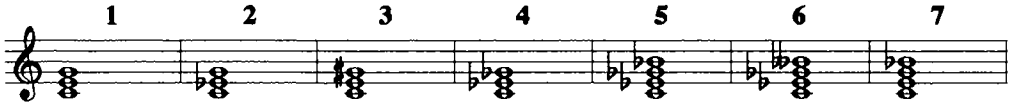
Example 1.9 Rimsky-Korsakov, *Scheherazade*



5. Chords and Harmony

A chord is any combination of three or more notes. Traditionally, chords are constructed by stacking notes at intervals of a third. Several common types of chords exist: major, minor, augmented, diminished, half-diminished, fully-diminished, and dominant seventh. Each type of chord has its own particular sound quality and each serves a different purpose. Chords can also be formed using intervals of a second, fourth or fifth. Chords constructed using fifths, or quintal harmony, has become common in contemporary music and is mentioned in section V during an analysis of one of my own works.

Example 1.10



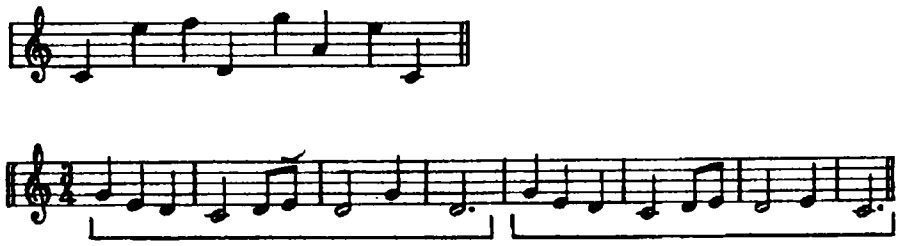
1. **Major**
2. **Minor**
3. **Augmented**
4. **Diminished**
5. **Half-Diminished**
6. **Fully-Diminished**
7. **Dominant Seventh**

The way in which chords relate to each other is the foundation of harmony. A dominant seventh chord has a particular sound that creates a longing for a second chord based on the tonic. The dominant seventh - tonic relationship is a good example of basic harmonic structure. This harmonic motion is very common at the end of many traditional pieces. As a composer's knowledge of chords and chord patterns grows, his harmonic language will expand, thus making his music much more interesting to listen to.

6. Melody and Accompaniment

Giving a clear and precise definition of a melody has proven to be quite difficult. One dictionary defined melody as an arrangement of different musical sounds for an instrument or voice. This definition truly falls short of explaining what a melody is. By following this definition almost any combination of notes can be deemed a melody. Compare the two examples below. According to the above definition, both are melodies, but many will agree that the second is clearly a better example of a melody than the first.

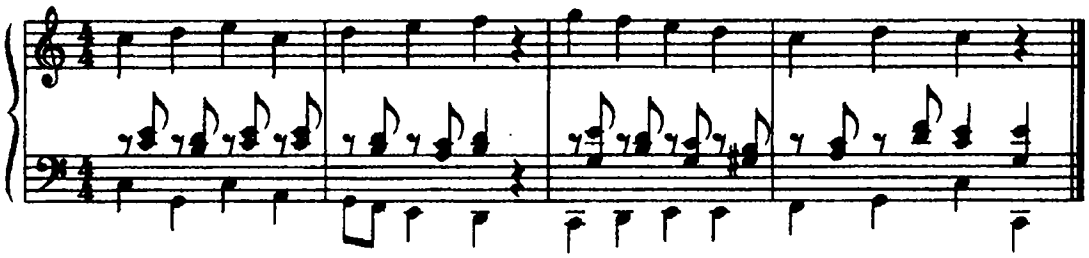
Example 1.11



This example shows that a melody is much more than a combination of notes. A good melody has a shape to it and each of the notes has a role in forming that shape. Shape, as Henry Baynton-Power puts it, "makes most things either beautiful or ugly".[5] If a melody is to be musical, it must contain aspects of symmetry and balance and often must reach a climax. This climax can be achieved either through the use of dynamic contrast or through a change in register. These qualities, among others, are what make a melody one that is both enjoyable and memorable.

Next we ask ourselves, "what is accompaniment?" Music that supports the melody, mainly rhythmic and harmonic devices, is considered accompanimental. In simple piano music, the melody is often in the right hand and the accompaniment is in the left hand. Accompaniment often consists of chords beneath the melody which provide harmonic supportt. Example 1.11 shows how an accompaniment that contains rhythm and harmony, can create a musical piece out of an otherwise simple melody.

Example 1.12



8. Form

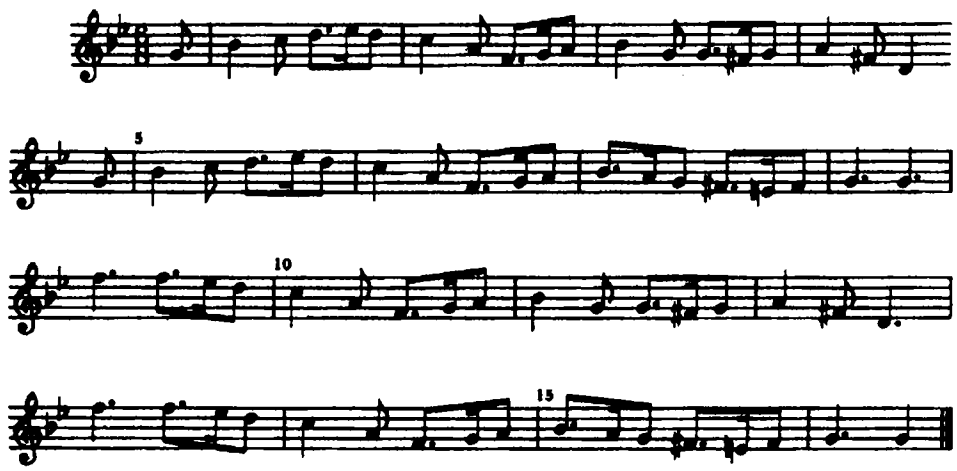
For traditional music, there exists a framework as to how a piece of music is to be constructed. Although the composition of musical ideas is often a highly creative process, many logical thought processes must take place in order to combine all of these ideas into an understandable piece of music. The concept of form, "concerns itself with how the various parts of a composition are arranged and ordered" and how these sections of material appear in musical works.[6]

Composers from the classical period through the present have employed several widely accepted forms for music composition. These include binary and ternary forms, rondo form, sonata form, Minuet and Trio and the concerto form, of which I will briefly discuss the first three. A short explanation of these three forms and their importance will suffice, since numerous other books can give much more specific information regarding the details and intricacies of such forms.

Binary form is the most basic form, consisting of only two parts. The two sections are often labeled A and B. They differ generally with regard to their melodic and motivic content. The two sections act as the subject and predicate of a musical sentence, if you will. The binary form, "emphasizes a sense of structural symmetry" since it creates a beginning and an end.[7] A

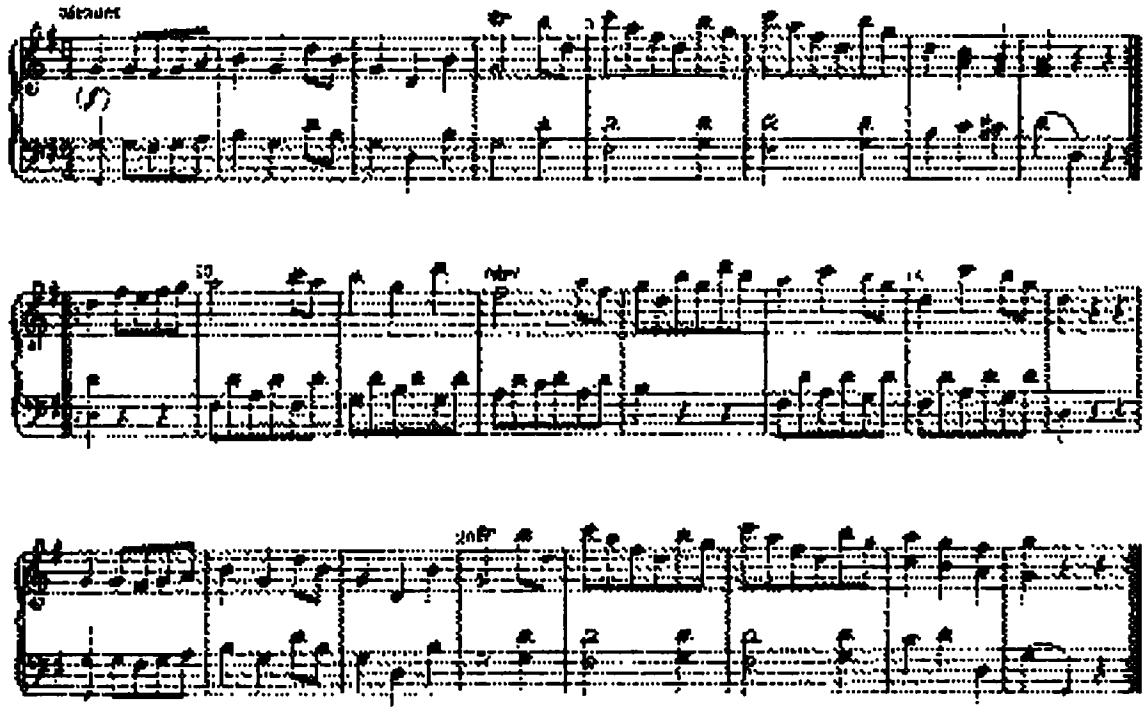
good example of a simple binary form is the song *Greensleeves*. There are two distinct sections and a different melodic idea in each section.

Example 1.13 *Greensleeves*



Closely related to the binary form is ternary. This form is an expansion of binary in that the third section is often a restatement of the first section, usually labeled as the recapitulation. The overall form is statement (A), contrast (B), and return (A'). The middle section achieves contrast by often moving to the key center of the dominant harmony and by introducing developmental material and melodic ideas that differ from the opening motives found in section A. The recapitulation states the A theme again, sometimes slightly different, and returns to the tonic key in to order to end the piece. A good example of ternary form is from Haydn's Sonata no. 11, movement II.

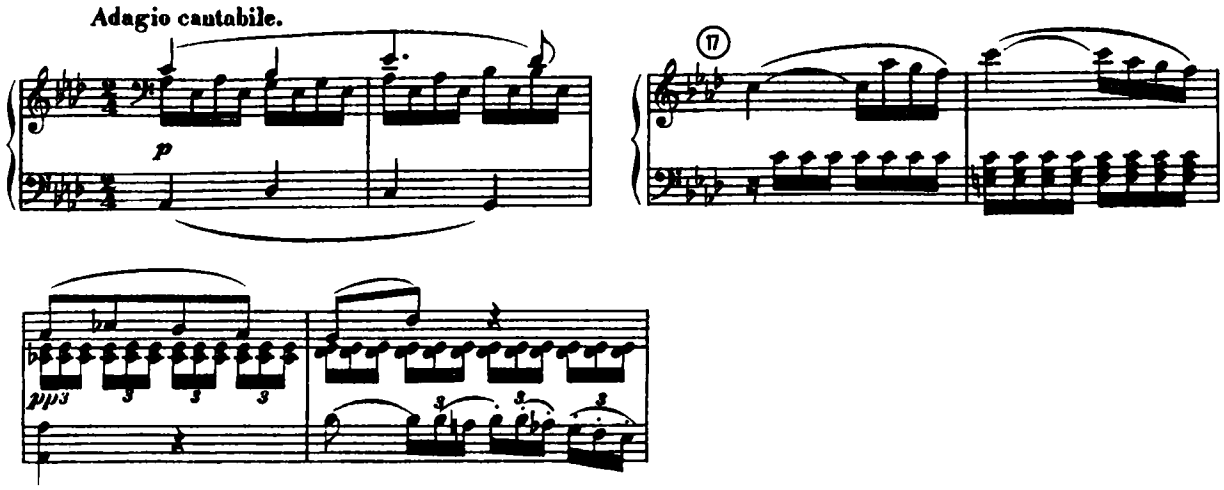
Example 1.14 Haydn, *Sonata No. 11, III.*



The rondo is simply an expanded version of the previous two forms. It relies on the return of the A section in between each section of new material. Rondo form is often in five or seven parts and is symmetrical in design. Common examples of rondo form would be A-B-A-B-A and A-B-A-C-A-B-A. This implies that the A section returns before other material is introduced. Rondo form is also symmetrical is design, reaching a climax at the middle, often developmental, section.

