

that most students know and like, but the purpose of the course and book is not to get people to give up any type of music. Instead, the goal is to broaden people's musical horizons, which will then offer listeners more and richer musical choices.

People generally like what they know and avoid what they don't know. If there be truth in the phrase "I know what I like," there is also truth in the words "I like what I know." This is so partly because people don't hear unfamiliar types of music accurately or fully; they simply miss a lot that music in an unfamiliar style has to offer. Another reason why people prefer what they know is that they feel more comfortable and competent with it. An unfamiliar type of music may make a person a bit uncomfortable because he or she can't make much sense out of it. That encourages self-doubt, which discourages positive associations with the music.

The recordings (available on record or cassette) that supplement this book contain two versions of essentially the same musical work, the first large, independent section (**movement**, in musical terms) of Felix Mendelssohn's Symphony No. 4. The popular version is shorter, has more emphasis on the beat, and is played on instruments associated with popular music. Most people, at least on first hearing, will probably prefer the popular version. Over time, and with increased understanding, however, they will probably find that their interest in the original version for full orchestra increases.

The fact that knowledge and preference are two sides of the same coin has some important implications for music appreciation courses. One is that people should know something about a musical work before deciding how well they like it. Judgments should be based on information and experience, not made on impulse. Another implication is that judgments of relative value should be made only on works of the same general type. It is not possible to compare accurately a country-western song with a chant created for a worship service. A third implication is that the role of the music should be considered. A square-dance tune should not be thought about in the same way as a symphony. One is for recreation and the other is for careful listening.

This chapter has presented the view that music is more than just a pleasant diversion or background for other activities. In a way that no one can fully explain, skillfully organized sounds are important to human beings. Such music exists for its artistic qualities, and it is often profound and complex. Learning to listen to and understand this music requires some effort, but it is an effort well worth making.

Thinking about Music

Acquiring information and improving listening skills are fine. However, these are even better if students in music classes do some thinking about the points covered and how they relate to other areas of music and life. To encourage such thinking by students, questions are presented at the conclusion of each chapter. Some of these questions call for a thoughtful opinion, while others encourage the synthesizing of information. Most of the questions do not have ready-made answers, even for knowledgeable musicians.

The first Thinking about Music questions are: Why is ballet considered a fine art and square dancing not so considered? What does ballet have that square dancing doesn't have? Does each type of dance have its own role to play in human life? What are those respective roles?

2

Listening to Music

While in college I had the good fortune to take an art appreciation course. One day the instructor projected a Rembrandt painting on the screen and proceeded to point out Rembrandt's genius in his treatment of light and shadow, the overall design, the brushwork for the hands of one of the figures, and similar features. After about ten minutes I was struck by the fact that every feature of the painting had been present when I had first looked at it, before his explanation, but I had not been aware of them. *I bad looked but not really seen.* I realized then that I needed to be taught to see all that a fine painting has to offer.

It is much the same in music. Most people need to be taught to hear what a fine piece of music has to offer. The purpose of this chapter is to provide such help.

Types of Listening

Aaron Copland, the eminent American composer, has spelled out three types or "planes" of listening. They are discussed here as though they were separate and distinct, but of course they are not. Certain aspects of listening are more important than others at particular moments, but the types are interrelated. An awareness of these types aids in learning to listen to music more fully.

The Sensuous Type

The first type is termed *sensuous*, meaning 'of or appealing to the senses.' In music it refers to the purely physical effect that music has on listeners. When the orchestra works its way to a climactic point and a chill runs up the listener's spine, the effect is primarily a sensuous one. Most of the time, however, sensuous qualities in music are not appreciated in such an obvious way. A rich-sounding chord in the music may cause a certain feeling, but the listener does not break into tears or cheers. The feeling is not that strong; besides, our society teaches us to control our emotions.

Hearing is an action involving a sense organ. Sounds are physical in nature, so the sensuous pleasures of music are not particularly intellectual. They should not be downgraded, however. There is real pleasure to be gained by listening to the tone of a violin or French horn. The majestic sounds of an orchestra or large choral group have a certain inherent excitement about them, just as does the view from the top of a mountain.

