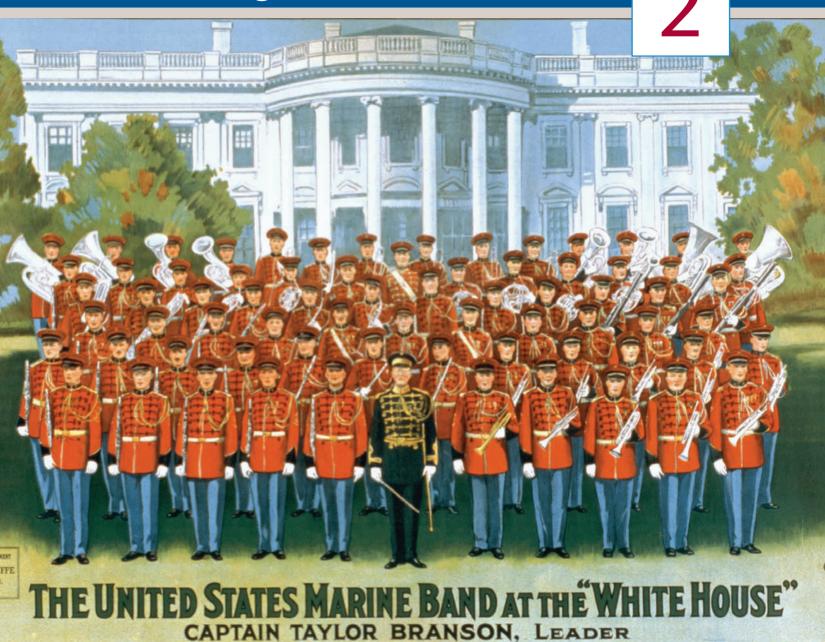
CHAPTER

Listening to Music



CHAPTER GOALS

- To develop tools for listening.
- To understand the basic elements of music.
- To develop a vocabulary of musical understanding.
- To explore the relationships between musical sound and musical meaning.

OUESTIONS FOR THOUGHT

- How does music communicate meaning?
- How might a composer portray heartbreak? Joy? Fear? Surprise?
- How might a composer create coherence in a long piece?

Active Listening

Music is not a universal language. Rather, it is a culture-specific system of communication. Each musical culture has its own particularized grammar and syntax. Thus, sounds that are important in one musical system may not be meaningful in another. As with their first spoken language, children learn to make sense of music without much conscious effort. To understand music's complexities, however, we have to actively train, or "tune," our minds to respond to the proper audible stimuli.

This process is complex, yet relatively easy to understand. The ear itself takes in the enormous range of information from the soundscapes in which we live. But the mind quickly discovers that not all sounds—as is true with the information from our other senses—are equally important. Gradually, we learn to identify relevant sound patterns while disregarding the irrelevant ones. This is how we learn to speak a language. It is also how we learn to understand music.

The key is to actively listen. By focusing on a specific sound source or pattern of sounds, for example, we can follow a single conversation in a crowded room. Likewise, a trained musician can distinguish the second clarinetist's melody amidst the sonic commotion of a full orchestra. We can also train ourselves to simultaneously follow multiple musical ideas (or conversations).

Active listening is an acquired three-step skill that involves attentiveness, analysis, and interpretation. First, the active music listener pays careful attention to the sounds being played. Second (and often simultaneously with step one), she organizes the sounds into meaningful components. Finally, she constructs an interpretation of the performance. Hearing is

easy—our eardrums do that automatically. But *active* listening takes work and requires careful attention. It is also hugely rewarding.

In order to get a better understanding of active listening, think back to a recent conversation you had with a friend. You listened to words for their meanings, of course. But you also listened to much more. You took notice of the speaker's tone of voice, tempo of speech, choice of words, and perhaps even the grammatical syntax. From these clues you attempted to deduce additional meanings that may have been hidden behind the words—for example, if the speaker was confident or nervous, honest or conspiratorial. All of this helped you to develop a rich interpretation of the speaker's true intent.

Compared with speech, music listening is more abstract, although the general process is the same. We pay attention to the instruments used and their sound qualities, as well as the melodic contours and rhythmic inflections. We listen for repeated patterns and musical phrases; perhaps we even tap a foot to help find the proper rhythmic groove. Then we process this information in an attempt to figure out what the composer and musicians are up to—what they are trying to express, and what they want us to think and feel.

The Elements of Music

Performers rely on sonic road maps to navigate their way through a composition. This is true for every musical genre or style. Listeners use road maps too. The biggest difference between a performer's road map and a casual listener's road map is the level of complexity. A performer's map is necessarily intricate and multifaceted. It consists of interrelated informational layers that

"Music is the art of thinking with sounds."