Beethoven's Piano Sonata No. 8 contains three distinct themes and is a five-part rondo. Each theme has a different quality to it, creating musical contrast throughout the piece. Below are examples of each of the three themes.

Example 1.15 Beethoven, *Piano Sonata No. 8 in C minor ("Sonata Pathetique") Op. 13*



It is hoped that the previous sections have provided some insight as to how much knowledge of music theory is required in order to be a well-educated composer. Even though composing is a highly creative art, without a clear knowledge of the fundamental technical and logical processes that exist in music, a composer cannot make the best use of his creative skills. A well-educated composer spends many years studying theory in order to be able to use all the tools of theory whenever writing a piece. He needs to have a "palette full of many colors" if he is to be able to express his ideas musically.

If a composer is not fluent in the many different keys, chords, and chord patterns then his music will be harmonically plain. A composer who is knowledgeable in these areas writes music that maintains energy through key changes and differing harmonies. A good composer understands that a melody needs shape, and he knows how to create melodic contour, giving a melody just the right shape for a particular passage. He can also use rhythm in interesting and effective ways to give his music direction and energy, two necessary ingredients in good music.

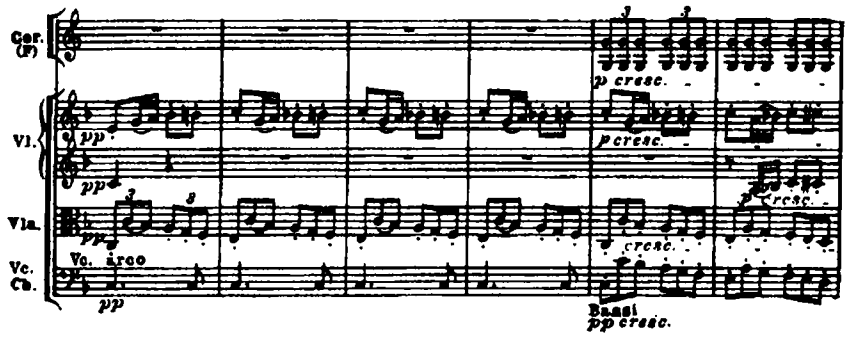
II. Instrumentation and Orchestration

Once a solid grasp of music theory is attained, a basic understanding of the many components of orchestral, band, and choral music must be established. Each instrument has its own characteristic sounds and accepted functions within the band and orchestral settings. An understanding of these qualities and the characteristics of each instrument is essential if a composer is going to effectively communicate his musical ideas to the audience.

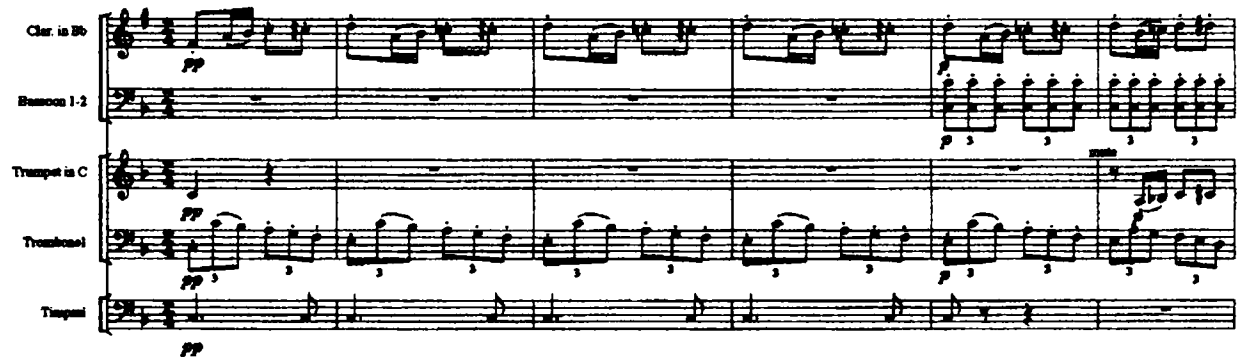
A great distinction has to be made between the ability to write a good melody and the ability to write well for a particular instrument. A melody that sounds beautiful on the flute, such as the famous solo from Ravel's *Daphnis and Chloe Suite #2*, would undoubtedly sound very different and quite awkward if played on the trombone. This is when the understanding of instrumentation becomes very important.

An understanding of the nature of each instrument and its characteristics helps a composer determine what instruments to write for in each piece and in every passage of music. Example 2.1 shows an excerpt from Beethoven's *Symphony No. 6* in its original orchestration. Following is another orchestration undoubtedly poor in nature. The soft and light texture that Beethoven creates would be ruined if he had orchestrated it another way. Writing for strings in this passage is an effective way to create the sound he desired. The "other" orchestration does not create the same effect.

Example 2.1 Beethoven, *Symphony No. 6, mvmt. I*



the "other" orchestration



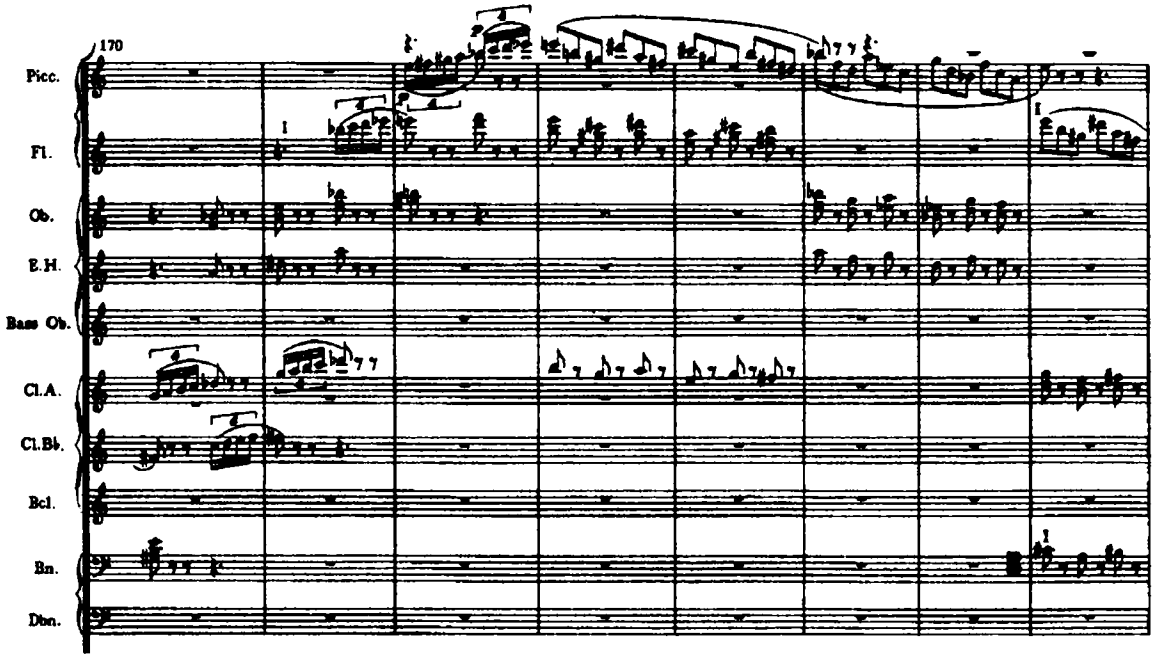
I do not plan to present an entire book on instrumentation, because numerous books on the subject already exist. I will, however, provide a brief overview of the main sections of the contemporary band or orchestra and the instruments that make up each section. Two books that have been of tremendous assistance in my development as a composer have been Samuel Adler's *The Study of Orchestration* and *The Art of Orchestration* by Kent Kennan. These two books can easily supplement the present discussion.

1. The Woodwinds

The woodwind family in the modern orchestra consists of three groups: the flute family, the single-reed family, and the double-reed family. The piccolo, flute and alto flute make up the first section of the woodwind family. The single-reed family contains all of the clarinets: the Eb clarinet, the Bb and A clarinet, and the bass clarinet. The double-reed family contains both the oboe and English horn and the bassoon and double bassoon. All of the woodwind instruments are treble clef instruments except for the bassoons, which read mainly the bass clef.

Found rarely in the orchestra, but a key section of the wind ensemble, is the saxophone family. The saxophone family is made up of the Bb Soprano, Eb Alto, Bb Tenor, and the Eb Baritone, each being single-reed instruments. Example 2.1 is a good example of what an entire woodwind section (without saxophones) looks like on the score.

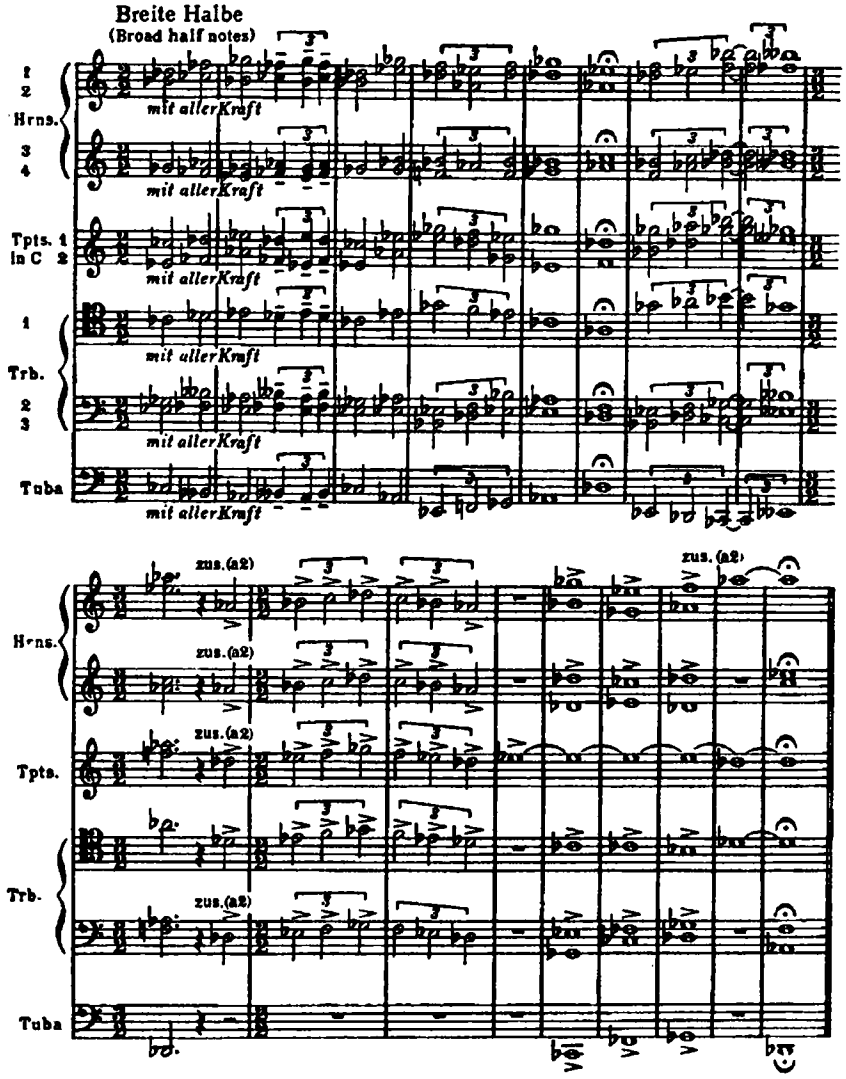
Example 2.1 Holst, *The Planets, "Mercury"*



2. The Brass Section

The brass section of the modern orchestra is comprised of four main instruments: the French horn, trumpet, trombone, and tuba. With each of these instruments, variations exist, primarily relating to transposition, size and range. However, for the purposes of this discussion, we will limit the orchestra brass section to four instruments. The modern wind ensemble includes additional instruments, the cornet and the euphonium. I mention the cornet separately from the trumpet, because often their corresponding roles are quite different in a piece of music.