Sensuousness in music also involves time and rhythm. Music, because it is perceived in a context of time, is relived with each hearing. A composer can take the musical resources available and spread them out to achieve the maximum effect. A musical work can have a sudden thunderous chord or the delicate tone of a flute at just the right moment. The timing of such effects gives music much of its sensuous impact. In fact, listening to music can be compared to taking a "sonic journey" in which the listeners figuratively "ride along." A musical work seems to unfold as they listen; there are moments of much activity and moments when the music seems more calm and thoughtful.

Listening to music for its sensuous qualities can be carried to excess, however. Listening only for climactic moments or pounding rhythms causes a person to overlook other qualities that music has to offer—something like eating only one of the foods served at a fine five-course dinner.

The Expressive Type

There is little doubt that music has expressive power, since it stimulates feelings in the listener. A particular phrase may evoke a psychological reaction similar to some previous reaction. But music is limited in its ability to designate specific thoughts. For example, music may give an impression of sadness, but it cannot describe what is causing that feeling. Nor can it designate objects. For most people, one sound does not represent "clouds," another "bread," and another "wheel." Music can provide general moods, but not specific thoughts.

The indefiniteness of music's meaning is to its advantage in certain ways, even if it cannot substitute for words. A musical work may be heard by a thousand people, but each will hear it in a slightly different way, depending on each individual's inclinations. Even more important, music can break through the barrier of words. Words are often too brittle, too inflexible, too conventional to allow for full expression. Between the words *pleasure* and *enjoyment*, for example, there are many shades of meaning. As a feeling becomes more complex, it is harder to describe. When a loved one dies, a person feels emptiness, grief, remorse, and powerlessness. But these feelings cannot be fully communicated to someone else, no matter how many words are used or how carefully the words are chosen.

Works of music differ in their tendency to encourage feelings. Sometimes composers associate their instrumental works with an idea or event; this is a type of music discussed in Chapter 22. Such music is usually more effective in its expressive qualities than other works. In vocal music, words and music are combined, with the music designed to enhance the words being sung. In other cases, composers concentrate more on the organization of the sounds, and often their music is more intellectually interesting but less emotionally involving.

The Sheerly Musical Type

The sheerly musical plane, as Copland refers to it, consists of listening for what happens in the music—what notes are being played or sung, at what speed, in what combination with other notes, on what instrument, in what range—the aspects of music that will be discussed in Chapters 3 and 4. This type of listening requires more effort and training than the sensuous or expressive types, but it offers its own satisfactions and rewards. Also, because such listening does require more knowledge and skill, and because an aware-

ness of the sensuous and expressive qualities in music is not so susceptible to training, most music appreciation courses and textbooks center their efforts on this type.

Improving Listening Skill

Helping students listen to music more perceptively is an important goal of most music appreciation courses. Fortunately, listening is a skill in which people can make improvement. The following suggestions for doing so are general, and they are not presented in order of importance.

1. *Adopt a positive attitude toward listening to music.* If a listener is unwilling to make a modest effort, the efforts of the instructor and textbook (no matter how good they may be) will be largely wasted. No one can pay attention and listen for someone else; each individual must do that personally.

It is also helpful to realize that the music that people find interesting and satisfying—and want to hear more than a few weeks during their lives—usually contains complex relationships among its sounds. People quickly grow tired of music that follows set plans or formulas too closely. Certainly music that reaches deep into human psychological character, something art music does, is not going to be understood without some effort.

An attitude of tolerance toward unfamiliar music is also helpful. Sometimes when people have difficulty understanding a work of music or art, they tend to reject it and to think that something must be wrong with it. It is better to assume that the work is an honest effort of a composer. In the case of music that knowledgeable people have generally found to be of high caliber, it is better to assume that it is indeed good and that with careful study and listening less experienced listeners will grow to understand it better and like it more.

An attitude of tolerance also encourages learning. If listeners expend their energies in deciding whether or not they like a piece of music before they know it reasonably well, they probably will not gain enough understanding of or familiarity with it to like it. Listeners should not first ask "Do I like it?" but rather "Is the main theme being played now?" "How does it fit in with what I heard before?" "What is the composer trying to achieve in this portion of the music?" and similar questions.