—Jules Combarieu (1859–1916)

are accessed to different degrees according to the demands of the music. These layers include such basic elements as melody and harmony, rhythm and texture, and others. By comparison, a listener's map might initially include only general outlines and expectations—perhaps just the lyrics of a song, or the overall emotional feeling it projects, or the dance beat. It takes active listening to fill in the details of a musical landscape.

Active listening requires mental work. But it is also satisfying work. After all, if you like music now, but are only taking in a small part of the information, just think how satisfying the experience will be when you are processing much more.

So how does one build a road map? You need specific tools, which we will learn to use in the following pages. Musical road maps can be extremely complex, of course. Do not worry about that. Like a house made of bricks, complexity is built by combining relatively simple ideas. These ideas, or building blocks, constitute the six major "elements" or "fundamentals" of music.

- 1. Melody
- 2. Rhythm
- 3. Harmony
- 4. Timbre
- 5. Texture
- 6. Form

In this chapter we focus on each element individually. In the next chapter we will look at three different compositions in order to see how all of the elements work together to form musical meaning.

Melody

At the most basic level, melodycan be understood as a unit of distinctly ordered pitches (ortone) sounding successively through time. Stated in a more natural fashion, one might say that melody is the tune; it is the part of a song or composition you go away singing.

Melodies can portray many different emotions. For example, a melody that moves by step (conjunct motion) from one pitch to the next and is narrow inrange(the distance between highest and lowest pitches) might represent calmness. In contrast, one that has many leaps between high and low pitches (disjunct motion) might represent vigor or anxiety. Melodies that progress

slowly downward from high to low often project relaxation, melancholy, or even sadness. Melodies that move upward often represent resolve or optimism. (Experiment with these ideas by humming a favorite song. Pay attention to how the melody fits with the lyrics.)

Think of a melody as a sentence in tones. As you know from studying English grammar, sentences embody complex ideas that are organized into phrases and held together by periods, commas, and other punctuation. Nouns are stable; verbs suggest action. Still other words function as articles and prepositions, adjectives and adverbs. In a well-constructed sentence, every word has a function—a place in the grammatical whole. So too is the case with the various tones that comprise melodies.

The Western melodic system is built upon the principle of tension and release. Each of the seven tones of the major scale—do, re, mi, fa, sol, la, ti, (do)—embodies a different emotional tendency. "Do" (the home tone or tonic) and "sol" (the dominant) represent stability and rootedness (like nouns). Other scale degrees, particularly "ti" and "re," are relatively unstable and have action tendencies (like verbs). They generally create tension, such as a longing to return to "do." So it is with every scale tone. Each has its own distinct personality, like the different colors of a rainbow or the green/yellow/red of a traffic signal.

The term "scale" comes from the Latin *scala*, meaning ladder. Like a ladder, musical scales consist of ascending and descending steps; on each step resides a tone.

The Western scale is divided into 12 equidistant steps called half steps (or semitones). A scale that contains all 12 notes is called a **chromatic scale** (see Figure 2.1).



FIGURE 2.1 Chromatic scale

Most pieces of Western music use either major or minor scales, which consist of specific patterns of whole steps and half steps. The pattern of the major scale is shown in Figure 2.2.

Both major and minor scales consist of seven tones that eventually repeat as the pitches extend higher or lower. The interval (or distance) from one tone to its upper or

FIGURE 2.2 Major scale

Ascending	Descending				
do re mi^fa sol la ti^do	do^ti la sol fa^mi re do				
W W H W W H	HWWWHWW				

Minor Scales In the Western melodic system there are three types of minor scales: natural, harmonic, and melodic. All three use a lowered third scale degree whereby "mi" becomes "me." The differences among the three are in the raising and lowering of the sixth and seventh steps. We present the simplest of the three, the natural minor scale, which has a lowered sixth degree ("ti" becomes "te"; see Figure 2.3).

lower repetition (for example, "do" to "do" or "sol" to "sol") is called an octave. In Western art music, some hear the major scale as joyful, the minor scale as sorrowful. We shall see that this connotation is not always the case, but you might think of major tonalities as bright in color and minor tonalities as dark. Remember, though, that these descriptions are stereotypes. They serve only as a starting point.

FIGURE 2.3 Natural minor scale

Ascending	Descending					
Do re^me fa sol la^te do	Do te^la sol fa me^re do					
W H W W W H W	$W \ H \ W \ W \ W \ H \ W$					

DID YOU KNOW?