Example 2.2 Hindemith, *Mathis der Maler*



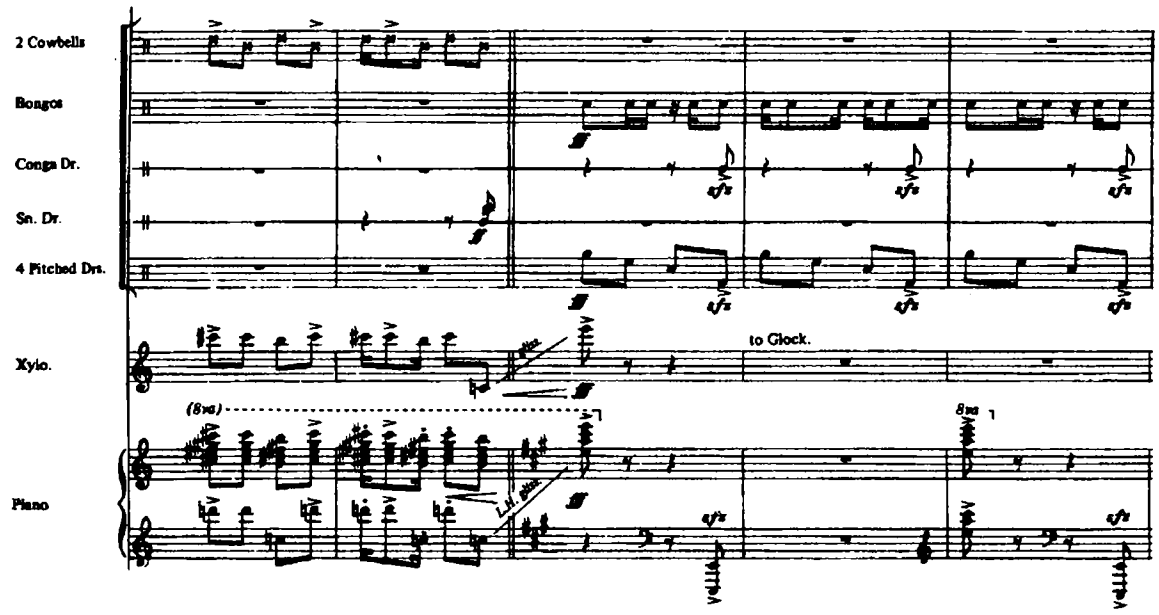
Samuel Adler's *The Study of Orchestration* provides many good examples of writing for the brass section as well as the common characteristics and effects of brass instruments. When one considers the dynamic possibilities, the numerous muting techniques available for each instrument, and the effectiveness of the brass as a section or individually, it is easy to understand why the brass section has grown to become an integral part of the modern-day orchestra.

3. The Percussion Section

"The number of percussion instruments available to the contemporary composer or orchestrator is virtually unlimited."[8] That is what Samuel Adler remarks about the nature of the percussion section in his book *The Study of Orchestration.* Over the years, the percussion section has grown from just timpani to bongos, guiro, suspended cymbal, and even wind machine. As composers have imagined new sounds, percussionists have created new instruments and discovered others in order to reproduce those sounds. I use the term discover, because often instruments have been made out of "non-musical" objects, such as auto brake drums.

Percussion instruments basically fall into two categories, pitched and non-pitched, with some instruments floating back and forth between both groups. Timpani is an example of a pitched instrument, while tambourine and snare drum are examples of non-pitched. Most percussion parts written for orchestra or band contain combination of both types of instruments, since some are used for melodic ideas and others strictly for rhythm and support. This excerpt from Bernstein's *West Side Story* shows a percussion section that requires at least six players plus the timpani and piano part.

Example 2.3 Bernstein, "Mambo" from *West Side Story*



Often one percussionist can play several instruments throughout the course of a piece. Composers have to devise ways to get the most that they can from the percussion section while still using only a limited number of players. Sometimes only three players are available, including the timpanist. Good composers can write their music in such a way that often only three or four players are needed to cover all of the parts. It is always a good idea to talk with an experienced percussionist when trying to determine the best way to write for a section.

4. The Chorus

The chorus consists of Soprano, Alto, Tenor, and Bass voices. Often the abbreviation for a chorus is listed as SATB, short for the names of the four sets of voices. Choral music is written in four parts, but composers often divide each section into two parts as well, making the total number of parts equal up to eight. In order to understand better how to write for voices, a composer should listen to many works that are written for chorus alone and chorus with

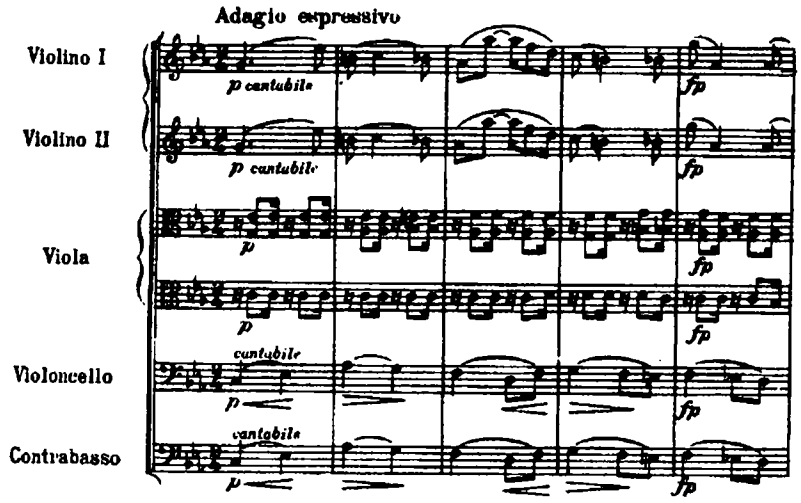
orchestra. The most important idea to keep in mind is that the chorus should never sing constantly during a piece. As with instrumentalists, moments of rest are necessary in order to ensure that the singers' voices remain strong and fresh throughout the entire work.

5. The Strings

The string section is perhaps the most homogeneous section of all. The sound quality and tone colors of the instruments blend very well. The four instruments of the string section are the violin, viola, violoncello, and string bass. In an orchestra, there are two separate violin parts, giving the string section five voices. Each voice is capable of dividing into two or more parts, with the only risk being that as voices are divided, fewer and fewer players are on each part. Especially in younger orchestras, it is wise not to divide a voice into more than two parts.

Example 2.5 is an excerpt from Schumann's Symphony No. 2 providing one possible way to write for the string section. This example shows a common method for writing for strings, with the violins playing the melody, the viola providing a harmonic and accompanimental role and the cello and bass parts providing the bass line. The works of Mozart, Beethoven, Hadyn, Richard Strauss, Brahms, and Debussy include endless possibilities for writing for the string section.

Example 2.5 Schumann, *Symphony No. 2*, mvmt. 3



Orchestration goes far beyond the descriptions of instruments or explanations of how each is used in solo passages and in ensemble writing. Books on the subject of orchestration give information about each instrument and serve as a guide with regard to how composers have traditionally used instruments throughout the history of music. They list effective combinations of instruments and provide good examples of how to orchestrate for various sections of the ensemble as well as the ensemble as a whole. Books can give a composer the much needed technical information that exists on an instrument and attempt to provide clear understanding about an instrument's accepted role in the ensemble, however they cannot provide the composer with first-hand experience.

Books on instrumentation, orchestration and composition explain how instruments work but they do not give musical insight, nor can they replace a composer's true musical intuition. They cannot explain fully when it is best to employ a particular instrument, but can only tell how it is generally used. Often the best way to learn how to write for an instrument is to learn how to play that instrument or to spend time with a performer of that instrument. First-hand information

from performers gives composers valuable information regarding how music is typically written for that instrument, and how it is generally used within the orchestra. Performers often can provide valuable technical information about an instrument which is beyond the composer's own experience.

Having the insight to know precisely when to write for a particular instrument comes from experience and from listening to other music. Norman Demuth writes that, "anyone who professes that he can teach a student "how to compose" is laboring under a big delusion."[9] Demuth continues by stating that composition must be learned from experience and by studying the works of past composers.

A book cannot replace the creative brain of the composer. It can only educate the composer so that at no time is his creativity ever held back by a lack of technical knowledge or understanding - two things that can dramatically hinder an artist's creative process. Demuth's *A Course in Musical Composition* begins with a discussion on techniques because, he felt that a composer must have a grasp of the technique if he is to "know exactly how he is going to express himself."[3]

The following scenario from the world of art creates a good analogy. Suppose an aspiring young painter wishes to recreate the landscape that is behind his house. If he does not know how to use each of his brushes or his colors in their most effective manner, then he cannot begin to paint a picture of what he sees. The beauty that he sees and experiences each day cannot be shared with others because he does not have the capability to put the images on the canvas. He is hindered by his lack of knowledge and therefore, his creativity suffers.

Creativity should never be bound by a lack of technique. If it is, then new techniques must be learned. This is how music has developed throughout history. Composers have heard

music in their minds and have had to come up with new musical techniques in order to realize them. This has been particularly significant in the 20th century.

With all that being said, the question still arises. How does one write for a particular instrument? What does writing "idiomatically" mean? How will one know if a melody will sound acceptable on a certain instrument? The best way to answer these questions and others like them is to listen to music by well-known composers and to see how they have written for specific instruments. By listening to the music of many different composers and by studying the scores to their works, an aspiring composer can learn the traditional uses of instruments and their most common melodic figures, as well as their general role within the ensemble.

A composer is recognized and remembered by his style, meaning that his music is unique in some way. Almost every composer strives for a unique style during his career, especially young composers who often focus too heavily on this concept in their early stages of development. This uniqueness is established and matured only after years spent studying the music of others. The concept works in many areas of life: if you want to be different, then you have to first know what the standard is.

Listening to other composers' music provides a wealth of knowledge that cannot be found in books. Since music is a aural art, then it must also be learned from the aural perspective. Of course, reading books and studying musical scores is very educational and is advised, but one cannot truly study music without listening to it. Since that is the case, I have provided, at the end of this paper, a brief list of works that may serve as guidelines for composing. Just as no two pieces of music are exactly alike, so each of these works utilizes the ensemble differently, providing a wide range of listening experiences.

III. A Blank Canvas?: Tips on How to Start

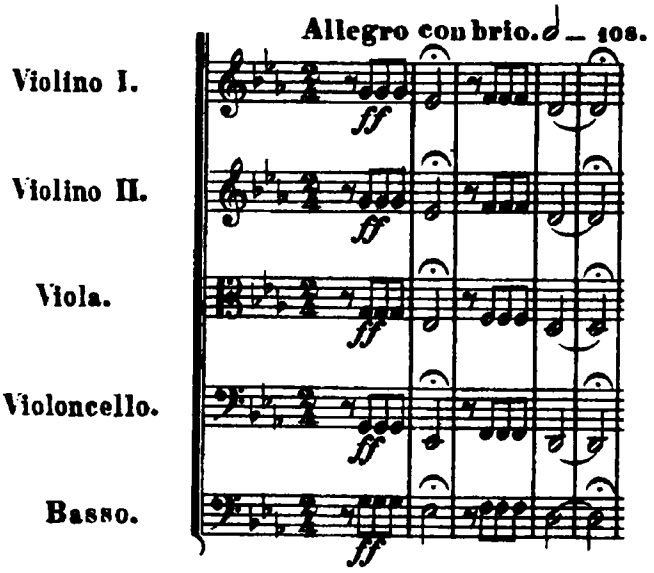
Many people who have an interest in music often ask composers, "how do you start composing a piece?" That is a question that both composers and non-composers seem to ask at some point or another. Where does the composer begin? How does he compose the first melody? What instruments will he use? Each of these questions is very important, and with every composer comes a different answer.

This section will provide some helpful information as to how to begin the creative process in composing a piece of music. No "correct" method exists as the sole way to compose a piece, but several methods have proven to be effective for many composers, as well as myself. The composing "strategies" discussed below are a combination of methods used by past composers as well as some of my own.