2. *Work to remember music better.* Memory is absolutely necessary for the comprehension of music. At any particular instant, only one sound can be heard. It may be a single tone or several sounds occurring simultaneously. In any case it can be perceived only for a moment, and other sounds are heard in succeeding moments. To make sense out of these brief sounds, a listener must rely on memory and anticipation. Even anticipation involves memory, because it is a prediction of what will happen in the future based on what has happened in the past.

Visual experiences do not involve the element of time. An entire painting or piece of sculpture can be seen in a moment. (Closer analysis and full appreciation require a longer period of examination, of course.) If memory were to be made an integral part of looking at a piece of art, it might be done like this: A picture that is unfamiliar to the viewers would be covered except for a thin vertical slit. The picture would be seen only as the slit was drawn horizontally across the picture. The viewers' knowledge of the picture would then be the result of (1) their memory of what they have seen, (2) the slit-sized portion they can see at any particular instant, and (3) their guesses about what will be revealed through the slit in succeeding moments. Difficult? Definitely, but that is the way music is perceived, and that is why memory is so necessary.

Generally, the more frequently the viewers see the slit drawn across the picture, the better they will be able to recall it. The fifth time they view the picture in this way their idea of it will be much better than it was the first time. Similarly, the more times people hear a piece of music, the better they remember and understand it. For this reason repeated hearings are one of the best ways to gain a greater understanding of a musical work.

People who are not experienced at listening to the longer and more complex works often found in art music should occasionally listen several times to short sections of a work. This practice is especially useful for understanding portions of music that sound disorganized when heard the first time. Between playings, listeners can run through the music in their minds by closing their eyes and trying to rehear it mentally. This process can be repeated several times, if necessary, until the mental rendition is reasonably accurate.

Memory can be helped by actual participation. Singing, playing, or whistling themes contributes to remembering them.

3. *Concentrate attention first on the main themes of the work.* When hearing a piece of music for the first time, a person cannot perceive

everything in it. Listening to an unfamiliar work is a bit like learning to drive a car. The novice driver must give total attention to executing a few basic actions, such as keeping the car on the road and not hitting other cars or pedestrians. With experience, however, the driver can safely do other things-notice the scenery or carry on a conversation with a passenger. The same principle applies to listening to art music.

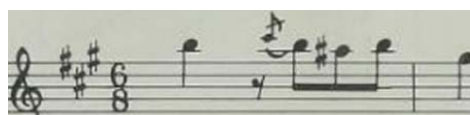
How can listeners know which features of a piece are the main ones before hearing it? In this book the main themes and sections are indicated. Also, "road maps" or "guided tours" of twenty-one compositions are provided in the form of Listening Guides, which are designed to be read and followed while listening to the recordings that accompany the text. When people attend a concert or listen to a recording, program notes are provided

The first Listening Guide, for the first movement of Mendelssohn's Symphony No. 4 (1,A), is on pages 20-21.

4. *Notice what happens to themes and musical ideas as the music goes along.* In his Fourth Symphony, Mendelssohn does some masterful composing that can easily be overlooked unless attention is directed to it. From both the first and third themes he extracts small melodic ideas, or **motives**. From the first theme he takes the opening three or five notes,



sometimes changing the rhythm slightly. From the third theme he takes



five notes and the rhythmic pattern. These motives bob in and out of the music and, in the process, act as unifying ideas for the movement. More than that, at two places well along in the movement, Mendelssohn has the two motives vie with each other, almost as though there were a contest between them.

No one should be discouraged if he or she has some trouble hearing themes and how they are treated during the course of the music. A few people-usually well-trained musicians-can do that on the first try, but most people cannot. They have trouble remembering a popular song, which is usually not as complex, even though they hear it many times

Listening in a Different Way

When trained musicians use the word *listen*, they don't mean merely being aware of some sounds. They are referring to an activity involving intense concentration. College music majors take a course that contains some work on what is called *ear training*. In that portion of the course they listen to melodies, rhythms, and chords, often played by the instructor on the piano or from a tape or disc, then they try to render in music notation what they have heard. While taking ear training, many music majors have discovered an important fact: Until they needed to listen in order to pass the course with a decent grade, they had seldom really listened carefully before. They had *heard* but not genuinely *listened*. As the course progressed, they began to be aware of things in musical works that they had never noticed before.