WESTERN MUSICAL NOTATION

Western musical notation developed in Europe during the ninth to fifteenth centuries. Pitch is indicated by placing symbols (called notes) on a five-line **staff**. Different clefs—treble and bass are most common—indicate the overall range of the staff. There are various ways to indicate the duration of notes. Notes of longer duration have white noteheads, shorter ones are black. Very short notes add "flags" on the stems. The more flags, the shorter the note. A time signature shows the meter (top number) and which type of note gets the beat (bottom number).





The original 1935 production of Porgy and Bess.



"Summertime" CD I/Track 1 Download track 1

Melody in the Western World: "Summertime" from Poray and Bess Listen to the first verse of "Summertime" from the opera Porgy and Bess (1935) written by George Gershwin, DuBose and Dorothy Heyward and Ira Gershwin. Pay special attention to the words of lyricist DuBose Heyward (1885–1940). The setting is a steamy evening along Catfish Row in Charleston, South Carolina. The verse divides into four complete sentences. The first three are strangely lethargic, lacking a tendency for action. Each requires more context. When we hear, for example, in the first line that the "livin' is easy," we do not really know what to make of this news. Is easy livin' good? Bad? Indifferent? Why should we care?

We have similar emotional responses to the second and third lines. We know about jumping fish, the successful cotton crop (which tells us it is mid summer), and a pretty mamma and rich daddy. But what to do with the information? Resolution finally arrives in the fourth sentence, "So hush little baby don't you cry." Now we have context. This is a lullaby. And yet, with that knowledge we perhaps feel some inner disquiet.

Why spill tears in an opera's opening scene if life is so placid?

Maybe it is not.

If you are reading actively, and thinking symbolically, you realize the Gershwin's and Heyward's have created a sense of social disquiet.

Now let's listen to the melody. Mirroring the poetry, Gershwin and his collaborators divide the music into four melodic sections or **phrases**. After each, there is a short pause, allowing time for the singer to breathe and time for the listener to reflect.

Notice that the first and third phrases are virtually identical in terms of melodic contour. For purposes of analysis, we will label them as "A" phrases. Also notice that the A phrases meander downward in the same easy manner.

Relaxed though they are (and like the lyrics they enhance), the phrases do not provide a sense of resolution. Why? Because the phrases end on the pitch "sol," the dominant, rather than "do," the tonic. The listener is left hanging.

The second phrase (the "B" phrase) is similar in shape and downward direction to the A phrases, but the range is narrower. As B begins, we wonder if it will provide the anticipated resolution to the A phrase, but by ending on "re," it does not. Once again, there is no resolution.

Do you see how the Gershwin's and Heyward's are delaying satisfaction? They make us continue to listen to the complete story.

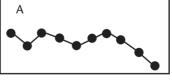
The awaited resolution finally comes with the fourth phrase (the "C" phrase), which begins on the same low pitch that ended the A phrases. Notice that in contrast to the first three phrases, which all began on the same pitch and moved downward, the C phrase has a generally upward direction, though in the end it relaxes downward to "do," the tonic.

Figure 2.4 shows a simple map of the melodic structure of "Summertime."

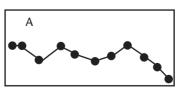
Notice the tidy balance of the ABAC format. Four distinct sections divide neatly into two main groupings: AB and AC.

Now let's fully consider the relationship between melody and words. Hearing the melody without the words, one might characterize the emotional content as beautiful, but lethargic . . . perhaps even sad.

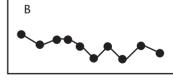
What about the meaning of the lyrics? At first they seem rather optimistic, don't they? Living is easy; Daddy is rich; Mamma is goodlooking. But then the Gershwin's and Heyward's stirs the crying child into the mix.



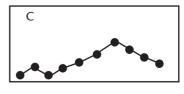
Summertime and the living is easy



Your daddy's rich and your mamma's good lookin'



Fish are jumpin' And the cotton is high



So hush little baby Don't you cry

FIGURE 2.4 Melodic map of "Summertime"

When words and melody are combined, perhaps intuitively we become aware that something is not quite right. We note the eerie calm that precedes a terrible storm. Maybe daddy is not so rich after all. And maybe Mamma's good looks are going to bring a heap of trouble.

