2018–2019

MUSIC

Resource Guide

The 1960s:
A Transformational
Decade in Music

USA**D**® United States
Academic Decathlon®

Table of Contents

Northwest Pa. Collegiate Academy - Erie, PA

Introduction

The 1960s were a transformational decade in music. Classical music had undergone major changes in the preceding decades, and the 1960s continued along this innovative path. Musical theatre had experienced a "Golden Age" in the years leading up to 1960, but by the end of the 1960s was headed in a different direction. In film and television, directors and composers experimented with new ideas and techniques in the 1960s. Each decade of the first half of the twentieth century brought new ways of playing jazz, and the 1960s were no exception. Music technology and the music industry changed rapidly during the 1960s. The biggest changes in music during the 1960s, however, came in popular music.

In 1959, the top-selling recording in the United States was a humorous country music re-telling of the story of the Battle of New Orleans during the War of 1812. The first song to hit number one that year was another novelty song, the "Chipmunk Song" by the Chipmunks with David Seville. The top albums were from conservatively composed musicals like South Pacific and My Fair Lady, a television soundtrack with jazz-influenced orchestral music by Henry Mancini, and family "Sing Along with Mitch" recordings. By 1970, the most popular music of the day was quite different. Top-selling singles included songs like "Mama Told Me (Not to Come)" by the group Three Dog Night, about a bad drug trip; "War" by Edwin Starr, a funky protest against the futility of war; and the hard-rocking "American Woman" by the Guess Who. Top albums included the second and third albums by the proto-heavy metal band Led Zeppelin; the last two Beatles albums; and albums by Santana, Creedence Clearwater Revival, Simon and Garfunkel, and Blood Sweat & Tears. The soundtrack from the documentary Woodstock, about the 1969 countercultural music festival, topped the charts for four weeks.

This Resource Guide will explore the many changes that occurred in music during the 1960s. Section I introduces you to music's specialized vocabulary and notation system. It discusses many of the ways that musical pitches are manipulated and combined, and it identifies larger relationships and structures that can be crafted from these

components. The rest of the Resource Guide considers a series of musical innovations and events that changed the course of music during the 1960s and beyond. Section II focuses on the early 1960s, the "brief shining moment" that was the optimistic period of the Kennedy administration. Section III follows the developments during the heart of the 1960s—after the assassination of John F. Kennedy—an unsettled period when "a change" was "gonna come." Section IV summarizes the troubling years at the end of the 1960s, a tumultuous time that was so full of rising Vietnam body counts, assassinations, riots, drug problems, and even murder, that each day might reflect John Lennon's lyrics—"I read the news today, oh boy."

NOTE TO STUDENTS: Throughout the resource guide you will notice that some terms have been boldfaced and others have been both boldfaced and underlined. Boldface indicates a key term or phrase. Terms that are underlined as well as boldfaced are included in the glossary of terms at the end of the resource guide. With regard to the listening examples, if one were to create an ideal compilation of music from the 1960s, it would surely include recordings by Bob Dylan, The Beatles, the Rolling Stones, the Beach Boys, and Jimi Hendrix, among others. Unfortunately, it is exceptionally difficult and prohibitively expensive to license the music of these iconic artists. Despite sincere and prolonged efforts, USAD was not able to license tracks by these musicians for use on the listening CD. (In some cases, it was feasible to license cover versions, such as the Byrds' cover of Dylan's "Mr. Tambourine Man" and Otis Redding's cover of the Rolling Stones' "Satisfaction.") All of these artists made significant contributions to the music of the 1960s, and they and their works are discussed in the text of the resource guide. We hope that students will find time to extend their exploration of the music of the 1960s beyond the scope of this resource guide and the companion CD by listening to original recordings by these artists, many of which are available online. However, only excerpts from the fourteen tracks on the USAD Music CD will be included on the listening portion of the music test.

SOUND AND MUSIC

DEFINITIONS
Music Is Sound Organized in Time

The broadest definition of music is "sound organized in time." Many kinds of sounds—including noises and tones produced by any means, not only by musical instruments—can be used to create music, particularly in the modern era. All that is required is a time frame, sound waves, and a cognizant mind to perceive and interpret those sounds. Common but not required factors include a person (often called a composer) who first imagines the music, human or mechanical performers to generate the sounds, and a mechanical means of recording and reproducing them. Sometimes the composition and performance happen simultaneously (often as **improvisation**, but sometimes via electronic composition). Some degree of human intention and perception are necessary for music to exist, but defining this exactly continues to puzzle scientists and philosophers, who debate questions like whether birdsong can qualify as music, whether accidental sound can be music, or whether a phonograph playing in the forest is music if no one hears it.

Music of the Western World

It should be noted that many cultures have markedly different views of music; indeed in some cultures, music is so interconnected with ritual, language, dance, and other aspects of life that in some languages there is no separate word for "music." At certain times in history, Western traditions have encountered and incorporated the music of non-Western cultures. And, in recent decades, globalization has made the boundaries between Western and non-Western culture increasingly permeable. Nonetheless, the material in this guide will pertain to what is called the "music of the Western World"—the musical traditions that developed in Europe in the past two millennia and their cultural extensions in the Americas.

THE PHYSICS OF MUSICAL SOUND
Sound Waves

In the abstract, sound is described as a wave of energy. As a wave, it has both amplitude and frequency. The amplitude affects the decibel level, or how loud or soft the tone is. The higher the amplitude of a sound wave, the louder it is. The frequency affects the pitch, which is the highness or lowness of the sound. The greater the frequency of a sound wave, the higher its pitch. When the frequency of a wave is between 20 and 20,000 cycles per second, the normal human ear hears it as a single, sustained tone. A pure sine wave at 440 Hz (cycles per second) sounds like an A above middle C. Orchestral musicians in the United States usually tune their instruments to "A-440," meaning 440 Hz. Of course, not every sound has a regular frequency. When you drop a book on the floor, the sound quickly dies down and has no discernable pitch because the wave pattern is so irregular and short. Thus, there are two kinds of musical sounds: pitched and non-pitched. Percussion instruments provide most of the non-pitched sounds in music.

Instruments as Sound Sources

How is a musical sound wave produced? In the late nineteenth century, two ethnomusicologists (the modern term for scholars who study the music of other cultures, or who study multiple cultures comparatively), Curt Sachs and Erich von Hornbostel, categorized instruments into four groups. Chordophones, such as violins, harps, and guitars, have one or more strings, which are plucked, bowed, or struck; the vibrating string creates the sound wave. Aerophones (brass and wind instruments such as the many varieties of horns and flutes) feature a vibrating column of air. Membranophones have a skin or other membrane stretched across some kind of frame. The membrane, but not the frame, vibrates when struck. With idiophones, the body of the instrument itself vibrates when struck. Some examples of idiophones are bells, woodblocks, and xylophones. A fifth category was added later: electrophones, which
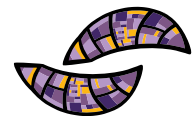
TABLE 1–1

FAMILY	NAME	SACHS/HORNBOSTEL CLASSIFICATION
Stringed instruments	Violin, viola, cello, doublebass; *also* guitar	Chordophones
Woodwinds	Piccolo, flute, oboe, clarinet, bassoon; *also* saxophone	Aerophones
Brass	Trumpet, trombone, French horn, tuba; *also* flugelhorn, baritone, bugle	Aerophones
Percussion	Timpani, bass drum, snare drum, tambourine	Membranophones
	marimba, xylophone, vibraphone, tubular bells, gongs, cymbals, triangle, wood block	Idiophones
Keyboards	Piano, harpsichord, organ, celesta	Varies

The most common Western orchestral instruments.

The theremin's inventor, Russian physicist Leon Theremin (1896–1993) with his instrument.

create sound waves using a mechanical device known as an oscillator and are dependent upon electricity.

Centuries before Sachs and Hornbostel, Western orchestral instruments were grouped into "families." These categories are still used for Western instruments today. **Strings** or stringed instruments are usually bowed or plucked. **Brass instruments**, which are aerophones made of metal, are sounded by the performer's buzzing lips, which make the column of air vibrate. **Woodwind instruments** are also aerophones in which the column of air is moved by breath alone—as in the case of flutes, recorders, and related instruments—or by one or two vibrating reeds usually made from wood. **Percussion instruments** include membranophones as well as idiophones, plus some chordophones that are struck rather than bowed or plucked, such as the piano. In some cases, **keyboard instruments** constitute a fifth category. TABLE 1–1 lists the most common members of each family of instruments.

The first electronic instruments began to appear in the first decades of the twentieth century. The **theremin** is one of the best known early electronic instruments and is still occasionally used today. When playing this instrument,
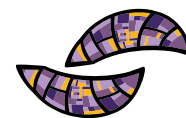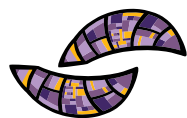
FIGURE 1–1
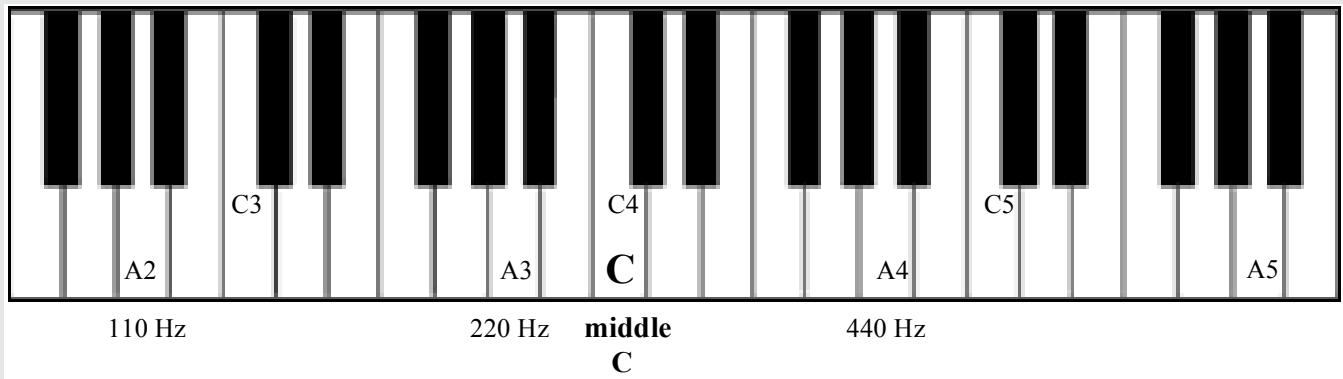
PITCH ON A KEYBOARD.
The diagram identifies middle C, A440, A220, A110, and the names of other Cs labeled with pitch names and octave numbers.* Note that As always appear between the upper two of the three black keys on the keyboard.
 *Note that the octave number changes at C, not A.

the performer regulates frequency with one hand and amplitude with the other by disturbing the electrical fields that surround the protruding bars.

The next important step in electronic instruments came at the end of World War II. Enormous advances in electronics and radio technology had been made for wartime purposes, but after the war, many state-of-the-art studios were no longer needed for military purposes. Within a few years, scientists and composers began collaborating to make art with the new equipment. Electronically generated sounds and sounds produced by live instruments were recorded on tape, where they could be edited, manipulated, and mechanically recombined to form collages of sound that were "performed" via loudspeaker. This type of composition was first known as **musique concrète**; the term used is French due to the fact that the first practitioners were based in Paris. The basic techniques of tape music (later followed by more purely electronic music produced on computers) are looping and splicing, both of which permit compositions that cannot be reproduced by a human performer. Rome, Paris, Cologne, and New York City all had famous postwar centers for electronic music.

PITCH, RHYTHM, AND HARMONY

A single, isolated musical sound has four properties: pitch, duration, volume, and timbre.

PITCH
Pitch, Frequency, and Octaves

Pitch is the highness or lowness of a sound. A Chihuahua has a higher pitched bark than a St. Bernard; a kitten's meow is higher pitched than a tomcat's yowl. A tuba is pitched lower than a piccolo. When musicians speak of "a pitch," they are referring to a single tone whose highness or lowness does not change—that is, a sound that consists of a steadily oscillating sound wave, like A-440.

If you pluck the A string on a guitar (A-110), find the exact midpoint and press it firmly to the fret board, and then pluck the now-half-as-long string (either side), you will hear the next-higher A. This is because when you halve the length of the string, it naturally vibrates twice as fast (220 Hz), producing a pitch twice as high. The musical term for the distance between A and the next higher or next lower A is called an **octave**.

Pitch on a Keyboard

A piano keyboard provides an excellent visual aid for understanding pitch and harmony. High-sounding pitches are to the right, low-sounding pitches are to the left. Therefore, moving from left to right is called moving "up" the keyboard, while moving from right to left is called moving "down." Middle C is roughly equidistant from either end. The black keys are arranged in alternating groups of two and three. Middle C is located to the left of the group

FIGURE 1–2

Treble clef   Bass clef   Alto clef   Tenor clef
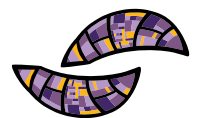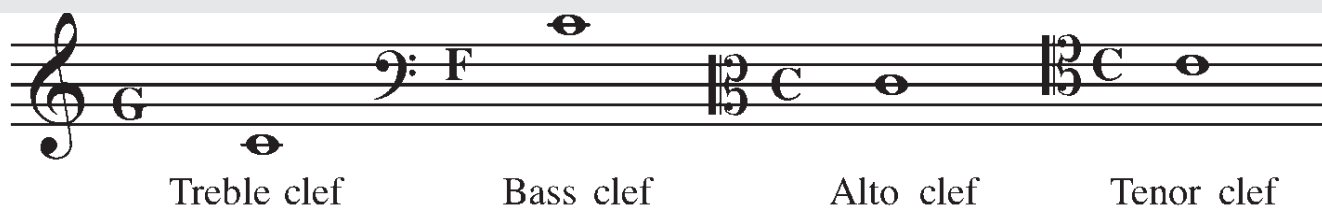
The Three Main Clefs: G-clef, F-clef, and C-clef (with C-clef shown in its two most common positions). The bold-face letters on the staff lines show the pitch name indicated by each clef; the whole notes show where Middle C would appear in each clef.

of two black keys closest to the middle of the keyboard.

FIGURE 1–1 identifies middle C, A440, A 220, A 110, and the names of the other keys on the keyboard. Note that all the As appear between the upper two of the three black keys on the keyboard. The distance between any two adjacent keys on the keyboard is called a **half step**, or **semitone**. A **whole step** is the distance between every other key (regardless of color, black or white). Both half steps and whole steps are the basic **intervals** of any **scale** (a sequence of pitches in ascending or descending order) in Western music. The white keys are usually called the **natural** keys, spanning seven alphabetical letters, A through G. The symbol that represents a natural note is ♮. (If the natural sign is omitted, musicians still assume the pitch is natural, but sometimes the symbol is included for

FIGURE 1–3
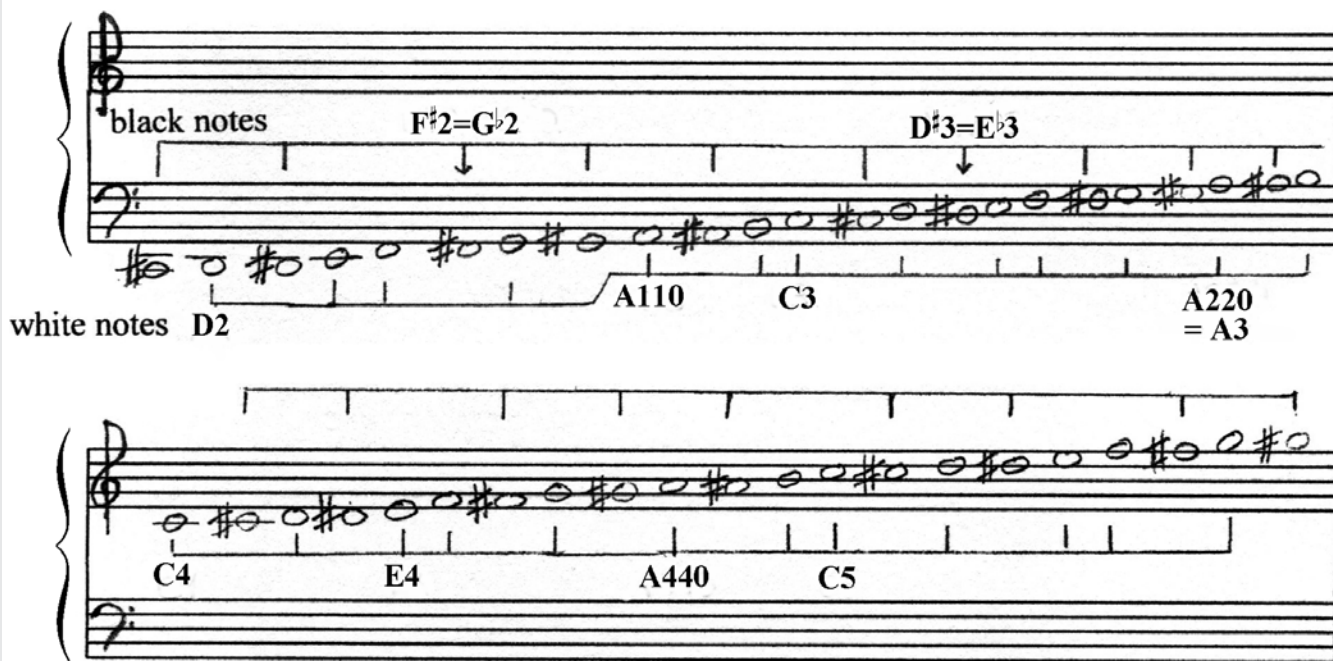
Grand staff, with all sharps and flats. Vertical lines from below point to white notes, and lines from above point to black notes.
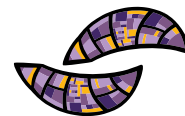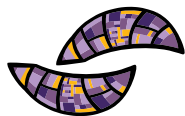
FIGURE 1–4
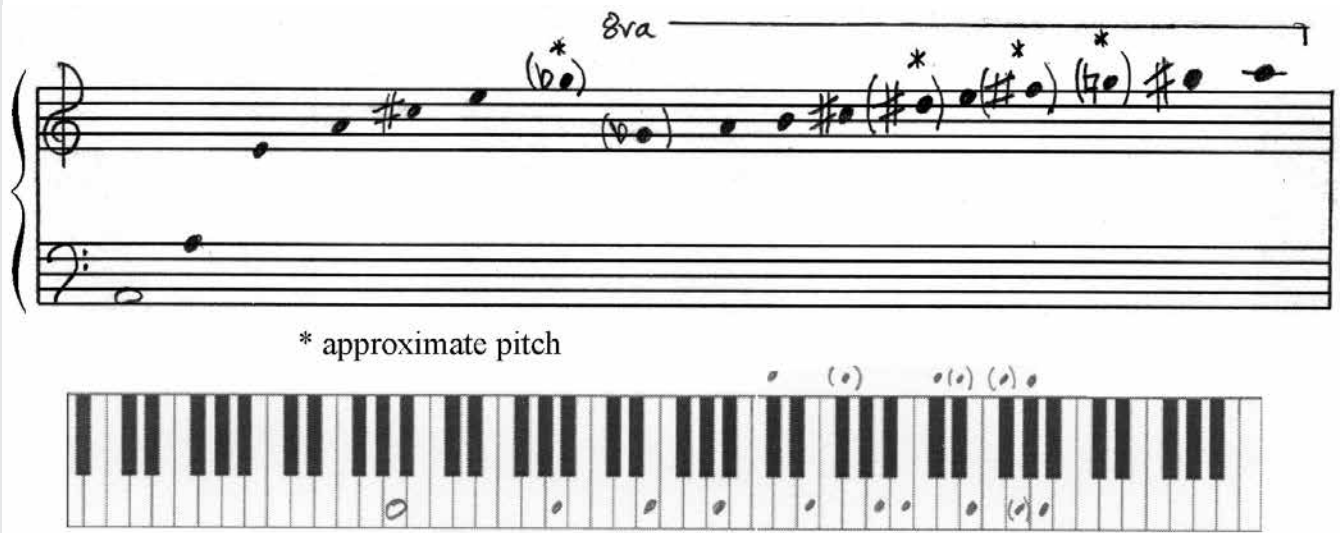
Diagram of overtone series on a staff and a keyboard. (Note: the 8va written at the top of this figure is shorthand for one octave higher than written.)

clarification.) The signs ♯ (**sharp**) and ♭ (**flat**) indicate that a given pitch, such as A♮, has been raised or lowered, respectively, by a half step. So the next note to the right of A on the keyboard is A♯. But, you can also look at that same A♯ key as being a lower neighbor of the key to *its* right—in other words, if you move a half step to the left from B♮, the same A♯ key can also be called B♭, since it is half a step (one key) below the B.

Pitch on a Staff

Music notation uses a five-line **staff** as a type of a ladder to indicate pitches. Each line or space on the staff is assigned to a letter of the musical alphabet—but the assignment can vary, depending on the **clef** symbol at the left-hand end of the staff. "Clef" comes from the French word "key," and each clef symbol is the "key" for reading the lines and spaces of the staff. Each clef focuses on one line of the staff; musicians can then figure out the remaining lines and spaces based on that one reference point. There are three main clefs in use today: the **treble clef**, or "G-clef" [𝄞], which indicates that the second line from the bottom of the staff is the pitch "G"; the **bass clef**, or "F-clef" [𝄢], which indicates that the fourth line from the bottom of the staff should be read as the pitch "F"; and the "C-clef" [𝄡], which is centered on a line that is read as "middle C." The "C-clef" has different nicknames since it is a movable clef. (The F- and G- clefs *used* to move,

but that practice has died out.) When the C-clef indicates that the pitch C should be placed on the middle line of the staff, we call it the **alto clef**. But, if the C-clef is centered on the fourth line from the bottom of the staff, it is called the **tenor clef**. FIGURE 1–2 presents each of the standard clefs (along with the location of the pitch that each clef emphasizes), and the pitch "middle C" is shown on the appropriate places on the staff, depending on the clef being used.

Pitch on the Grand Staff

In piano music, two bracketed staves (the plural of "staff") are used, known as the grand staff. In general, the left hand plays the music notated on the lower staff, usually containing a bass clef, and the right hand plays the notes written on the upper staff, which usually contains a treble clef. FIGURE 1–3 shows a grand staff with the pitches labeled that correspond to the white notes and black notes on the keyboard. (Notice, too, that the sharp or flat symbol follows the letter when we refer to pitches in prose—e.g., F♯, A♭, etc.—but the symbol precedes the notehead when we write pitches on a staff.)

Overtones and Partials

Very few pitches consist of a single, pure frequency. Rather, one frequency dominates, but many other frequencies are also present at very faint volume. For example, when the
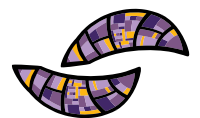
FIGURE 1–5
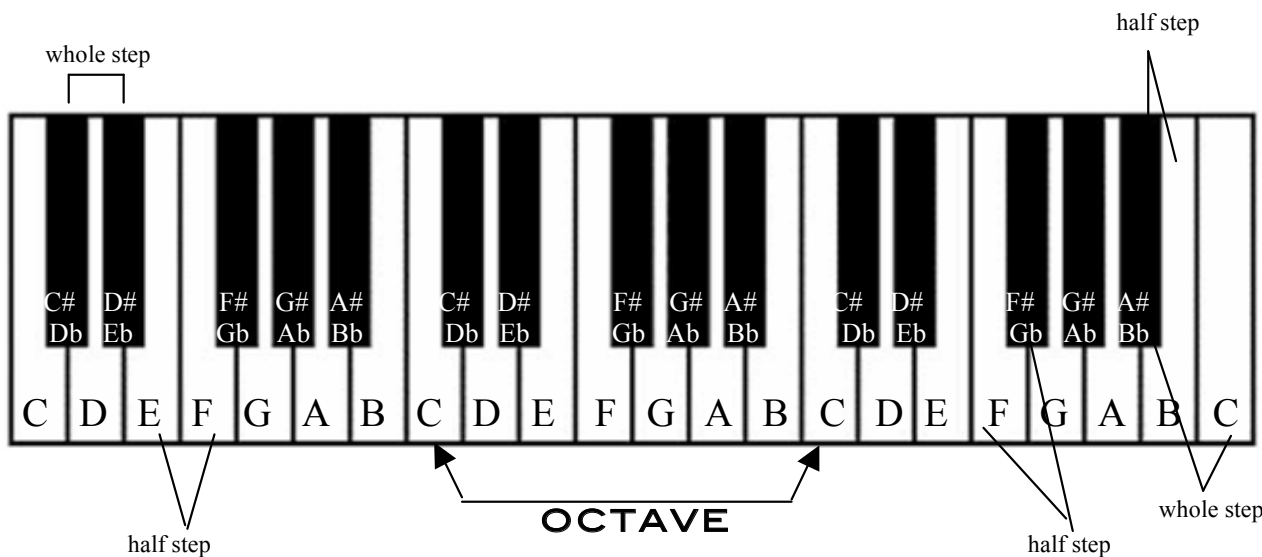
Keyboard with all chromatic pitches labeled.

A string of a guitar is plucked, the strongest sound wave produced is 110 Hz. But many other waves can exist on the string at the same time. One is half the length of the string, another is one-third the length of the string, another is one-quarter the length of the string, and so on. The lowest A is called the **fundamental**. It is by far the loudest and strongest. But it is "colored" by the faint presence of the higher pitches, which are called **partials**, or **overtones**. FIGURE 1–4 shows sixteen overtones, or partials, above an A fundamental.