Many everyday experiences in hearing encourage us *not* to listen carefully. The mind has a way of "tuning out" sound that it does not want or need to hear. The

ticking of a clock, the noise of traffic, and the sound of a refrigerator turning on and off can be ignored. People become good at ignoring music, too. With supermarkets, banks, eating places, and even doctors' offices offering a continual stream of music, to say nothing of all the radios and records being played, much of the time all of us must learn to not notice music. So, we have learned very well how to "tune out" music, and we have little experience in trying to listen intently to music. This is fine for most of the music we hear, but not for art music.

Not only does careless listening become an established habit, but also certain attributes of popular music encourage listening in a way that is too superficial for the more complex sound patterns found in art music. The differences and their effect on listening include:

1. Most popular music is played at a loud dynamic level. By comparison, art music may seem weak and anemic.

during the weeks it is being played often. The ability to listen can be improved through practice, fortunately.

5. *Apply knowledge to what is heard.* For example, knowing that a section of a work is in a certain form, a person can follow the design of the music better and grasp more of its meaning. Information about music helps people know what to listen for and, equally important, what not to listen for.

The first movement of Mendelssohn's Fourth Symphony uses sonata form, which will be explained more fully in Chapter 15. The overall plan

2. Most popular music works are short, often about two and a half minutes long. In an music the listener must pay attention and remember what has been heard for periods as long as fifteen or twenty minutes without a break. To someone not accustomed to art music, listening to it may be like watching a film of a basketball game in slow motion.

3. Few popular works of music present any development of themes. something that is a feature of many types of art music. The main musical idea in a popular song is presented in the first thirty seconds after that the song consists of that idea repeated and a little contrasting material.

4. Popular music often presents more activity and more theatrical features than an music. Performers move around a great deal and make their actions and facial expressions quite obvious. Flashing lights are often a part

of the setting. Art music, except for opera and ballet, has little theatricality. Instead, attention is centered on the sounds being produced.

For these reasons, learning to listen carefully to art music usually requires a different approach. While superficial attention may be satisfactory for most popular music, it is not enough concentration for an music. Therefore, we need to listen with different "sets of ears" to different types of music, just as we use different "sets of eyes" to read a paperback mystery and a great novel or poem. The ability to listen in different ways is done successfully by many people without realizing that they are being so flexible. They apparently make an unconscious mental shift in their approach, and in that way listen to each type of music in the most effective manner.

of the form is three large sections: one in which the themes are presented, one in which the themes are developed or "worked over," and then one in which the themes from the opening section are presented again. Knowing this much about the form of the movement gives listeners a better idea of what is happening in the music, which in turn leads to listening to it more perceptively.

6. *After the main themes are grasped, become more aware of the subtler and smaller features of the music.* There is more to an interesting piece of music than its themes, important as they are. Musical works written

for artistic reasons have skillful manipulations of sounds and many subtleties. A slightly changed pattern of chords, a brief interruption of a rhythmic pattern, a new combination of instruments, the insertion of a fragment of a melody-such apparently small changes can spell the difference between an ordinary piece and an exceptional one.

7. *Encourage personal reactions to what happens in the music.* This suggestion does not refer to grandiose emotions such as those aroused in a drama. However, if listeners pay careful attention to the music, they will have some response to each thing that is heard. These reactions, which change constantly as the piece continues, are among the pleasures of listening to music. Furthermore, they can occur with any piece of music. The opening of Mendelssohn's Symphony No. 4 can serve as an example. In the first three measures of the first theme, the opening pattern of three notes is repeated immediately and exactly. The second appearance makes the melodic figure seem more emphatic. The figure is then heard a third time, but with its upper note higher and longer than before, which makes it seem even more emphatic. These three appearances of the theme generate a reaction in the listener that like most reactions cannot accurately be put in words. The energetic accompanying music played by the orchestra just ahead of and during the first theme also adds a sense of energy and seems designed to grab the listener's attention. It, too, generates a reaction in the listener, one a bit different from the reaction to the three playings of the opening figure.

Now, what has just been described here is only three measures lasting not more than two seconds among the 563 measures in the first movement of the symphony. Virtually every instant of this music and other musical works offers something to which listeners will have a reaction-if they are listening carefully.