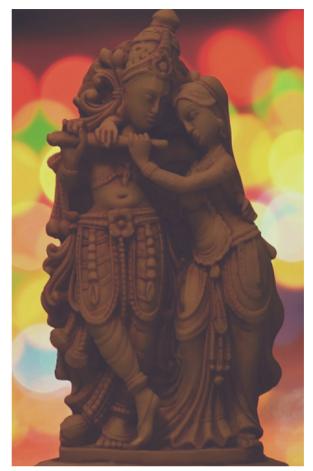
Take a moment to consider what a strange, wonderful, and emotionally complex world the composer and lyricist have created. It is as if the plain meanings of everyday life have been suspended in a dream, the meaning of which is just out of conscious reach. Such is the power of a well-constructed song.

Melody in the Non-Western World: An Example from South India We have seen that Western melodies are built on specific concepts and expectations. Composers engage those ideas when writing music. The Western system is not universally employed, however. In the classical music of India, for example, melodies are based on collections of pitches called *ragas*.

Ragas may be compared to Western scales in that both comprise a specific set of pitches. In both systems, these individual pitches have particular personalities, including tendencies toward stability or motion. But there are also important differences.

- Even though two ragas may contain exactly the same pitches, one might be distinguished from another:
 - by emphasizing different pitches.
 - by employing characteristic turns of phrase.
- Individual ragas are associated with specific emotions or spiritual states. Some are associated with particular times of the day or night.
- The Western system employs just a handful of scales; thousands of ragas are theoretically possible.

Like the Western major and minor scales, ragas use a system of seven syllables to distinguish the *svaras* (tones): sa-ri-ga-ma-pa-dhani-(sa). The intervallic relationships between the tones, except for the fixed foundational interval between the "pillar tones" of "sa" and "pa," may be slightly larger or smaller from one raga to the next. Thus a raga's tones, which might fall between the measured half and whole steps of the Western scale, sometimes sound unusual to the Western ear.



Krishna and his consort Rahde.

Generally speaking, classical Indian music begins with an improvised and rhythmically free section known as *alapana* (*alap*). Within the alap, the raga's various tonal, melodic, and emotional characteristics are introduced. In the next listening guide, we will listen to a brief alap excerpted from a longer performance by South Indian *venu* (bamboo flute) player Dr. N. Ramani. As you listen, notice the general melodic outline as first the instrument's lower range, then upper range, are explored. Notice as well the melody's mercurial quality.

Rhythm

Rhythm refers to the ways in which music is organized into distinct time units. To illustrate this, we will study the hymn tune, "Amazing Grace," the rhythm of which is built on a general pattern of short and long tones (see Figure 2.5).

short	long	short	long	short	long	short	long
A-	ma-	zing	grace;	how	sweet	the	sound.

FIGURE 2.5 "Amazing Grace" rhythm pattern

LISTENING GUIDE



EXCERPT FROM *MANASU VISAYA* BY TYAGARAJA (NATAKURANJI RAGA AND ADI TALA)

ALAPANA

Performed by Dr. N. Ramani (venu), T. S. Veeraraghavan (violin)



	ALALANA
0:00	The music begins with the soft sound of the "tambura," a resonant string instrument that plays a drone on "sa" and "pa." The tambura, which continues throughout the composition, has the essential role of providing the tonal backdrop against which all other pitches are understood. Even so, once the other instruments enter, the tambura is hardly noticed.
0:09	The venu enters and begins the essential process of unpacking and exploring the raga. Notice that Dr. Ramani immediately establishes his independence from the raga's pillar tones ("sa" and "pa") by entering on "ga." He stays on that single tone for nearly five seconds before relaxing downward and oscillating between "sa" and "dha." There is a sense of resolution when "sa" becomes the focus beginning at 0:18 and continuing through 0:26. Then the melody momentarily drops down to "ma" before rising (at 0:35) to a second held tone on "ga" (the same pitch as the opening). A violin follows the flute. Sometimes it follows the melody exactly; other times it plays the melody in a slightly different version or holds a single steady tone.
0:38	Though melodic movement is both up and down, there is a general upward movement as the flute's upper range is explored. The upper pillar tone "sa" is reached at 1:03 and finally "ga" (one octave above the melody's opening tone) and its upper neighbor "ma" are reached at 1:36. This is the high point of the alap. From here the movement generally relaxes downward, a sign that the section is moving toward its completion. Notice that phrases now tend to end on "sa," the raga's home tone.
1:57	The flutist introduces a brief motive that foreshadows the precomposed song that follows the alap. To the informed listener, this is another clear sign that the alap is nearly finished.
2:31	There is a sense of relaxation as the flute improvisation comes to a final end on the tone "sa." Now the violinist briefly explores the raga's tones and brings the alap to its conclusion.