Equal Temperament: Generating the Twelve Pitches by Dividing the Octave

In the world of pure sound waves and overtones, pitches follow mathematical patterns. But, in the Western tradition, after about 1750, a system of tuning called equal temperament became dominant. With equal temperament tuning, the mathematical ratios are adjusted so that the octave is divided into twelve equal parts. Equal temperament is so common that it is assumed; tuning

FIGURE 1–6
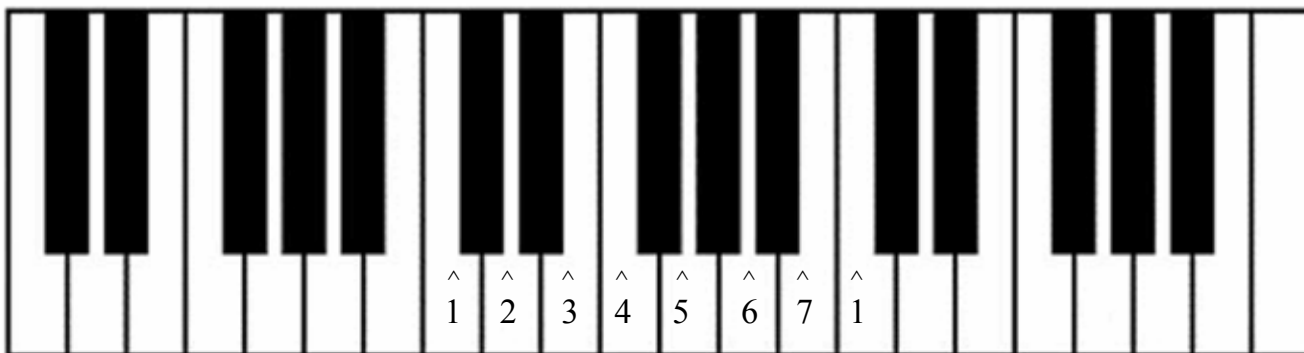
Diagram of keyboard with the C scale degrees labeled $\hat{1}$, $\hat{2}$, $\hat{3}$, etc.
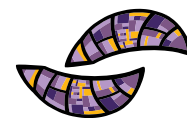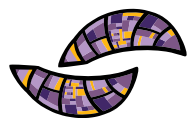
TABLE 1–2

NUMBER OF HALF STEPS	NAME OF INTERVAL + (ABBREVIATION)	EXAMPLES, ASCENDING (FIRST PITCH IS LOWER)
1	Half step (⌃) or (m2)	C-D♭ E-F G♯-A
2	Whole step (M2)	C-D E-F♯ A♭-B♭
3	Minor third (m3)	C-E♭ A-C E♭-G♭
4	Major third (M3)	C-E E♭-G E-G♯ G♭-B♭
5	Perfect fourth (P4)	C-F F-B♭ E♭-A♭ G♯-C♯
6	Augmented fourth (aug4) or diminished fifth (d5) or tritone (TT)	C-F♯ (aug.4) C-G♭ (dim.5) B-F E-B♭ F-B
7	Perfect fifth (P5)	C-G E♭-B♭ B-F♯
8	Minor sixth (m6)	C-A♭ G-E♭ B-G D-B♭
9	Major sixth (M6)	C-A C♯-A♯ D-B
10	Minor seventh (m7)	C-B♭ G-F E♭-D♭
11	Major seventh (M7)	C-B G♭-F E-D♯
12	Octave (P8)	C-C E-E A♭-A♭

The Most Common Intervals

systems are mentioned only if they differ from equal temperament, and this is very rare. The twelve different pitches in ascending order are called the **chromatic scale**. The distance between any two consecutive pitches in the chromatic scale is called a half step. FIGURE 1–5 identifies each note name on the piano keyboard.

Each of the black keys derives its labeling from its neighboring white keys, and so each black key has two names. As noted earlier, sharp (♯) means "raised" by a half step and flat (♭) means "lowered" by a half step. For instance, notice that E♭ and D♯ refer to the same black key. This means that they are identical in pitch; we call two different labels for the same piano key **enharmonic pitches**. (Note: In older tuning systems, an E♭ and a D♯ are *not* identical and differ slightly in the number of cycles per second.) Some of the white keys have additional names as well. For instance, one half step to the right of the B key is another white key, C—but the enharmonic name for C is B♯. Similarly, an enharmonic name for the B key is C♭.

There are also symbols that indicate a pitch should be raised by two half steps, or a "double-sharp" (✖). The symbol for lowering a pitch by two half steps is called a

double-flat (♭♭). Both of these symbols occur only rarely.

Scales: Leading Tone, Tonic, Dominant

In the Western tradition, most composers choose a set of seven pitches as the basis for a piece of music. When arranged in ascending order, the seven pitches are known as a **diatonic** scale, and the pitches fall into one of four different patterns (major and three varieties of minor). The C major scale is perhaps the most common scale; the piano keys needed for this scale are shown in FIGURE 1–6.

C ($\hat{1}$) – D ($\hat{2}$) – E ($\hat{3}$) – F ($\hat{4}$) – G ($\hat{5}$) – A ($\hat{6}$) – B ($\hat{7}$) – C

When playing or writing down a scale, the first pitch is normally repeated at the top, as the last pitch. It would sound very unstable to stop at pitch number 7. The seventh scale degree is known as the **leading tone** because to Western ears it begs to resolve upward to the C above.

In the C major scale and the melodies that use it, C is the anchor, a point of repose and completion. Sometimes called the "resting tone" or "Do" (as in "Doe, a deer...." from *The Sound of Music*), it is most often known as the

Northwest Pa. Collegiate Academy - Erie, PA
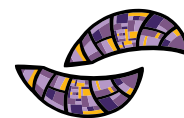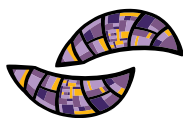
FIGURE 1–7
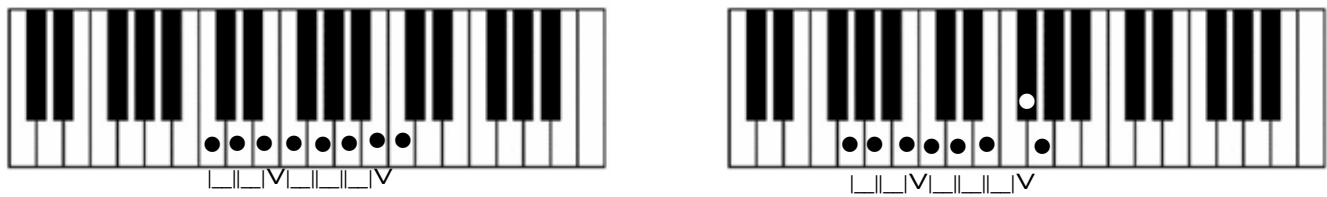
Diagram of keyboard with C scale, left, and G scale, right, with symbols beneath to indicate intervals.

tonic pitch. In a C scale, C is the tonic pitch. In an A scale, A is the tonic pitch. In an A♭ scale, A♭ is the tonic pitch, and so on.

The fifth scale degree, called the **dominant pitch**, is nearly as important as the tonic. In non-technical terms, it functions like a second gravitational center that sets melodies in motion by pulling them away from the tonic. The dominant pitch may appear in a melody more often than the tonic pitch, though the tonic remains the final resting point. In the key of C, G is the dominant pitch, and B is the leading tone.

Intervals

The distance between any two pitches is called an interval. Remember that the distance between any two adjacent keys on the piano is a half step (or semitone); that is the smallest interval that is normally used in Western music. Any larger distance between two piano keys can be measured by the number of half steps it spans; these distances are shown in the first column of TABLE 1–2. However, other terms for intervals are derived from the alphabetical letter names of the two pitches. For that reason, although the interval from C to E spans four half steps, it is called a "Major third" (M3) because of the three letter names between the lower and upper pitches (C to D to E). TABLE 1–2 gives the names for the most common intervals.

Any interval can be performed so it is harmonic (the two pitches occur simultaneously) or melodic, with the two pitches occurring in succession. Melodic intervals are either ascending (the lower pitch occurs first) or descending.

A few intervals that exceed an octave are the major and minor ninth and the major and minor tenth. They can be thought of as an octave plus a m2 (spanning 13 half steps), M2 (14), m3 (15), and M3 (16 half steps).

Intervals of the Major Scale

A scale can be described as a succession of whole and half steps (or major seconds and minor seconds). Referring back to the C major scale on the keyboard, you can see that the distance between $\hat{1}$ and $\hat{2}$, in this case C to D, is a whole step, or M2. (The C♯/D♭ key, which is skipped over, is the intermediate half step in between.) Pitch numbers $\hat{2}$ and $\hat{3}$ are also a whole step apart. (D to E♭ is one half step; E♭ to E makes two half steps, which added together make a single whole step.) Between pitch numbers $\hat{3}$ and $\hat{4}$, however, there is no intermediate piano key. The E and the F are only a half step, or an m2, apart. FIGURE 1–7 reproduces the C major scale on the piano keyboard, with the melodic intervals labeled. You can see that they follow a pattern of whole steps (marked with square brackets "⊔") and half steps (marked by angled, or pointed, brackets "∨"). Therefore, a major scale's sequence of intervals consists of whole step–whole step–half step–whole step–whole step–whole step–half step (or ⊔-⊔-∨-⊔-⊔-⊔-∨).

By using that same sequence of melodic intervals, you can create a major scale starting on any key of the piano. For instance, a G major scale proceeds up the keyboard looking very much like a C scale (all white notes), until you get to the seventh scale degree. By definition, if a scale is major, $\hat{6}$ to $\hat{7}$ must be a whole step, and $\hat{7}$ to $\hat{8}$ a half step apart. A whole step above $\hat{6}$ (E) is F♯. Why not call this note G♭? The seven pitches of any major scale are properly spelled using seven *different* letters, so you would not want to have a G♭ and a G♮ in the same scale. Also, an E to a G♭ would properly be called a diminished third, not a major second—and a major scale should consist only of major and minor seconds. (When a minor interval is made smaller, either by lowering the top note using an accidental, or by raising the bottom note using an accidental, the resultant interval is said to be "diminished." So, for example, E to G (3 half-steps) is a minor third. When

FIGURE 1–8

Diagram of an A major scale.
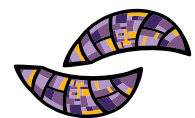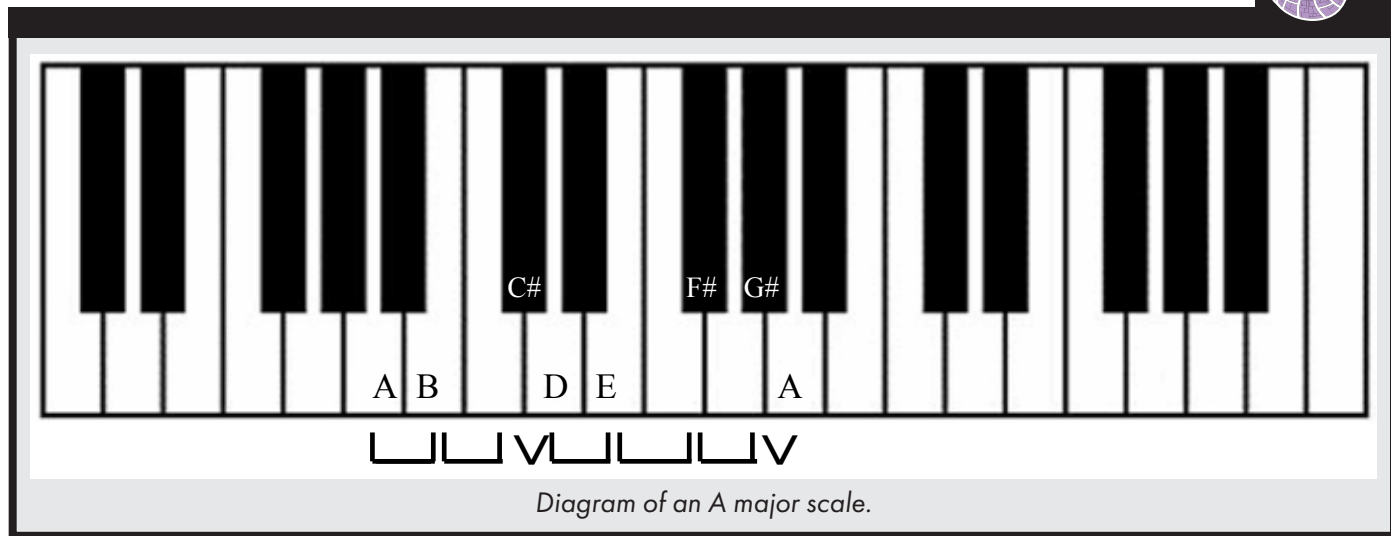
you keep the same letter names but lower the G to G♭, it is still a third, but it is no longer minor, since it consists of only two half-steps. It is now a diminished third.) Compare the keyboard diagrams shown in FIGURE 1–7, and you will see the same *sequence of intervals* is preserved (⊔-⊔-∨-⊔-⊔-⊔-∨), even though one begins on G and the other begins on C.

FIGURE 1–8 shows an A major scale. The sequence of intervals, labeled below the diagram, is identical to the C and G major scales. The sequence will be the same in every other major scale, regardless of the starting pitch.

Minor Scales and Blues Inflections

The next most common scale is the minor scale. There are three slightly different varieties: natural (or pure) minor, harmonic minor, and melodic minor. FIGURE 1–9 shows each of the three, beginning on A. (Like the major scale, each scale has its own pattern of whole and half steps.)

All minor scales feature a lowered third scale degree, meaning the interval from the tonic to the third pitch of the scale is a minor third, not a major third (the interval that occurs in the major scale). Note that the half steps of the natural minor scale are located between $\hat{2}$ and $\hat{3}$, and $\hat{5}$ and $\hat{6}$. The major scale's upward pull from $\hat{7}$ to $\hat{8}$ is not present in the natural minor. Try playing the scale through. It can just as easily fall back down to $\hat{6}$, then $\hat{5}$, as it can rise to $\hat{8}$. In order to create that pull, many pieces of music use the harmonic minor mode, which is created by raising the seventh scale degree one half step (by adding a sharp or natural). Melodic minor, shown with intervals marked

in FIGURE 1–9, is the final option. Both the sixth and seventh scale degrees are raised a half step as the scale ascends, and then they are restored to their normal "natural minor" pitches as the scale descends. The alterations here encourage a sense of upward motion to the higher tonic and a pull downward to the fifth scale degree.

Because C natural minor and E♭ major use the same seven pitches—just different tonics—they are called the **relative major and minor** to each other. (These relative scales are shown in FIGURE 1–10.) Their relationship is still **relative** even when the natural minor is altered to make the harmonic or melodic minor scales. In contrast, major and minor scales that begin and end on the same tonic pitch are called **parallel**. Relative major and minor scales are perceived as being more closely related to each other than parallel scales since they use the same collection of pitches.

A scale with **blues inflections** combines elements of both major and minor scales. In a **blues scale**, scale degrees 3 and 7 can be either lowered, as in a minor scale, or normal as in a major scale, or somewhere in between, using a pitch "between the keys" of the piano. Often the pitch is part of a small slide—for example, from ♭3 to 3. Less commonly, the 5th scale degree is lowered in a similar manner. In the Rolling Stones' "Satisfaction," the high point of the chorus is the repetition of the phrase "I can't get no," and right at the highest note ("get"), Mick Jagger sings a ♭3 against a major chord. Surrounded by the ♭7s in both the melody and the famous guitar riff, the blues flavor of "Satisfaction" is undeniable.
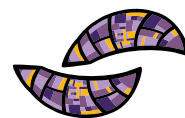
FIGURE 1–9
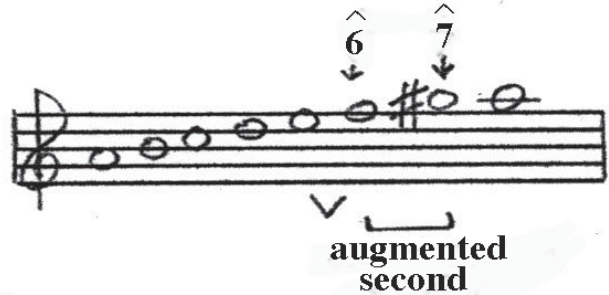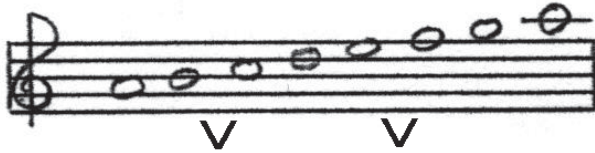
NATURAL MINOR

HARMONIC MINOR

augmented
second
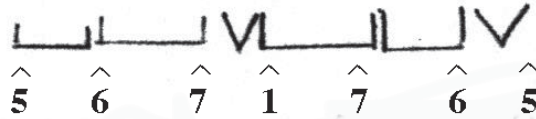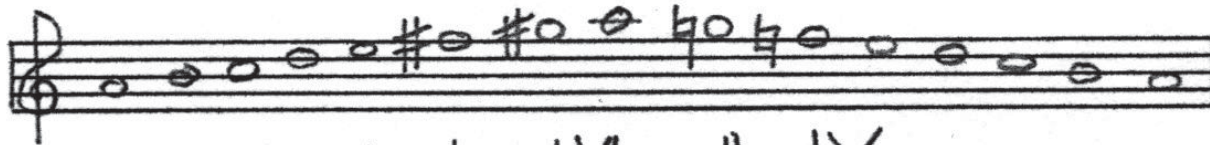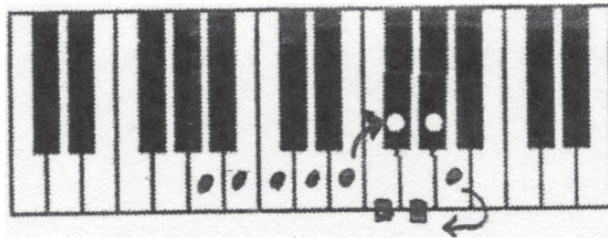
MELODIC MINOR

Minor scales: natural, harmonic, and melodic.

Melody Defined with an Example Using Scale Degrees

A **melody** is a series of successive pitches perceived by the ear to form a coherent whole. Only one pitch occurs at a time in a melody; if two pitches occur together, you have either **harmony** or **counterpoint**. Most melodies use the seven notes of a single scale. The song "Happy Birthday," which is in the major mode, uses the scale degrees shown in the box at the bottom of this page.

It follows the same scale degrees whether you use the C

$\hat{5}$ $\hat{5}$ $\hat{6}$ $\hat{5}$ $\hat{1}$ $\hat{7}$ $\hat{5}$ $\hat{5}$ $\hat{6}$ $\hat{5}$ $\hat{2}$ $\hat{1}$ $\hat{5}$ $\hat{5}$ $\hat{5}$ $\hat{3}$ $\hat{1}$ $\hat{7}$ $\hat{6}$, $\hat{4}$ $\hat{4}$ $\hat{3}$ $\hat{1}$ $\hat{2}$ $\hat{1}$
Hap-py birth-day to you, hap-py birth-day to you! Hap-py birth-day, dear Susie, hap-py birth-day to you!
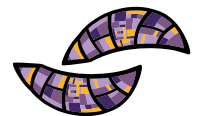
FIGURE 1–10
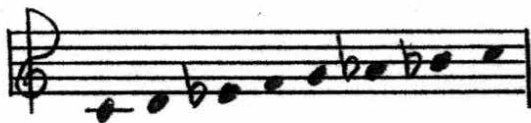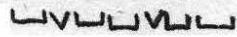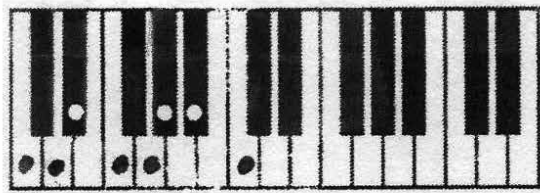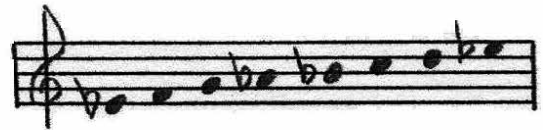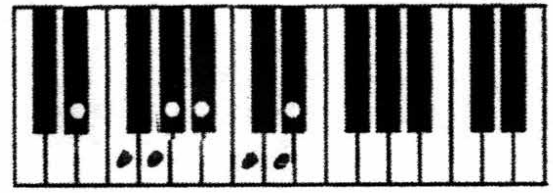
Relative minor and major scales, both with three flatted pitches (B♭, E♭, and A♭). C natural minor (left) and E♭ major (right).

major, F major, E♭ major, A major, or any of the fifteen major scales. You can transpose the melody *Happy Birthday* to *any* major key by beginning the same pattern of intervals on a different note, and it will remain the same melody.

Contour

All melodies have a **contour**, or profile. A **conjunct** melody moves smoothly, in stepwise motion, that is, in mostly half steps and whole steps. "Row, Row, Row Your Boat" is a familiar tune using conjunct motion. Apart from "merrily, merrily, merrily, merrily," all the intervals are whole steps and half steps. A **disjunct** melody, on the other hand, contains proportionally more leaps (intervals larger than a major second). "The Star Spangled Banner," for instance, uses far more leaps than steps, so it is disjunct. There is even a melodic leap of a major tenth (equivalent to sixteen half steps) between "gleam-ing" and "… and the rockets' red glare."

Another way to describe a melody's contour is by direction. Melodies may ascend, descend, or move in a wavelike manner. "Row, Row, Row Your Boat" ascends to the first "merrily," then mainly descends to the end. A very common contour for melodies is that of an arch, ascending at the beginning, reaching a climactic high point, and descending toward the end. Contour is normally described in general terms. Exact intervals and pitches are named when more precision is needed.

Range and Tessitura

Every instrument (including the human voice) has a range of possible pitches that it is capable of producing. In order to indicate exactly which A, B, or C♯, etc., is being played or discussed, each pitch is numbered from the bottom of the grand staff up: C1 through B1/C♭1, followed by C2 through B2/C♭2, and so on. A viola's range (C3 to E6) is higher and slightly narrower than a cello's (C2 to A5). The high, middle, and low parts of an instrument's range are often called the high, middle, or low **register**. A striking effect occurs at the end of The Beatles' "[A Day In the Life](#)," with the orchestral instruments gradually rising from pitches in their lower registers to high register pitches. A melody with a high **tessitura** calls for more pitches in the performer's high register than does a melody with a medium or low tessitura. This Italian term is applied most often to vocal music.

RHYTHM
Rhythm is the way music is organized in time.

Beat

Beat is the steady pulse that underlies most music. Sometimes the beat is audible, sometimes not, but it is present, like the silent or ticking second-hand on a mechanical clock.
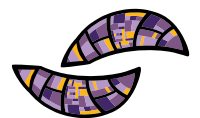
TABLE 1–3

BEATS PER MINUTE	ITALIAN TERM	MEANING (APPROX.)
200	Presto	very fast
120	Allegro	fast
108	Moderato	moderate
84	Andante	"at a walking tempo"
72	Adagio	slow
40	Lento or Grave	very slow

Common tempo markings.

Tempo

The speed of the beat is called the **tempo**. Occasionally, the beat slows or pauses. TABLE 1–3 shows different tempos and their traditional Italian names. The Italian terms predate the invention of exact timekeeping, so they originally indicated mood or other expressive qualities as related to tempo. For example, *Allegro* means "cheerful," and so the music should be executed in a fairly lively, or slightly "fast" manner. The numbers at the left indicate the approximate number of beats per minute. Substantial variations exist in the beats-per-minute.

Tempo can slow down (*ritardando*) or speed up (*accelerando*), and it can do either gradually (*poco a poco*) or suddenly (*subito*). When there is no steady tempo—which is the same as no discernable beat— music is said to be **unmetered**. The fourth movement of John Coltrane's *A Love Supreme* (LISTENING EXAMPLE 8 includes portions of movement 1) is an excellent example of unmetered music. If there *is* a perceived beat, but it speeds up and slows down for expressive effect, it is called *rubato*. The opening of "In A Silent Way" (LISTENING EXAMPLE 13) demonstrates a rubato tempo.

Meter: Duple, Triple, and Quadruple

All beats are of equal length, but not all beats are of equal importance. Normally, beats are grouped into **measures** (or more informally, bars), which are separated by **bar lines**. The first beat of any measure is usually the strongest, so it is customarily called the **downbeat** or strong beat.

Meter describes the pattern of emphasis superimposed on groups of beats. In general terms, meters are **duple**, **triple**, **quadruple**, or **irregular** (also called **asymmetrical**). Music with groups of two beats (alternating as STRONG-weak-STRONG-weak, etc.) is in duple meter. Triple meter has a three-beat pattern with a STRONG-weak-weak-STRONG-weak-weak (etc.) pulsation. Two excellent example of triple meter are Bob Dylan's "The Times They Are A-Changin'" and John Coltrane's jazz version of "My Favorite Things." Most common is quadruple meter, in which there are groups of four beats, with 1 being the strongest

FIGURE 1–11

1	2	3	4	1	2	3	4
	I'm	pickin'	up	good	vi-	bra-	tions

Quadruple meter in "Good Vibrations."
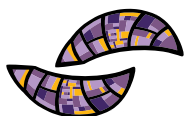
FIGURE 1–12

	1	2	3	**1**	2	3	**1**	2	3	**1**	2	3
Hap-py	**birth-**	day	to	**you,**		hap-py	**birth-**	day	to	**you!**		[Hap-py...]

"Happy Birthday"—four measures with words and beat numbers.

beat, 3 being the second strongest beat, and 2 and 4 being weak beats. However, it is often difficult to distinguish duple from quadruple by ear, so quadruple is sometimes treated as a "duple" meter by listeners and the opposite is also true—duple meter is sometimes treated as quadruple meter. "Aquarius" (Listening Example 7), from the musical *Hair* is an example of duple meter. FIGURE 1–11 shows two measures from the chorus of the Beach Boys' "Good Vibrations" with the quadruple beats numbered. Most popular music of the 1960s is in quadruple meter, including examples such as The Beatles' "I Want to Hold Your Hand," the Rolling Stones' "Satisfaction," and "Stop! In The Name Of Love" (Listening Example 10) by Diana Ross and the Supremes. Irregular (or asymmetrical) meters are other groupings that cannot be divided into steady pulsations of two, three, or four beats. The most common irregular meters are five-beat or seven-beat measures. For an example of five beats per measure, listen to "Take Five" by Paul Desmond and Dave Brubeck.

The song "Happy Birthday," with its groupings of three beats, is in triple meter as is shown in FIGURE 1–12. The first word falls before the downbeat. This is called a "**pickup**" or **anacrusis**. Another illustration of triple meter occurs in "Take Me Out to the Ball Game"; this song begins *on* the downbeat.

Rhythmic Notation

A variety of symbols indicate how long a note should last. An oval note, called a **whole note**, is the longest symbol used today. A line called a **stem** can be added to that oval, and that oval-plus-stem symbol indicates a time value that is half as long as the whole note, or a **half note**. When the oval, or note head, is solid black (with a stem), that indicates a **quarter note**: a note that is half as long as a half note (and one-fourth the duration of a whole note). When a flag is added to the stem, the quarter note is halved in duration, so that is called an **eighth note**. Additional flags can be added, each subdividing the value of the note by half again: **sixteenth notes**, **thirty-second notes**, and so forth. The

relationships of the most common note symbols are shown in FIGURE 1–13. (Notice that multiple flagged notes have an alternate notation, called **beams**; these are sometimes easier for a musician to read quickly, since it is customary to "beam" together a beat's worth of notes.)