1. The Motive: The Seed of Musical Growth

The motive is the smallest part of a musical composition. It serves as the basis for melodic ideas, rhythmic ideas and sometimes the overall form of the piece. The motive can be anything from two notes to several measures. Probably, the most famous motive is the opening four-note passage from Beethoven's Symphony No. 5 in C minor.

Example 3.1 Beethoven, *Symphony No. 5* in C minor



Once a composer has chosen his motive, or possibly several main motives, more music can be composed based on the motive. Accompaniment figures can be created to support and harmonize the motive and the melody of which it is a part. Creating a musically effective and interesting motive can often be the key towards creating a good overall piece of music.

Throughout a piece, the motive may be quoted in many different ways, all unique and interesting to listen to, but requiring less creative power from the composer than having to create a new theme for each section. A motive can be rewritten with a different rhythm. This is a very effective way to draw attention to not only the new version of the motive but to the return of its original version as well. Harmonizing a motive in a different way also creates musical interest as does inverting it. Inversion is when a melodic line is "flipped upside down", creating a new idea based directly on the original. Each of these methods is a good way to effectively use the motive as the starting point of the entire piece.

2. Form: Determine Your Overall Structure

Sometimes the best way to begin a piece is to picture what the overall form might be. When writing a short keyboard work, a composer may determine that he is going to write in a short binary form. This decision may help him determine how long his phrases will be or when a key change might occur. Sometimes developing the overall form helps a composer determine how the music might progress through the course of the work.

This idea of developing a form early on should not be restricted to the traditional forms of classical music but might be best constructed through a visual image. A visual representation of a piece is often a good way to imagine the overall structure of a piece, including its climaxes and its softer sections. A picture of a very long mountain range in my compositions professor's office provided many opportunities for me to imagine the various structural possibilities that existed for whatever piece I may have been working on at the time.

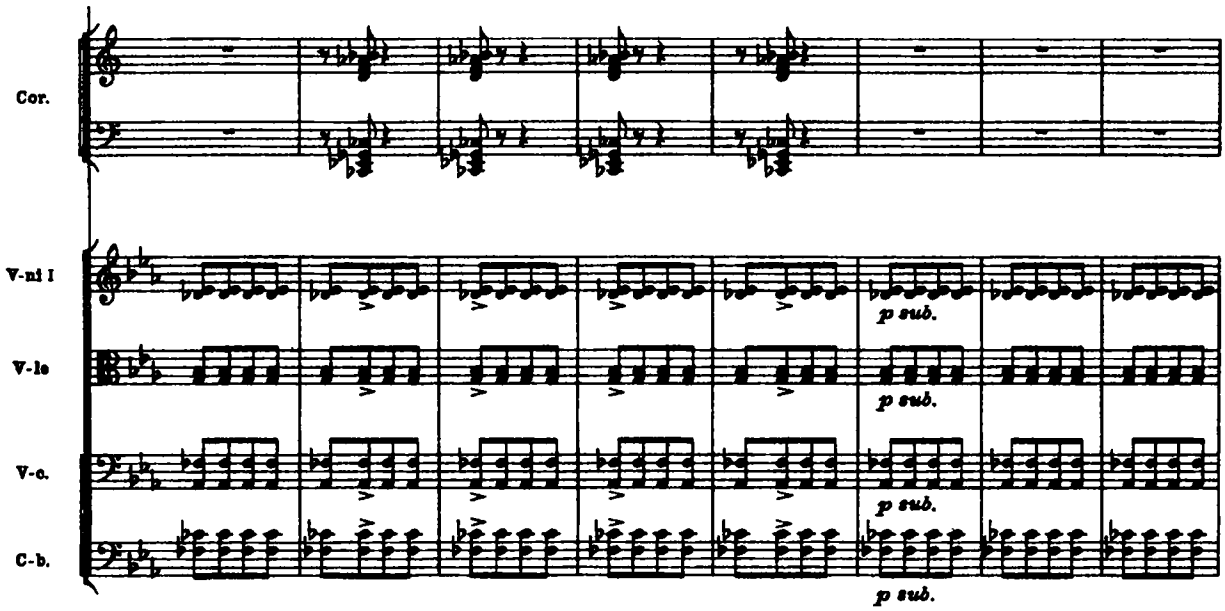
A very common form that serves as a good model for beginning composers is that of the concert overture. This form contains three basic sections: exposition, middle, and recapitulation. It can be characterized as a type of ternary form, in which the two outer sections are generally quick in tempo and the middle section is slower. Many works for young band are constructed this way, not only serving as good teaching devices for the young performer but also for the young composer who learns more about the ensemble by writing playable works for it.

3. Sound: A Moment in Music

Often I have a concept of a particular sound I want in a piece. This may be the sound of a specific harmony or a moment of certain rhythmic activity. A repetitive, harsh percussive attack sound might be the initial sound a composer hears that leads him to the creation of more music. One example of sound as a key element is from Igor Stravinsky's famous ballet, *The Rite*

of Spring. During the "Dances of the Young Girls", the strings and horns play a very dense chord that is repeated in a very rhythmic and percussive manner. In one case the chord is repeated for 35 measures. The driving force of the dissonant chord, combined with accents placed irregularly, creates a character for this section upon which the rest of the music builds.

Example 3.1 Stravinsky, *The Rite of Spring*, "Dances of the Young Girls"

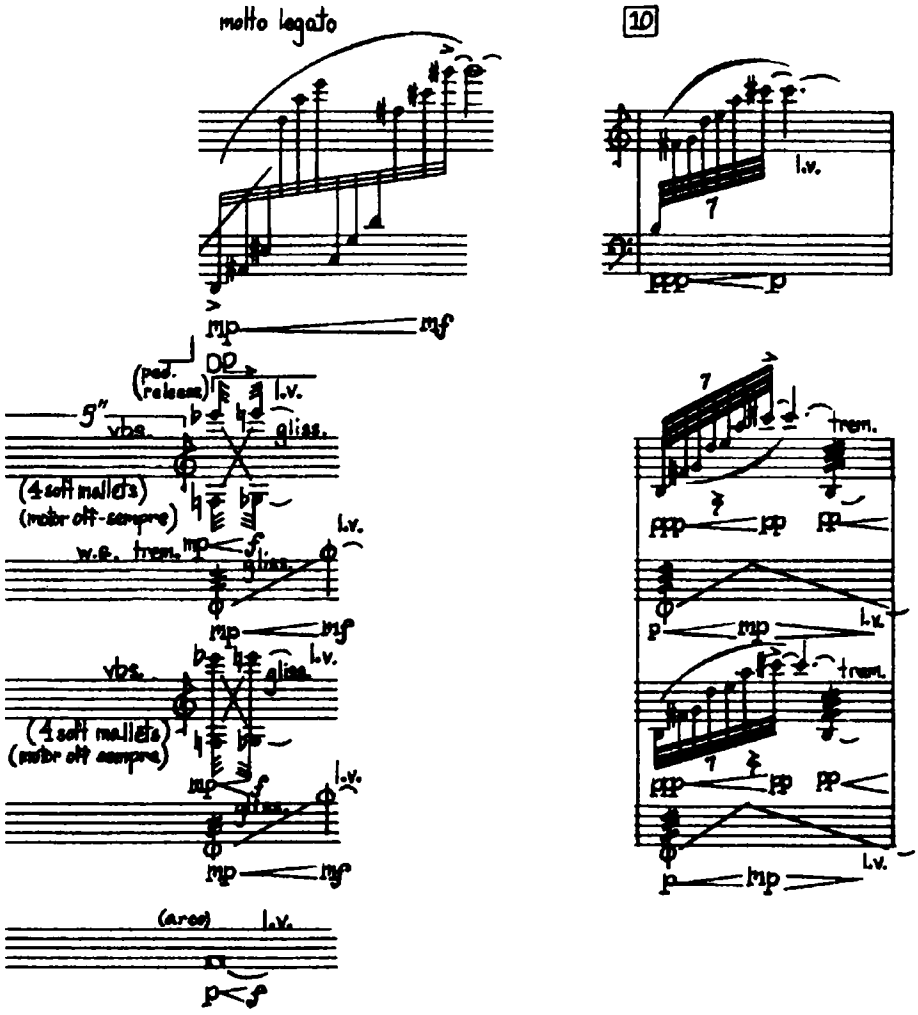


A humorous story states that Stravinsky was noted as to have said that he liked the chord very much and played it on the piano for the famous Russian impresario and producer of the famed Paris ballet troupe, Serge Diaghilev. However, Diaghilev did not share his enthusiasm for such dissonance from the orchestra. When asked by Diaghilev how long that chord would be pounded away by the orchestra, Stravinsky simply replied "to the end, my dear."

Many contemporary composers rely heavily on the concept of sound in their works. As composers have moved away from traditional ideas relating to tonality and key, ideas regarding the construction of particular sounds have grown. Individual notes or harmonies are not stressed as much as the homogeneous sound that is created when instruments of different tone and timbre as combined. This is often done with instruments of the percussion section. Many good

examples can be found in the works of Joseph Schwanter, such as his well-known work for wind ensemble *And the Mountains Rising Nowhere.*

Example 3.2 Schwanter, *And the Mountains Rising Nowhere*



4. Finishing an existing melody

One final method that can be very effective in learning how to compose melodies is to take existing melodies and compose new ideas to complete them. Using portions of existing melodies allows composers to create new music without having to think of the initial motive. Once a composer has created a successful second half to a melody, he can easily go back and write something new to accompany it. Once the process is completed, a new melody has been

composed, based on the structure and style of a previously existing melody. This process is called modeling, and will be discussed in more detail in the following section.

The three methods discussed above are not the only ways to begin composing a piece, but they can serve as tools when having difficulty beginning. Each provides ways to think creatively without being hindered by the details of a piece. Starting with just one sound brings forth many new ones later. Conversely, beginning with a large-scale view of the piece might help narrow down musical ideas once the form is established. Each method can be useful at some point, but every composer has to find his own method of composing that works best for him and allows him to be most effective.

IV. Three Composers: Their Technique and Their Music

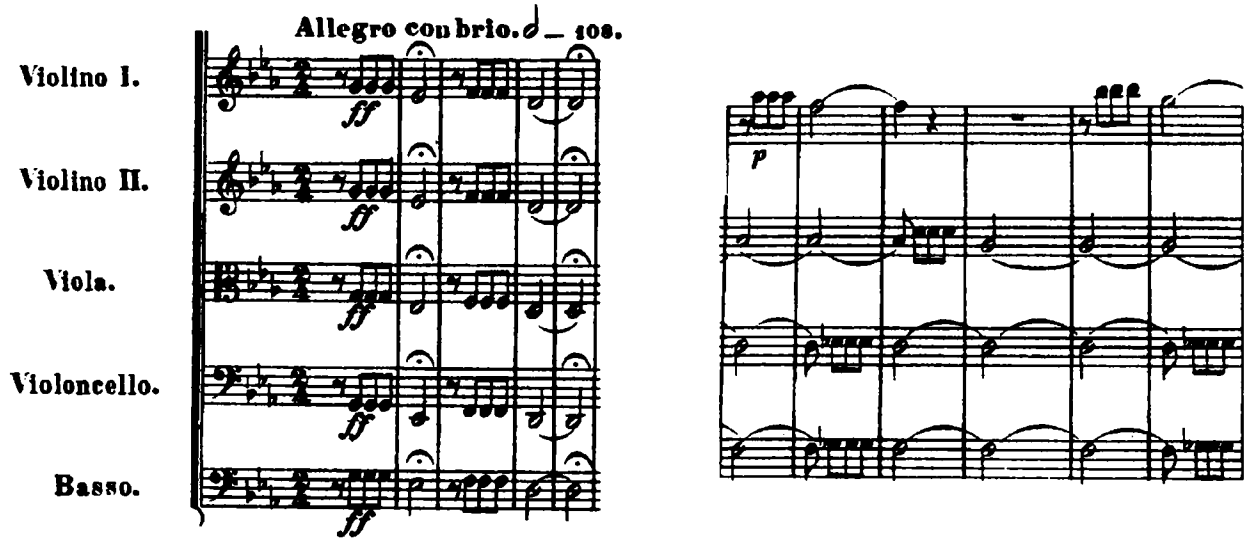
In order to write good music, it is of the utmost importance for young composers to listen and study the music of other great composers. It is imperative that a composer listen to all different types of music in order to expand his understanding of music and what composers have done in the past. Understanding the past is a key to creating the future.