ACTIVITIES AND ASSIGNMENTS

- Take a familiar piece and map its melodic phrases. Which phrases sound final? Which sound incomplete? On what pitch does the melody want to end? Where in the phrases are the highest notes? The lowest? Is the melody conjunct or disjunct? Is the range narrow or wide? How do these characteristics affect your emotional response?
- Using an online video source, find examples of traditional music from non-Western cultures. Does the melodic language sound different from what you are used to? Describe the differences using the previous concepts.

A crucial element of rhythm is pulse, or the **beat**. Understanding the beat is simple; it's what you tap your foot to, what you step to when you dance, and what soldiers march to. Some think of pulse as the musical heartbeat that underlies the musical flow.

Beats are generally organized into repeated groups (measures, or "bars") of strong and weak pulses. In most Western music, the first beat of every measure (the downbeat) is strong. The number and accentuation of beats in each measure determines a composition's meter. Meter is a fundamental organizing principle, a temporal yardstick that organizes rhythm's various elements into a cohesive whole.

To find the beat in "Amazing Grace," recite the previous lyrics and tap out a steady pulse that gives one tap to the "short" tone and two taps to the "long" tone. When long and short patterns are thus combined we get a repeating pattern of three pulses, called triple meter. Music that groups into two beats per measure is called duple meter; four beats per measure is quadruple meter.

So far, the concept of rhythm seems pretty simple. But there is one more issue to tackle. Where does the meter begin? On which pulse? As a general rule, begin your metric analysis with a strong pulse. That will be the downbeat. Thus in "Amazing Grace," the meter begins not with the vowel "A-," but with the accented syllable "ma," a fact we have indicated by using bold typeface. The syllable "A" is a pickup beat to the meter's beginning (see Figure 2.6).

FIGURE 2.6 "Amazing Grace" metric analysis

Notice that lyricists generally place the most important words or naturally accented syllables on strong beats. Thus in "Amazing Grace" the accented syllable "ma" is placed on the strong beat one, as are the colorful words "sweet" and "sound."

The last aspect of rhythm we need to discuss here istempo Simply put, tempo refers to the pace at which the beats go by. It is fine to refer to tempos as fast or slow, but classically trained musicians, who follow a European system developed over centuries, often use Italian terms, such asadagio(at ease), andante (walking tempo), and allegro (lively). These are the words you

will generally see in the program book for a recital or symphony orchestra concert, even in English-speaking counties.

Tempo might stay steady throughout an entire work, or it might vary. Tempo can change gradually or suddenly. Often tempo changes signify a shift in emotional focus, or a shift from one musical section to another.

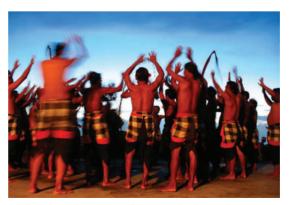
MUSICAL THEMES THE RAMAYANA

The Ramayana (Rama's Journey) is an epic Sanskrit poem of 24,000 verses. Its authorship is attributed to the poet Valmiki, who lived during the fourth century BCE.

Valmiki tells the story of Rama (a worldly incarnation of the Hindu deity Vishnu) who lives on Earth unaware of his divine heritage and worldly mission. Throughout his life, Rama endures hardships and learns many difficult lessons.

Rama's greatest trial begins when his wife Sita is kidnapped by the many-headed demon Ravana, who desires Sita for himself. With the help of the monkey god Hanuman (an incarnation of Shiva) and Hanuman's monkey army, Rama is eventually able to defeat Ravana, an act that brings peace to the world.

Rhythm in the Non-Western World: An Example from Southeast Asia Just as concepts of melody vary from culture to culture, rhythmic organizations also differ. A contrasting approach to rhythmic organization can be found in Bali, Indonesia, an island famous for its physical beauty, brass gamelan orchestras, and interlocking rhythms.



A kecak performance photographed in Bali.

These interlocking patterns are demonstrated here in kecak (pronounced ké-chak), a composition for narrator and men's chorus.

Drawing from the Hindu epic the *Ramayana*, the narrator tells a story from Rama's battle against Ravana. As he tells the story, perhaps acting out various roles along the way, the men's chorus takes on the role of the monkey "army," which chatters away. To achieve this effect, the men divide into groups and shout out monkey-like sounds ("cak") in interlocking rhythms that include short spaces for breathing. The Balinese call this interlocking technique **kotekan**, a central rhythmic foundation of Balinese music. It may be performed vocally (as in this example) or, more commonly, on the instruments of the gamelan.