Another device used in rhythmic notation is the **dot**. A dot adds half the original value to a note—so a dot following a half note would represent a quarter note, and thus the total duration of a dotted half note should be a half note *plus* a quarter note. Also, notes of the same pitch can be connected with a curved line called a **tie**; it "ties" their values together, so that the note lasts as long as their combined values.

The note value symbols in the top half of FIGURE 1–13 indicate how long musical *sounds* should last—but musicians can also be told how long *not* to make sound. These symbols for silence are called **rests**, and they follow a similar hierarchy as the note values; the lower half of FIGURE 1–13 illustrates the standard rest symbols (and their equivalent note symbols), and how each rest should be placed on a staff. (The placement is especially important for whole rests and half rests; they look identical otherwise.)

Time Signature

In music notation, the meter is indicated with a **time signature**, which usually consists of two numbers. The lower number indicates a durational value, with 2 meaning the half note, 4 the quarter note, 8 the eighth, and 16 the sixteenth note. (This is *not* a fraction! Note that there is no line between the two numbers.) The upper number indicates how many of those durational values (or their equivalents) will occur in one measure. Thus, if the time signature is $\frac{6}{8}$, the measure will contain the combined time value of six eighth notes. Two other symbols are often used to represent the time signature: a large capital C (called "**common time**") is equivalent to $\frac{4}{4}$ time, and a vertical slash through the C (¢) indicates that the time signature is $\frac{2}{2}$; this symbol is usually called "**cut-time**," although its original name is *alla breve*."
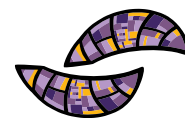
FIGURE 1–13
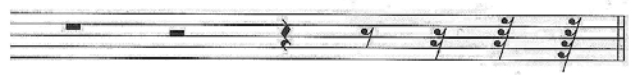
Symbols for Notes and Rests. The hierarchy of notes is illustrated by their alignment: 1 whole = 2 half notes = 4 quarter notes = 8 eighth notes = 16 sixteenth notes = 32 thirty-second notes (etc.). The same relationships are true for rests as well.

FIGURE 1–14
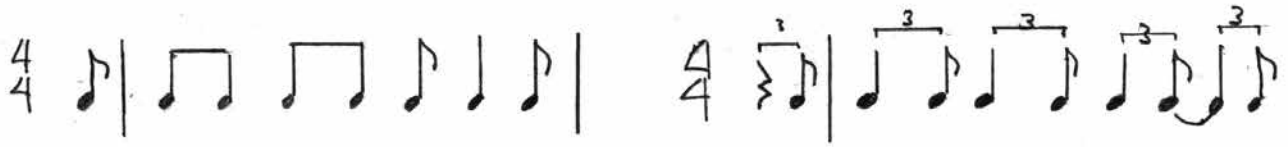
Swing example: Notated (left); performed (right)

Simple and Compound Meter

Normally each beat is divided in half (1 & 2 & 3 & or 1 & 2 & 3 & 4 &), which is referred to as **simple** subdivision. If the beat is subdivided into three equal parts, then the meter is **compound**. For example: $\frac{6}{8}$ meter can be counted **1** 2 3 **4** 5 6, **1** 2 3 **4** 5 6, or ONE-&-a TWO-&-a, ONE-&-a TWO-&-a. The rhythms used in **swing** music are notated as if they are in $\frac{4}{4}$ time, but played as if they are $\frac{12}{8}$, as shown in FIGURE 1–14. Part of the charm of Sam Cooke's "A Change is Gonna Come" is the tension caused by overlapping simple meter horn passages with the underlying compound division of the beat. In the third verse (beginning with "I go to the movie"), the repeated notes in the brass help emphasize the compound division of the beat. FIGURE 1–16 illustrates triplets on the second and third staves.

Mixed and Irregular Meter

Mixed meter and **irregular** or **asymmetrical meter** are variations on the grouping of beats. In mixed meter, measures that have different meters occur in rapid succession. Irregular meter features measures that have different meters alternating in an irregular pattern. Irregular meter may also mean there is a steady beat but it is grouped unpredictably or inconsistently. A measure of seven beats, for example, may go ONE-two-three ONE-two ONE-two, or ONE-two ONE-two ONE-two-three. (See FIGURE 1–15; the > symbol above or below a note head is called an "accent." An accent indicates that the note is to receive a greater stress than the unaccented notes around it.)

When two or more meters are operating simultaneously, it is referred to as **polymeter**. For instance, a melody with three large beats per measure played over a bass line with four beats per measure—with the downbeats (but not the weaker beats) aligned—would be an example of polymeter.

Syncopation

Rhythm is **syncopated** when accented or emphasized notes fall on weak beats or in between beats. The rhythms in "Happy Birthday" are regular and coincide with the

FIGURE 1–15
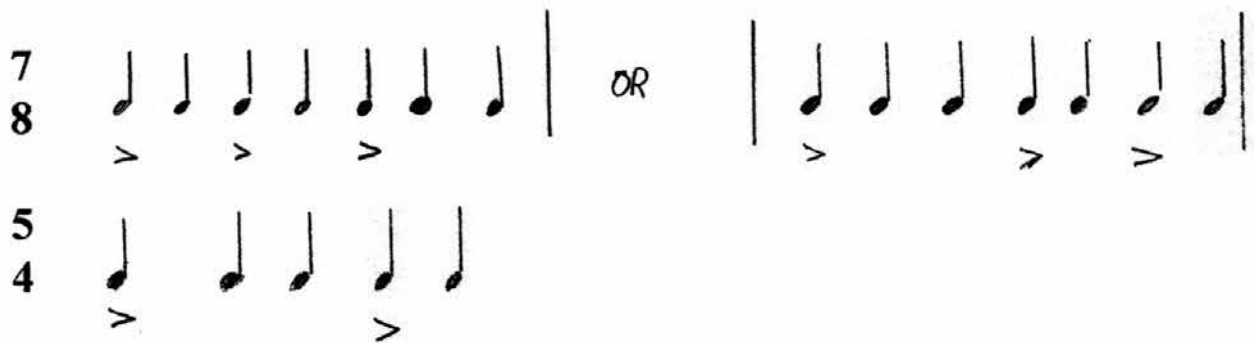
Examples of asymmetrical (irregular) meters.
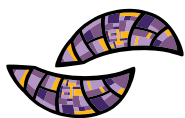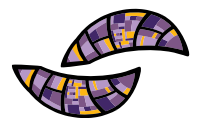
FIGURE 1–16

Two against three (top) and three against four (bottom) polyrhythms.

beat, so it is not considered syncopated. The rhythms in "Aquarius" (LISTENING EXAMPLE 7), however, do not coincide with the beat. Many important notes fall just before the beat, such as the word "stars," the first syllable of "dawning," and the last syllable of "Aquarius." Syncopation is a prized rhythmic component of ragtime and jazz, as heard in The Beatles' "When I'm 64" and Louis Armstrong's recording of "Hello, Dolly!".

Polyrhythm

Polyrhythm, also called **cross-rhythm**, occurs when two conflicting rhythmic patterns are present simultaneously. The most common, as shown in FIGURE 1–16, are two against three (the upper example) and three against four (the lower example). Note that the meter does not change. Polyrhythms are common in jazz, and John Coltrane's "My Favorite Things" includes numerous instances of polyrhythm.

Rhythm: Summary

The important distinction to keep in mind is that **rhythm** is a collection of varying durations, and it is always audible. **Beat** refers to a regular underlying pulse that is not always *audible* but is always *felt* or imagined, and **meter** is the grouping of beats and the associated patterns of strong and weak beats.

HARMONY
Harmony occurs whenever two or more tones are sounding simultaneously.

Common-Practice Tonality

Common-practice tonality (also called **common-practice harmony**) is the system of organizing pitch and harmony that we find intuitive today in Western cultures. It developed in Europe beginning in the Middle Ages and was codified by about 1750. Since then, layers of
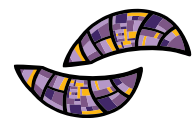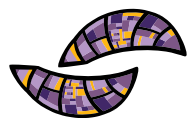
FIGURE 1–17
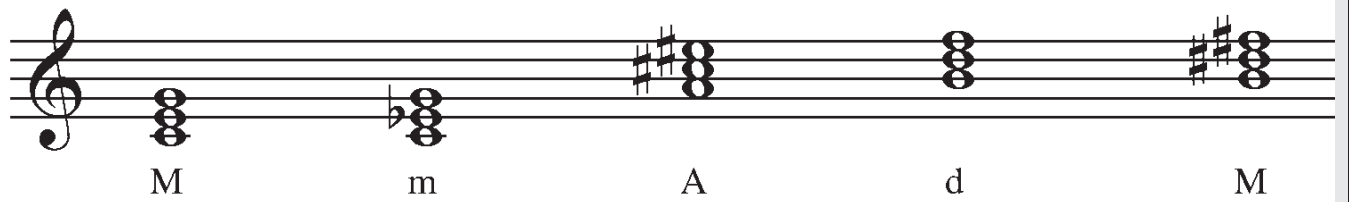
Examples of triads: C-E-G, C-E♭-G, A-C♯-E♯, B-D-F, B-D♯-F♯.

complexity have been added, vigorous challenges have been made by various composers, and knowledge of non-Western music traditions has increased dramatically. Despite these changes, conventions of common-practice tonality govern nearly all of the music produced or consumed in the Western world. Notable exceptions will be discussed in Sections II, III, and IV of this guide.

Chords

A **chord** is three or more pitches sounding simultaneously. A book, or a forearm, pressed down on a piano keyboard creates a chord. However, the most common and useful chords do not employ immediately adjacent pitches.

� Triads

A **triad** is a three-note chord consisting of two intervals of a third. Triads come in four qualities: major, minor, diminished, and augmented. A **major triad** (abbreviated as "M") has a major third interval between its lower two pitches and a minor third between the upper two pitches. A **minor triad** (m) has a minor third on the bottom and a major third above. Less common are the **diminished triad** (d) (two minor thirds) and the **augmented triad** (A) (two major thirds). Triads of various qualities are shown in FIGURE 1–17. The basic chords in any piece of music are the triads built above each note of the scale.

The **root** is the lowest of the three notes in a triad. The middle note is called the **third**, and the highest note is called the **fifth**. When the root is on the bottom, the chord is in **root position**. Root-position triads are shown as the first four chords of FIGURE 1–18.

✖ Inversion

Any pitch of a triad can be moved up or down any number of octaves. When the third of the triad is on the bottom, the chord is in **first inversion**. When the fifth is on the bottom, it is in **second inversion**. When describing inverted chords, first inversion is indicated by a "six" following the chord symbol; second inversion is indicated by a six and a four aligned vertically, rather like a fraction with the line missing. First- and second-inversion triads are also illustrated in FIGURE 1–18.

Any triad may be **inverted**. The bottom pitch determines the inversion; the other pitches may be in any order, and any of the triad's three pitches may be duplicated in the same, or different, octaves without changing the chord's classification as a triad.

Keys

In music theory, the **key** is the world of pitch relationships within which a piece or substantial section of music takes place. "Key" in music theory is not to be confused with the piano key that you press to produce a single pitch. In terms of harmony, the "key" of a piece of music is the set of seven notes, or scale, that has been selected for use in that piece. The gravitational center of a key is the tonic pitch, which in turn lends its name to the entire key. A piece of music whose tonic pitch is D is said to be in "the key of D;" similarly, an A major piece consists of the seven pitches of the key (or scale) of A. Whether the key is major or minor depends upon other scale degrees, namely $\hat{3}$, $\hat{6}$, and $\hat{7}$. Within a key, pitches and harmonies relate to one another in specific ways. Each chord has a different relationship to the tonic.

Unless otherwise specified, "the key of C" means "the key
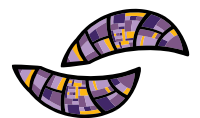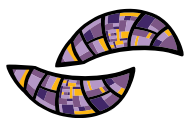
FIGURE 1–18
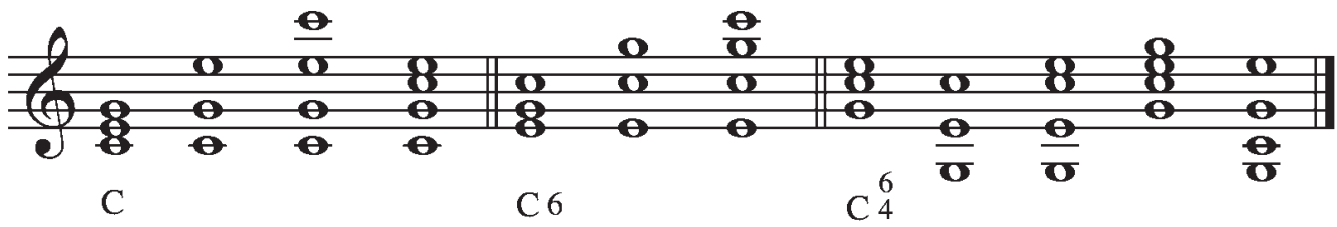
Example: C triad plus its inversions, all three with different spacing: CEG CGE CGEC CGCE // EGC ECG ECGC // etc.

of C *major*." (The other options in common-practice tonality are C natural minor, C harmonic minor, and C melodic minor.) Music in the key of C major uses mainly the seven pitches of a C major scale, and their octave transpositions. If other pitches occur, they are called chromatic pitches—and are usually decorative or expressive, but not structural.

✤ **KEY SIGNATURES**

The **key signature** is a set of sharps or flats at the beginning of every staff that indicates the key of the music. The key signature signals which seven pitches make up the scale for that piece by indicating which pitches will be consistently raised or lowered. When an F♯ appears in the key signature at the beginning of the piece, that means all Fs in the entire composition are automatically raised, unless otherwise indicated (which would be done with a natural sign in front of the individual note). There are only two scales that need *only* an F♯: G major and E minor (which are relative scales to each other). A scale beginning on E needs only the second note (F) raised to have the order of whole and half steps common to all **natural minor** scales. A scale starting on G needs only the 7th degree (F) raised

to fall into the **major scale** pattern of whole and half steps. When music is notated, all three types of minor scales use the same key signature—the one for natural minor—and add **accidentals** to individual notes throughout the score for harmonic or melodic inflections.

The key signature is a convenience. See the E major scale in FIGURE 1–19, shown on the keyboard and in two versions on the staff. The first notated version uses an accidental in front of each affected pitch. The second notated version begins with a key signature of four sharps (F♯, C♯, G♯, and D♯), indicating that the performer needs to sharpen any F, C, G, or D pitches he or she encounters.

✤ **HIERARCHY OF KEYS: CIRCLE OF FIFTHS**

Key signatures fall into a fascinating pattern. Remember, there are fifteen major scales. There are also fifteen minor scales. Each scale corresponds to a key of the same name. And each major scale contains the *same pitches* as one of the natural minor keys. (Remember the example in FIGURE 1–10: C minor is the **relative minor** of E♭ major; E♭ is the **relative major** of C

FIGURE 1–19

E major scale on a keyboard (left), E major scale on a staff <u>without</u> key signature (center), E scale on a staff <u>with</u> key signature (right).
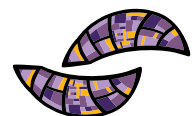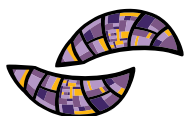
FIGURE 1–20
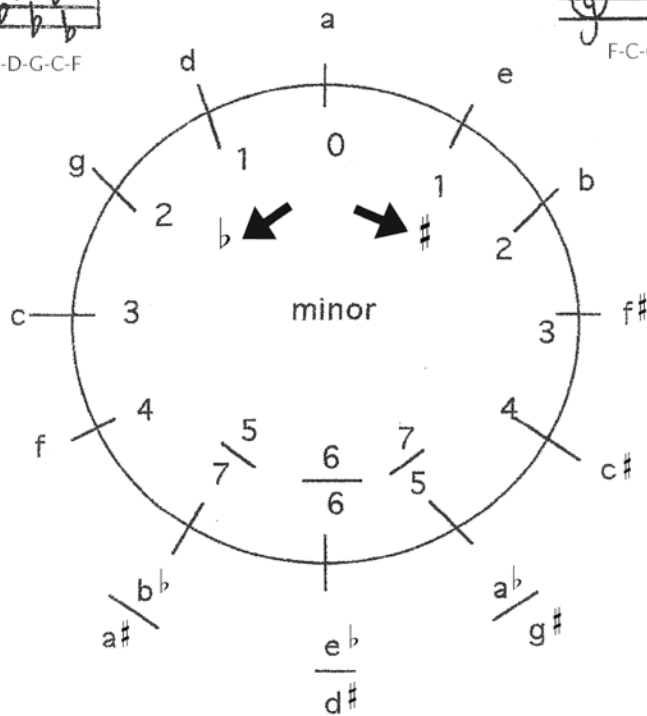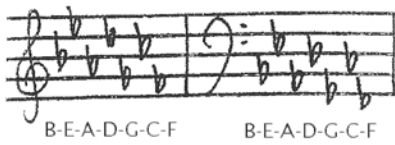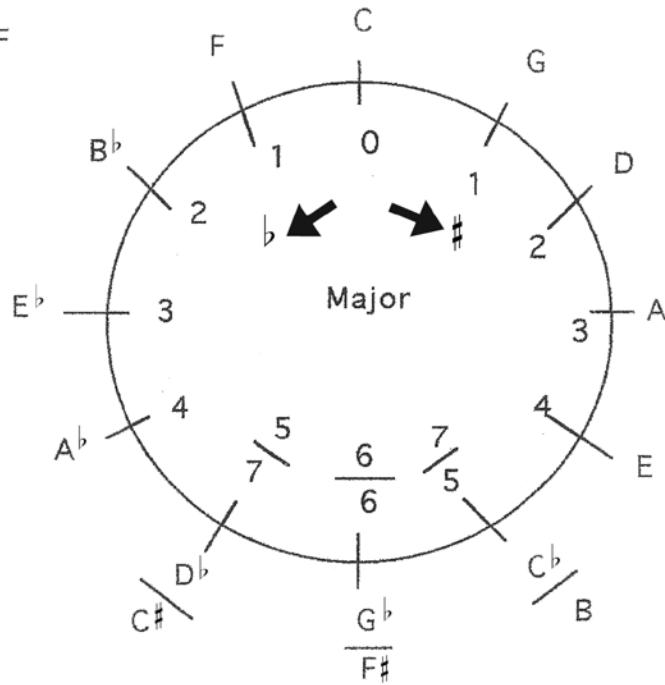
Circle of Fifths.

FIGURE 1–21
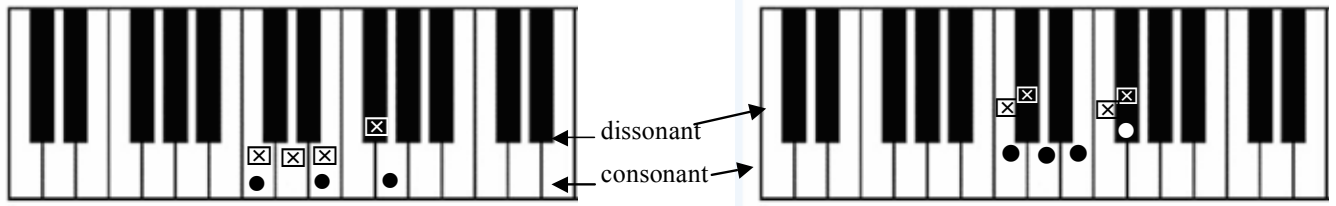
Examples of more dissonant chords (piano keys marked with "×") and more consonant chords (piano keys marked with dots).

minor.) There are fifteen key signatures needed. Because the major and natural minor scales have to preserve a certain order of whole and half steps, there are only thirty possible keys.

Refer to the circle of fifths for major scales shown in the upper half of FIGURE 1–20 while locating each key's tonic on the keyboard. C, the key at the top of the circle, has no sharps or flats in its key signature (all of its pitches are natural). The key of G is a perfect fifth higher, and it uses only one accidental, an F♯ (all the other pitches are natural). A perfect fifth is an interval of seven half steps subsumed within five letter names, e.g., C-G or B♭-F. The key of D is closely related to G; it is a perfect fifth higher, and it needs only one additional sharp—C♯. As you continue moving clockwise, each successive scale is a perfect fifth higher than the previous one, and another sharp is added each time, to a maximum of seven sharps. You will see that the scale with seven sharps is C♯ major—in effect, you have raised *every* pitch of the C major scale by one half step. To go the other

direction, e.g., counter-clockwise (toward scales that are each a perfect fifth lower than the previous one), you add flats one at a time, progressing from the key of C to F, B♭, E♭, A♭, D♭, G♭, and C♭. The counterclockwise cycle overlaps the clockwise cycle at the bottom of the circle, where three pairs of scales dovetail with each other. The scale with five sharps, B, uses the same piano keys as the scale with seven flats, C♭ major. The scales with six sharps and six flats (F♯ major and G♭ major) also use precisely the same keys on the piano. Similarly, since C♯ and D♭ are enharmonic equivalents, their scales also overlap on the circle and on the piano.

Musicians usually memorize the order of sharps and flats that occur in the key signatures: F♯-C♯-G♯-D♯-A♯-E♯-B♯ and B♭-E♭-A♭-D♭-G♭-C♭-F♭. Notice that the letter names for the sharps reverse the order of the letter names for the flats—so if you memorize one list of accidentals, the other one is simply in backward order. Many people make up mnemonic phrases to help them remember at least one of the lists. One saying for the flats is "Big

FIGURE 1–22
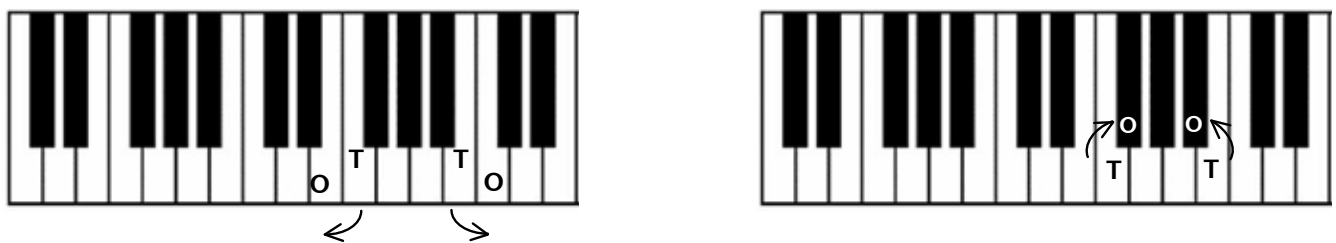
Two resolutions (shown as "O" notes) of the F-B tritone (shown as "T" notes).
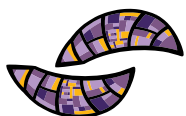
FIGURE 1–23

Diatonic triads.

Eaters Always Demand Good Chinese Food." You can have fun inventing your own phrases.

The lower diagram shown in FIGURE 1–20 presents the circle of fifths for minor scales. It uses exactly the same principles as the circle of fifths for major keys, except that the scale at the top (with no flats or sharps in the key signature) is A minor (the relative minor of C major).

Harmonic Progression

A **harmonic progression** is a series of chords or intervals that moves from tension (dissonance) toward resolution (consonance).

✤ **DISSONANCE AND CONSONANCE**
Dissonance is the quality of a pitch, interval, or chord that makes it seem "unstable" or tense. The more dissonant a sound, the more the listener longs to hear a "resolution." The opposite of dissonance is consonance, the quality of a pitch, interval, or

chord that makes it seem a suitable point of rest or resolution. The tense horror of the gruesome shower scene in Alfred Hitchcock's film Psycho is underscored to great effect by the juxtaposition of silence and dissonance in Bernard Hermann's masterful score.

Dissonance is relative. The most consonant chords are ones that stress the lower partials on the **overtone series**. Few things will sound more consonant than an octave with a fifth added above the bass. A major triad, especially with the root doubled, is also extremely consonant. But other chords can sound dissonant *or* consonant depending upon what precedes them. A cluster of whole steps (say, C, D, E, F♯, shown as "x" notes in the left-hand keyboard of FIGURE 1–21) sounds dissonant compared to a C-E-G triad (the black-dot chord in the left-hand keyboard). But that same cluster is more consonant (the dots of the right-hand keyboard) than a chord composed of C, D♭,

FIGURE 1–24

ii-V-I and IV-V-I as simple triads in root position.
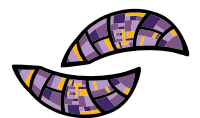
FIGURE 1–25
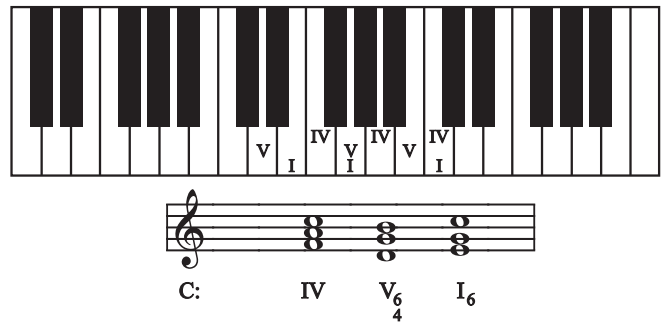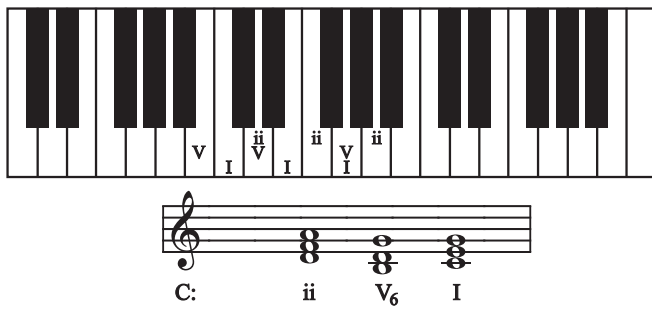
The same pitches that were shown in FIGURE 1–24 are present in these chords, but the notes are rearranged (i.e., some of the chords are inverted).

F, G♭ (the "x" notes of the right-hand keyboard).

Ears accustomed to Western music expect dissonance to resolve. Tension is created as the listener waits for a tense interval or chord to come to resolution in something more restful. Dissonance and its resolution are central to harmonic progression. An example of this is the tritone. The tritone is an interval made up two notes that are three whole steps apart (e.g., C-F♯: C-D, D-E, E-F♯), or six half steps. Tritones can also be called augmented fourths (when spelled with two note names a fourth apart, as in C-F♯) or a diminished fifth (when spelled enharmonically with two note names a fifth apart, as in C-G♭). Play an F and B together on the piano (the "T" notes in FIGURE 1–22). The two most natural sounding resolutions are *either* G♭ and B♭, or E and C, as shown by the "O" notes on the keyboard diagrams in FIGURE 1–22.