8. *Don't conjure up visions or fantasize when listening to music,* unless it is a work specifically composed for that purpose. Sometimes students in elementary school are given listening lessons dealing almost exclusively with **program music**-music in which the composer consciously attempts to associate the work with a particular story or scene. This type of music is in many ways well suited to the requirements of guided listening experiences in the early grades. Unfortunately, however, students sometimes begin to assume that for every piece there must be a picture or story. They conclude that music is incomplete by itself.

One of the rewards of listening to music is being aware of how the sounds are manipulated. Trying to imagine a tender love scene or a ship

plowing through the waves distracts from the qualities of the music itself. Instead of listening, the mind is engaged in creating fantasies, and fantasizing can quickly turn into daydreaming.

9. *Practice learning to listen to music more effectively.* There are several ways to do this. One is to follow the eight suggestions that have just been offered in this chapter

Another is to use the Listening Guides located at various points throughout the book. These guides outline the main features of a musical work, such as themes, prominent solos, and form. On the left-hand side of each guide appears the time at which the feature appears in the recording. Other recordings will have similar but not identical timings. (Whether a listener checks the time while listening is a matter of personal preference; the timings are helpful but not essential.) The benefits come from following the guide *while listening* to the work; otherwise the Listening Guides are rather dry reading. When listeners can follow the guide without getting lost, they can be reasonably sure that they are hearing the main features of the music. Some of the more subtle musical qualities in the music may yet be uncovered, but at least a good start has been made. It is suggested that listening practice on any musical work be spread out over a number of days by doing some listening each day rather than "cramming" immediately before examinations. The first Listening Guide is for the first movement of Mendelssohn's Symphony No. 4, and appears on pages 20-21.

A third way to improve listening skill is through practice with the simplified line scores that appear in the supplementary *Study Guide and Scores*. These scores take the twenty or more lines of an orchestral score (which is discussed on page 85) and reduce them to one or sometimes two lines that present the most important portion of the music at that point. The scores also indicate the instruments heard most clearly and describe the form of the composition and other features. Although most people cannot read music, they are frequently able to follow a line score. (The box on page 22 offers some ideas for doing this.) The purpose, like that of the Listening Guides, is to help the listener follow along without becoming lost. Repeated hearings of a work may be required to be able to do this.

A fourth aid in developing skill in listening is the "Listening Practice" in the *Study Guide and Scores*. These pages center on a particular aspect of music or make comparisons between musical styles.

A final suggestion for improving listening skill is to work with another person at pinpointing changes in short rhythmic or melodic figures. For

Listening Guide

Mendelssohn: Symphony No. 4 (*Italian*)

First Movement (Record/Cassette 1,A)

Exposition

0:02 First theme (*A*) played by violins.

Allegro vivace (lively)



0:19 Brief transition built out of first six notes of theme sounded by French horn and woodwinds.

0:42 *A* theme played again by violins.

0:55 Transition in which fragment of theme is traded between woodwinds and strings.

1:02 Cellos and basses play a portion of *A* theme; music continues as violins and strings play running passages.

1:33 Second theme (*B*) played by clarinets.

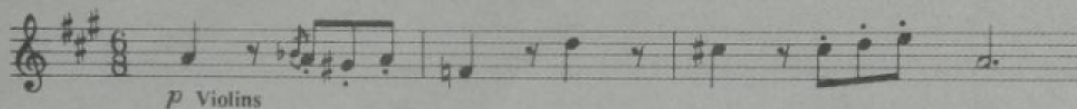


1:45 *B* theme played by flutes and oboes; music continues into an extension of *B* theme.

2:18 Codetta begins with six-note fragment from *A* theme played by clarinet and followed by violin. (Exposition not repeated.)

Development

- 2:43 Section begins without break, opens with many rapidly moving passages skittering among the strings.
- 2:56 Third theme (C) begins in the second violins; is soon imitated by first violins, violas, and then cellos and basses.



Music grows more contrapuntal.

- 3:34 Fragment of *A* theme sounded by woodwinds; music increases in intensity as *A* theme and *C* theme vie with each other.
- 3:59 *C* theme sounded by orchestra.
- 4:14 *C* theme repeated at loud level by orchestra. Fragments of *A* theme are heard again.
- 4:30 Music becomes quieter as *A* theme fragment is heard more clearly.
- 4:44 Oboe sounds long note that leads into *A* theme fragment and transition into final section of the movement.