A standard kotekan pattern for three groups of kecak performers appears in the following diagram. Form a trio (or larger group with two or more on each part) and try performing it. Reading horizontally from left to right, sing the patterns while clapping the beat. First, have everyone sing the same line together. Then, divide the parts so that each person (or group) sings a different line. You will notice that all the patterns have the same exact sequences of sounds and silences, but

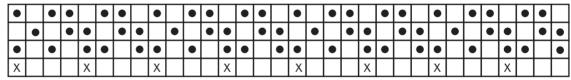
because each pattern fits differently against the beat, each feels different. When the patterns are performed together, every temporal subdivision is filled with a sound. (This is also the case when either patterns one and two or patterns two and three are performed together; see Figure 2.7.)

Harmony

Harmony occurs when at least two different pitches sound at the same time, such as when two people sing together with different material or when a musician strums the strings of a guitar. Harmonies that sound pleasing to our ears are said to be **consonant**. Those that sound harsh or clash are said to be**dissonant**. As a general rule, dissonant harmonies are used to produce feelings of anxiety or tension.

Different cultures and time periods have different standards of what is consonant and dissonant. A musician in the twelfth century, for instance, would likely find the works of Wolfgang Amadeus Mozart (1756–1791) to be jarringly dissonant. Today, however, we consider Mozart's music to be quite consonant.

In Western art music, three or more pitches that sound at the same time create a **chord**.



Each square represents a steady pulse

Clap the beat on X

- Represents "cak"
- Represents silence

FIGURE 2.7 Kotekan pattern

OUESTIONS FOR THOUGHT

- What would a composite diagram of all the kotekan parts look like?
- Notice in "Amazing Grace" that the full syllable is "maz," but that when sung the "z" is moved back and attached to the "ing." Experiment singing the phrase both ways. Why does the "z" get moved?
- How do you identify meter in music without words? What are the cues?

ACTIVITIES AND ASSIGNMENTS

- Tap out the beats to a song you know. Is there a pickup beat? Do the beats group into twos/ fours (duple/quadruple) or threes (triple)? Have one person clap the rhythm of the piece and one person tap the beat. What's the difference between the rhythm and the beat?
- Compose an interlocking pattern for two people. Perform it for the class.
- Find a video of kecak on the Internet. Can you hear a pulse?

Chords are built ac-cording to specific rules. The most basic rule is that a simple three-note chord, or triad, is built upward from its root in alternating scale tones. A triad built on "do" (remember the scale tones: do, re, mi, fa, sol, la, ti, do) will skip "re," include "mi," skip "fa," and end on "sol." The resulting triad will be do-mi-sol.

Chords function in a manner similar to melodic scale tones in that they too have varying degrees of stability. A chord built on the first scale degree (do-mi-sol) is the most stable. This is called the "tonic" or [Roman numeral] I chord. Most pieces in the Western tradition begin and end on the tonic chord. The "dominant," or "V" chord, is second in foundational importance to the tonic chord. It is built on the fifth scale degree (sol-ti-re). The dominant chord is slightly less stable than the tonic chord and has a tendency to return home to the tonic. Third in foundational importance is the "subdominant," or "IV" chord (fa-la-do). The subdominant tends to move either to the tonic or the dominant (see Figure 2.8).

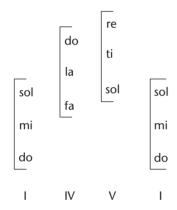


FIGURE 2.8 I-IV-V chord progression

These three chords make up the harmonic backbone of Western music. If you string these together [subdominant (IV), dominant (V), and tonic (I)] you get a common ending formula known as a cadence.

Listen to the chorus of "Hang on Sloopy," a 1965 #1 hit song by The McCoys. Notice the repeating I, IV, V, harmonies accompanying the melody. Focus on the bass tones that sound the bottom notes of the chords. Instruments introduce the harmonies: I, IV, V, IV and repeat the progression after every line of text (see Figure 2.9).

Although harmony is central to most Western music, it is not a universally employed device. Traditional music cultures in the Middle East, India, Asia, and Native America do not use harmony.

ACTIVITIES AND ASSIGNMENTS

■ Keeping the alternating-scale-tones rule in mind, build a triad based on "re"; then build a triad based on "la." Notice that chords often share notes with one another. Triads built on "do" (do-mi-sol) and "la" (la-do-mi) have two notes in common. Triads based on "fa" (fa-la-do) and "do" (do-mi-sol) have one note in common.