Try playing the tritone followed by its resolution a few times. Then try playing it backwards (the "O" notes *before* the "T" notes) to see if there is a way to make the tritone sound more restful than the other interval. It is difficult, if not impossible. Any chord that contains a tritone will sound more dissonant than a chord without one.

❀ **DIATONIC TRIADS**
The term **diatonic** means "within the key." A chord or melody is diatonic if no accidentals are needed other than those already indicated in the key signature. The *quality* (major, minor, diminished, or augmented) of a diatonic triad depends upon which scale degree its root is on. If a melody or chord borrows notes from outside the key, then it is **chromatic**.

Chords within any given key are related to each other in a predetermined pattern that sounds perfectly intuitive to Western ears. The fascinating thing is that the pattern connecting diatonic chords is also based on the circle of fifths. But, first let's take a closer look at the individual triads.

The **tonic triad** (also called the tonic chord or simply the tonic) is a diatonic triad built on the tonic pitch, $\hat{1}$. This is perceived as the most stable chord in a key. Nearly all pieces of music end on the tonic chord. In a major key, the tonic triad is always major.

The other major triads that occur naturally in a major key are on scale degrees $\hat{4}$ and $\hat{5}$. The diatonic triads on $\hat{2}$, $\hat{3}$, and $\hat{4}$ are minor (even though they are part of a major key). The triad built on the seventh scale degree is unique, consisting of two minor thirds. This is a **diminished triad**, and it is highly unstable; intuitively the listener wants to hear it resolve to something more restful. The diagram in FIGURE 1–23 shows a C major scale (left) and a D major scale with a triad built on each scale degree. They are labeled with Roman numerals. The single diminished triad is lower-case with a small superscripted circle added. Capitalized numerals indicate major triads, and lower-case numerals (with no superscripted circle)

FIGURE 1–26

Bass line: $\hat{2}$ $\hat{5}$ $\hat{1}$ $\hat{4}$ $\hat{5}$ $\hat{1}$
C: ii V I   C: IV V I
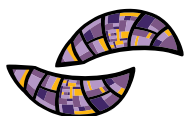
Chord progressions with bass lines added.

indicate minor triads.

� The Dominant Triad's Special Rule

Aside from the tonic chord, the dominant chord (V) is the most important. It contains the leading tone ($\hat{7}$) and the fifth scale degree, both of which want to resolve to the tonic pitch.

Other harmonies, in turn, "pull" to the dominant: these are called **pre-dominant harmonies**. The triads built on the second and fourth scale degrees (ii—also called the **supertonic**, and IV, the **sub-dominant**) are the most common predominant harmonies.

A chain of triads, each pulling to the next, is called a **chord progression**. The most common chord progression is predominant-dominant-tonic. This can be ii-V-I or IV-V-I. In FIGURE 1–24, these are written as simple triads in root position.

More often, some of the chords are inverted to create what is called smoother **voice leading**. If you think of the three chords as three horizontal layers (the top note in each chord is one layer, the middle note in each chord is a second layer, and the lowest note in each chord creates a third layer), this means each layer is relatively conjunct and easy to sing. (This is due to the fact that when Western art music developed, the vast majority of music was written for the voice.) In FIGURE 1–25, note that the same pitches are present in each chord, but the notes are rearranged (that is, the chords are inverted).

If one person sings the top note of each chord, and another sings the bottom notes, and a third person sings the middle pitches, no one person has to leap around excessively, making the progression easier to sing.

✖ Bass Lines

The **bass line** is the lowest "voice" in a series of chords. It provides the finishing touch, reinforcing the forward pull of the progression. Bass lines often, but not always, play the root of the harmony. Bass lines are usually notated in bass clef, as shown in FIGURE 1–26.

The most "final" sounding, strongest kind of bass line is one that descends a fifth. $\hat{5}$ to $\hat{1}$ is the most common bass motion at strong **cadences** (pausing points), like those which occur at the end of pieces or significant sections of music. A $\hat{5}$-$\hat{1}$ bass line supports a V-I harmonic progression. The most natural-sounding chord progressions within a key are a chain of descending fifths, such as moving counterclockwise through the circle of fifths. The example in FIGURE 1–27 shows how a simple descending fifths bass line supports a chain of harmonies that includes every diatonic triad in root position and ends on a cadence when the harmony moves from V to I and the melody (in the topmost notes) ends on $\hat{1}$.

✖ The Dominant Seventh Chord

To intensify its pull to the tonic triad, the dominant triad is often turned into a **dominant seventh** chord, or V^7 (see FIGURE 1–28). In the key of C, the dominant *triad* is G-B-D, but the dominant *seventh* chord adds a fourth pitch that is an interval

FIGURE 1–27

IV   vii°   iii   vi   ii   V   I

A descending fifths bass line supports a chain of harmonies that includes every diatonic triad in root position and ends in a perfect authentic cadence.

FIGURE 1–28

V⁷ on staff and keyboard with scale degrees, pitches, and all intervals labeled.

of a minor seventh from the root of the chord: i.e., G-F. (No matter what the key, a dominant seventh chord always consists of scale degrees $\hat{5}$-$\hat{7}$-$\hat{2}$ and $\hat{4}$. In this C major example, the pitches are G-B-D-F.)

The dominant seventh chord contains a tritone between $\hat{7}$ and $\hat{4}$, and thus the chord holds a great deal of tension. As was true for the dominant triad, the urge for V-I and $\hat{5}$- $\hat{1}$ harmonic resolution is powerful in a dominant seventh chord. Again, the leading tone ($\hat{7}$) pulls strongly to $\hat{1}$. But the additional pitch, $\hat{4}$ (a seventh above the root), pulls just as strongly *down* a half step to $\hat{3}$.

The diminished triad built on $\hat{7}$ usually functions in the same way as a dominant harmony because unless it is chromatically altered, it contains the $\hat{7}$ - $\hat{4}$ tritone that pulls so strongly to the tonic.

❊ **EXAMPLE: A HARMONIZED MELODY**
The song "Happy Birthday" can serve to illustrate the idea of harmonic progression. In FIGURE 1–29, it is harmonized with diatonic triads and labeled with Roman numerals.

Other Diatonic Chords

As common practice harmony developed beyond 1750, it became more complex. Triads remained the basis for the music, but composers began using additional pitches to embellish the triads. The most common embellishing notes

are a sixth, seventh, and ninth above the root of the chord. Examples are given in FIGURE 1–30, using a C major triad in every case, but adding a sixth (A), a seventh (B), or a ninth (D) in turn. Two samples of each added pitch chord are given. The first is in "close position," and the second, which contains the same pitches, is spread out ("open position") as it would be more likely to appear in a piece of music. As long as the root is on the bottom, the chord is considered in root position; the upper notes can be mixed in any order. (Sometimes composers omit the fifth, making identification tricky.)

Aside from the dominant-seventh chord, other diatonic seventh chords can be used to create a more complex, sophisticated sound. They can be built on any scale step by adding an interval of a seventh above the root to any diatonic triad. The addition of the fourth pitch, particularly when it is diatonic, rarely changes the function of the original triad, but it does add richness or atmosphere to the music.

Chromatic Harmonies and Modulation

Simple harmony is diatonic, and it uses mostly triads. Complex harmony uses more chromatic pitches, and four or more separate pitches may sound at the same time. Sometimes the added pitches are diatonic, but sometimes they are chromatic, adding "color." A brief passage of chromaticism is heard in "Take Me Out to the Ball Game," during the phrase "Buy me some peanuts ..."
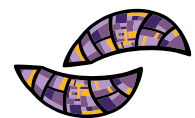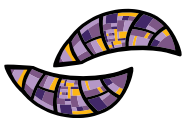
FIGURE 1–29

"Happy Birthday" harmonized.

Sometimes one or two pitches of the basic triad are altered, resulting in modal mixture. This normally happens between a major key and its parallel minor key. For instance, in a piece using the C major scale, a C minor triad or F minor triad might occasionally appear—using accidentals to indicate the E♭ in the former and the A♭ in the latter.

Unless they adhere strictly to the natural minor scale, minor keys are more chromatic than major ones. Most crucially, the natural minor scale has no leading tone. Unaltered, $\hat{7}$ is a whole step below $\hat{1}$, and it lacks the strong pull to the tonic. Without a raised $\hat{7}$, the dominant seventh chord is relatively weak because it contains no tritone.

Another way that harmony can be made more complex is to **modulate** (that is, change keys) frequently. The simplest way to modulate is to use accidentals to create the dominant seventh chord of the new key and then resolve it to the new tonic. However, if the composer wants a smooth transition, it must be done gradually and at the right time. Getting from C major to F major is quite easy because they are closely related keys, adjacent on the circle of fifths. To modulate smoothly from B major to C, the harmonies would

need to progress through every intervening key in the circle of fifths, so the two keys are said to be less closely related.

After a modulation, if the music remains in the new key for a significant amount of time, a double bar appears, and the new key signature is inserted. If the new key is temporary, the key signature does not need to change; instead, the composer uses accidentals to change any pitches that need to be altered.

Beyond Common Practice

Modulation and chromatic harmonies allowed composers to write music that strayed further and further from the "home base" tonic. Compositions could be longer and longer and more and more chromatic. Composers generally pursued these changes in order to be more expressive.

Throughout common practice, resolution of dissonance is the driving force behind harmony. In the nineteenth century, many Romantic composers sought out new ways to portray emotion and individuality in music. To many musicians and listeners, complex chromatic harmonies were better able to express the subtle variations of an individual's feelings.

Northwest Pa. Collegiate Academy - Erie, PA
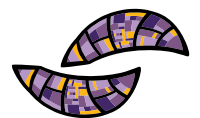
FIGURE 1–30

C major triads with added notes.

Richly textured chords could effectively convey the power, intensity, and transcendence of emotions.

Another way of increasing complexity (and, composers believed, expressivity) was to delay the resolution to the tonic. Sometimes through deceptive harmonic turns and temporary modulations to ever-more-distant keys, it could take five or ten minutes for a dominant harmony to resolve to a tonic.

Around 1910, a composer named **Arnold Schoenberg** concluded that music had become so chromatic that the only possible next step forward was to "free" dissonance from the need to resolve to the tonic. Schoenberg called this the "emancipation of the dissonance."[1] He called for composers to abandon the conventions of common-practice harmony that made one pitch lead to another. Lacking a fixed tonal center, this music soon became known as "atonal music." Pierre Boulez' 1960 magnum opus, [Pli Selon Pli](#) assiduously avoids a tonal center.

By 1925, Schoenberg developed a new system for determining pitch relationships. This system was known as the "**twelve-tone method**." Instead of a scale, each piece had a primary "tone row" consisting of all twelve chromatic pitches. Constructing this "tone row" was a crucial part of the composition process, for there was no pre-set pattern of intervals to follow as there was for a major or minor scale. Each composition would have its own row of twelve tones from which its melodies, motives, bass lines, and chords would be derived. Schoenberg's protégés, Anton Webern and Alban Berg, used his methods extensively in the 1930s, but **twelve-tone techniques** (as they are now called) and other "serial" techniques

(a term that reflects the serial ordering of the pitches in the row) caught on more widely only after World War II. Today, most composers consider Schoenberg's approach to be one of many intriguing ways to organize pitch.

Other challenges to common practice tonality were mounted in the late nineteenth and early twentieth centuries. Some composers sought to redefine "music." Luigi Russolo sought to generate and categorize "noises." Claude Debussy, Igor Stravinsky, and other composers sometimes used familiar chords from the common-practice tradition without ever resolving them (**non-functional harmonies**), adopted **unusual scales** (including pentatonic, whole-tone, and octatonic), and sometimes wrote music in two different keys to be performed simultaneously (**polytonality**). A brief example of a whole-tone scale can be heard in Variation XI of Ulysses Kay's *Fantasy Variations*. As the twentieth century progressed, an increasing number of experimental composers rejected the idea of forward motion in music, preferring to create music that was meditative, static, or circular rather than linear.

OTHER ASPECTS OF MUSICAL SOUND

TEXTURE, COUNTERPOINT, INSTRUMENTATION, AND MORE

TIMBRE
Besides melody, rhythm, and harmony, a number of factors greatly affect how a performance sounds. Texture in music has a specific meaning. It describes the number of things that
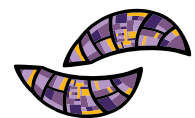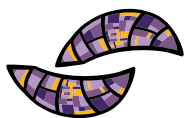
are going on at once in a piece of music. The four types of texture in Western music are **monophony**, **homophony**, **polyphony**, and **heterophony**. Monophonic music consists of a single, unaccompanied melodic line. Steve Reich's "[Piano Phase](#)" begins with a single piano playing a monophonic motive. A second piano joins in unison, and they gradually separate into multiple polyphonic parts. Multiple instruments or voices may be playing that melody, but they are all performing the same pitch at the same time—that is, they are playing the one melody in **unison**.

Homophonic texture has two different things going on at once: a melody and a harmonic accompaniment. The accompaniment differs from the melody, but plays a clearly subordinate role, as seen in FIGURE 1–29. Similarly, Bob Dylan accompanies himself on the guitar (with occasional harmonica breaks) as he sings "[The Times They Are A-Changin'](#)." Nearly all popular songs today employ homophonic texture; as listeners, we focus on the voice, but the voice is supported by background instruments. Sometimes the accompaniment lines move in the same rhythm as the melody itself, as the lower voices in a church hymn or chorale, but the notes of the accompanying voices fill out the chord pitches; they are not independent melodies.

In a **polyphonic** texture, however, two or more separate melodies unfold simultaneously. Each could stand alone, but the composer created them to relate to each other on a note-by-note basis while retaining their independence. There are two main types of polyphony: **counterpoint** and **imitative polyphony**. In counterpoint, the simultaneous melodies are usually in different registers. They are *different* melodies—each has its own pitches, contour, shape, and rhythm, but they follow the same beat. Most importantly, their pitches fit into the same harmonic progression. The two (or more) melodies are carefully coordinated by the composer on a note-by-note basis. Any dissonances or non-harmonic tones must occur within a complicated and detailed set of parameters. If the "rules" are broken, the music will not sound right to experienced Western ears, and most performers will find the music especially difficult to play or sing. The rules are a bit like grammar rules; they were created to describe a complex process, but can also be used in a prescriptive way to create successful sentences.

Composing counterpoint is a bit like completing a difficult number puzzle, like Sudoku, or a diagramless crossword puzzle. Every choice affects many other choices. When complete, everything fits together in a complex but fulfilling system in which vertical and horizontal components mesh at every point of intersection.

Imitative polyphony, on the other hand, features only one melody, but it is played by multiple people at staggered intervals, such as the way that children are taught to sing "Row Row Row Your Boat": each group sings the same tune, but starts slightly later in time than the previous group, so that polyphony ("many sounds") results. Despite its non-traditional nature, Steve Reich's "[Piano Phase](#)" is probably the ultimate example of imitative polyphony.

If two performers are producing versions of the same melody at the same time, but are not playing in precise unison—that is, each has its own slight differences—the texture is called **heterophony**. Heterophonic texture is fairly rare in Western music, but was employed quite often in the earliest styles of jazz.

Instrumentation, the instrument or combination of instruments used, is among the most noticeable features of a given piece of music. If the pitches of a melody fall within the range of an instrument, that instrument can play the melody. An electric guitar playing "Happy Birthday" sounds quite different from a piano playing it—yet even a small child will recognize it as the same tune. If the same pitches were divided up and given to members of a symphony orchestra, a marching band, or a four-part choir, the effect would be drastically different each time. **Arranging** is the art of taking an existing piece of music (melody, harmony, rhythm) and giving instructions as to what each individual performer should play. Two different **arrangements** of "Happy Birthday" for the same combination of instruments may sound very different, depending upon which instruments are given prominent, as opposed to secondary or background, roles.

Each instrument has a unique pattern of overtones. All the partials we have discussed are present to some degree, but they differ in their relative strength. With a clarinet, for instance, the first and third partials are very strong. Partials that produce other pitches are relatively very weak on the clarinet. As a result, the clarinet produces a sound wave that looks very similar to a pure sine wave, with little ambiguity in pitch. On the opposite end of the spectrum are church bells. Sometimes the overtones with bells are so strong that they seem to drown out the fundamental, and the listener may wonder what the "real" pitch is supposed to be. The **timbre** of a pitch is also affected by the thickness and density of the instrument's material and the amount of resonance. The timbre (also called **tone color**) of an acoustic guitar is affected by the size and shape of its hollow wooden body, where the sound waves produced by the strings resonate and are amplified.
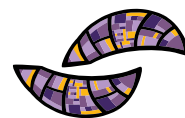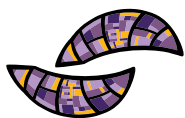
TABLE 1–4

ppp	pianississimo	as quietly as possible
pp	pianissimo	very quietly
P	Piano	quietly
mp	mezzopiano	somewhat quietly
mf	mezzoforte	somewhat loud
f	Forte	loud
ff	fortissimo	very loud
fff	fortississimo	as loudly as possible

Dynamics Chart.

For much twentieth-century music, both popular and classical, the choice of instruments and the way they are combined play a central role in making each piece a unique work of art. In *Threnody for the Victims of Hiroshima* (LISTENING EXAMPLE 1), Penderecki takes the traditional string instruments of the orchestra and requires them to be played with non-traditional techniques, producing a unique soundscape. In the absence of common-practice harmony, many twentieth-century compositions use changes in timbre to mark changes in form. In popular music, many listeners can distinguish styles—rockabilly, Motown, bluegrass, disco, punk, or house—after hearing just a few seconds of music, due to the differences in characteristic combinations of instruments and timbres.

Dynamics, Articulation, Ornamentation

Dynamics, the loudness and softness of a sound, are useful to performers and composers for expressive purposes. TABLE 1–4 shows the common Italian terms for different dynamic levels and their abbreviations. The full name of the modern piano is "pianoforte" because, unlike its keyboard predecessors, it could play both quietly (*piano*) and loudly (*forte*) in response to changes in the pianist's touch.

A gradual increase in dynamics is called a **crescendo**, and a gradual decrease is called a **decrescendo** or **diminuendo**. In a score, either the abbreviations "*cresc.*" or "*dim.*" or a symbol shaped like an elongated V rotated ninety degrees clockwise (for *crescendo*) or counterclockwise (for *diminuendo*) indicates a gradual change in volume.

The dynamic level for even a single pitch can change multiple times if its duration is long enough. Imagine a consonant chord, such as the first syllable of the "A-men" at the end of a sacred piece of music, swelling from a soft to a loud dynamic level then *decrescendo*-ing back to a whisper: a very dramatic effect.

Another expressive factor affecting the sound of a piece is **articulation**. Articulation has to do with the mechanics of starting and ending a sound. **Staccato** indicates that the performer should shorten the duration of a note rather than letting it sound for its full value; this produces extra silence before the next note, often making the musical phrase sound crisper or choppier. **Legato** means multiple pitches are played in a smooth, connected but not overlapping manner. On a keyboard, one can produce staccato by poising the finger above a key and pecking down quickly, then quickly returning the finger to its original position. On wind instruments, players use their tongue to produce a distinct beginning for a given pitch. On a violin, the bow may be bounced from the string, or the finger used to pluck it (called **pizzicato**); harp and guitar are string instruments that are plucked (or strummed), as is electric bass. Legato passages played on the piano involve leaving the finger (with the weight of the arm balanced on it) on the key until it is time for the next pitch, at which time the weight is transferred to another finger on the next key. An **accent** involves more sudden sound than a staccato, and, unlike staccato, silent space before the next pitch is not required. Various degrees of pressure, tonguing, and bow pressure all contribute to articulation. (Several articulations are depicted in TABLE 1–5.)
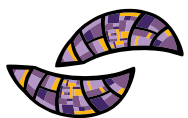
TABLE 1–5

symbol (applied to three quarter notes)	♩ ♩ ♩	♩♩♩	♩ ♩ ♩ >	♩ ♩ ♩	♩ ♩ ♩
term	staccato	legato	accented or marcato	slur	tenuto
description	short, separated	smoothly	sharply	connected	stressed without force
tonguing on a wind instrument	(tot tot tot)	(tah-tah-tah)	(TAH ta ta)	(tah-ah tot)	(taaht taaht taaht)

Common Articulation Symbols.

Ornamentation refers to localized embellishments, which are often not written down. A pop singer can swoop into a pitch, and a trumpet player can add a **trill** (a rapid oscillation between two adjacent notes) to the last pitch of a melody as a grand finale. Jazz musicians often decorate a melody with notes just above or below the original melody notes. In "[Concierto de Aranjuez](#)," trumpeter Miles Davis decorates the previously stated melody in much the same manner as a flamenco guitarist would. Ornamentation becomes so prominent in soul, pop, and rock music that it is often difficult to discern just where the original melody ends and the ornamentations begin.

FORM IN MUSIC

Form describes how music is organized on a larger time scale—how units are combined to make larger structures. Form is the architecture of music.

PERCEIVING MUSICAL FORM

Music takes place in time. By the time the final notes are heard, the sound waves from the beginning have long disappeared. To have a sense of the whole shape of a piece of music, a listener must *remember* what came before. Most people use some kind of visual representation of the music to think about its overall form, such as scores (music

notation) and **diagrams**.

Memory and anticipation are the key components to the listening experience. A listener who *expects* a dissonant passage to resolve into a consonant one may encounter one of several results. The expectation may be *met*, it may be *thwarted*, or it may be *deferred*. As the listener hears a piece, he/she experiences an ebb and flow of tension and release. Tension and release, we know, lend shape to a chord progression or melody. Tension and release also operate on a larger scale, though the listener is often less conscious of it. The primary way that tension is created is through harmonic **dissonance**.

Besides dissonance, tension can be created in other ways, including increased dynamic level, increased tempo, or increased rhythmic activity using shorter durations. Some combination of all of these is needed to sustain tension and release throughout a long composition of more than a minute or two in length. The end of The Beatles' "[A Day in the Life](#)" demonstrates how a combination of factors, including dissonance, delayed resolution to the tonic, increasing dynamics, and a rising line, can all add to the tension.

In the next section, we will describe the building blocks of musical form: motives, phrases, cadences, and themes. Then, we will examine how Western composers combine
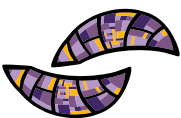
these to create larger forms using the principles of repetition, variation, development, and contrast.

ELEMENTS OF FORM

Motive

A **motive** is the smallest unit of form. A motive is best defined as the smallest identifiable recurring musical idea. A motive has a distinctive melodic and rhythmic profile. In "Happy Birthday," the first four notes (corresponding to the four syllables of text) could be called a motive. This motive has rhythmic traits ("happy" consists of a long duration followed by a shorter one, while "birthday" consists of two durations of equal length, and "birth" falls on the downbeat, which gives that syllable rhythmic emphasis and melodic traits (the two notes of "happy" occur on the same pitch; then on "birthday," the melody rises a step and falls back to the first pitch). To describe the motive's melodic contour, we would say it rises and falls. A melodic or rhythmic motive that is repeated many, many times in immediate succession is called an ostinato (from the Italian word for "obstinate"). Ostinatos can be heard in the opening of "Take Five" and in the bass part (joined by the snare drum) at the beginning of Jefferson Airplane's "White Rabbit" (Listening Example 14).

Phrase

A **phrase** is a cohesive musical thought. In "Happy Birthday," the music for the first four words can be thought of as a short phrase. It has a beginning (the motive) and an end ("...you"), followed by a brief pause. The second time the words "Happy Birthday to you" are sung, they constitute a second short musical phrase, also followed by a brief pause. It begins with the same motive, but ends a little differently.

Phrases often come in related pairs. The first member of the pair is called the **antecedent** phrase, and the second is called the **consequent** phrase. As in the "Happy Birthday" example, the two phrases are very similar in length, rhythm, and melodic contour. The difference lies in the way each phrase ends. The first phrase ends somewhat inconclusively; this is something the listener can sense, feeling that something more is needed for closure. Musical terminology can describe this sense of inconclusiveness. The phrase's rhythm does indeed come to a rest on a downbeat ("you"), but the harmony supporting the end of the phrase is a dominant harmony, and the melodic pitch is scale degree seven, the leading tone. To ears accustomed to Western music, both of these are particularly unstable.

The consequent phrase provides the perfect solution. It begins with similar musical material, in what is called a "parallel structure." In this case, it duplicates the entire rhythm and first four pitches of the antecedent phrase. The difference is that the consequent phrase comes to a more restful end. Merely by moving the last two pitches up one scale degree ($\hat{2}$- $\hat{1}$ rather than $\hat{1}$- $\hat{7}$), it is now possible for a tonic chord to support "you" this time.

Cadence

The term for a resting point in a piece of music is **cadence**. Not all cadences have the same amount of strength or finality, and there are different names to indicate this. A **half cadence** rests on the dominant harmony, like the first short phrase of "Happy Birthday." (See FIGURE 1–29.) A **full cadence**, also called an **authentic cadence**, uses the progression V-I, as the second short phrase of "Happy Birthday" does. Authentic cadences are broken down further by the degree of finality they convey. Other types of cadences also exist, but the important idea is that a cadence is a point of relative rest in music, roughly analogous to a comma, semicolon, or period in language. Cadences occur at the ends of most phrases, themes, larger sections, and entire pieces of music.

Theme

A **theme** is a set of phrases that make a complete melody, which plays a prominent role in a longer piece of music. For example, the entire song "Happy Birthday" could be used as the main theme for a twelve-minute composition called "Variations on a Birthday Tune, for Concert Band."

Introduction and Coda

Many pieces of music begin with an **Introduction**, which is music that precedes the first main theme of the piece. It is particularly common in popular music to have an instrumental introduction that precedes the singing. Examples on the USAD Music CD that begin with an instrumental introduction include "Aquarius," and "Satisfaction." Similarly, a great many pieces end with a coda, which means "tail" in Italian. A coda sounds conclusive, as if it is wrapping up the composition. When analyzing the form of a piece of music, introductions and codas are usually disregarded; they serve mainly as an outer "frame" for the central piece. The Beatles' "When I'm 64" has a short coda at the end, while "Aquarius" (Listening Example 7) has a coda of a type common in rock and roll: the final word is repeated several additional times.

FIGURE 1–31

Measure (bar):	1	2	3	4	5	6	7	8	9	10	11	12
Poetry:	*a*				*a*				*b*			
Triads in C Maj:	C	C	C	C	F	F$^{(\flat 7)}$	C	C	G	G$^{(7)}$ or F$^{(\flat 7)}$	C	C
Chords:	I	I	I	I	IV	IV$^{(\flat 7)}$	I	I	V$^{(7)}$	V$^{(7)}$ or IV$^{(\flat 7)}$	I	I

Twelve-bar blues, basic progression.