I want to quickly discuss three composers who I believe have written good music. All three of them have influenced my musical growth and development as a composer. Their music has served as models for my works and I have gained much knowledge from listening and studying their pieces. Ludwig van Beethoven, Igor Stravinsky, and Cindy McTee are three composers whom I have modeled my music after at some point in my musical growth.

A short study on a major facet of each of their compositional styles will provide three ways in which to go about composing music. Each of the three composers comes from a different time period, in each case, the orchestra being in a different stage of development. Each writes for the orchestra differently, providing a broad spectrum of teaching examples.

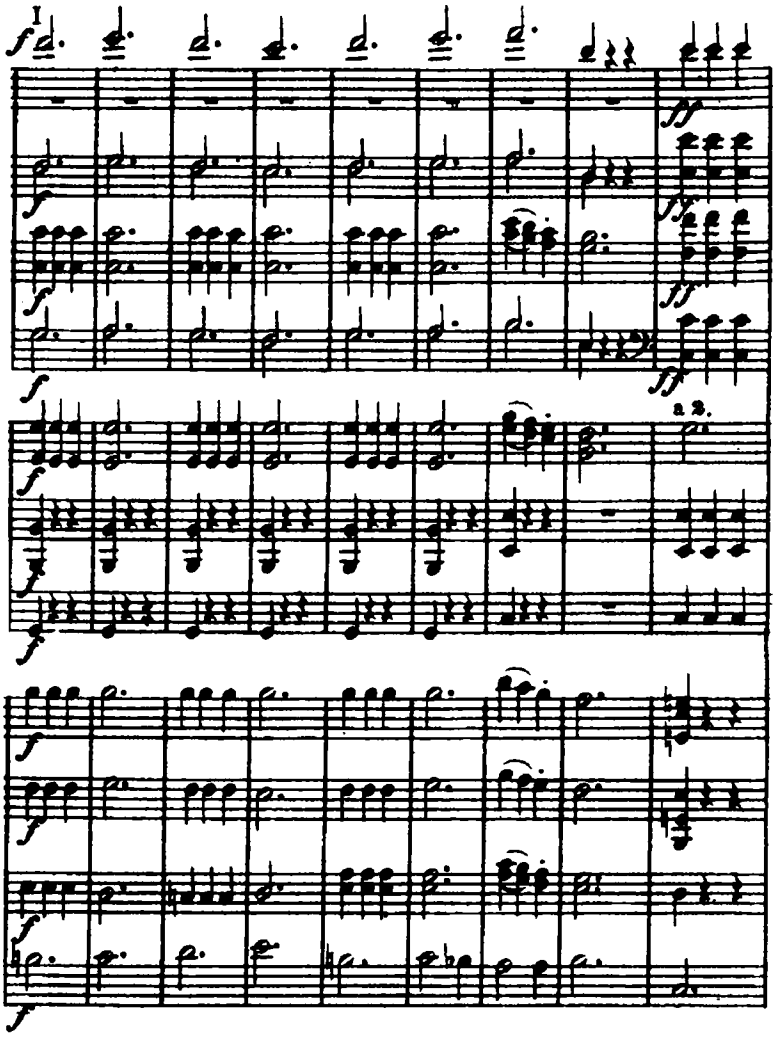
Beethoven's Symphony No. 5 in C minor, is one of the best examples of how to use a motive. In this work, Beethoven displays his ability to take a motive and create an entire symphony based on nothing more than four notes. The first movement relies heavily on the opening motive as part of its melodic and harmonic design.

Example 4.1 Beethoven, *Symphony No. 5* in c minor, mvmt. III



In the third movement, Beethoven brings back the characteristic rhythm of his four-note melody and uses it to pound out the next theme. Even though the initial motive is not quoted, an aspect of it is. The strong rhythmic quality of the motive's "short-short-short-long" nature becomes a driving force throughout the entire orchestra in the third movement. This is a good example of how any aspect of the motive can be applied to other melodic ideas. Even if the audience is not consciously aware of the motive's application, such a technique gives a structure to the piece, which audience members do sense.

Example 4.2 Beethoven, *Symphony No. 5* in c minor, mvmt. III



This brings us to the idea of coherence in music. Good music is music that puts forth its melodic ideas and harmonies in a coherent fashion. Even if a work is complex, if it is coherent, then audiences will understand it and probably enjoy it. The connection of themes throughout a piece of music is a concept that young composers need to learn. Often in young composers' works, those of my own included, no correlation exists between the various themes that are introduced in the piece. Each is composed and presented separately without any connection between them. This makes music seem too simple and less interesting. By studying Beethoven's

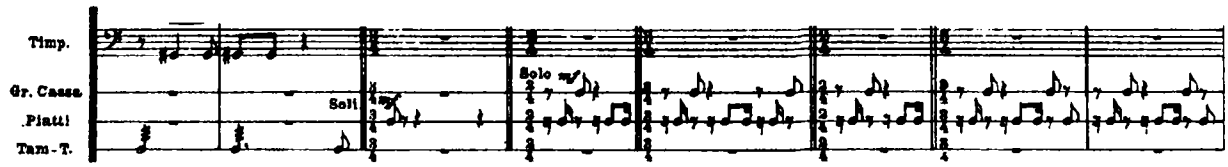
music, composers can learn how to tie their motives together, creating a coherent and connected piece of music.

I feel that it is necessary to discuss Igor Stravinsky because of the breakthroughs that he made in his music regarding rhythm. Stravinsky had an ear for interesting rhythm, and his music often displays that energy and excitement. Listeners had never heard such music when he introduced them to the seemingly chaotic rhythms of his 1913 ballet *The Rite of Spring*. He pushed the boundaries of strict and formal rhythm that had been in place for many years. Example 4.3 is an excerpt from *The Rite of Spring* in which the time signatures change almost every measure, masking any sense of meter or strict time.

Example 4.3 Stravinsky, *The Rite of Spring* "Sacrificial Dance"

Stravinsky also effectively used rhythm even in quiet background figures as in example 4.4. In this example from his ballet *Petrouchka*, he uses members of the percussion section to create a rhythmic background figure that quietly accompanies the melody. The rhythm is not dominating at all when in context with the orchestra, but even though barely heard, it creates a sense of forward motion characteristic of Stravinsky's music.

Example 4.4 Stravinsky, *Petrouchka*



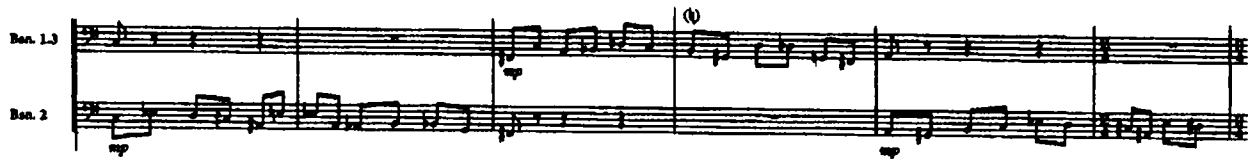
Interesting and energetic rhythmic development is a key element of good music. Good rhythmic devices do not have to be fast or even very complex. A simple change from two repeated quarter notes to a repeated quarter note triplet pattern can make a musical passage become completely different in nature. In order to write good music, a composer must have the ability to write interesting rhythms and to know when to use rhythm to enhance his melodic ideas.

The music of Cindy McTee embraces the many types of synthetic scales that were discussed earlier in section one. She has often used scales such as the octatonic and pentatonic to create motives and intricate accompanimental figures. Even though these scales do not fit into a standard tonality, they do provide a key center and a sense of home pitch.

Each scale has its own set of notes that serve as a basis for a key center. When a different scale is used, certain new notes are introduced, which slightly alters the arrangement of notes, and creates a different key center.

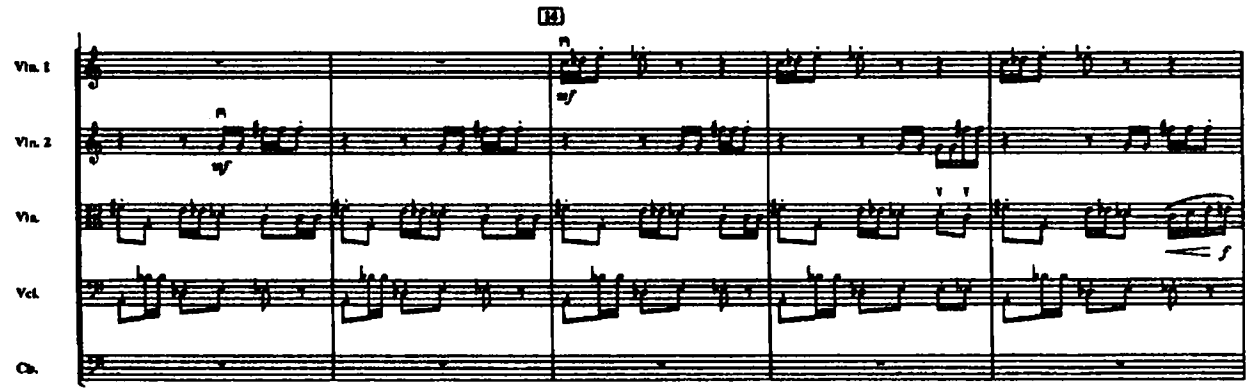
In the piece *Circuits*, McTee uses the octatonic scale. Example 4.6 shows how the bassoons alternate measures in a bass line that is comprised of varying octatonic scale patterns.

Example 4.6 McTee, *Circuits*



Another excerpt shows the string section using the octatonic scale in some very rhythmic figures.

Example 4.7 McTee, *Circuits*



Using synthetic scales does not mean that McTee's music has become atonal, but instead, it shows how music that is outside the realm of traditional harmonic structure can still contain a sense of a tonic.

I have quickly discussed each of these three composers and one aspect of their music to help introduce the idea of modeling. Modeling is the process in which a composer observes characteristics of a particular piece or a number of pieces and attempts to write a new works incorporating those ideas. Often composers model their works after other composers without intending to. If a composer mentions that his is influenced by the music of particular composer, then he has probably modeled his own music after qualities of that composer's music at some point or another.

The process of modeling is a very effective and educational method to use when learning how to compose. Many composition books use modeling as a tool for teaching ways to compose works such as inventions, contrapuntal fugues, and even chorale preludes. Modeling enables a young composer to see the work of another composer and use music already written to help him

create his own. Often seeing and listening to other music first helps to boost a composer's creativity and give him an idea of how to come up with his own motives and melodies.

V. An Analysis of Two Original Compositions

This last section discusses how two of my most recent works were composed using previously composed pieces as models. Each of these pieces was influenced in some way by one or more works written by well-known composers. In each case a technique or compositional process used by that composer served as an influence in the creative process that took place in creating my work.

Through this analysis, I explain how I used several works as models in some fashion for a portion of my works. Their works served as influences for my pieces and my music displays that influence. The modeling process supports my belief that the only way to learn how to compose good music is to allow your music to be influenced by others who have written good music.

1. *Fanfare for Six Trumpets* - 1998

Fanfare for Six Trumpets combines traditional ensemble writing with aleatoric techniques of the 20th century. This work is made up of two distinct sections, each of which was influenced by previous music written for the trumpet. The piece opens with four individual fanfares played in succession. Then the fanfares are played simultaneously, each performer repeating what he had played as a solo earlier. The combination of all four fanfares creates a very dissonant and chaotic sound, but it is slightly offset by the fact that each part of the whole has been heard as a separate entity.