I IV V IV I IIV V IV
Hang on Sloopy; Sloopy hang on (instruments)



FIGURE 2.9 "Hang on Sloopy" harmony

"Hang on Sloopy" CD I/Track 3 Download track 3

Timbre

Every sound has a particular tone color or timbre. It is through timbre that you can tell the difference between your grandmother's voice and your girlfriend's, a flute and a violin, and even one violin from another. During the course of the semester we will find that timbre can identify not only the individual or instrument producing the sound, but perhaps also the particular culture from which the music derives. In vocal music, for example, certain cultures value purity of tone whereas others value tones that are grainy or strongly nasal. So too, some instruments have a harsher quality than others. An instrument's timbre depends on a combination of three factors: (1) the size of the

DID YOU KNOW?

MUSICAL INSTRUMENT CLASSIFICATION SYSTEMS

Musical instruments are categorized in many ways, though the most common in the Western system is that used in the modern orchestra: strings, woodwinds, brass, and percussion. The early twentieth-century German scholars Kurt Sachs and Erich von Hornbostel created a more formal classification system based on five large categories: chordophones, aerophones, membranophones, idiophones, and electrophones.

instrument, (2) the material from which it is made, and (3) how the sound is produced (see sidebar, Musical Instrument Classification Systems). Playing styles can also influence instrumental timbre.

A symphony orchestra (sometimes just called "symphony," "orchestra," or "philharmonic") is a Western art music ensemble consisting of strings, woodwinds, brass, and percussion instruments. In the eighteenth century, when these ensembles were first established, the typical orchestra rarely had more than 30 players. Over the years, as concert halls became larger and as composers imagined new textures and timbres, the orchestra grew. Today's ensembles may include 100 or more instrumentalists.

Most large cities have a resident symphony orchestra. In the United States alone there are nearly 2,000 such ensembles, ranging from unpaid community groups to prestigious full-time ensembles employing some of the world's finest musicians. In the 2008/2009 season over 25 million people attended a symphony orchestra concert.

Texture

The ways in which different musical parts fit together is called texture. Music can have different textures. A large orchestral texture might be thick, like velvet, whereas a solo flute might be silky thin. Music theorists categorize texture according to the following four characteristics.

- 1. Monophony
- 2. Polyphony
- 3. Homophony
- 4. Heterophony

Monophony consists of a single musical line without accompaniment. Even though many voices or instruments might be heard, as long as all are sounding the exact same line, the texture is monophonic.

This "Kyrie eleison" is an example of a monophonic, sacred chant from the Middle Ages (see chapter 6: Music and Spirituality). Notice that all of the voices are singing the same melody.



<u> ACTIVITIES AND ASSIGNMENTS</u>

- Have students who play instruments bring them to class to demonstrate. After hearing them played, try to describe their sound.
- Make an idiophone with things in your backpack or on your desk. Can you make a chordophone? An aerophone?
- Notice how people change the timbre and pitch of their voices when talking to babies, yelling at a sports referee, or talking in front of a crowd. How and why do you change the timbre of your voice?
- As you listen to the pieces discussed in later chapters, describe the timbre of the instruments you hear (nasal, clear, rough, etc.). Then consider how the timbre affects the meaning of the work.



Standard symphony orchestra seating arrangement.

OUESTIONS FOR THOUGHT

- Where does an acoustic instrument leave off and its electric counterpart begin? Rock guitarists, for example, create many new sounds through electronic effects.
- Theater companies, as well as TV and movie producers, try to save money by reproducing the sounds of instruments electronically rather than paying musicians. What effect does this have on the music? On the musicians?
- In the seventeenth and eighteenth centuries, the trombone was associated with the underworld and death. Are certain instruments associated with particular ideas today?

Polyphony involves several independent lines sounding simultaneously. The simplest kind of polyphony is a round (also called a canon). A good example is the children's song "Row, Row, Row, Your Boat" in which everyone begins singing the melody at a different time.

In more complex examples of polyphony, the independent melodies are not necessarily the same tune. Instead, complementary lines are woven together like threads in a tapestry. Much of the music of the Renaissance and Baroque periods was written polyphonically, and composers relied on a strict set of rules to combine the different lines. Later composers often used polyphony to indicate a "learned" or elevated style of music.

Listen to a six-voice polyphonic setting of a Kyrie eleison text by the Renaissance composer Giovanni Pierluigi da Palestrina (ca. 1525–1594). Notice how each voice enters separately, one after the other (see Figure 2.10 and chapter 6: Music and Spirituality).

soprano	1				
alto	2				
tenor 1	3 .				_
tenor 2	4				_
bass 1	5				_
bass 2	6				

FIGURE 2.10 Diagram of voices in Palestrina's "Kyrie eleison"

Homophonic texture consists of a melody plus chordal accompaniment, such as a folk singer accompanying herself on guitar. The basic idea behind homophony is that the tones sound together as a whole rather than as individual parts. For example, when a musician strums a six-string guitar, the listener hears a single event comprised of six tones, rather than six individual melodies each with its own particular identity. In the Western tradition, the vast majority of hymns, folk tunes, and popular songs are set in a homophonic texture. Listen to the Robert Shaw Festival Singers singing "Amazing Grace." Concentrate on the texture, particularly the relationship between the melody and the accompanying chords (see chapter 6: Music and Spirituality).