COMMON FORMS

Musical **form** controls larger spans of time. Just as mystery novels, thirty-minute television sitcoms, and movie scripts tend to follow certain patterns, so does music. Balance, proportion, drama, climax, and denouement operate in musical form. Some music-specific vocabulary will help explain common forms.

Repetition, variation, and contrast are the most basic formal processes in music. The listener must remember what he/she has already heard in order to recognize any of these. Often, musical memory happens on a subconscious level. A phrase may simply sound "right"; a song heard for the first time may seem oddly familiar when the composer makes skillful use of repetition.

Repetition

Repetition means, literally, repeating musical material, using the identical pitches, rhythms, and harmonies, or at least a very close approximation. If a musical idea (usually two measures or less) is repeated at a different pitch level, it is called a **sequence**. A sequence can be rhythmic, melodic, harmonic, or any combination thereof. In *A Love Supreme* (LISTENING EXAMPLE 8), John Coltrane repeats the four-note "Love Supreme" theme in a sequence that takes him through all twelve keys.

When describing musical form, complete sections of music are labeled with capital letters. The music to a song made up of a single, multi-phrased melody (perhaps two sets of antecedent-consequent phrases), repeated four times with different words each time would be diagrammed as follows: A A A A.

Variation

The principle of variation is also central to music. Generally speaking, variation is repetition with enough alterations that the listener senses both continuity and contrast.

❁ **THEME AND VARIATIONS**
Theme and variations is a common way of structuring a composition. Such a piece generally starts with a straightforward statement of the theme, and then follows it with a new section that repeats the theme but makes significant changes. The listener recognizes that the theme is recurring, but different harmonies, or a new accompaniment pattern, or a fancier rhythm, or a more complicated texture clearly delineate a new section. A variation may involve changes in any of the basic musical elements, but enough must remain unchanged that on some level it remains the same musical idea. A variation is diagrammed by adding a "prime" mark to the same capital letter used for the theme. Most variations, therefore, could be diagrammed A A' A'' A''' A'''', etc. Ulysses Kay's *Fantasy Variations*, however, present a twist (or variation!) on this idea (or theme!) by saving the actual theme for last.

❁ **TWELVE-BAR BLUES**
The **twelve-bar blues** is also a variation form. This twelve-measure chord progression is repeated, with variations in the melodic material, for several minutes or more. Usually in a moderate or relaxed tempo, with four beats to the measure, the blues progression can be played in any key, though C, B♭, and F are traditional favorites. Minor-key blues are possible but less common.

The basic shape, as shown in FIGURE 1–31, can be summarized as three phrases of four measures, each ending at the tonic. The first line lays out the tonic harmony—and the singer's main lament. The second line starts with a harmonic attempt to escape the tonic, but is pulled back down, while the singer repeats his/her complaint. The third line
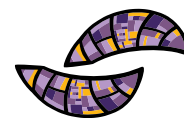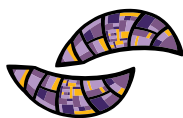
begins with an even stronger effort to rise above the tonic, but it too sinks quickly back to the starting point. Harmonic alterations that embellish but do not change this three-line profile are common.[2]

❀ **IMPROVISATION**
Improvisation in jazz, especially the styles common before 1950, uses the principle of variation. Individual performers create spontaneous variations of a familiar melody while the other instruments play its harmonies in a steady tempo. John Coltrane's recording of "[My Favorite Things](#)" illustrates this concept.

Repetition and variation occur throughout music on more abstract and more localized levels. As a localized example, the second, consequent phrase of "Happy Birthday" varies the material of the antecedent phrase. Rhythmically, the song is quite repetitive: try speaking the rhythms on a neutral, un-pitched syllable, and you'll find it impossible to distinguish the first, second, and fourth phrases. On a larger scale, you can think of every new birthday performance as a repetition. Sometimes a brave soul will attempt to add harmony, or vary the words or the tune. Everyone present usually realizes this is a variation on the familiar song, not a new composition out of left field. Whether taking place on a small scale or in the form of a lengthy piece, repetition and variation lend continuity to music. They prevent a piece of music from sounding like a string of unrelated events by providing musical coherence.

Contrast

Contrast is an important characteristic of many larger musical forms.

❀ **TERNARY AND RONDO FORMS**
The simplest form using contrast is three-part or **ternary form**, also called **ABA form**, in which two sections of very similar music frame a contrasting middle section. Each of the three sections is self-contained; each normally ends with an authentic cadence. In classical music, ternary form is often used for the inner movement(s) of multi-movement works. First movements more often use **sonata form** (discussed later) while last movements are usually in sonata or rondo form. **Rondo form** is also built from distinct sections, one of which keeps returning. Typical diagrams for rondo form include ABACABA or ABACA.

There are no hard-and-fast rules about length, proportions, or the nature of the contrast. Frank Zappa's "[It Can't Happen Here](#)" is an avant-garde work structured with a combination of ternary and rondo form, resulting in a diagram of A B C B A.

❀ **32-BAR FORM**
In mid-twentieth-century popular music, most choruses contain a section of contrasting material. Songs like "I Got Rhythm" and "Somewhere Over the Rainbow" often consisted of an eight-measure A section that is repeated, contrasted with a second eight-measure idea, and then returns, resulting in a **32-bar form**, which is then repeated with different text. By the 1960s, however, this way of organizing a song had become something of a cliché, and most music of the 1960s either plays with the form (extending or shortening one or more of the sections) or simply avoids it altogether.

❀ **VERSE-CHORUS FORM**
In the early days of popular music, the most popular formal architecture was the **verse-chorus** (or **verse-refrain**) form. It consists of multiple verses, each with different words, and a repetitive chorus, or refrain. This form is often diagrammed as **a-B-a-B** (etc.), with the upper-case "B" indicating that both the melody and the words repeat. During the verses, it is only the melody that repeats.

Development

❀ **FUGUE**
Fugue is not actually a standard form, but a technique. However, the form of many classical pieces is determined by the way the composer uses fugal technique, rather than by any of the other forms described here. A fugue usually has a single theme, called a **fugue subject**, which the composer develops using the technique of **imitative counterpoint**. When there is a companion theme, it is called a **countersubject**. **Imitation**, the approximate repetition of a melodic idea at a different pitch level, is central to fugal technique. At the beginning of a fugue, the subject is usually heard alone, without accompaniment or harmony. A second line of music then enters, imitating the subject (usually a fourth lower or a fifth higher), and soon a third and sometimes a fourth line enter, also imitating the subject, until a thick polyphonic texture
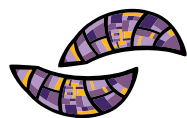
has been created. As the fugue continues, the subject may be inverted (turned upside down), reversed, elongated, fragmented, transposed, and overlapped with itself or with polyphonic countermelodies. Fugue techniques are much older than the major-minor tonal system, but even into the twenty-first century composers have found them intriguing and flexible.

❀ Sonata Form

Sonata form is a standard form that has been used for the first movements of many Western classical compositions, beginning around 1730. (See the discussion that follows for a definition of **movement**.) Within a two-section structure, a sonata form has three main activities—exposition, development, and recapitulation—and two main musical ideas, or melodies. The first section contains the **exposition**, which presents the first idea in the tonic key, modulates to a different key (usually the dominant key), and presents the second idea in the new key. These "ideas" can be easy to identify when they are themes made of antecedent and consequent phrases. But sometimes they are simply collections of motives or chords, in which case the key change is the best signal that Idea #2 is about to begin. The key change, or **transition**, is usually characterized by increased rhythmic activity, louder dynamics, turbulent or unstable harmonies, and new accidentals. Idea #2, in the new key, has an element of contrast. It may be gentler, lighter in texture, higher in range, or contain more—or less—motion than Idea #1. Idea #2 is most often in the dominant, or the key that takes the fifth degree of the opening key's scale as the tonic. The exposition ends with a strong cadence in the new key. Traditionally, the exposition is repeated, in part to help establish the ideas in the listener's memory.

The second section begins with the **development** portion of the sonata form, which is harmonically unstable and exploratory. Melodic, harmonic, and rhythmic material from the exposition reappears, sometimes fragmented and varied. Phrases of irregular length, sudden changes in dynamics and texture, chromatic alterations, unexpected chord progressions, and frequent modulations convey a sense of struggle. The development portion ends in a **half cadence** on the dominant chord of the original key. With the **recapitulation**, order is restored. Idea #1 returns, just as it was presented

in the exposition. The transition and Idea #2 follow, in what is *almost* a literal repetition of the exposition. The big exception is that the transition does not modulate. When Idea #2 arrives, it is now played in the same key as Idea #1. Not only has order been restored, but the contrasting Idea #2, off in its own key at the beginning, has now been pulled into the key of Idea #1, the key that started the whole movement. A concluding section in the original key brings the entire movement to a close. In the Classical period, the development and recapitulation portions were played a second time through as well, but most performers today omit that repetition.

The first movements of countless symphonies, piano sonatas, string quartets, and other compositions are in sonata form. For that reason, sonata form was simply known as "first movement form." However, sonata forms can appear in other movements.

Very long works often consist of three or four shorter, distinct pieces called **movements**. The **sonata cycle** is the most prevalent multi-movement composition. The term sonata cycle is rarely used, but it is seen everywhere, particularly in longer instrumental works from about 1730 to 1950. Thousands of three-movement works titled "Sonata" exist for solo piano, for solo instrument unaccompanied or with keyboard, and for small groups of instruments. Three-movement sonata cycles usually follow a fast-slow-fast pattern of tempos. The first movement is usually a dramatic sonata form; the second slower and more lyrical, using ABA form; and the final movement lively, in either sonata form, rondo form, or a hybrid of the two. In addition, most compositions titled "String Quartet" or "Symphony" from the same date range use a four-movement sonata cycle form. In the four-movement sonata cycle, which is favored by composers writing for string quartets or orchestras, a dance-like "minuet and trio" movement normally appears before the last movement.

WHICH IS THE REAL MUSIC? SCORES, RECORDINGS, AND PERFORMANCE

Music theory traditionally describes pieces of music as if they were fixed objects. However, it is important to remember that (most) music is performed by living people. Music notation is able to convey some things precisely—pitch relationships, rhythms, instrumentation, and to some degree phrasing, dynamics, and articulation. Yet it also has obvious limitations.
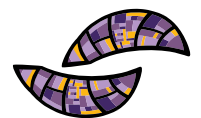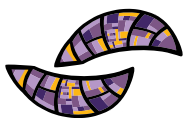
We cannot know how smoothly people in the 1870s performed a "legato" phrase. Historians have found written comments suggesting that the exact pitch for concert A may have varied as much as a minor third in either direction from today's A440—which even today is not universally adopted. Recording technology has allowed us to preserve far more information than notation allows, but this too is limited in different ways. An entire subfield called "performance practice" exists to address the question, how did the music really sound? Perhaps critics like Christopher Small have it right when they propose that in addition to marveling at the intricate structure of Western music, we should also study the human activity he calls "Musicking."[3]

SECTION I SUMMARY

SOUND AND MUSIC

❄ Music is sound organized in time.

PITCH, RHYTHM, HARMONY

❄ Developed over centuries in the Western world, common-practice tonality is the widely accepted system for describing the relationships among pitches and harmonies.

❄ **Pitch** is the highness or lowness of a sound. It is the basic building block for melody and harmony. **Harmony** occurs when two or more pitches sound simultaneously.

❄ The **octave** occurs naturally in the overtone series. Western tradition divides it into twelve equal intervals called **half steps**.

❄ **Melody** is a coherent succession of pitches perceived as a whole, with a beginning, middle, and end.

❄ **Major and minor scales** are sets of seven different pitches arranged in a specific pattern of whole and half steps within a single octave.

❄ The **beat** is the steady, regular pulse underlying most music. **Tempo** is the speed of the beat.

❄ **Meter** groups beats into regular patterns of strong and weak beats.

❄ **Rhythm** is the series of durations of varying lengths that overlie the beat.

❄ Nearly all Western music is built upon the need for **dominant harmony** to resolve to the tonic, or

resting tone.

❄ A **key** is a hierarchical set of harmonic and melodic pitch relationships organized around a tonic and using one of the thirty major and minor scales.

❄ **Diatonic music** uses pitches from only a single scale; music is **chromatic** when it uses **accidentals** (sharps and flats) to add pitches from outside the key, or to change keys.

❄ The **triad** is the most basic type of chord. It consists of two stacked thirds.

❄ Some composers in the last 120 years have sought to expand and even overturn common-practice tonality.

OTHER ASPECTS

❄ **Texture**, **counterpoint**, **dynamics**, **articulation**, and **ornamentation** are important features that can distinguish otherwise similar musical sounds.

FORM

❄ **Tension and release**, **memory and anticipation**, and **continuity and contrast** are fundamental to the listener's musical experience.

❄ Motives, phrases, cadences, and themes are the smallest building blocks of **form**.

❄ Musical material may be repeated, varied, developed, or contrasted with different material to create longer forms; it can be framed by an **introduction** and/or a **coda**.

❄ Common forms include **theme and variations**, **twelve-bar blues**, **thirty-two-bar form**, **ABA form**, **verse-chorus**, and **sonata form**.

CONCLUSION

❄ Music can be represented by diagrams, with notation, or on sound recordings, each of which has limitations.

❄ Because music is an art form that structures time rather than space, some people consider it an activity rather than a fixed object.
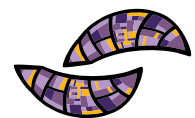
CAMELOT AND KENNEDY

In early December 1960, shortly after John F. Kennedy was elected president of the United States, a new musical opened on Broadway. Alan Jay Lerner and Frederick Loewe were capitalizing on the success of their preceding Broadway blockbuster, *My Fair Lady* (1956). This new musical, *Camelot*, told the story of King Arthur, his beautiful wife Guinevere, and the cadre of advisors and supporters who surrounded the King. Lerner, the lyricist, had been a classmate of Kennedy at Harvard, and Kennedy grew fond of the musical. Legend has it that he would often listen to the soundtrack and that he was particularly fond of the last few lines of the musical: "Don't let it be forgot, that once there was a spot, for one brief shining moment that was known as Camelot."[4] Kennedy's administration became associated with Lerner and Loewe's musical. This romanticized view of the Kennedy administration typifies our reaction to the early 1960s. Although there were serious threats to prosperity and peace (Cold War, Bay of Pigs, Cuban Missile Crisis), there was nevertheless a sense of optimism and idealism. In many ways, the music of the early 1960s reflects that attitude.

"THE TORCH HAS BEEN PASSED"

John F. Kennedy was the youngest person elected President of the United States,[5] and the first President born in the twentieth century.[6] As such, it was appropriate that his inaugural address included the famous words, "Let the word go forth . . . that the torch has been passed to a new generation of Americans."[7] Many historians see this as a sort of declaration of independence and the burgeoning of youth culture, at least in America, if not the whole world. The world of music seemed to follow a parallel path, with the real leadership in music coming from the "new generation."

TELEVISION—CAUSE AND EFFECT

During the 1950s, television ownership in the United States had increased at an amazing rate, from fewer than ten percent of households to more than ninety percent.[8] Substantial increases could be seen around the world.[9] One could almost call the sixties the "television decade." The election of John F. Kennedy over Richard Nixon reflected the continuing influence of television. One author even called television "the key to the election."[10] The televised presidential debates helped popularize the medium further.[11] The newly popular medium would have a substantial influence on the music—especially the popular music—of the 1960s, introducing audiences to new music and disseminating that music quickly and nearly universally.[12]

SETTING THE STAGE— TRADITIONALISTS AND ICONOCLASTS: MOVING FROM 1959 INTO 1960

As would be the case in nearly any period of history, there was a dichotomy in the late 1950s and early 1960s between musical traditionalists and iconoclasts (those who purposefully break from tradition), but as we shall observe during the rest of Section II, in this time of the "brief shining moment," most of the iconoclasts were rather tame compared to what would transpire later in the decade.

MUSICAL THEATRE: THE END OF AN ERA—THE SOUND OF MUSIC AND THE DEATH OF OSCAR HAMMERSTEIN

For nearly twenty years, the team of Richard Rodgers and Oscar Hammerstein had been at the pinnacle of Broadway musical theatre, during what many authors call the "Golden Age" of the Broadway musical.[13] *The Sound of Music*, which opened in November 1959, won the 1960 Tony for Best Musical. However, fans of the dynamic team had their enthusiasm tempered by the death of Oscar Hammerstein from stomach cancer the following August.[14] In many ways, *Sound of Music* and the death of Hammerstein marked the end of an era. That is not to say that there were no musicals that fit the mold of the shows of the "Golden Age," but that the time was coming for the torch to be passed.

Northwest Pa. Collegiate Academy - Erie, PA

Photograph of composer Frederick Loewe at the piano, working with lyricist and librettist Alan Jay Lerner, 1960. Camelot *was Loewe's last show before his retirement.*

Camelot is an example of a 1960 musical that stuck to the older formula. Had *Camelot* premiered ten or fifteen years earlier, it would not have raised any eyebrows or ruffled any feathers. *Camelot* was also a signal of the end of the "Golden Age," as it was Frederick Loewe's last show before his retirement from writing for the musical theatre.[15]

BROADWAY ENTERS THE MODERN ERA

Charles Strouse (later known for *Annie*) was just at the beginning of his career in 1960 when he collaborated with lyricist Lee Adams to create *Bye, Bye, Birdie*. The melodic, rhythmic, and harmonic language of *Birdie* was nothing new. In many ways the harmonies, melodies, and rhythms were simpler and more repetitive than the more sophisticated work of Rodgers and Hammerstein or Lerner and Loewe and certainly could not compare with the complex rhythms, rich harmonies, and challenging melodic material of Leonard Bernstein's 1957 *West Side Story*.[16] So why does this musical help mark the end of an era?

Bye, Bye, Birdie can hardly be called experimental, and most authors do not consider it iconoclastic; but it does have characteristics that make it a real entry-point into the 1960s. First, there is an Elvis-like character (Conrad Birdie) who sings, gyrates his hips, and gets all the girls. The plot includes his military induction, paralleling Elvis' military service, which figured prominently in the news of the day. Second, the youth orientation (teens are main characters) was unusual at the time and fit with the new emphasis on youth culture that coincided with Kennedy's election. Not only were teens the subject matter, they were also, to some extent, the target audience. Strouse's music—in particular the songs sung by Birdie—was composed to sound like Broadway adaptations of the popular music of the day. A
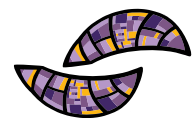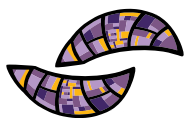
third characteristic was that the instrumentation, including electric guitar, was hinting at the future of musical theatre orchestration, opening the door for many rock-oriented shows to follow.[17] The golden era of the Rodgers and Hammerstein orchestral musical may not have come to an abrupt end in 1960, but the door was now open for new musical styles to become part of Broadway.[18]

Another aspect of *Bye, Bye, Birdie* that plants it squarely in the 1960s was that television played a part in the storyline. *Birdie* emphasizes one specific television show that had become a staple of American viewing audiences, one which was starting to take on the gravity of a cultural arbiter: *The Ed Sullivan Show*. In the song "Ed Sullivan," the McAfee family celebrates the fact that they have been invited to appear on *Ed Sullivan* as part of a publicity stunt related to Conrad Birdie's enlistment.[19] Despite its lack of rhythmic, harmonic, or melodic innovation, *Bye, Bye, Birdie* pointed in the direction of a new style of musical theatre that would evolve during the 1960s.

CLASSICAL MUSIC: SOMETHING OLD AND SOMETHING NEW

Classical music of the twentieth century also includes both traditionalists and iconoclasts. Even before Igor Stravinsky's *Rite of Spring* (1913) broke the mold, composers like Richard Strauss, Arnold Schoenberg, and Anton Webern tested the boundaries of music. By mid-century, John Cage had confounded critics by creating music over which he had no real control: By composing for twelve radios, Cage made the sound of *Imaginary Landscape No. 4* (1951) completely dependent on the radio stations within range of the performance and what those stations were broadcasting. This music of "chance," that differs at every performance with a final result not pre-determined by the composer, is called "aleatoric" music. (The word aleatory comes from the Latin word *alea*, meaning dice.) In August 1952, in a small town in upstate New York, Cage premiered an aleatoric work that was even more iconoclastic: *4'33"*, a work that consisted entirely of silence lasting four minutes and thirty-three seconds. As the pianist, David Tudor, timed the silence, the performance consisted only of ambient sound and relied greatly on the imagination (and goodwill) of the listener.[20]

While John Cage worked to remove composer control over the final result, other composers sought new sound sources that afforded them increased control. Composers like Edgard Varèse, Luciano Berio, Karlheinz Stockhausen, and even Cage himself, experimented with magnetic tape, creating ***musique concrète*** (music consisting of the

manipulation of recordings of pre-existing sounds, whether played by musical instruments or found in nature), and even creating electronically generated music using oscillators, tone generators, and rudimentary synthesizers. By 1960, the definition of music in the **avant-garde** (music which is forward-looking or experimental) was sufficiently broad that it was difficult to be an iconoclast. There are an infinite number of sound sources, however, and an infinite number of ways of combining them, so composers in the 1960s were still able to create new and surprising music that could hardly be called traditional.

Despite a healthy and active avant-garde branch of musical composition and performance, many composers remained much closer to the traditional forms of music making, composing for piano, voice, orchestral instruments, and using harmonies, melodic shapes, and rhythms in which audiences could find some familiar (and perhaps comforting) sounds. One such composer was Benjamin Britten from England. While Britten's music could exhibit some modern characteristics even in works from before mid-century, his music was written for traditional musical forces (orchestral instruments, piano, the human voice), used in traditional manners, and while his works demonstrated a highly developed palate of rhythmical and harmonic gestures, they were not overly strident or groundbreaking. In particular, when Britten was looking at England's glorious past, as in his Shakespeare-based 1960 opera *Midsummer Night's Dream*, his harmonies and rhythms were conservative in nature.

American composer Leonard Bernstein had the ability to stand in both camps. In 1957, Bernstein shook the world of Broadway with a musical that incorporated rhythms, melodic shapes, and harmonic language from modern jazz as well as ideas from classical music. *West Side Story* got the attention of the Broadway elite and put them on notice that the *status quo* was not going to be sufficient for much longer. However, at the same time that Bernstein was disrupting Broadway traditions, he became the principal conductor of the New York Philharmonic, a position in which he would champion the great masterworks of the past: Bach, Beethoven, Brahms, and his favorite, Mahler.[21]

As important as Bernstein was for *West Side Story* in the 1950s, for *Mass* (in memory of John F. Kennedy) in the 1970s, and for his conducting career that took him all over the world and resulted in a huge body of recorded work, his main contribution to music in the 1960s, and perhaps the greatest musical contribution of his entire career, was the series of *Young People's Concerts* that began in

Composer John Cage prepares a piano, c. 1954.

Photo courtesy of the John Cage Trust.

1958 and continued throughout the 1960s.[22] These were extremely significant because they were broadcast on television and intended for young listeners around the world, not just those present in the concert hall in New York with their parents.[23] Using the nascent medium of television, Bernstein raised the cultural awareness and musical interest of hundreds of thousands of young viewers. The medium of television shaped musical sensibilities and helped build new audiences for classical music.

While Britten's compositions and Bernstein's conducting, recording, and television shows might have served primarily to continue musical traditions that preceded the 1960s, there were still new compositional paths to be opened up by musical pioneers like John Cage, Karlheinz Stockhausen, Pierre Boulez, and Krzysztof Penderecki.

In many ways, the music of John Cage was more about musical concepts than about musical results. It is not surprising, therefore, that Cage not only challenged the rules of how music should sound, he also challenged the rules of how music should look. Cage's score for "Aria" (1958) contains no traditional musical notation, but rather
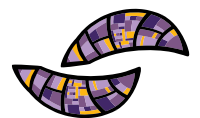
text fragments and phonemes in five different languages, shapes, and colors.[24] Each of the twenty pages is intended to last approximately thirty seconds. In 1960, Cage combined "Aria" with his electronic tape composition *Fontana Mix* (1959). The new piece, *Aria with Fontana Mix*, became one of the first compositions combining [graphic notation](), pre-recorded electronic sounds, and the human voice, all within an aleatoric framework. The innovative soundscape created by this combination ensures that each performance will be different, and that the composer does not control the final result, despite the fact that the pre-recorded tape will be the same every time.[25]

While John Cage may have chosen to combine live and recorded music in a random manner, Karlheinz Stockhausen was meticulous about the relationship between the recorded and live sounds in his 1959 composition *Kontakte*.[26] Unless you are fortunate enough to hear the piece performed live, it is often difficult to ascertain where the live sounds end and the recorded sounds begin.[27]

By the beginning of the 1960s, writing tonal music was considered "anathema"—to be avoided at all costs.[28] Even well-established composers like Aaron Copland and Igor Stravinsky used serial techniques to avoid tonality in the early 1960s. In the 1950s, Pierre Boulez had become a strict serialist composer. In 1960 Boulez also incorporated aleatoric techniques into his music. His *Pli Selon Pli* consisted of sections of music that would be re-ordered at each performance.[29] As if that level of indeterminacy were not sufficient, Boulez had sections within the work where various sections of the ensemble moved at different speeds. Even the finest musicians operating under these parameters align differently at each performance. Thus, like John Cage, Boulez was relinquishing some control over the final result. At the same time, Boulez composed the fragments that made up *Pli Selon Pli* using Schoenbergian serial techniques as well as serializing dynamics and rhythms, as French composer Olivier Messiaen had done in the 1940s.[30] Boulez integrated two previously opposing factions from the avant-garde wing of classical composition.
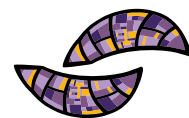
Poland in 1960 was not exactly fertile ground for building an international reputation as a composer. As if the devastation of World War II were not challenging enough for Poland, Soviet repression during the Cold War caused Poland to languish for decades. However, Krzysztof Penderecki brought Polish music to the attention of the world with a single, disturbing, jarring, and thought-provoking work. *Threnody for the Victims of Hiroshima* catapulted the composer and his compatriots into the mainstream of avant-garde classical music.[31]

LISTENING COMPANION—LISTENING EXAMPLE 1: *THRENODY FOR THE VICTIMS OF HIROSHIMA (1960)—KRZYSZTOF PENDERECKI*

Krzysztof Penderecki (b. 1933) was twenty-six years old when he completed his striking composition for fifty-two string players. He had originally titled the piece *8'37"*—the length of time it was supposed to take to perform.[32] After hearing a recording, Penderecki felt the piece was too evocative to have a title that only described its length and renamed it **Threnody** for the Victims of Hiroshima, referring to the victims of the atomic bomb dropped on Japan by the U.S. at the end of World War II.[33] According to the Merriam-Webster dictionary, a "threnody" is a song of lamentation for the dead, and it has a connotation of wailing.[34]

Threnody was an experimental composition in many ways. First, it did not use traditional pitch notation most of the time. Instead Penderecki gave suggestions, such as "Highest note of the instrument (no definite pitch)," or asked the musicians to bend the pitch up or down from the normal pitches to notes that are in between the notes on the piano (**quarter tones**). At other times he asked for an oscillating pitch that slid up and down a distance halfway between two pitches on the piano. He sometimes specified that the speed and intensity of this oscillation (known as **vibrato**) should increase and other times decrease. When you consider the fact that the musicians were doing this at slightly different rates of speed (only a general idea of the speed of oscillation is given), you can imagine how discordant and dissonant the sound was.