Recapitulation

- 5:05 *A* theme played by violins.
- 5:25 Transition of rapidly moving notes played predominantly by violins.
- 5:37 *B* theme played by violas and cellos; clarinet and flute play rapidly moving contrasting figures.
- 5:50 *B* theme played by violins and later extended.
- 6:25 Coda begins with appearance of *C* theme played softly by woodwinds.
- 6:49 *C* theme and fragment of *A* theme are played at same time, *A* in the violins and *C* by the flutes and oboes; then the themes alternate.
- 7:14 New melodic material introduced in viola and cello parts, and first violins have rapidly moving notes, music begins to build again.
- 8:17 Movement closes with fragments of *C* theme and a series of brief chords.

Understanding Music Notation

Many people are a bit intimidated by music notation. They look at the music examples in music appreciation textbooks and wonder, "Am I supposed to be able to read music? Am I expected to understand every symbol and term that appears in the examples?"

The answer is both yes and no. No, it is not necessary to understand every symbol in the examples. And no, students are not expected to perform the examples from reading the music. But, yes, listeners can gain an impression of how the music goes from looking at the notes—probably much more of an idea than they may realize. These impressions can be strengthened by following the examples while listening to the music being played on an instrument or recording.

To begin with, the five horizontal lines (called the *staff*) are like a graph that shows how high or low a note is. When the notes

go beyond the top or bottom of the five-line staff, short lines are added to extend the range of the staff. Therefore, it is possible to sense the direction and extent of change. For example, in the Listening Guide for the first movement of Mendelssohn's Symphony No. 4 (pages 20-21), it is easy to tell that the first three notes in the first theme are immediately repeated exactly. The fact that the third group of notes is like the first two but goes up higher is also visible.

Rhythm is indicated by adding a vertical line (called a *stem*) to the note head, or by adding horizontal lines (*beams*) to the stem, or by filling in the head of the note to make it solid rather than a circle, or by adding a dot to the right of the note head. A number of things about the music affect how fast the sounds actually happen, but *in general* the more the note heads are filled in and the more beams

example, one person can make up and play a four-note pattern on a piano, and then repeat the pattern with one note changed. The other person can try to identify which note was changed—the first, second, third, or fourth. A similar exercise can be done when tapping rhythmic patterns. The length of the patterns can be increased as skill improves.

Tests of Good listening

How can listeners tell if they are really hearing what a piece of music has to offer? They can ask themselves these practical questions:

Does the music seem sensible?

Does it move along without seeming to be stagnant?

are added, the faster the music will sound. The note that is just a circle is the longest type; a circle with a stem is half the length of the circle, a note with a stem and solid head is half again as long, a solid head with a stem and beam or a wavy line called a *flag* is half again as long; and so on. Therefore, a reader can tell that the first note in the second theme (page 20) is noticeably longer than the two notes that follow it. The dot, by the way, adds half the value of the note to the note.

Many of the signs and words tell the performer how the music is to be performed. Some of these are quite guessable. For instance, in the example for the second theme of Mendelssohn's Fourth Symphony, below the notes there are two rather long horizontal lines that come together as the music progresses. These lines indicate that the music should grow softer. The chevron-shaped marks above

the notes in both first and second themes indicate that those notes should be accented, or "punched out" somewhat louder. Dots over or under (*not* beside) notes, seen in the third theme, tell the performer to make the notes clearly separated-like dots. Traditionally the verbal directions in the music are in Italian. Some of these are also guessable. *Espressivo* means "expressively" and *risolúto* means "resolutely." *Appass* is an abbreviation for *appassionáto*, a word that every college student should be able to guess. *Cantabile* means "in a singing style," which may not be easily guessed except by persons who have studied French or Spanish. Generally such terms in this book are followed by an English translation in parentheses.

Further information about notation is provided in Appendix B.

Do I hear specific details of form, rhythm, and melody?

Do I keep my attention focused on the music almost all of the time?

Do I have some reactions to the music as I listen to it?

Do I like to listen to the music? Do I enjoy it?

Does it seem interesting?

If the answers to these questions are consistently "yes," there can be little doubt that the listeners are hearing the music rather completely.

Composers intend that their music be enjoyed, that it be found interesting and meaningful. They want their skill at handling sounds to be appreciated, and they want to produce music that will have lasting attraction. When people hear music more fully and with feeling, they are understanding and appreciating it.