The piece which I modeled this portion of my work after is the *Fanfare for St. Edmundsbury*, by Benjamin Britten. It is a fanfare for three trumpets, in which each trumpet

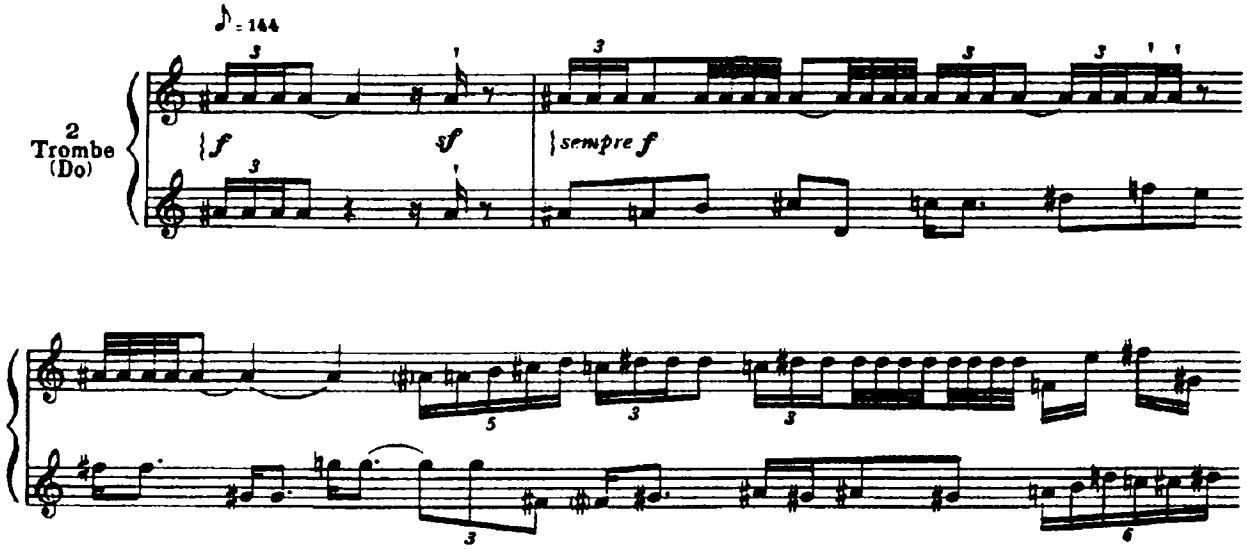
plays a solo melody before all three are combined at the end. The end result is much the same as that of my piece.

Another work from trumpet literature served as a model for the first section of my piece. Igor Stravinsky's *Fanfare for a New Theatre*, written in 1964, is an extremely short piece for two trumpets that is very rhythmically complex. The complexity of the piece stems from the rapid exchange of very intricate cross-rhythms between the two parts. Only for a brief moment do the two parts play in exact rhythm. At the beginning of the second measure, the two trumpets also play at very close intervals to each other for a moment. This creates a dissonance that I found to be very effective.

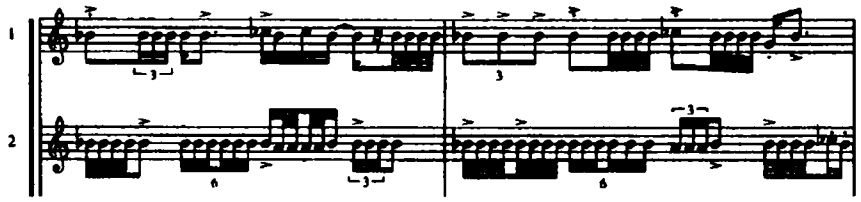
I achieved the same effect in *Fanfare for Six Trumpets* beginning in measure 20 by giving trumpets 1 and 2 rhythms that contrasted each other. Only for three measures (mm. 26-28) do the two parts play in unison rhythm. This rhythmic unity creates contrast from the chaotic rhythms heard both before and after.

I expanded the effect that Stravinsky created in measure two of his work, keeping the two trumpets at very close intervals with one another for a much longer period of time. Both start on the same pitch and slowly work outward from each other over the course of ten measures, eventually ending up an octave apart. This created a high degree of tension, making measure 25 a very effective release of that tension. Examples 4.1 and 4.2 show the similarities between Stravinsky's work for two trumpets and this excerpt from *Fanfare*.

Example 4.1 Stravinsky, *Fanfare for a New Theatre*



Example 4.2 *Fanfare for Six Trumpets*



The second section of *Fanfare for Six Trumpets* contains a technique used by many 20th century composers, which is known as aleatory or aleatoric writing. This technique, often often indicated by very odd rhythmic values or lack of time signatures or barlines, creates a chaotic effect or a sense of randomness in music. Thomas Benjamin calls this technique "random processes", and attributes the invention of this effect to the increased desire by composers for chance in music.

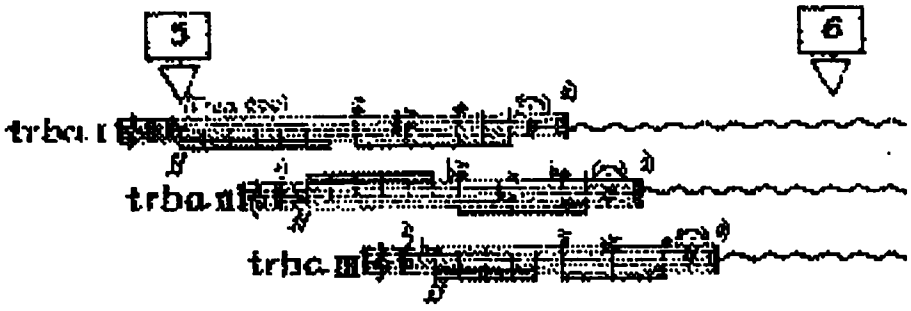
In *Fanfare*, each of the bottom four trumpets plays its own individual fanfare-like motive, which is repeated beneath a measured fanfare played by the first and second trumpets. The four

unmeasured fanfares enter in succession and create a harmony that supports the melody being played in the foreground. Measure 55 is a good example of an instance where all four parts enter at various times with separate fanfares. Even though an attempt is made to visually represent when each of the four fanfare parts are to change harmonies, it is left up to chance as to when the exact changes will take place. Rehearsing this section of the piece proved the effectiveness of this concept, since at no time was the end result exactly the same. However, the desired effect was achieved every time.

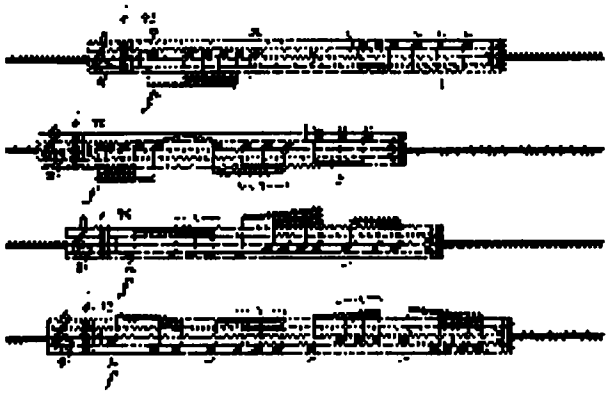
The influence for this portion of the piece comes from the *Concerto for Cello and Orchestra* by Witold Lutoslawski and from the small ensemble work, *Einstein's Dreams* by Cindy McTee. At performance cue **5** in the cello concerto, the three trumpets enter in succession playing separate unmeasured fanfares. The resultant sound is that of chaos and timelessness, with no one fanfare being more pronounced than the others.

Einstein's Dreams used the same basic type of notation: a segment of a staff system containing a musical idea surrounded by repeat markings, which show that the phrase is to be repeated continuously. Following the section of music is a line, or arrow, drawn to a certain length to show for how long, or how many times, the segment is to be played. Both of these styles of notation are used throughout the works and serve as models for my piece. Examples 4.3 and 4.4 show the similarities between the two pieces and *Fanfare.*

Example 4.3 Lutoslawski, *Concerto for Cello and Orchestra*

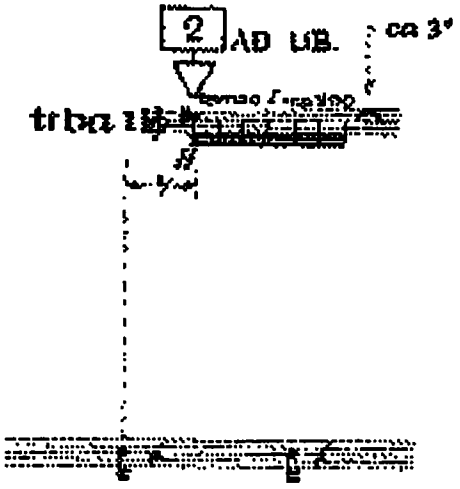


Example 4.4 *Fanfare for Six Trumpets*, mm. 55

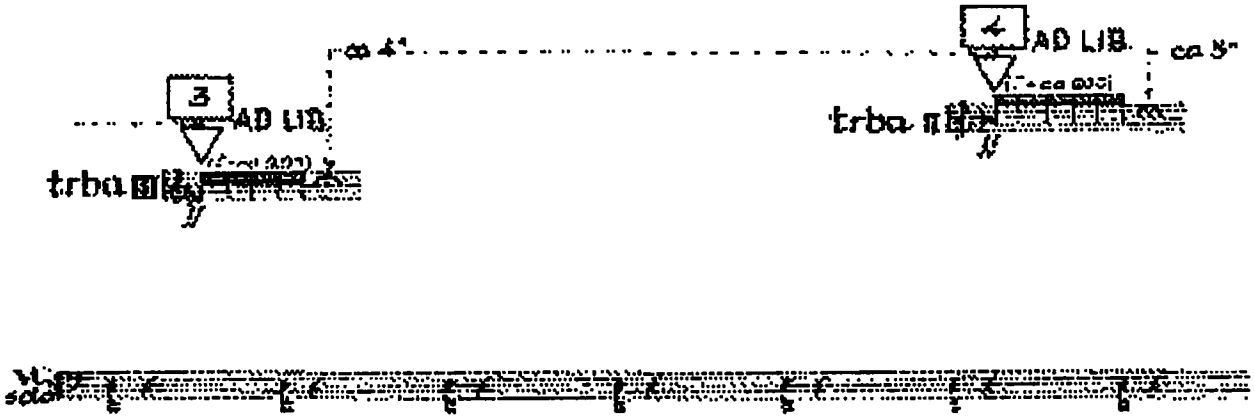


In aleatoric music it is very important to show how instruments are to relate to each other as time elapses. When two instruments are to play in conjunction with one another, a visual marking on the score must be made to signify that to the conductor. Lutoslawski uses a dashed line to indicate points in time when two or more instruments are to enter simultaneously. The dashed line extends vertically between the two or more instruments signifying their relation in time. A dashed line also can be drawn horizontally to show the amount of time that is to elapse before the next musical action is to take place. Occurrences of both types of notation are shown below.