Threnody was also experimental with respect to how the instruments were played. Penderecki specified techniques that include playing with the bow in places that a string player normally does not play (which makes some strange

sounds that you will hear when listening to this track), or even hitting the instrument with the bow or with the fingertips, making percussive sounds. At other times he asked for a "very rapid non-rhythmisized tremolo"[35] The Italian word **tremolo** comes from the same root as the English word "tremble." String players achieve this sound by moving the bow back and forth on the string as fast as possible. This is actually a rather common orchestral string effect, but when used in conjunction with the strange clusters of notes being played, it had quite an unusual result. To specify the different techniques he required, Penderecki devised a series of graphic symbols that represented the sounds.

Penderecki also chose to notate the passage of time in a non-traditional manner. Instead of using meters and whole, half, quarter, and sixteenth notes, Penderecki used a timeline and placed the graphic symbols linearly to indicate when they were to be executed. The score was divided into seventy sections, most ranging in length from four seconds to thirty seconds. Each section was different from the others, so there is not any repetitive form. There was no return of familiar ideas, though some techniques used in one part of the piece do come back in later parts and are thus recognizable, but they are never repeated verbatim.

Composer and conductor Krzysztof Penderecki.

Penderecki described the process of creating the score as follows:

> I had to write in shorthand—something for me to remember, because my style of composing at that time was just to draw a piece first and then look for pitch . . . I just wanted to write music that would have an impact, a density, powerful expression, a different expression . . . I think this notation was for me, in the beginning, like shorthand, really, coming from drawing the piece. I used to see the whole piece in front of me—Threnody is very easy to draw. First you have just the high note, then you have this repeating section, then you have this cluster going, coming—different shapes. Then there is a louder section; then there's another section, then there is the section which is strictly written in 12-tone technique. Then it goes back to the same cluster technique again, and the end of the piece is a big cluster, which you can draw like a square and write behind it fortissimo . . . I didn't want to write bars, because this music doesn't work if you put it in bars.[36]

Penderecki infused his work with the disturbing sound of microtonality through carefully organized but unorthodox pitch notation and non-synchronized pitch variations, creating microtonal tone clusters that are even more disturbingly dissonant than those developed by Henry Cowell.[37]

Penderecki divided the strings into fifty-two parts as follows: twenty-four violins, ten violas, ten cellos, eight basses. Each player had an individual part. While sometimes they played in larger groups (at the beginning, for example, the violins only divide into four parts), at other times each player had individual instructions. This became particularly important when Penderecki used sliding tone clusters. Each player had an individual assignment of a starting pitch and an ending pitch and was instructed to slide from one pitch to the other in a certain amount of time. Since each player would slide at their own rate, and they are sliding different distances, the result was a cluster of sound within a certain pitch range, but with no specific discernable pitch.

These techniques were not common in the early 1960s, but after the success of *Threnody*, many other composers adopted several of Penderecki's techniques and graphic notation symbols. This was not music of melody, harmony, or
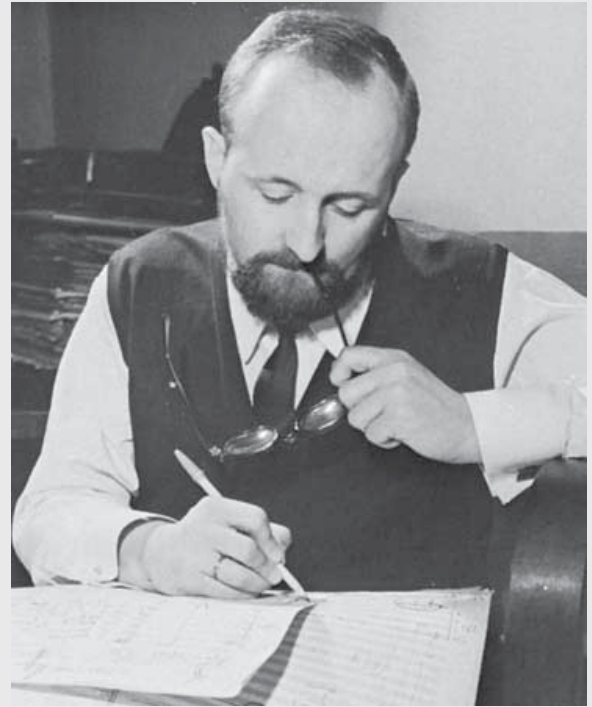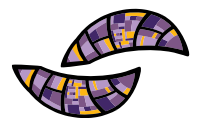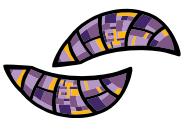
rhythm. It was music of gestures, shapes, texture, and perhaps most important of all, unique sounds. While *Threnody* may not have been the first piece (or even Penderecki's first piece) to explore most of these techniques and sounds, for many musicians it was the first piece with these sounds that they heard or learned about. Its influence on music from 1960 on is substantial.

The USAD CD includes the first several minutes of a performance of *Threnody* with the composer conducting. To give you an idea of how much different performances of the piece can vary, even though the piece was originally entitled *8'37"*, the complete recording, even with the composer conducting, lasts more than ten minutes.

	Listening Guide 1 *Threnody for the Victims of Hiroshima—1960* **Krzysztof Penderecki (b.1933)**	
Time	**Techniques**	**Musical Result**
0:02	Highest note of the instrument (no definite pitch), quite loud, additive staggered entrances, in seemingly random order, but primarily from high to low, each pitch sustains at loud volume after entering.	Screeching, screaming, increasing intensity, and thickening texture.
0:22	After all instruments have entered, some instruments sustain a steady tone (still on the highest pitch, while others add quarter-tone vibrato. Slightly softer.	Wailing, sorrowful, but still screeching.
0:58	Quieter volume, much faster but narrower vibrato in some instruments.	Sounds like a huge flock of birds all chirping at once.
1:08	Still quieter. Fastest vibrato is obscured by slower vibrato.	Even more mournful, almost siren-like.
1:25	Suddenly the cellos start rapidly and loudly repeating a series of unusual percussive sounds: plucking the highest note on the instrument, bowing the wrong end of the strings with the wooden part of the bow, hitting the end of the bow on the main body of the violin. At the same time, the violins increase their volume and slow their vibrato down. Staggered entrances add to the intensity as violas, then violins, then basses join in.	Cacophonous confusion, as if hail were hitting a wooden shack, or like the sound of debris thrown against a flimsy building during a tornado or hurricane. Birds continue to shriek, as if they are being hit by hail also. Some sounds resemble breaking glass. It is hard to believe this is being achieved entirely by classical string instruments.
2:18	Percussive sounds stop, revealing the cellos quietly playing a narrow band of pitches. Some players slide up a few pitches, while others slide down. They then reverse direction, returning to the narrow band of pitches.	There is a sense of calm, but uncomfortable calm, as if teetering on the brink of something horrible.
2:35	Upper violins come in quietly, on a slightly lower note than the cellos. Some slide up and others down, but they do not slide back together like the cellos.	Still uncomfortable.

2:47	As the violins finish their sliding, the basses enter quietly. They slide up and down further than the other sections did, before sliding somewhat more abruptly back to the small band of pitches.	Sounds like overlapping sirens.
3:03	The violas enter on a wider band of pitches, at a louder dynamic, and slowly move to a narrow band of pitches, nearly in unison, and getting softer.	
3:12	As the violas finish their slow movement to a single pitch, the second half of the violins enter, quietly, on a much higher note, and start to spread.	All these clusters of changing thickness have a calm, yet unsettling effect. This section seems to change character less rapidly than preceding sections of the work.
3:25	Before the lower violins can finish, the cellos enter loudly in a moderately wide band of pitches. They begin to narrow the band and get quieter.	This section starts to resemble a fugue, with the expansion idea passed around the orchestra like a theme on different pitch levels.
3:34	Violas enter, approximately one half-step above the cellos and sustain for a while before expanding and contracting.	
3:44	Before they can even start their expansion, the upper violins enter quietly on very high notes, getting louder before they expand and contract.	The entrances start to come closer together and overlap, like the **stretto** section of a fugue.
3:56	Now the basses enter before the violins can do their expansion.	
4:01	As the basses finish their contraction, the violins do their expansion and contraction rather quickly, before returning to an almost unison high note.	
4:06	The basses have faded to nothing, and the high note is left alone. The high note begins to fade.	
4:14	These sounds end as abruptly as they started.	This is where our sample ends, approximately halfway through the piece. There are many interesting sounds and techniques in the second half of the piece as well.

The remainder of *Threnody* (approximately six minutes) contains many more fascinating and strange sounds. The piece ends with the fifty-two players each assigned to a different note. This final block of sound lasts for thirty seconds. The players are instructed to start as loud as possible, gradually diminishing in intensity, while also changing from the most aggressive, nasal-sounding bowing placement, through to the normal-sounding placement, and gradually moving to the most hollow-, mellow-sounding bow placement. Slowly the sound fades to nothing. It is as if the last living thing has stopped moving, just as must have happened at Hiroshima after the explosion. You can imagine why this piece served as a frightening, moving, and appropriate memorial to the victims of Hiroshima. Is the music beautiful? No. Effective? Yes. Penderecki's career was launched, and composers had a new repertoire of sounds, symbols, and ideas to explore.

FIGURE 2–1
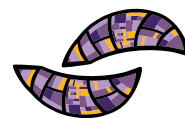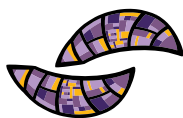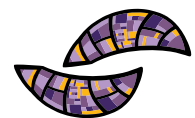
Abkürzungen und Symbole
Abbreviations and symbols

Erhöhung um einen Viertelton sharpen a quarter-tone	‡
Erhöhung um einen Dreiviertelton sharpen three quarter-tones	‡‡
Erniedrigung um einen Viertelton flatten a quarter-tone	♭
Erniedrigung um einen Dreiviertelton flatten three quarter-tones	⟁
höchster Ton des Instrumentes (unbestimmte Tonhöhe) highest note of the instrument (no definite pitch)	↟
zwischen Steg und Saitenhalter spielen play between bridge and tailpiece	↑
Arpeggio zwischen Steg und Saitenhalter (4 Saiten) arpeggio on 4 strings behind the bridge	⇈⇈
auf dem Saitenhalter spielen (arco), Bogenstrich über den Saiten- halter (in einem Winkel von 90° zu dessen Längsachse) play on the tailpiece (arco) by bowing the tailpiece at an angle of 90° to its longer axis	⊥
auf dem Steg spielen (arco), Bogenstrich über das Holz des Steges senkrecht zu dessen rechter Schmalseite play on the bridge by bowing the wood of the bridge at a right angle at its right side	⟊
Schlagzeugeffekt: mit dem Frosch oder mit der Fingerspitze auf die Decke klopfen Percussion effect: strike the upper sounding board of the violin with the nut or the finger-tips	∮
mehrere unregelmäßige Bogenwechsel several irregular changes of bow	⊓∨
molto vibrato	⌇⌇
sehr langsames Vibrato mit ¼ Ton-Frequenzdifferenz durch Fingerverschiebung very slow vibrato with a ¼ tone frequency difference produced by sliding the finger	∿
sehr schnelles, nicht rhythmisiertes Tremolo very rapid non rhythmisized tremolo	⊠
ordinario	ord.
sul ponticello	s. p.
sul tasto	s. t.
col legno	c. l.
legno battuto	l. batt.

Composer Krzysztof Penderecki's instructions for the performance of his Threnody for the Victims of Hiroshima.
Source: Penderecki, Threnody to the Victims of Hiroshima.
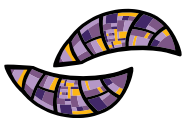
JAZZ: *MANY DIFFERENT STREAMS*

As jazz matured in the 1950s, some musicians represented the traditionalist side of jazz, maintaining the styles that had developed in the earlier part of the century. A good example of this is Ella Fitzgerald. Fitzgerald was tempted to revisit the old **standard** "Mack the Knife" (from Kurt Weill's 1928 *Threepenny Opera*) after Bobby Darin's version held the number one spot on Billboard's Hot 100 for ten weeks in 1959. Fitzgerald's 1960 recording is not groundbreaking, but is a continuation of the style that had made her famous since her discovery at the Apollo Theatre in 1934.

During 1959 in particular, many jazz musicians began to explore new styles of jazz that went on to become better known and more significant in the 1960s. John Coltrane, for example, was primarily known as a **sideman** (a musician who plays "alongside" a better-known leader) before the release of his 1959 album *Giant Steps*. On this album, Coltrane explored the technical limits of bebop, expanding the harmonic language to incorporate more complex chord **changes** (the series of chords repeated for each "verse" of a jazz improvisation) and demonstrating the level of technical expertise that could be achieved in creating perpetual strings of notes to fit the changes. The title tune of the album, "Giant Steps," is still a challenge for jazz musicians today.[38]

Following a sixteen-measure "melody" (repeated twice), with longer notes (two or three per measure), Coltrane takes off on an almost non-stop flurry of notes (usually eight per measure) crafted to fit perfectly with the series of chords played by the rhythm section. With a series of notes that fast, one might assume that Coltrane was repeating something that he had worked out in advance. Quite the opposite is true. The CD version of the original album contains an additional take with a completely different improvisation. Furthermore, this composition was new to his band. Unlike many pieces recorded in the studio, this piece was not perfected in live performances before being recorded. As a result, "Giant Steps" was a brilliant example of the improvisational possibilities that Coltrane opened up in 1959 and the early 1960s. With this album, Coltrane established himself as the pre-eminent tenor saxophone player of the era and an important leader for the jazz of the future.

It was also in 1959 that the Dave Brubeck Quartet released the album *Time Out*. This album featured several compositions that expanded the rhythmic and metrical boundaries of jazz. Since jazz was often dance music, most jazz up to this point was in quadruple meter, with
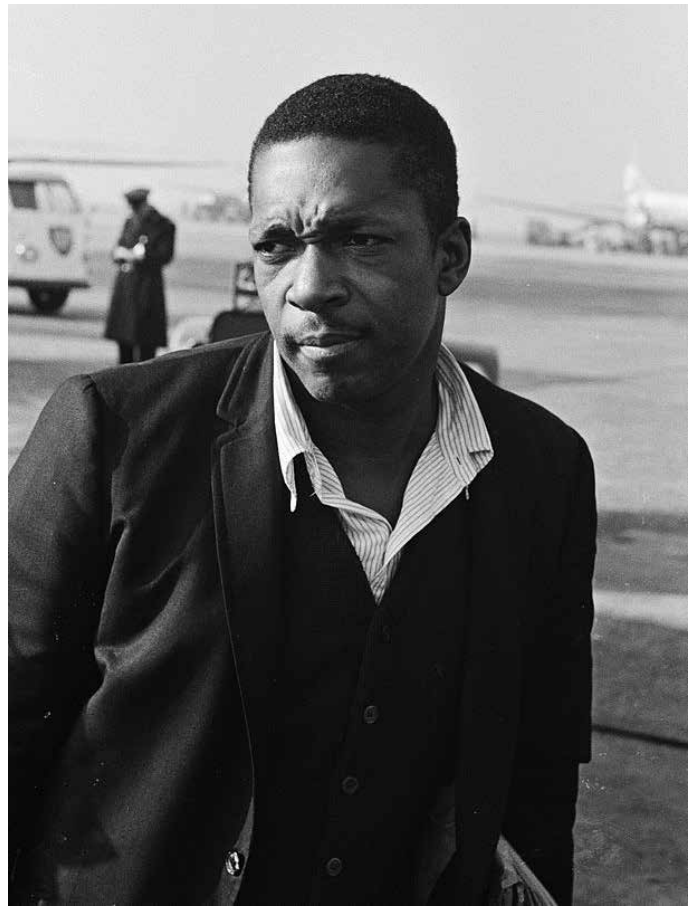
John Coltrane, photographed in 1963. On his 1959 album Giant Steps, *Coltrane explored the technical limits of bebop.*

Photo by Gelderen, Hugo van / Anefo - Dutch National Archives, The Hague, Fotocollectie Algemeen Nederlands Persbureau (ANeFo).

occasional compositions in triple or duple meter. This album included pieces with meter changes in practically every measure and even different irregular combinations of the same meter. One of the best examples of this is "Blue Rondo a la Turk," which, in addition to other meters, included a series of $\frac{9}{8}$ measures divided sometimes into an unusual combination of 2+2+2+3, and other times into the traditional pattern of 3+3+3. The most famous example from this album is the piece "Take Five," which was actually composed by the saxophonist of the group, Paul Desmond. In "Take Five," each measure is five beats long—a pun with the other meaning of "take five," to "take a break," which can, in turn, be used as slang for taking a "solo break." Jazz was no longer restricted to three or four beats per measure, and composers and performers began to experiment with rhythmic and metrical alternatives.

Few experts would contest the claim that Miles Davis' 1959 recording *Kind of Blue* is the single most important album
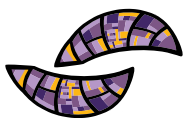
in the history of jazz. It almost always appears at the top of any "best of" list. The album is considered so significant that music critics have written entire books about its impact.[39] One of the main innovations of the album, which included John Coltrane performing on tenor saxophone as a sideman, was its emphasis on "**modal jazz**." The simplest description of "modal jazz" is that instead of selecting a series of chords, each with its own corresponding scale, to define the shape of the melody and improvisations in a jazz composition, a single scale-like rising series of notes provides the note choices for the entire composition. Sometimes these groups of notes could have the same series of whole- and half-steps as the major and minor scales discussed in Section I, but sometimes (as was often the case in *Kind of Blue*) the musicians could choose groups of notes that are organized with other relationships, such as the **Dorian mode**, which forms the basis for the first piece on the album, "So What." The Dorian **mode** is a group of seven notes that is almost the same as the seven notes of the natural minor scale (see Section I), but with a whole-step between the fifth and sixth degrees, which causes the interval between the sixth and seventh degrees to be a minor second.

Interestingly enough, "So What," a groundbreaking new piece that "forever changed the way in which we listen to music,"[40] is in the almost outdated traditional 32-bar AABA format. It is how the format is used that makes the piece unusual. Each of the A sections consists entirely of the Dorian mode, with no further chordal variations, and the contrasting B section consists only of the same mode transposed up a half-step. Basically, during the same year that John Coltrane was demonstrating the limits of the complexity that jazz harmony could achieve, Miles Davis was demonstrating how simple chord changes could become. While Coltrane's "Giant Steps" required absolute technical mastery to handle the complexity of the harmony, Davis' "So What" required incredible inventiveness and creativity if soloists like Coltrane and Davis were going to maintain the listener's interest with only a single mode (and its transposition) to define the framework of the entire composition. Together, these two works explored the extremes of how jazz harmony could be organized and opened up new pathways for jazz musicians to explore in the 1960s.

1959 was also the year that Miles Davis and Gil Evans released the album *Sketches of Spain*. This album is considered one of the first examples of **Third Stream music**, a style that combined jazz improvisation, embellishments, and harmonies, with classical musical

Gil Evans (left) and Miles Davis (right). Davis and Evans released the album Sketches of Spain *in 1959, which was one of the first examples of third stream music.*

materials and orchestration.[41] Classical composer Gunther Schuller was an enthusiastic proponent of this combination of the two musical styles.[42]

In addition to the musicians who were inspired by the creative use of instruments and the blending of classical and jazz elements, other musicians found that the organization of the album *Sketches of Spain* around a single theme (Spanish music) provided interesting opportunities for creativity. This idea of a **concept album** not only had an effect on jazz musicians, but also became pervasive in popular music. When jazz musicians performed arrangements of classical music, the resulting recordings would necessarily be longer than could fit on the normal medium for jazz and popular record sales at that time, the **45 rpm record** or **single**, which was limited to shorter selections of four or five minutes maximum. When part of the aesthetic value of the recording came from the relationship between the pieces, the order in which they were recorded, etc., this also contributed to rising interest in album purchases, which eventually caused changes in both the recording industry and in radio.

Charles Mingus is considered one of the most important composers in jazz history (along with Thelonius Monk and Duke Ellington). One of his most significant works, dating from 1959, was "Fables of Faubus," a work that impressively demonstrated the efficacy of his workshop method of composing music, but perhaps more importantly addressed one of the most important social and political issues of the day: civil rights and segregation. Orval Faubus was the infamous governor of Arkansas who opposed the Eisenhower administration's insistence that black students be permitted to study at a previously all-white
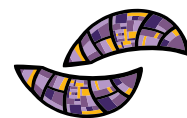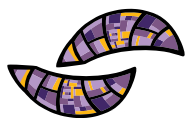
high school in Little Rock, Arkansas.[43] The instrumental version of "Fables" released in 1959 was an unequivocally unflattering musical portrait of the governor; however, the recording company did not permit Mingus to include the vocals because the text was considered too inflammatory.[44] It was not until 1960, when Mingus went through a different record company, that listeners around the world were able to hear texts such as the following:

> Name me someone who's ridiculous . . .
> Governor Faubus!
> Why is he so sick and ridiculous?
> He won't permit integrated schools.
>
> Then he's a fool! Boo! Nazi Fascist supremists [sic]!

Boo! Ku Klux Klan (with your Jim Crow plan).[45]

Mingus inspired many other musicians to write about social and political injustice, which became a central focus of music in the '60s.

Jazz music was at a pivotal point in its development. It had advanced from entertainment for dancing to serious artistic creations, sometimes tackling social and political issues. The parameters of jazz expanded. Dave Brubeck tested the boundaries of rhythm, Miles Davis challenged the notion of being restricted to fitting a series of chords, John Coltrane tested the technical limits of jazz, and Charles Mingus challenged the way jazz was created. Now the jazz world was ready for another great innovator.

LISTENING COMPANION—LISTENING EXAMPLE 2: *FREE JAZZ* (1960)—ORNETTE COLEMAN

In 1959, Ornette Coleman began performing in New York City with an unorthodox quartet: alto saxophone, trumpet, bass, and drums. There was nothing out of the ordinary with the instruments that were included; it was the instrument that was left out that made his groups so unusual. There was no chordal, harmonic instrument—no piano or guitar.[46] This made it easier for Coleman's groups to avoid harmonic encumbrances. The goal was to make the music function in a linear, horizontal fashion, where the line was the most important aspect, rather than vertical alignment creating specific chords. When jazz was music for dancing, having all the instruments play rhythms that fit the beat was important. Coleman had no interest in providing an easily recognized steady beat since he did not intend for the music to accompany dancing. In Coleman's first recording, *The Shape of Jazz to Come*, the song "[Lonely Woman](#)" is a great example of this. At the beginning of "Lonely Woman," the bass moves at one speed, the cymbals of the drumset at another speed, and the saxophone and trumpet at a separate (but coordinated) tempo. Coleman and his trumpet-playing colleague, Don Cherry, are less interested in playing the exact pitches as they would be played on a piano, but use pitches just above and below the expected pitches to add more tension and expressiveness to the theme. Cherry and Coleman are also not concerned with moving at exactly the same time.

The music that Coleman and Cherry were creating was free of harmonic and rhythmic constraints. The musicians were free to move at their own speeds, and, much like the indeterminacy of classical composers like John Cage, Coleman relied almost entirely on the sensitivity and creativity of the players in his ensemble. John Cage said, "I try to arrange my composing means so that I won't have any knowledge of what might happen."[47] Coleman wrote, "I don't tell the members of my group what to do. I want them to play what they hear in the piece for themselves. I let everyone express himself just as he wants to. The musicians have complete freedom and so, of course, our final results depend entirely on the musicianship, emotional makeup, and taste of the individual member."[48] This type of music came to be known as "free jazz."

In 1960, Coleman put together two quartets to record what he called "a collective improvisation by the Ornette Coleman double quartet." Consisting of two piano-less quartets, this ensemble featured some of the best young jazz musicians of the day, including bassists Charlie Haden and Scott LaFaro, trumpeters Freddie Hubbard and Don Cherry, drummers Ed Blackwell and Billy Higgins, and woodwind player, Eric Dolphy. The players were not given complete sheets of specific musical instructions, only some information about thematic material and form. Thus, a great deal of the musical material was created spontaneously in the recording studio. The result was the thirty-eight-minute improvisation known as "Free Jazz."
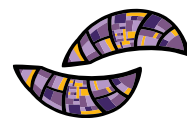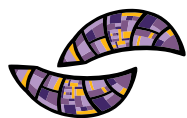
When one listens to players who do not hit the exact notes on the piano, who don't line up rhythmically with one another, who don't seem to be following a specific pattern of chords, who sometimes purposefully make screeching and squawking sounds, it might be easy to dismiss the performers as being poor musicians. It was difficult to tell if the musicians were making a sincere effort to be expressive, or if they were simply using this freedom to mask a lack of musical ability. Many jazz musicians understood the possibilities that Coleman and his ensemble players were exploring. Even Classical musicians like Leonard Bernstein and Gunther Schuller spoke out in support of this new music. Bernstein reputedly jumped to his feet in the middle of one of Coleman's first New York City performances and shouted, "This is the greatest thing ever to happen to jazz!"[49] Schuller even served as an advisor for the project.[50] Jazz pianist John Lewis called free jazz "the only really new thing in jazz since the innovations in the mid-forties of Dizzy Gillespie, Charlie Parker, and those of Thelonius Monk."[51] But some listeners felt that the musicians were charlatans (fakes or frauds). Dizzy Gillespie found the music perplexing: "I don't know what he's playing, but it isn't jazz."[52]

Ornette Coleman in 1959.

Photograph: Michael Ochs Archives.