Thinking about Music

In Chapter 1 the Thinking about Music questions were about the differences between ballet and square dancing. How would these two types of dancing be evaluated by someone viewing them? Which type of dancing requires more effort on the part of the viewer? Which has more interesting patterns and graceful movements? Does a parallel situation exist between art music and other types of music? If a person wanted to get more out of watching ballet, what might he or she need to do to achieve this?

3

What Is Music? Rhythm, Loudness, and Timbre

Music is one form of sound. Sound results when a vibrating string, reed, or vocal cord sets air molecules in motion. The molecules bump into one another, something like billiard balls, each setting the next in motion. This chain reaction continues until it strikes the eardrum, where the nervous system picks up the impulses and transmits them to the brain. Some of these sounds are considered music and others are not. What makes the difference?

What Is Music?

To be music, sounds must seem organized and meaningful to listeners. The letters t-t-h-r-s-e-c are all letters in the alphabet, but unless arranged into s-t-r-e-t-c-h, they have no meaning. Random sounds cannot be music except

by sheer accident, although in some types of music the performers are given some choices of what to do and/or when to do it.

Most musical sounds possess pitch-recognizable levels of highness and lowness. But not all musical sounds have pitch. The snare drum and the cymbal have been recognized members of the orchestra for 200 years, yet these and a few similar instruments do not play definite pitches. In recent years sounds have been synthesized on tape recorders and electronic equipment, and pitch is not always present in such music. *Music, then, is a combination of sounds that are organized and meaningful, occurring in a prescribed span of time and usually having pitch.*

Because music is organized sounds, what composers do with and to sounds is crucial. Sounds are to music as cloth is to a piece of clothing. Just as tailors cut and shape fabric to create an article of clothing, composers can manipulate and form sounds to create a musical composition. Composers (and, in some kinds of music, performers) can treat a sound in several ways:

They can make it higher or lower.

They can place it before, after, or among other sounds in a series.

They can combine it with other sounds so that several are heard simultaneously.

They can regulate its duration.

They can make it stronger or weaker.

They can change the quality of it in countless ways.

They can use any combination of these six possibilities

For somewhat different reasons, musicians and students learning about music need to think about how sounds are organized into music. Musicians consider what can be done with sounds because it is the substance with which they work. Students of music need to learn some basic terms that describe the various ways in which sounds are manipulated. Although these terms are needed in discussing music, they are even more important in helping people to think about music. Words are implements that permit people to classify objects and ideas and to organize their thinking. Persons who understand the word timbre (which is presented in this chapter) can consider more effectively why one particular quality of sound was chosen instead of another for a certain portion of the music. And when people are more conscious of such choices, they are thinking about music more as musicians do, and they can understand and appreciate better the musical decisions represented in a musical work.

Rhythm

Sound can be manipulated in terms of time. Time can be controlled in two ways: (1) by altering the length or duration of a sound and (2) by adjusting its placement in relation to sounds occurring before and after it. The word that refers to the flow of music in terms of time is **rhythm**. In music it does not refer only to a recurrent pattern, orderly movement, or a repeated situation, as it sometimes does in everyday usage. Musical rhythm is a broad term that has several aspects.

Beat

One aspect of rhythm is **beat**, which many people incorrectly think is a synonym for rhythm. The beat is the recurrent throb or pulse in music. It is felt more strongly in some pieces than in others, but it is present most of the time. In fact, if by some mechanical means a piece of music could be performed without a feeling of beat, listeners would tend to put one there anyway.

There are usually subdivisions and multiples of the beat that are sensed along with it. The beat and its divisions and combinations are something like a large wave on the ocean. Not only is there the main swelling of water, but there are also numerous smaller formations apparent on the wave, and larger tides affecting all the waves. Because there is more to rhythm than just the beat, a piece with a throbbing, pounding beat may actually have little rhythmic interest, at least to musicians, while a quiet-sounding work may have an elaborate rhythmic structure.

The beat remains basically steady, like a heartbeat. A heartbeat that jumps from a couple of fast beats to a few slow ones and then to one or two fast beats again is a sign of physiological disorder. Music with an unstable beat is equally disturbing and unpleasant. (Try to sing a familiar song while purposely speeding up and slowing down the beat. The effect is irritating and unsettling.) Occasionally, of course, it may be desirable to change the beat suddenly, but only if the composer and performer think it is right for that piece of music.