Example 4.5 Lutoslawski, *Concerto for Cello and Orchestra*

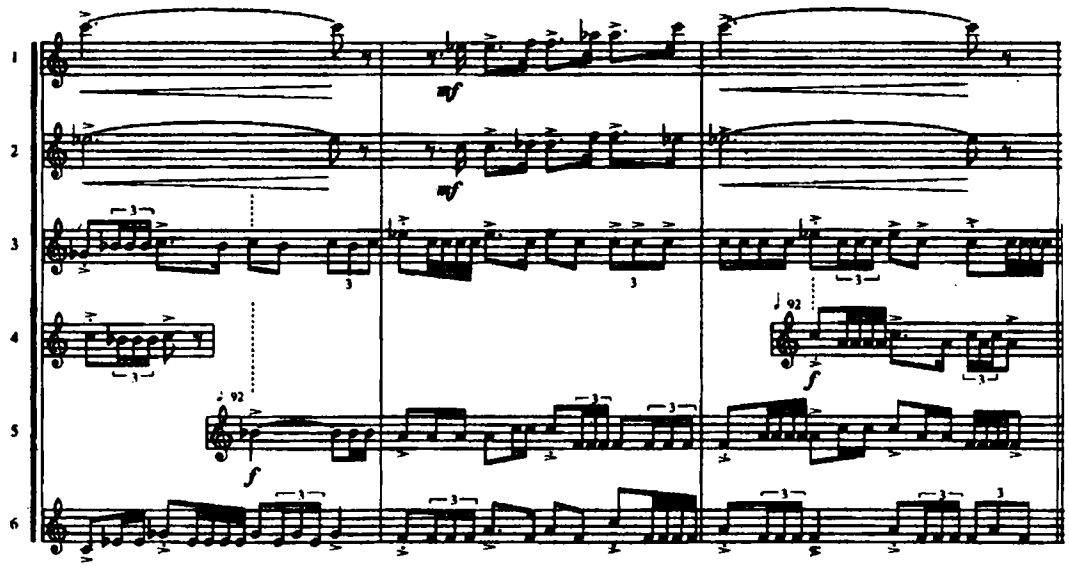


Example 4.6



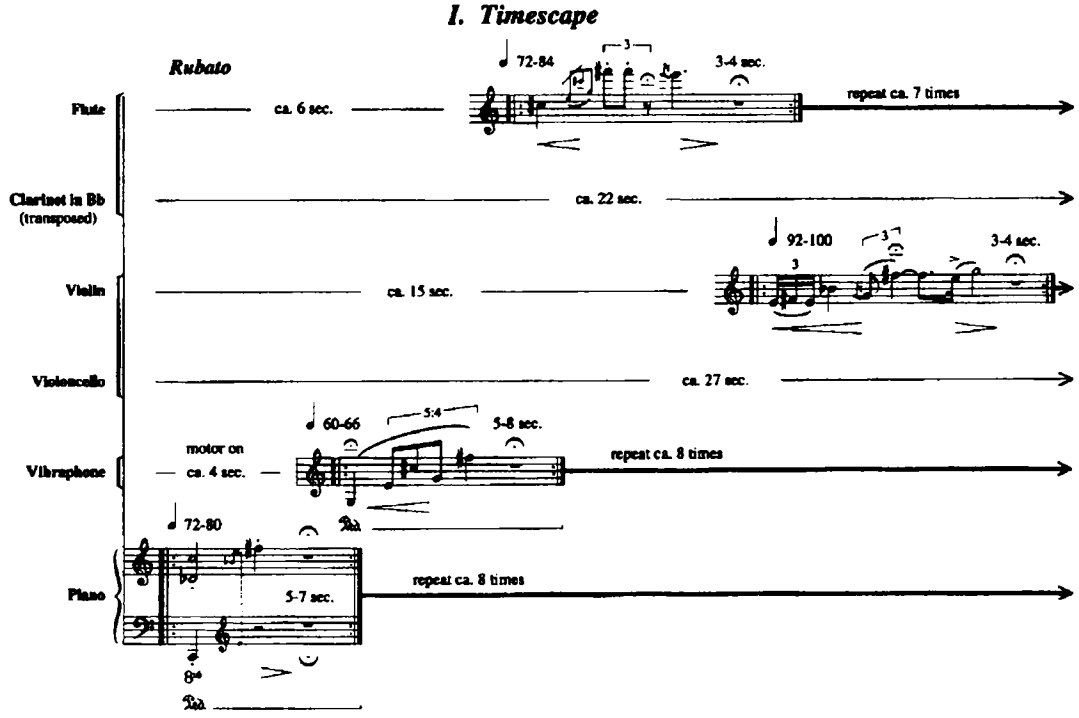
I use both types of notation in my piece to show how instruments are connected in time. The vertical dashed line is used at measure 61 to indicate that trumpet six is to play in tempo with the first and second trumpets. This notation is used three more times to indicate when the remaining three trumpets are to join in tempo with the ensemble. In each case, the dashed line is drawn from the entering trumpet's first beat to that of a part already in tempo within the ensemble. Example 4.7 shows two occurrences of this notation.

Example 4.7 *Fanfare for Six Trumpets*



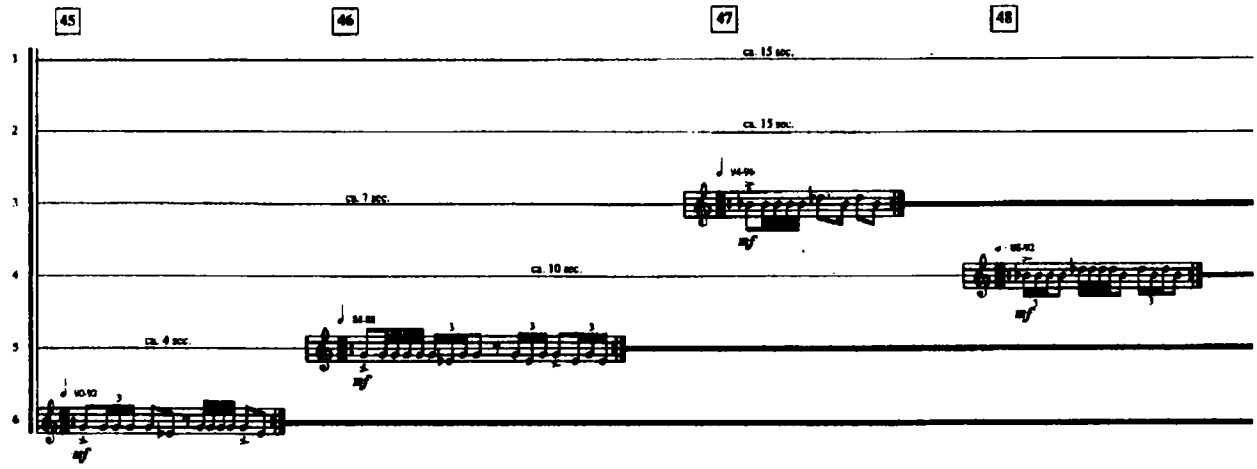
In Cindy McTee's *Einstein's Dreams*, a horizontal line is used represent the passage of time. This notational practice gives clear direction to both the conductor and the performers as to how much time is to elapse during certain sections. Such markings are very important when the music does not contain a distinct pulse. Example 4.8 shows the first movement of *Einstein's Dreams.*

Example 4.8 McTee, *Einstein's Dreams* "Timescape"



In *Fanfare for Six Trumpets*, the horizontal line is also used to indicate how much time elapses between new musical ideas. This is very important since there is no conductor to give downbeats.

Example 4.9 *Fanfare for Six Trumpets*



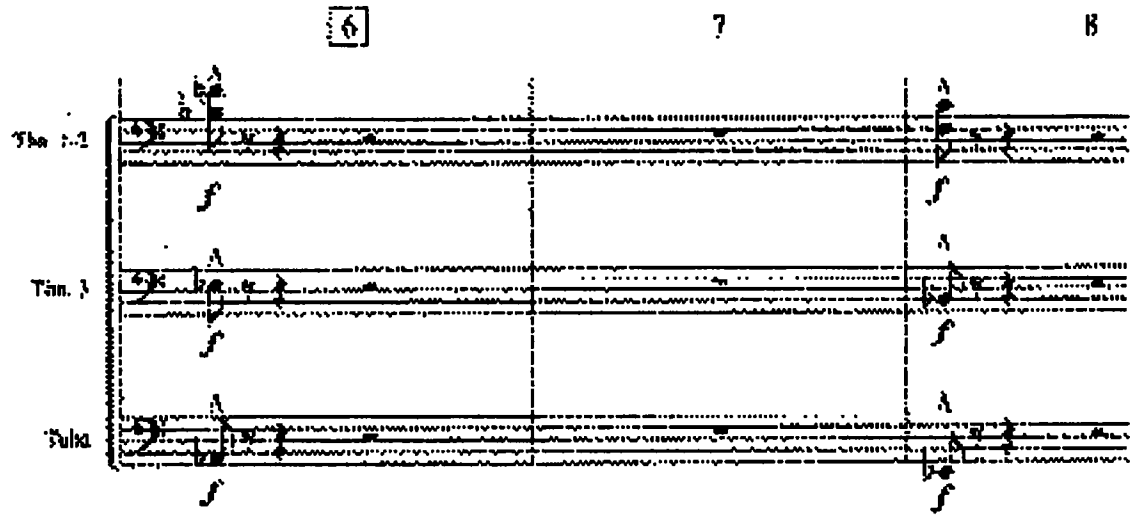
Upon analysis, it is clear that the three aforementioned pieces served as models during the composition of *Fanfare for Six Trumpets*. I found the techniques that the composers used to be quite effective in suspending the concept of time through the application of chaos as well as the combination of measured and unmeasured melodic ideas presented simultaneously. The notational techniques that the three composers used served as good examples of how to notate my own music. Each of these elements, taken to fit the parameters of my own work, helped to create a piece that contains both traditional ensemble writing and 20th century aleatoric procedures.

2. *With rhythm and energy* (for brass choir) - 1999

This four-minute work for brass choir combines quintal harmonies and rhythmic ostinato patterns, giving it its name, *With rhythm and energy*. The initial concept for this piece stemmed from my interest in quintal harmony. Quintal harmony is the construction of chords built by stacking perfect fifths, resulting in a sound that is harmonically dense but the structurally open. This harmonic design contrasts traditional tertian harmony (harmony built by stacking thirds).

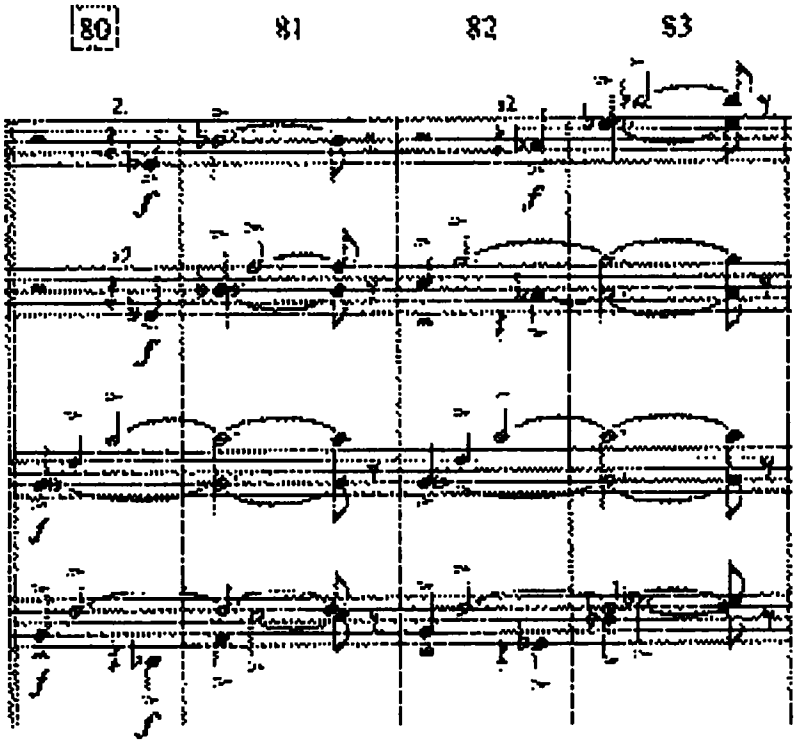
Therefore, this work began from a purely sonic standpoint. Example 4.10 shows the first two chords in the low brass starting at meas. 6.