How does one listen to this music? How does one judge its quality? You must first trust that the musicians are sincere and mean what they are "saying." This might be difficult if you have no frame of reference, but if you learn more about the abilities of these musicians, you will find that they had the skill to play more traditional jazz and that they were sincere about this music they were creating with Ornette Coleman. Ornette Coleman eventually won a Guggenheim fellowship, a MacArthur "genius" award, a Grammy lifetime achievement award, and the Pulitzer Prize for music.[53] We realize now that the music sounded this way because this was how Coleman and his musicians intended it to sound.
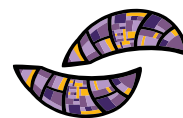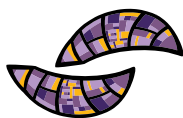
When you trust the musicians, then you can listen for imitation, layers, ideas put forth by one musician and picked up by another. Because of the complexity of the music, you will hear different aspects each time you listen, just as you might see different things each time you look at a [Jackson Pollock painting](#).

Time	Description
Listening Guide 2 *Free Jazz: A Collective Improvisation—1960* **Ornette Coleman (1930–2015)**	
0:02	Our sample begins approximately 9:40 into the 37:00 continuous performance. The wind players move slowly, on moderately long notes, with seemingly little harmonic or rhythmic relationship. Underneath you can hear that the rhythm section is moving rather rapidly.
0:13	Ornette Coleman, on the alto saxophone, starts some pre-determined bebop-like material, and the other wind players quickly join in, though not lining up perfectly with the rhythm played by Coleman. Their tempo also seems not to align completely with the four-beat tempo being played by the rhythm section.
0:25	Coleman continues on in a similar vein without the rest of the horns.
0:31	At first, most of the background comes from the rhythm section players keeping time in the left channel: Scott LaFaro on bass and Billy Higgins on drums.
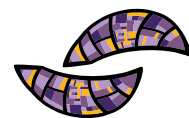
0:36	Ed Blackwell, the drummer in the right channel, starts to decorate more with cymbals, toms, and snare drum. Bassist Charlie Haden joins in.
0:53	The double bass lines and overlapping polyrhythms in the two drumsets result in a rather complex accompaniment.
0:56	Coleman's rhythms and articulations swing, though the harmonic implications may be difficult to follow, without a chordal instrument.
1:06	LaFaro, a real virtuoso on his instrument, moves up into the highest range of the bass and plays very rapidly.
1:10	Don Cherry (trumpet player in the left channel) starts to play a background behind Coleman's solo.
1:15	Freddie Hubbard (trumpet player in the right channel) quickly joins in with a similar background figure that harmonizes strangely.
1:17	Eric Dolphy (bass clarinet in the right channel) joins in the background figures, making the harmonization even more complex.
1:21	Cherry breaks off from the backgrounds being played by Dolphy and Hubbard, and improvises freely behind the other horns, adding to the harmonic and rhythmic complexity.
1:34	Hubbard and Dolphy start breaking apart the background and shifting it so that we almost end up with four horns improvising all at the same time.
1:42	Coleman recalls a fragment of the pre-determined phrase, as if it were the "melody" of the piece, before resuming freer improvisation.
1:45	LaFaro again plays very rapidly, almost doubletime.
1:49	Dolphy plays a long, loud mid-range note on the bass clarinet and repeats it several times.
2:04	Now he plays two short notes, more than an octave higher, in a different key before returning to the longer, lower note. He alternates between these two notes, in different octaves, in unpredictable rhythms that seem more closely related to avant-garde classical music of the 1960s than to jazz improvisation.
2:21	Coleman's improvisation contains many licks and patterns that with a different accompaniment would sound totally appropriate in bebop or jazzy blues.
2:27	Now Don Cherry's backgrounds experiment with pitch and rhythm for a short while, before a pause while Coleman is the only horn playing.
2:50	Dolphy, Hubbard, and Cherry start improvising as well, though they are still permitting Coleman to remain in the foreground.
2:59	Dolphy continues to emphasize longer notes than the other improvisers.
3:05	Dolphy alternates between midrange notes and some of the lowest notes on the bass clarinet.
3:17	Coleman plays a melodic passage with regular phrasing that could serve as the head of a bebop tune.
3:26	Coleman catches a traditional bebop lick.
3:33	Coleman emphasizes what sounds like a blue note.
3:50	Dolphy reaches up higher in the bass clarinet range, sounding almost like another alto sax player and playing faster passages with a melodic shape that could have been used to write a bebop tune.
4:01	As Dolphy continues with his pattern and Cherry increases his volume and plays higher, Hubbard starts to play louder and higher also, resulting in almost cacophonous group improvisation.
4:17	As the other players increase their volume and intensity, Coleman plays flurries of fast notes, remaining in the spotlight, though the fast notes do not necessarily fit the tempo implied by the rhythm section players.
4:26	LaFaro starts to play with the bow, adding long notes to the collection of sounds.
4:45	It sounds like Hubbard has moved closer to the microphone. His sound is now louder than even Coleman. The improvisers are now mostly equal.

| 4:54 | Hubbard starts to add fast flurries of notes that also bring him to the foreground in this collective improvisation. |
| 5:00 | As our listening guide concludes at the five-minute mark, the example on the CD continues for another 5:13 with group improvisation, more passages featuring Coleman, and a return to the opening musical idea of this section. |

The portions of "Free Jazz" not included on the USAD CD further explore the concept of free improvisation with limited harmonic references. Each horn player is featured for about five minutes, except Coleman, who solos for about ten minutes. As in our sample, there are some clearly planned sections and other sections that are pure improvisation. Is free jazz completely free? No. Are these musicians faking it, or can you hear their impressive musicianship and communication? Free jazz is musicians' music. The joy of creating and communicating on such a high level is thrilling— but it is not audience-oriented music. Free jazz may have been an artistic success, but it was not a box office success.

ROCK AND ROLL: AT HOME ON AM RADIO

While jazz and classical music were undergoing transitions and changes in 1959 and 1960 and musical theatre was poised for something new, the most significant musical transformation in the 1960s occurred in the world of popular music—rock and roll, soul, rhythm and blues, and folk music. During the 1950s, AM radio had become the primary medium for the dissemination of new music. As it grew more popular, investors bought groups of radio stations and started standardizing the playlists, moving to a "top 40" format, where lists were developed of the most popular songs, and they were played over and over. Since most songs were less than five minutes in length, even with news and advertisements these stations could get through all forty songs in four hours. As a result, some of these songs were played six times each day. Thus, popularity bred popularity. Unfortunately, this led to corruption. If you could pay a particularly popular and influential "disc jockey" to play your recording, it would be heard more often, and would be more likely to have increased record sales. This system, known as **payola**, squelched new and creative acts and favored the status quo. Billboard's pop music sales charts reflected this stagnation.

And the Number One Hit . . .
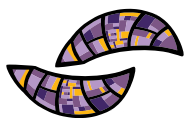
The years 1959 and 1960 did not hint that popular music was at the edge of a major transformation. In 1960, a conservative orchestral instrumental, "Theme from a Summer Place" by Percy Faith, held the number one spot for nine weeks. For the most part, the artists who reached the top ten that year, like Frankie Avalon, Connie Francis, and Brenda Lee, were not breaking new ground, but

sticking close to the tried and true that had made them popular in the first place.[54] As the authors of *Rock of Ages: The Rolling Stone History of Rock & Roll* put it, "Music was coming down with a case of the creeping blands."[55] Even the closest observers in 1960 could not have predicted that popular music was on the edge of a revolution.

FILM MUSIC: PSYCHO

Film music in 1960 was also largely conservative. However, there were some new developments in Europe, where film composers were creating a new style that more closely resembled the dissonant music of modern classical composers, rather than the more traditional romantic or Copland-like scores that had dominated film music for the preceding several decades. Before long, Hollywood composers followed suit, composing music concerned with setting a psychological mood, while avoiding Hollywood clichés.

Bernard Herrmann's score for the 1960 Alfred Hitchcock classic *Psycho* is considered one of the first masterpieces in the newer style. To match Hitchcock's black-and-white filming, Herrmann created the score using only string instruments, without adding the colors of woodwinds, brass, and percussion. To reflect the disturbed states of the main characters, Herrmann's score is intensely dissonant throughout. Clashing tone clusters, full of minor seconds and major sevenths, are repeated rhythmically, building the tension. Polytonality keeps otherwise tonal thematic material on edge, echoing the disharmony in the plot. Herrmann and his technical crew went one step further in the famous shower scene by placing the microphones unusually close to the instruments to pick up every screech and scrape of the percussive violin tone clusters in this

frightening passage.[56] *Psycho* helped open a new breadth of expressive options for film music composers. The stage was set. In film music, rock and roll, jazz, and classical music, the iconoclasts and traditionalists were poised to move forward, and a transformational decade was underway.

THE TIMES THEY ARE A-CHANGIN'—1961–63

The years 1959 and 1960 saw some important developments in jazz, a few new ideas in musical theatre and film music, and some hints of what was to come in rock and popular music. As the 1960s progressed, the "change train" seemed to pick up speed and momentum. 1960 might not have sounded all that different from 1959, but by 1963, it would be clear that "the torch had been passed to a new generation."

CLASSICAL MUSIC: MASTERPIECES, SOCIAL COMMENTARY, AND INNOVATION

As the 1960s progressed, there were certainly musicians whose compositions did not break new ground, but were still masterpieces. When Francis Poulenc's *Gloria* was premiered in 1961, it was similar in character, rhythmically and harmonically, to his earlier religious-themed works. Authors consider the lyrical work "neo-Classical," meaning it adheres to older compositional values, employing less dissonance and more predictable rhythms than more "modern" music.[57] *Gloria* was one of Poulenc's final works, as he died in his native France in 1963.[58] *Gloria* did not break any new ground, but it is one of the great choral liturgical works of the twentieth century.

The music of African-American composers in the 1960s began to get more attention, in particular works by Hale Smith, William Grant Still, and Ulysses Kay. These three composers might not have been inventing new techniques, but they were starting to whittle away at the race barrier that confronted African-American composers.[59] Kay's 1963 *Fantasy Variations* is a particularly interesting work and has been called "his most forward-looking score"[60] and "one of the most successful works of the mid-twentieth century utilizing the theme and variations idea."[61] Kay's *Variations* incorporate many twentieth-century compositional techniques, including tone clusters, polychords, whole-tone melodic structures, and quartal harmony.[62] One of the most interesting, creative, and unusual aspects of this composition is that the composer chose to turn the theme and variations form on its head by waiting until the final section of the piece to reveal the theme itself.[63]
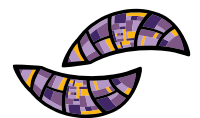
By 1960, John Cage had established himself as the philosophical leader of the avant-garde movement in the United States. In addition to lectures at the various schools where he held employment, he eventually began to give speeches at other schools and artists' clubs and published many articles. In 1961, excerpts from some of these speeches and articles were gathered into a book titled *Silence*.[64] Although Cage published five other books, *Silence* remains his most influential.[65]

While the measure of nineteenth-century composers was the symphony, in the twentieth century, composers were judged more on their innovations. The symphony seemed almost to fall out of favor. By 1960, though, one major composer was known almost exclusively for his symphonies: Dmitri Shostakovich. Many of Shostakovich's symphonies were already considered significant. In 1961, he completed Symphony No. 12, and in 1962, Symphony No. 13.[66] Both symphonies were programmatic in nature, but while Symphony No. 12 was patriotic—subtitled "The Year 1917" and dedicated to Lenin—Symphony No. 13 told a very different story. Based on the *Babi Yar* poems by the Soviet dissident poet Yevgeny Yevtushenko, the symphony tells the story of an anti-Semitic massacre perpetrated by Nazis during their occupation of the Ukraine, with the complicity of the local citizens. The symphony also protests the Soviet government's failure to erect a monument to the Jewish victims of the massacre.[67]

The work was not musically radical, although there are dissonant passages, bitonal sections, and even the daring interjection of some Jewish-flavored harmonies and melodies. While the musical content might not have been controversial, it was, indeed, daring to admit the existence of Russian/Soviet anti-Semitism, to implicate the local citizens for their collaboration, and to criticize the government for its failure to recognize the primary victims of the massacre—the local Jewish population. While the audience reaction was favorable, official reaction was not, and Yevtushenko and Shostakovich were forced to change some of the text to lessen the emphasis on the anti-Semitic aspects of the massacre.[68] At the same time, however, Shostakovich had to be grateful, as only a few years earlier, such an audacious composition would likely have resulted in his arrest and imprisonment. Even in the Soviet Union there were glimmers of change in the early 1960s.

While Shostakovich's experimentation may have been with the level of political conflict he could survive, Karlheinz

Composer Ulysses Kay, whose Fantasy Variations *incorporated many twentieth-century compositional techniques.*

Composer Karlheinz Stockhausen. Stockhausen's Momente, *the first version of which premiered in 1962, was completely experimental and groundbreaking.*

Stockhausen's *Momente,* the first version of which was premiered in 1962, is completely experimental and groundbreaking in every aspect. In *Momente,* Stockhausen expands the spectrum of sound possibilities, even without the use of electronic instruments (other than two electronic organs). Instead, using percussion instruments, trumpets and trombones, four small choruses, and a soprano soloist, Stockhausen creates sonorities unlike any music heard before. The composition combines the composer's desire to control certain aspects of the performance and to forego control of others. In his quest for tight control, he specifies certain brands of percussion instruments, exactly where

and how to strike the drums, requires platforms of specific heights to be built, provides a scale drawing of the stage arrangement, and gives detailed instructions on how microphones are to be used. He gives up control of other aspects: different sections of the piece may be performed in different orders at different performances. Thus, each performance is, in effect, a new piece.

Using texts in multiple languages and in no language at all, the performers sing specific and unspecified pitches, whisper, shout, speak, clap their hands, shuffle their feet, and even babble incoherently.[69] Stockhausen requires some of the singers to create a series of percussion instruments from cardboard tubes, specifying that they each be "varied so that a scale of pitches results."[70] He does not specify which pitches, nor does he specify the scale to result from a similar series of metallic tubes assigned to another of the four choral groups.[71] *Momente* is the perfect example of of *avant-garde* music: innovation for the sake of innovation.

LISTENING COMPANION—LISTENING EXAMPLES 3 AND 4: *WAR REQUIEM* (1963)—BENJAMIN BRITTEN

In 1958, Benjamin Britten was commissioned to compose a work for the dedication ceremony of the new Coventry Cathedral that was being built to replace the old cathedral destroyed by the German Air Force in World War II.[72] Britten was deeply opposed to war and had even fled his beloved England as a conscientious objector during World War II.[73] Britten believed in the power of music to "utter the sentiments of a whole community," and the Coventry commission offered him the opportunity to do just that.[74] Britten's *War Requiem* is the masterpiece that resulted from that commission.

To grasp, to any extent, the brilliance of the *War Requiem* requires one to know a little bit about the traditional Latin Requiem **Mass**. A Mass is a set of texts used for the Roman Catholic worship service, and these texts are often set to music by composers—sometimes for use in a church service, and sometimes for concert performance.[75] A **Requiem** Mass is a mass for the dead and gets its name specifically from the first word of one of the texts that differentiates it from a regular mass—"*Requiem aeternam dona eis, Domine,*" which means "Give them eternal rest, O Lord."[76] Composers would sometimes add **tropes** to the mass—a section, often in the vernacular language, that poetically comments on the Latin text. This technique was, however, banned by the Catholic Church in 1562, so it was not widely known or commonly used.[77]

Britten chose to employ tropes to deepen the meaning of his *War Requiem* as further amplification of his pacifist beliefs.[78] He chose for these texts nine poems of the World War I soldier-poet, Wilfred Owen, who was killed in action just one week before the end of the war, at the age of twenty-five.[79] These poems about the horrors of war serve both to emphasize Britten's own anti-war beliefs and to deepen the meaning of the Latin texts they interrupt, linking the Latin texts more closely to the occasion at hand.[80] In addition to the dedication to the rebuilt cathedral, Britten dedicated the *Requiem* to the memory of four of his friends who died during World War II.[81]

British composer Benjamin Britten, photographed c.1968.

The alternating Latin liturgical texts and the English antiwar poetry set up a tension that befits the theme.[82] Britten went further to emphasize the dichotomy. The liturgical texts are performed by a soprano soloist, a mixed chorus, a boys' choir, organ, and full orchestra, while the Owen texts are performed by a tenor soloist (representing the voice of the Allied soldier) and a baritone (representing the German), accompanied by a chamber orchestra.[83] So the juxtaposition goes beyond just the sacred and secular texts.

The Britten *Requiem* consists of six of the movements of a Requiem mass: "*Requiem aeternam*" (Grant them eternal rest), "*Dies irae*" (Day of Wrath), "*Offertorium*" (Offertory), "*Sanctus*" (Holy), "*Agnus Dei*" (Lamb of God), and "*Libera me*" (Deliver me). Within these movements, the chamber orchestra and the male soloists comment on the Latin text, using Owen's poetry. Taking advantage of the space in which the work would be premiered, the chorus of boys, accompanied by the church organ, sing separately from the other forces, representing the otherworldly—they are far removed from the battle and are spatially separated from the other performers and the audience.[84]

Britten's complex organizational structure, the unique forces he assembles, his neo-tonal language with dissonance introduced at appropriate times, his sense of drama and pacing, and the way he combines instruments and voices all contribute to an effective depiction of the destructive forces of war and the loss that results from the violence. The tolling of bells (chimes), at the dissonant interval of a tritone, returns again and again to emphasize both the churchly mourning of a Requiem mass and the discomfort and lack of resolution caused by the interval known as the "*diabolus in musica*" (the Devil in Music).

The poetry Britten selected was evocative and gave him numerous opportunities to reflect the text, including references to "passing bells," "voices," "choirs," "bugles," the "stuttering rifles' rapid rattle," "the trumpet, scattering its awful sound," blasts of lightning, the rolling "drums of time," marches, battles, rest, even eternal rest, and a choir of angels.

The commission had specified that the horrors of war be balanced with the spirit of rebirth and reconciliation, and one
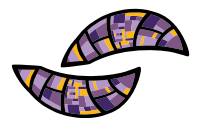
of the ways that Britten reflected the latter was by having the great German singer Dietrich Fischer-Diskau sing the baritone role, while the English singer, Peter Pears (Britten's personal and professional partner) took on the tenor part.[85] After singing separately for nearly twenty minutes, Britten forces the two enemies to sing together in the section (which is included on the USAD Music CD) with Owen's poem "The Next War," in which they talk about how they faced death together. At the end of the *Requiem*, all the forces join together as the two soldiers sing "Let us sleep now," and the choruses and soprano plead for them to be received into heaven and granted eternal rest. Finally, the chorus sings "Let them rest in peace" alone, interrupted one more time by the dissonant chimes before eventually arriving at the remote key of F major for the final chord of the final "amen."

The three representative sections that we will hear on the USAD Music CD present three particularly interesting musical ideas, but one cannot begin to comprehend this eighty-five-minute work without hearing it in its entirety.[86] The first example on the CD (LISTENING GUIDE 3) is an excerpt from the opening of the *Requiem* and sets the tone and provides some of the important elements that will recur throughout the work, such as the tolling chimes. The first section of the second example (Listening Guide 4 – "Out There") occurs about twenty minutes later, during the second movement, the "*Dies irae.*" The second section of Listening Guide 4 ("*Dies irae*") picks up about seven minutes further into the "*Dies irae*," and is a short recapitulation of the opening of the second movement.

Listening Guide 3 *War Requiem*—1963 Benjamin Britten (1913–76) *"Requiem aeternam"* Slow and solemn; approximately two seconds for each beat				
Time	**Text**	**Meter/Tempo, Rhythm**	**Instrumentation**	**Musical Features**
0:04		Four beats per measure	Full orchestra: tuba, timpani, piano, and gong	The work begins quietly with a low A, colored by gong. From the first note, the gong tells us that this is a concert work, not a churchly mass.
0:05		Pickup to long note	Remainder of full orchestra	In a jerky, short-long rhythm, the strings move up by a half step, resulting in mild dissonance all within the first measure.
0:8		Steady quarter notes	Chimes	When the tolling chimes enter on F♯ on beat four of the first measure, the result is that the notes D, E, F♯, G, and A are all present at the same time. The dissonance is still mild, but we know we are not supposed to feel comfortable.
0:10	*Requiem, Requiem aeternam*	3 notes per beat, then 4 notes per beat	Voices enter, accompanied by tolling chimes	Sopranos enter on an F♯, echoed by tenors, and begin to chant the *Requiem* text on a single note, almost reminiscent of Gregorian chant.
0:18		Quintuplet pickups to long notes, 32nd note pickups	Like the beginning	The orchestra enters again, first with the low A and then with the jerky short-long rhythm, extended in an arch that rises and then falls. The key of D minor is suggested, but the **octatonic** scale being used simultaneously helps add to the tension.

0:29			Chimes	The chimes enter a tritone below their first note, on a C.
0:30	*Requiem aeternam*	Five beats per measure	Voices and chimes	The basses chant "*Requiem*" on the C, repeated by the chimes, answered by the altos.
0:38		Four beats per measure	Full orchestra: tuba, timpani, piano, and gong	The low instruments again hold a long note, like the beginning, followed by the jerky short/long rhythm of 0:05, but extended to last twice as long, as it rises and falls.
1:00	*Requiem aeternam dona eis*			Sopranos and tenors repeat the first four words of the "requiem" text, four notes per beat, not simultaneously, but overlapping on the note F♯, followed by the altos and basses similarly, on the note C, further emphasizing the discomfort caused by the dissonant interval of a tritone.
1:14	*dona eis Domine*			The same concept is applied to the "*dona eis Domine*" text, but with only three notes per beat.
1:51	*et lux perpetua, luceat eis*			Now instead of repeating only one note, the descending tritone becomes the primary motif of this section, strongly marked, and accompanied only by the low instruments of the first measure, the chimes, and an intense crescendo in the timpani.
2:16				The jerky orchestral line reaches its highest point yet.
2:17	*Requiem aeternam*			The chorus sings all together for the first time, *forte*, with basses and altos on the F♯ and tenors and sopranos on the C.
2:22				As soon as the intensity reaches its zenith, it begins to diminish. The jerky orchestra idea descends now, reaching *pianissimo*, just as our sample ends (2:43).

<table>
<tr><td colspan="5" align="center">

Listening Guide 4
War Requiem—1963
Benjamin Britten (1913–76)

</td></tr>
<tr><td colspan="5" align="center">

Section 1: "Out There"
Fast and lively; 132 beats per minute (more than 2 per second)

</td></tr>
</table>

Time	Text	Meter/ Rhythm	Instrumentation	Musical Features
0:02		4 beats per measure, with occasional two and three-beat measures; compound meter	Chamber Orchestra: snare drum, low strings, winds	This section begins with a short introduction: the loud snare drum provides a steady martial beat, even through the meter changes, while the winds move jerkily, reminiscent of the opening of the entire work, but more energetic. Strings provide arpeggiated accompaniment, three notes per beat, separated and "heavy." Intervals of a fourth and accidentals seem to fight against the A major key signature.
0:11	Out there, we've walked quite friendly up to Death		Tenor and baritone, full chamber orchestra	Tenor and baritone sing together for the first time—but only for two words. The underlying accompaniment stops for a second, while all players in the chamber orchestra underline the words "Out there" with two strong notes, on the beat. The tenor then continues with the text, singing almost jauntily. Some authors have called this section a bit of "gallows humor."
0:16	Sat down and eaten with him, cool and bland		Baritone and chamber orchestra	Similar two-note accentuation of the beginning of the phrase, followed by resumption of accompanimental pattern, with the single accented notes for the text "and bland."
0:21	Pardoned his spilling mess-tins in our hand . . .			The vocalists alternate, then join together for "Our eyes wept." The key remains nebulous, seeming closer to F minor at this point.
0:34	But our courage didn't writhe . . .			The two soloists sing a sinuous line, in canon, as if writhing, thus revealing the text's false bravado.

0:42	Shrapnel . . .	Switches to two notes per beat		The sudden change to crisp articulation, as this word is repeated quickly in unison, joined by timpani strokes, sounds as if it were intended to represent the jagged edges of shrapnel. The upper woodwinds answer with a quick chromatic descent, extremely dissonant, swirling around each other at different speeds with conflicting divisions of the beat (two, three, and four notes per beat), while low strings and timpani seem to take up a march rhythm. Although the key signature has switched to C major, there are enough accidentals that the key is hard to hear.
0:45	We chorused when he sang aloft . . .			The two soldiers sing together in unison—in steady quarter note rhythm, as if "chorusing," while the dissonant woodwind line continues. On the word "aloft," the horn arpeggiates an A major chord with a major seventh, outlining a key that many of the other instruments seem to be fighting against.
0:52	We whistled while he shaved us with his scythe			As the soldiers sing the word "scythe" on an A, the horn again arpeggiates an A major 7th chord, this time going one chord tone higher to the minor ninth.
1:01	Oh, Death was never enemy of ours!			The soldiers continue singing in unison, against the march rhythm in the strings and the writhing descent in the woodwinds.
1:07	We laughed at him . . .	Return to three notes per beat		The jaunty flavor returns. The key is now A major, but still with plenty of accidentals.
1:15	We laughed, we laughed . . .			First alternating, then together, the soldiers repeat the words, with a jaunty laughing long-short-long-short-long rhythm, but starting to lose intensity.
1:21		Switches back to two notes per beat		The key signature switches to C (or A minor). The horn repeats its fanfare-like arpeggio an octave lower, but now as an A minor chord with a major seventh.
1:23	knowing that better men . . .			The soldiers continue to sing in unison, more melancholy in flavor, primarily on the beat. Now the horn arpeggio is shortened, and outlines an F♯ diminished chord with a minor seventh.
1:27	and greater wars;			The swirling woodwinds continue to descend and get quieter, even after the singers have finished the phrase.