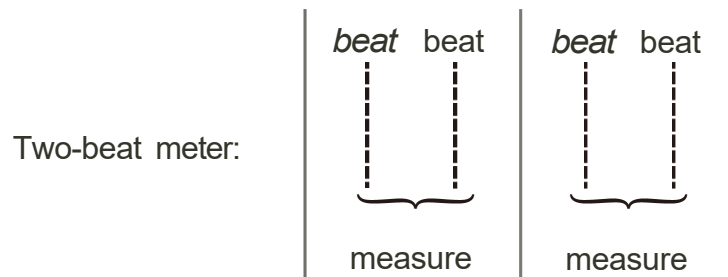
The beat is the unit of measurement for the duration of musical sounds. A musical sound is not judged as lasting for "three seconds" or "one-half minute." It is described as lasting for several beats, one beat, or a fraction of a beat. The time allotment for a note is called the *value* of the note. The notation of rhythm is presented in Appendix B.

Meter

In most music, beats (not notes) are organized into patterns called **meter**. There is a natural human tendency to organize sounds into patterns. The sound of a clock becomes "tick-tock" in our minds, even when all the sounds are the same. Meters are created by emphasizing certain beats: "ONE-two, ONE-two" gives the listener a two-beat pattern; "ONE-two-three, ONE-two-three" gives a three-beat feeling, and so on. Poetry often contains metrical patterns (called *iambic*, *trochatc*, etc.) Here is an example from Edgar Allan Poe's "Annabel Lee":

It was many and many a year ago,
In a kingdom by the sea,
That a maiden there lived whom you may know
By the name of Annabel Lee;
And this maiden she lived with no other thought
Than to love and be loved by me.

In music notation each group of beats is marked off into a separate unit called a **measure** by vertical bar lines on the staff. Each measure contains all the notes to be sounded over the span of time ticked off by two beats, three beats, or whatever the specified number of beats in the meter.



At the beginning of almost every piece, and sometimes within it, can be seen two numbers in the staff, one on top of the other. These numbers are known as the *meter signature or time signature*, and they tell the musician how the beats are going to be grouped and how they will be indicated in the notation. Generally, the top number tells how many beats are in each measure, and the bottom number tells which note value represents the duration of one beat. Exceptions to these rules of meter signatures exist, and these exceptions are explained in Appendix B.

Tempo

The word **tempo** in music refers to the rate of speed at which the beats (again, not the notes) recur. In other words, it is the pace of the beat. Tempo can be indicated accurately by use of a metronome, commonly a pyramid-shaped object whose inverted pendulum can be set to tick at varying speeds. (Electrical models have almost replaced their wind-up predecessors.) Some pieces of music display a marking like this at the beginning: ♩ = M.M. 120. The initials M.M. stand for Maelzel's Metronome. The number refers to the number of ticks that are to be produced per minute. The quarter note means that each quarter note should last for one tick, with other note values being in direct proportion.

Since the metronome was an invention of the early nineteenth century, composers before that time were not able to specify the desired tempo so exactly. They indicated the tempo in a general way by the use of a word such as *fast* or *slow*. Even today, when a metronome marking may be written in the music, it is customary to include verbal indications for the desired tempo. These words give the performer some flexibility in establishing the speed of the piece, and this freedom tends to make for more inspired and imaginative performances.

The words indicating tempo are generally written in Italian, although in the last 100 years some composers with strong feelings of nationalism have chosen to write directions in their native languages. The terms for tempo are especially significant because they are usually listed in concert programs and on record labels to identify the movements of an instrumental work. Here are some of the common terms:

ITALIAN TERM	MEANING	ITALIAN TERM	MEANING
Largo	Very slow, broad	Allegro	Moderately fast, moving briskly
Grave	Very slow, heavy	Allegro molto	"Much allegro," very brisk Lively
Adagio	Slow, leisurely	Vivace	Very fast
Andante	"Walking," moderate tempo, unhurried	Presto	As fast as possible
Moderato	Moderate speed	Prestissimo	
Allegretto	"Little allegro," moving easily		