Example 4.10 *With rhythm and energy*



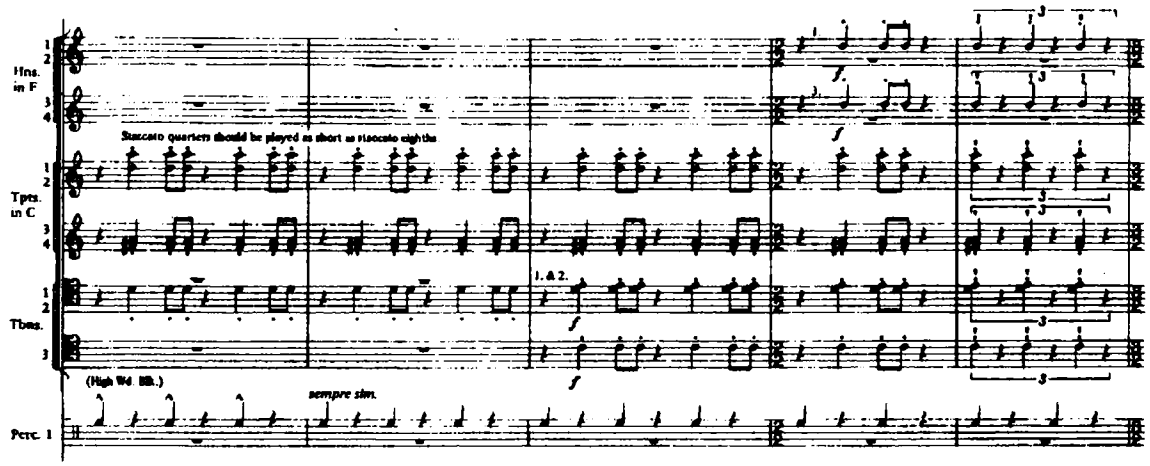
The chords, played accented and short, proved to be very effective in establishing harmonic structure. In contrast to these attacks, the forward momentum created by the driving rhythm slows down at times, and the chords are presented with longer note values. The chords are stacked one note at a time, allowing for the rich harmonic nature of the chords to be heard clearly as each tone is presented individually. Example 4.11 shows one instance when the French horns and trumpets stack different chords at once, presenting dissonant harmonies and colorful orchestration.

Example 4.11 *With rhythm and energy*



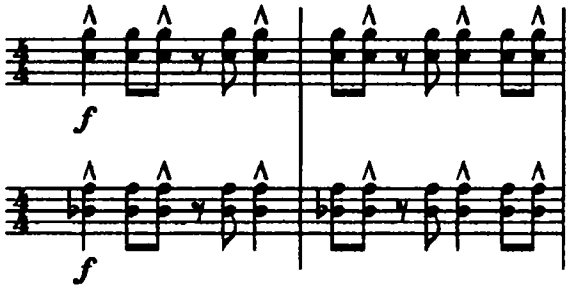
The second idea I had for this piece was to create a very repetitive rhythm pattern that continued throughout. John Adams' piece for orchestra entitled *Short Ride in a Fast Machine.* This four-minute piece contains a lot of syncopated rhythms in the brass that creates forward momentum, which drives the rest of the orchestra. Several of the rhythmic figures are written in such a way as to create a hemiola effect; thus, the duple meter is dominated by the triple feel of the music. The rhythmic ideas also continuously change, never allowing the listener to predict when the next rhythmic punctuation will occur.

Example 4.14 John Adams, *Short Ride in a Fast Machine*



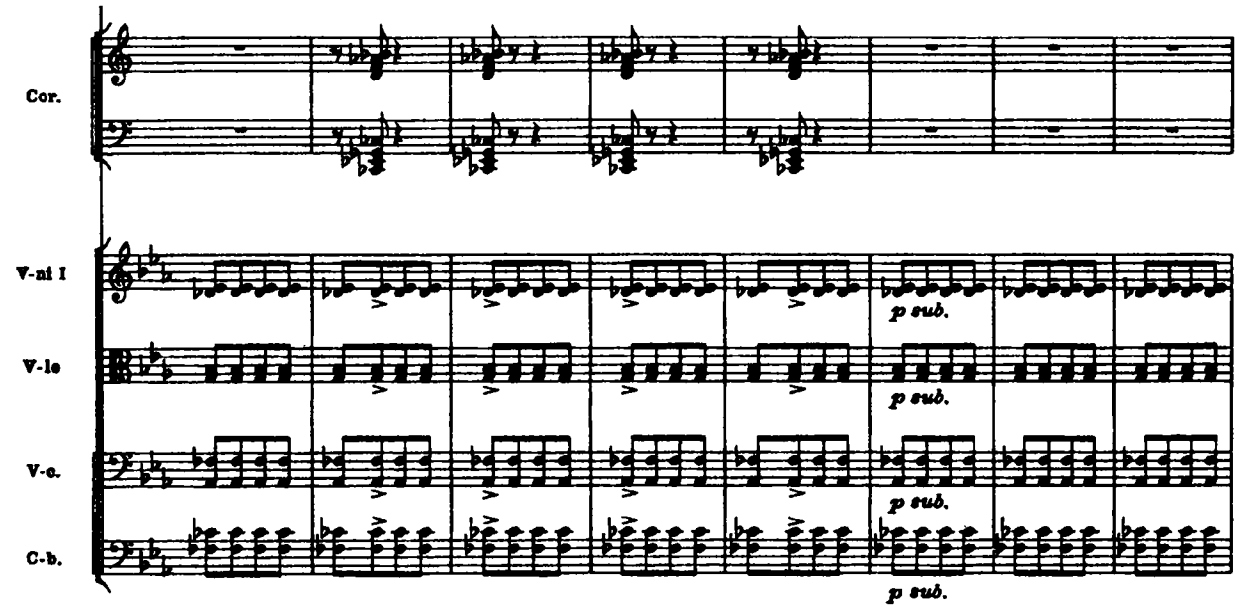
In *With rhythm and energy*, the trumpets play a rhythmic figure similar to those in the Adams piece, creating a rhythm that obscures the barline. This figure proved to be very effective in establishing a forward momentum while creating an irregular beat pattern. Example 4.15 shows an excerpt with the trumpets playing this repeated rhythmic figure across the barline.

Example 4.15 *With rhythm and energy*

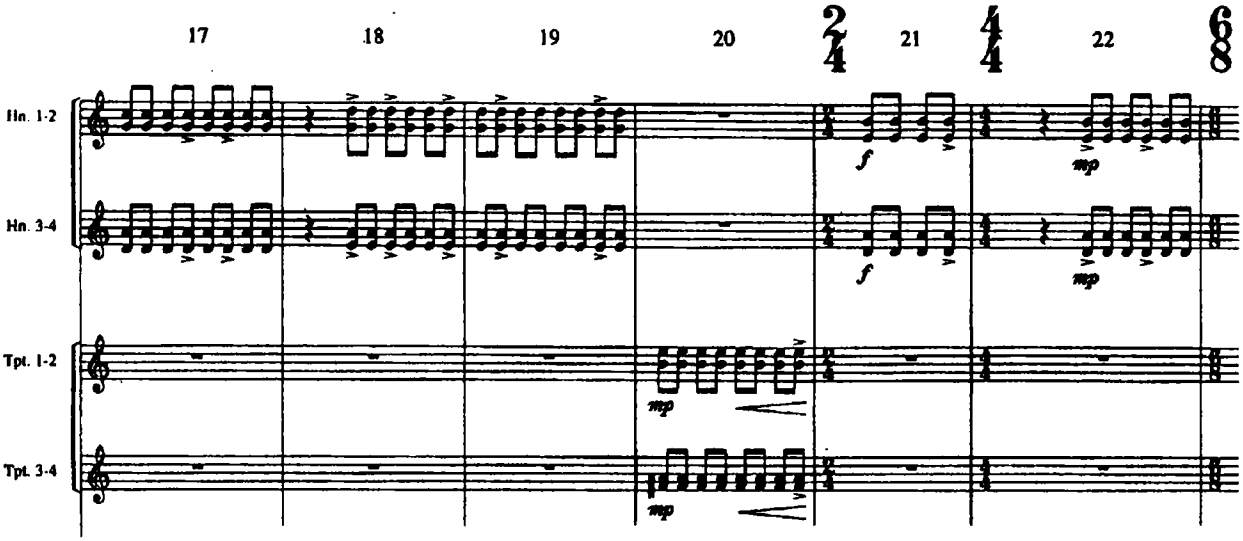


As discussed earlier, Stravinsky's *The Rite of Spring* contains a passage of repeated chords with irregularly placed accents. I used a repeated chord played by the horns, with irregularly placed accents, to create the forward motion that I desired. The correlation between the Stravinsky example and the excerpt from my work is quite obvious.

Example 4.16 Stravinsky, *The Rite of Spring*, "Dances of the Young Girls"



Example 4.17 *With Rhythm and energy*



In *With rhythm and energy*, a combination of rhythmic devices and a quintal harmony served as the key elements of the piece. I had a certain harmonic and rhythmic sound in mind when I began constructing this piece, based on their effectiveness in the Stravinsky and Adams

works. The other elements of this work, the melodies, the form, and the tempo, all stemmed from this rhythmic and harmonic concept.

Conclusion

Practicing composition is something that lasts for many years. Composers never "arrive" at the point where they can never learn more about how to compose and how to write good music. Composers are always striving to make their next work better. A basic understanding of the aspects of music and instruments is a key first step in the process of composition.

A composer should spend time studying music theory and be sure that he has a grasp of how the many aspects of music theory work together. He must learn the many instruments available to him and how to write for them, a learning process that comes from both reading books and composing experiences. Studying the music of others and modeling works after their own, is another useful step in the process of composition. It is by listening and observing other people's music do we get an idea of what wee ant our own music to be.

This paper has dealt with several aspects of the practice of music composition. I hope that it has provided a good understanding as to the many areas of music that a composer needs to study. As I have said throughout this paper, in order to learn how to compose good music - music that contains those elements discussed - one must listen to good music. So I urge all composers to read all that they can and start listening.

End Notes

1. Demuth, Norman. *Course in Musical Composition* – foreward. "Composition is something which must be learnt from the experience and practice of others."

2. ---------. *Course in Musical Composition* – foreward.

3. ----------. Course in Musical Composition. pp. 32.

4. Baynton-Power, H. How to Compose Music. pp. 17.

5. ----------. How to Compose Music. "So let us always endeavour to give our melodies shape, which, after all, makes most things either beautiful or ugly." pp. 28.

6. Caplin, W. Earl. *Classical Form.* pp.9

7. ----------. Classical Form. pp. 87

8. Adler, Samuel. *The Study of Orchestration.* pp. 368.

9. Demuth, Norman. *Course in Musical Composition* – foreward.

Suggested Listening List

Adams, John. Two Fanfares for Orchestra – *Tromba Lontana* and *Short Ride in a Fast Machine.*

Bartok, Bela. *Concerto for Orchestra.*

----------. *Music for Strings, Percussion and Celesta.*

Beethoven, Ludwig van. *Piano Sonata Op. 13* in C minor.

----------. *Symphony No. 5* in C minor.

----------. *Symphony No. 3* in Eb major.

----------. *Symphony No. 7* in A major.

----------. *Symphony No. 9* in D major.

Berlioz, Hector. *Symphonie Fantastique.*

Bernstein, Leonard. "Symphonic Dances" from *West Side Story.*

Copland, Aaron. *Appalachian Spring.*

----------. *Fanfare for the Common Man* (Brass and Percussion only).

----------. *Four Dance Episodes from "Rodeo".*

Debussy, Claude. *La Mer* tone poem for orchestra.

----------. *Prelude to the Afternoon of a Faun.*

----------. *Three Nocturnes.*

Haydn, Franz Joseph. *Symphony No. 104* in D major.

Holst, Gustav. *First Suite in F* for Band

----------. *Second Suite in Eb* for Band.

----------. *The Planets.*

McTee, Cindy. *Circuits* for orchestra.

Mussorgsky, Modeste. *Pictures at an Exhibition.* Original Piano version and Ravel's Orchestral transcription.

Mahler, Gustav. *Symphony No. 5* in c minor.

----------. *Kindertotenlieder* for solo voice and orchestra.

Mozart, Wolfgang Amadeus. *Don Giovanni.*

----------. Overture to *The Marriage of Figaro*

Puccini, Giacomo. *La Boehme.*

Shostakovich, Dmitri. *Symphony No. 5* in D minor.

Strauss, Richard. *Ein Heldenleben* ("A Hero's Life") tone poem for large orchestra.

----------. *Don Juan.*

Stravinsky, Igor. *The Firebird.*

----------. *Petrouchka.*

----------. *The Rite of Spring*

----------. *Symphony of Psalms.*

Tchaikovsky, Peter. *Nutcracker Suite.*

----------. *Romeo and Juliet –Overture/Fantasy*

----------. *Symphony No. 4* in F major

Wagner, Richard. *Tristan and Isolde* (19th century opera).

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