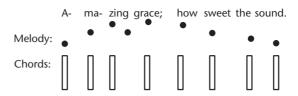


FIGURE 2.11 Vocal shape and chord accompaniment for "Amazing Grace"

MUSICAL TERMS

DYNAMICS

Dynamics refer to the volume of a note or passage of music. In Western music, Italian terms are used to indicate how loudly or softly to play.

Forte (f) = loudPiano (p) = soft

Other dynamic markings include:

fortissimo (ff), louder than forte mezzo-forte (mf), moderately loud mezzo-piano (mp), moderately soft pianissimo (pp), softer than piano

The term "crescendo" means to get louder, whereas "decrescendo" means to get softer.



"Palestrina's Kyrie from the Pope Marcellus mass" CD I/Track 5 Download track 5

Heterophony pertains to the same melody being performed slightly differently by two or more performers. For instance, one singer/player might add embellishments to his version of the melody in order to differentiate it from the main tune. Or, he might perform it with slightly different rhythms or a slightly different tempo from the other performer. This texture is uncommon in Western music, but is used quite often in Middle Eastern and Native American cultures.

Listen to "His First Hunt," sung by an Inuit couple from Repulse Bay, Canada. In this example you hear the singers each sounding a slightly different version of the same melody. Notice that one performer sings just a bit behind the other, and at times interprets the melody slightly differently. They sing together, but maintain independent musical voices.

"On his first hunt He killed a fine seal Even in the dark"



"Amazing Grace" CD I/Track 6 Download track 6



"His First Hunt" CD I/Track 7 Download track 7

ACTIVITIES AND ASSIGNMENTS

■ With a partner, read the following words aloud in exact unison: "Monophonic music requires perfect blend." If you succeeded in being in unison, you performed in a monophonic style. Now, choose a new sentence that your partner does not know. Say it aloud and have your partner repeat what you say as she hears it. Inevitably, she will speak her words slightly behind yours, and maybe even leave out or change a word. This is heterophony.

MUSICAL TERMS

GENRES

The word "genre" means "type" or "kind." Most cultural artifacts (art, literature, cinema, music, etc.) are labeled according to genre (novel vs. poem; watercolor vs. oil painting, for example). The following list includes the more common genres of Western art music (i.e., those you are likely to encounter in a concert setting).

Song: a work for a solo vocalist, usually with piano accompaniment (note that the term "song" is not a generic term for all pieces of music).

Symphony: a large-scale work written for a symphony orchestra, usually consisting of three or four separate sections called movements.

Concerto: a work for a solo instrument accompanied by a symphony orch0estra, usually in three movements.

Sonata: a multi-movement piece either for solo piano or for piano plus one other instrument. For instance, a violin sonata would be for violin and piano.

Opera: a staged drama told in music.

Chamber music: any number of instrumental combinations written for nine or fewer players. The most prevalent is the string quartet, written for two violins, viola, and cello.

Form

Form refers to the overall shape or structure of a piece of music. Composers generally have a basic form in mind before starting to write. Sometimes the form is the composer's invention, but often it conforms to a traditional structure. Examples of traditional Western art music forms include binary (two parts); ternary (three parts); and rondo, in which a familiar refrain alternates with new material. Forms

common to Western popular music include 32-bar song form and 12-bar blues. Composers use their full arsenal of musical elements to distinguish different sections of a form, including melody, rhythm, harmony, texture, and timbre. Through repetition, contrast, and development, composers can both set up and thwart expectations; they can create tension or relaxation, chaos or order.

<u>ACTIVITIES AND ASSIGNMENTS</u>

Find artworks or poetry (or create your own) that illustrate the equivalent of binary, ternary, and rondo forms. How are the different sections delineated?

CONCLUSION

This chapter equipped us with a vocabulary comprising the basic tools used to describe, order, and analyze listening experience. In subsequent chapters we put these tools to use in making sense of our musical world. The repertoire is fantastically diverse, but our general analytical techniques can be applied universally. With practice we will hear new complexities within single compositions, as well as connections between different musical genres, musical cultures, and historical eras.