Time	Text	Meter/Rhythm	Instrumentation	Musical features
1:35	when each proud fighter . . .	Return to three notes per beat		The compound meter seems to have lost its jaunty flavor, and the soldiers now just sing on the beat instead of long-short-long.
1:47	for flags.			While the baritone sustains his last word, the orchestra echoes the introduction, but now much quieter, and with resignation, as this section comes to an end, and we prepare for the next choral section.
1:54				Section 1 ends

<table>
<tr><td colspan="5" align="center">Section 2: "Dies irae"
Quick; about 150 beats per minute, more than 2 per second</td></tr>
</table>

Time	Text	Meter/Rhythm	Instrumentation	Musical features
1:56	*Dies irae, dies illa* (This day, day of wrath)	The steady, pounding beat suggests a march before the final arbiter on the day of judgment, but the march is thrown off-kilter with seven beats per measure.	Full orchestra and chorus	This section begins with a powerful G minor chord in the brass. The chorus (doubled by woodwinds) sings on repeated pitches, heavily and choppily, on beats 1, 3, 5, and 6, while the piano, strings, bass drum, and tuba respond one beat later with heavy quarter notes on 2, 4, 6, and 7. There is a composite rhythm of steady quarter notes. The chorus and strings alternate. The uncomfortable feeling is amplified by the orchestral interruption between the syllables of the word "*Dies*" (see FIGURE 2–1). Three-note rising brass fanfares lead from the seventh beat of one measure to the first beat of the next.
2:02	*Solvet saeclum in favilla:* (Shall consume the world in ashes,)			This rhythm is used on new text in the next two measures.
2:09	*Teste David cum Sibylla.* (As foretold by David and Sibyl)			Britten elides two measures of seven into a fourteen-beat combination for this text (see FIGURE 2–2). The fanfares come closer together and fill the measures, as the section builds to its first climax in only the seventh measure.
2:14	*Teste David cum Sibylla.*			After a big B♭ minor chord and a cymbal crash on beat one, the chorus descends a B♭ minor scale, with a quarter note on each beat.
2:19	*Solvet saeclum in favilla. . .*			This is basically a repeat of the second half of the opening section, and with diminishing dynamics.
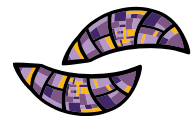
2:37	*Quantus tremor est futurus . . . (What trembling there shall be)*		Brass and percussion drop out.	Tempo gradually slows to a complete crawl. The fury of the day of wrath recedes, as we approach the next section, the day of tears.
3:05				Section 2 has faded to almost nothing.

FIGURE 2–2

Beat	1	2	3	4	5	6	7
Text	Di-		es		i-	rae	
Strings, etc.		*		*		*	*

Beat	1	2	3	4	5	6	7
Text	Di-		es		il-	la	
Strings, etc.		*		*		*	*

Dies irae opening rhythm.

FIGURE 2–3

Beat	1	2	3	4	5	6	7
Text	Tes-		te		Da-		vid
Strings, etc.		*		*		*	
Alternative counting	1	&	2	&	3	&	4

Beat	1	2	3	4	5	6	7
Text		cum-		Si-		byl-	la
Strings, etc.	*		*		*	*	*
Alternative counting	&	5	&	6	&	7	&

Combining two measures into a fourteen-beat pattern.

Britten's *War Requiem* was a masterpiece. While the use of tritones, tropes, word painting, mixing dissonance and tonality, and imitation separated by only one beat are hardly new ideas, the brilliance with which he incorporated them, and always in service of the message, was what made this piece transformational. These were particularly unusual techniques for music that was religious in nature. There were other innovative passages. Later in the work, for example, Britten has the

boys' chorus and organ move at one speed, while the mixed chorus and orchestra move at another. In the opening of the "*Sanctus*," the soprano sings a **melismatic** (many pitches per syllable) "*Sanctus*" while the pitched percussion instruments repeat F♯ quarter notes. Though the soprano has a specific rhythm to perform, and the relationship to the quarter notes is specified, the section does not have a time signature, but rather a series of eleven F♯s with which the soprano needs to coordinate her melisma. This happens again with percussion on a C (note the tritone relationship), after which choir members are asked to chant a line of text "freely," but on specific pitches. The resulting buildup of complexity is fascinating and unusual, and a technique to which other choral composers would return.

Benjamin Britten's *War Requiem* is a complex work that achieved his goal of uttering "the sentiments of a whole community." His heartfelt depiction of war, loss, and reconciliation expressed what the people of Coventry had been feeling and has continued to give voice to those who would oppose the type of bloodshed and destruction perpetrated by the combatants in World War II. The *War Requiem* is one of the great masterworks of the twentieth century.[87]

JAZZ: LOOKING FOR AN AUDIENCE

The early 1960s were difficult years for jazz musicians. The desire to have jazz taken as serious artistic musical expression, rather than just as dance music, was strong. The more intellectual, serious, and artistic the music was, the less likely it was to reach audience members, get played on the radio, or booked into clubs and concert halls. Jazz musicians in the early 1960s took several paths to reach out to audiences and try to re-establish their financial feasibility. Dave Brubeck and Paul Desmond managed to move onto the pop charts, and "Take Five"—composed by Desmond and recorded by Brubeck's quartet—became the biggest-selling jazz single in history. Few other jazz musicians were able to follow a similar path to success with "pure" jazz. Musicians tried various angles to get the attention of their audiences.

John Coltrane had already established himself as a leading player of the tenor saxophone. His highly acclaimed 1959 album *Giant Steps*, along with his achievements as the tenor saxophonist on Miles Davis' *Kind of Blue* album in the same year, combined to make him the preeminent player of this important jazz instrument. In 1960, Coltrane turned to the popular music of Rodgers and Hammerstein and chose to use the soprano saxophone, an instrument that had been neglected for several decades. Coltrane and his pianist McCoy Tyner simplified the harmonic structure so that it worked like the modal jazz Coltrane had encountered when recording "So What" with Miles Davis.[88] This forced him to concentrate on emotion, melody, and creativity, rather than on the technical aspects of fitting notes to a complex series of chords. Coltrane became inspired by this challenge and recorded a thirteen-minute improvisation on "My Favorite Things." Thirteen minutes was too long for a 45, or for radio play, so a shortened version was released

Dave Brubeck plays piano, and Paul Desmond plays the saxophone during a performance in Poland in 1958.

as a single. This became one of his signature tunes for live performances, where each version was unique.[89]

Some jazz musicians sought to bring audience members back by incorporating aspects of other musical styles, including rhythmic and metrical characteristics of rock and roll, gospel, soul, and even early aspects of funk. This new style, called hard bop, was often quite syncopated, with simpler harmonies, a steady beat, and simple subdivision of that beat (more like rock and roll than swing or bebop). Hard bop tunes would frequently begin with a catchy rhythmic riff that then turned into an accompaniment for a simple melody and for solid tonal improvisations.

Another avenue followed by jazz musicians in search of audiences was to incorporate characteristics of Latin music. Some musicians grew up with this music. Percussionist and bandleader Tito Puente was born in Spanish Harlem and was at the forefront of Latin music, having dedicated his entire professional career (which began at age thirteen!)
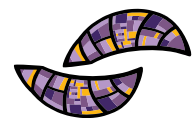
to Latin jazz.[90] He was so successful on the timbales, his preferred Latin percussion instrument, that he came to be known as "El Rey del Timbal," the king of the timbales. His most famous recording, "Oye Como Va," dates from 1963. The infectious repetitive piano riff has the same catchy feel as the riffs from hard bop pieces, but the percussion makes it clear that this is Latin jazz.[91]

Other musicians added Latin flavors to their music, but were not Latin specialists. Stan Getz, who was already respected as one of the great tenor saxophonists of jazz, incorporated Latin rhythms and harmonies into his music. He is credited with popularizing Brazilian samba music in the early 1960s and is particularly known for his 1963 recording of the [Antônio Carlos Jobim](#) composition, "The Girl From Ipanema."[92] This smoother music fit Getz's gentle timbre on the saxophone, a tonal conception that had earned him the nickname, "The Sound."[93]

One musician who was less concerned with commercial success and cared more about the intellectual and artistic aspects of his music was John Coltrane. In 1963, when Ku Klux Klan members bombed the 16th St. Baptist Church in Birmingham, Alabama, killing four young girls, Coltrane was compelled to compose "Alabama." The inspiration for his rhythmic and melodic shape is quite complex. Coltrane was interested in the free jazz of Ornette Coleman, but found it too random and was looking for a way to organize that freedom so that there was something that helped keep a free improvisation cohesive. Coltrane had been studying the music of India, one characteristic of which is a drone or pedal tone—a note that is heard throughout a piece so that there is a tonal center that the improviser can try to blend with or play against.[94] This was similar to the static harmonies that he had experienced when recording *Kind of Blue* with Miles Davis. The pedal tone helped provide structure to his free improvisation and allowed Coltrane to build tension by playing notes that conflicted with the pedal and release the tension by playing notes that fit better. He shaped his rhythms and pitches on the text of Martin Luther King's impassioned speech after the bombing.[95] This music is not intended to gather a huge audience, but it is intended to tell a story and express emotions.[96] Coltrane was able to combine other musical ideas with Coleman's free jazz techniques to create an effective memorial for the victims of the Birmingham bombing.

FILM MUSIC: BABY STEPS
The film industry seemed to take baby steps during the Camelot era. Big screen film musicals continued to be popular. In 1961, *West Side Story*, with its forward-looking
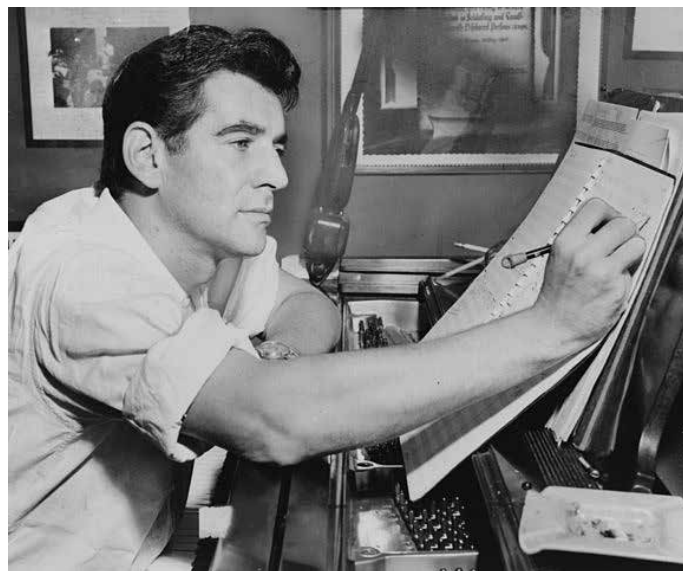
Composer Leonard Bernstein, photographed in 1955 annotating a musical score. Bernstein's score for West Side Story *mixed jazzy music with classical compositional techniques.*

score by Leonard Bernstein, won ten Academy Awards, including the Best Picture Oscar, only the fourth musical to do so.[97] Bernstein's score mixed jazzy music with classical compositional techniques, which in 1957 had started enriching the compositional language of Broadway composers. Now the film version brought these expanded resources to Hollywood composers. Both jazz and Latin music (representing the two gangs) figure prominently in the score. Although earlier scores included these styles, they were not treated with as much sophistication as Bernstein was able to bring to them, and most jazz in earlier films was the older style of swing, while Bernstein uses more modern jazz passages in his score. Some of Bernstein's other innovative techniques include the use of mixed meter in the dance sections, richer harmonic language, more sophisticated rhythms, and unusual melodic intervals.

Two great movie themes belong to the Camelot era. Film composer Henry Mancini won two Best Music Oscars in a row (*Breakfast at Tiffany's*, 1961, and *Days of Wine and Roses*, 1962) with well-written, romantic, string-laden, sentimental, old-style popular music, gently harmonized choruses, and a catchy opening tune.[98] Both films spawned popular songs ("Moon River" and the title tune of "Days of Wine and Roses") that had a life of their own beyond the silver screen and were covered by many different artists. However, neither song had the long-lasting impact of the jazz opening theme of Mancini's 1963 film score *The Pink Panther*.[99]
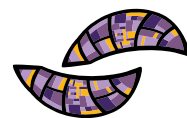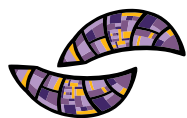
Equally iconic was the theme created in 1962 by Monty Norman and arranged by John Barry for *Dr. No*, the first James Bond film. This theme incorporated elements of both jazz and rock, particularly when, after a brassy big band introduction, the electric guitar was used for the melody, against a chromatic ostinato in the strings.[100] The Bond films bore a significant connection to rock and popular music, with popular songs coming from 1960s Bond films like *Goldfinger* (1964), *Thunderball* (1966), and *You Only Live Twice* (1967).[101]

MUSICAL THEATRE: SOMETHING FOR EVERYONE

Musical theatre remained largely conservative during the early years of the 1960s. One significant development foreshadowed changes that would take place later in the century: the introduction of Stephen Sondheim as a composer. Sondheim was a protégé of the great lyricist Oscar Hammerstein. Through Hammerstein's connections, Sondheim ended up as the lyricist for *West Side Story*, a role that thrust him into the forefront of American musical theatre.[102] Following his success with *West Side Story*, Sondheim worked on the lyrics for *Gypsy*[103] Though not as big a blockbuster as *West Side Story*, it was a reasonable success, running for almost two years and winning a Grammy.[104] Sondheim's real ambition, however, was to compose for the musical theatre, and his next major project, in 1962, was the beginning of Sondheim's Broadway career as a composer/lyricist.[105] A *Funny Thing Happened on the Way to the Forum* won six Tony awards[106] and ran for more than two years on Broadway.[107]

ROCK AND ROLL, FOLK, AND FOLK/ROCK MAKE A SPLASH

Initially, rock and popular music had been an AM phenomenon, while FM was more likely to be used for broadcasting classical music. However, before long FM radio was helping rock and roll rule the airwaves. In 1961, the first stereo FM radio stations went on the air, and by the end of 1962, there were more than two hundred stereo FM radio stations broadcasting in the United States and Canada.[108] With higher fidelity and stereo capabilities, FM fit better with the increased use of high fidelity recording equipment by rock musicians. FM stations were also less likely to be part of a tightly controlled chain and thus were less beholden to the top 40 format. This permitted new artists a little more chance to be heard and started to free up stations to play longer songs and even entire albums.[109]

Music of the early 1960s was influenced by other technological developments as well. The first cassette tape was introduced in 1963. This technological development had an unexpected effect on music. Because it was difficult to find the beginning of a selection on tape, consumers got in the habit of listening to an album in its entirety, instead of skipping around and mixing recordings of different artists. Knowing that more listeners would hear their music in the order in which it was intended encouraged musicians to put more emphasis on the significance of the order of selections on an album and inspired more rock groups to create concept albums that relied on sequential listening.[110] The Marshall Amplifier was developed in 1962 and became the amp of choice for many of the leading guitarists during the 1960s.[111] It is unlikely that the huge stadium concerts and rock festivals of the decade would have been possible without the powerful amps developed by Jim Marshall.[112]

Hitsville, U.S.A.

Berry Gordy's Motown label continued its growth and development. In the late 1950s, even the most popular soul records would rarely rise above the bottom half of the Hot 100. Berry Gordy knew that to reach the more lucrative audience of white record buyers, he needed to smooth the rough edges of artists who might previously have performed with a more gospel, soul, funk, or R&B edge. In 1961, The Miracles, featuring composer and lead vocalist Smokey Robinson, achieved Gordy's goal. Their song "Shop Around" not only hit number one on the R&B list, it hit number two on the pop music list, bringing Motown to national attention.[113] Shortly thereafter, Motown got its first number one hit: "Please Mr. Postman"[114] by the Marvelettes, the prototype of Motown "girl groups."[115] Motown was now hitting the pop music charts, not just the R&B charts.

As Berry Gordy developed his "hitsville" formula, he had some "secret" weapons in his arsenal that helped propel his artists' recordings to the top of the pop lists. It began with the songwriters who had a hand in the studio production as well. Brian Holland had helped produce the Marvelettes' hit, "Please Mr. Postman." Lamont Dozier had tried to break into the business as a solo singer, but was mostly relegated to background singing. Brian Holland's brother Eddie had experienced a little success as a lead singer for Motown. The trio, known as H-D-H, would each take responsibility for different aspects of the creation of a new hit. Dozier would come up with a melody, Brian Holland would come up with a structure, and then Dozier would come up with a title. Since none of the three were skilled at music notation, they would have a Motown staffer write down the chords in the
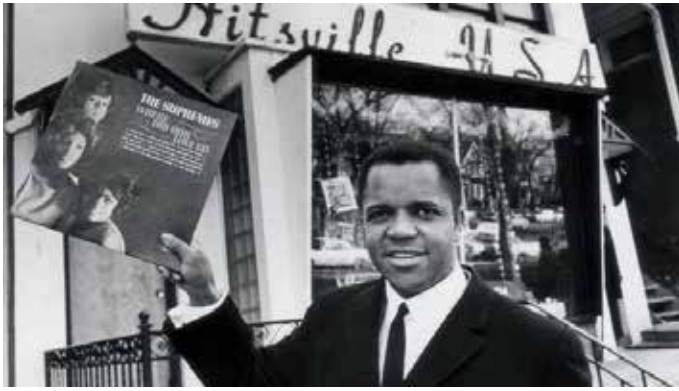
Berry Gordy's Motown recording label saw tremendous success during the 1960s.

Photograph: Tony Spina / Detroit Free Press.

appropriate key for the singers. Then it was time to record the background track, usually using the house band, the Funk Brothers.[116] Eddie Holland would then write the lyrics, which though perhaps repetitive, were always memorable.

In the studio, the members of the H-D-H trio each coached the recording artists in their area of expertise: Brian ran the soundboard and focused on the keyboards and guitars; Dozier took care of the background singers, drums, and bass; Eddie was in charge of the lead singer. H-D-H would often bring in vocalists from other groups as backup singers. Then it was time to lay down all the tracks: rhythm, vocal, percussion, horns, and strings. This was dictated, to some extent, by the Motown facilities, which could not accommodate all the assembled forces at once. On the third pass, all kinds of sounds were added to ensure that the beat was not lost—hand claps, tambourine, wood blocks, even banging chains on the floor, all to make sure that the beat was solid. Horn and string arrangements were created by one of the horn players, and another hit was ready to go.[117] Organ, baritone saxophone, hand claps, and vibraphone were favorite aspects of the tightly organized accompaniments.[118]
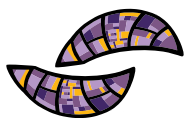
All this was accomplished under the watchful eye of Berry Gordy, who kept a tight rein on all aspects of the studio. When the groups performed in public, Gordy supervised all aspects of that as well, complete with a staff choreographer, an etiquette coach, supervision of makeup and wardrobe, and strict rules of conduct.[119] The result? Between 1963 and 1966, the H-D-H team at Motown recorded twenty-eight hits that made it to the top twenty, and twelve of them went all the way to number one, many of them were recorded by the top "girl group," The Supremes.[120] The formula worked, and not just in the

U.S. In 1964, the only American act to have a hit in the UK was the Supremes.[121] The "Hitsville USA" nickname given to Motown's headquarters was well deserved, and H-D-H had a big hand in the success.

One Motown artist needed no H-D-H formula, no lyrics by a Motown staff writer, no overdubbing, no carefully groomed backup singers, to reach number one, and with a live recording at that, the first live recording to do so. In June 1962, at the "Motortown Review" in Chicago, young Steveland Morris had played an instrumental from his first album, improvising on bongos and harmonica with a big backup band, singing an improvised call and response with the audience, and improvising a coda saying goodbye to the crowd.[122] Gordy was so impressed with the audience's response to his protégé that he decided to take a risk and put the second half of the improvisation out as a single.[123] The single caught on and spent fifteen weeks in the Hot 100, three of them at number one. At one point, Morris occupied the top spot on both the pop and R&B singles charts, and a new album containing the improvisation also hit number one at the same time.[124] Gordy's gamble paid off. Motown had its second number one hit.[125] Morris was only twelve when "Fingertips, Part 2" was recorded and had barely turned thirteen when he was on top of the pop music world. This accomplishment was even more amazing considering that Morris had been blind since shortly after birth. Morris was much better known by his stage name: Little Stevie Wonder. Not a bad start to an amazing career!

Wall of Sound

There was another successful formula being used to create hits: the collection of songwriters working out of the Brill Building in New York City, and the young producer associated with these songwriters, Phil Spector. Filled with songwriters like Burt Bacharach and Hal David, Carole King and Gerry Goffin, Jerry Lieber and Mike Stoller, the Brill Building was to New York what Motown was to Detroit, and the interaction and competition between the composers, producers, and artists resulted in a synergy that propelled many artists and songs into the limelight.[126] One very big factor in that success was producer Phil Spector and his concept that became known as the "Wall of Sound." Spector's goal was to give songs a unique sound that couldn't be copied.[127] As opposed to a group with three or four singers and a rhythm section, trying to sound in the studio as much like they would in person as possible, Spector went for the opposite effect, adding echo, string sections, horns, extra percussion, multiple guitars, and backup vocalists, building up a "Wall of Sound." Spector
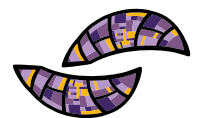
would experiment with different levels on the soundboard, using overdubbing to reinforce a sound or to add layers, all in an overall soundscape that would make it distinguishable from all the rest of the music on the market at the time.[128]

Spector was sometimes accused of overshadowing his "stars" with all the extra instruments and effects, but it seemed to be a successful formula—what he called his "little symphonies for the kids."[129] He was particularly successful when he applied this formula to girl groups, like the Crystals ("Da Doo Ron Ron") and the Ronettes ("Be My Baby"), even hitting number one with the Crystals' "He's a Rebel."[130] One author said that the sound Spector achieved sounded as if "thousands of instruments and singers labored together for the common good, all apparently placed inside a giant echoing cavern."[131] The result was that Spector's "Wall of Sound" recordings "seemed like the biggest sound in the world coming over the radio."[132]

Everybody's Gone Surfin'

A new form of music emerged in the early 1960s: Surf Rock. The first successful surf group was Jan and Dean, and their 1963 hit, their only hit to reach number one, was "Surf City."[133] However, Jan and Dean were not the first musicians to address the subject of surfing. A local California band had a regional hit with a song simply titled "Surfin'," which helped them get signed with Capitol Records.[134] If you think you hear some similarities between the two songs, there is good reason. The group that recorded "Surfin'" was soon to be known as the Beach Boys, made up of brothers Carl, Brian, and Dennis Wilson; Mike Love, who was their cousin; and a newcomer from the east, Alan Jardine. Brian Wilson, considered by most writers to be the brains behind the Beach Boys' success, gets co-writing credit on both Jan and Dean's "Surf City" and the Beach Boys' "Surfin'."[135] Before long, the Beach Boys had surpassed the popularity of Jan and Dean with top ten hits like "Surfin' U.S.A.," "Fun, Fun, Fun," "Surfer Girl," and "I Get Around" (their first number one hit). Other groups, like the Surfaris, cashed in on the surfing enthusiasm, and their drum-heavy instrumental "Wipeout" made it as high as number two on the Billboard Hot 100.[136] But none of the other surf-oriented groups could match the popularity of the Beach Boys. The surfing craze had hit the U.S.A., and the Beach Boys were riding the big wave.

Robert Zimmerman
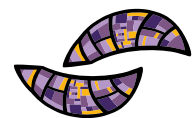
As the 1960s began, folk music and rock and roll seemed like two unrelated styles, as different from each other as jazz and classical music. One man was going to change

The Beach Boys perform on the Ed Sullivan Show *in 1964.*

that. He was born Robert Zimmerman and hailed from the heartland of America, albeit the northern edge of the heartland: Duluth, Minnesota. During a short stint at the University of Minnesota, he spent a lot of time in the collection of bars, clubs, and coffeehouses that had grown up around the university. Playing and singing and listening, he learned a lot about folk music and became particularly fond of the music of Woody Guthrie. In 1961, upon learning that Guthrie's health was failing, Zimmerman packed up his belongings and headed to New York to see his idol.[137] By this time Zimmerman had adopted a performance name that he thought sounded good and that referred to the tragically short-lived Welsh-born poet Dylan Thomas.[138] Guthrie was taken with the younger musician, now known as Bob Dylan, and helped introduce him to the Greenwich Village folk music scene. Dylan began to play at some of the clubs, accompanying himself on guitar and harmonica, singing traditional folk tunes and a few originals. He even managed to perform for the legendary talent scout, John Hammond.[139] Somehow, Hammond saw potential in the young man with the rough, untrained voice (one reviewer called it "anything but pretty"),[140] who almost spoke while strumming the guitar and occasionally interjecting a few notes on the harmonica slung around his neck. Hammond got Dylan a contract with Columbia Records.[141] It was a fortuitous choice.

Columbia was one of the largest and most successful record companies, but it had not gotten involved in recording rock and roll. Hammond produced Dylan's first **eponymous** album for less than $500. The album, which had only two original Dylan compositions, was not a great success, and Hammond had to do some serious negotiating to get

Bob Dylan performing in 1963.

permission to give Dylan a second chance. This time, he gave Dylan—who had been working on original material feverishly during the five months since the recording session for his first album—the freedom to record many of his own compositions. The result changed the history of music. *The Freewheelin' Bob Dylan* contains such iconic compositions as "Don't Think Twice, It's All Right," "Masters of War," "Girl of the North Country," and two songs that came to be anthems of the generation: the prophetic "A Hard Rain's A-Gonna Fall"[142] and the rebellious "Blowin' in the Wind."[143]

In stark contrast to the love songs and surfing music that were dominating the airwaves, these songs addressed social issues of the day and challenged the status quo. In the heady days of Camelot, "A Hard Rain's A-Gonna Fall" and "Masters of War" might have seemed dystopian, but these were also the years of the Cold War, the Bay of Pigs, and the Cuban Missile Crisis. The fear of nuclear destruction seemed to parallel the idea of a hard rain that

was bound to fall sooner or later. The younger generation had begun to question authority, and politically conscious songs seemed to touch a nerve—but Dylan's voice was rough, his guitar playing rudimental, and pop radio listeners were not quite ready for his style. On the other hand, when Peter, Paul, and Mary recorded Dylan's "Don't Think Twice, It's All Right," and "Blowin' In the Wind" and took them to numbers nine and two respectively, it was clear that Bob Dylan's star was rising.[144]

After Dylan's April 1963 concert at New York's Town Hall, *Billboard* magazine called him "the stuff of which legends are made."[145] In May, Dylan was scheduled to perform on the *Ed Sullivan Show*, but the CBS "Standards and Practices Department" objected to some of the lyrics in his song "The Talkin' John Birch Paranoid Blues." When Dylan was told he needed to choose another song, he refused, choosing to walk out. His decision got a lot of publicity over the next few days, maybe more than he would have gotten by appearing on the show, and his image as an uncompromising artist was enhanced.[146] That summer, Dylan appeared alongside Joan Baez, Pete Seeger, and Peter, Paul, and Mary at the first ever Monterey (CA) Folk Festival in May, and again at the Newport (RI) Folk Festival.[147] His Newport performance of "Blowin' in the Wind," with Baez and Peter, Paul, and Mary singing in the background, was a highlight of the festival, and when he led the civil rights anthem "We Shall Overcome" his place in the forefront of the political folk music movement was insured.[148]

On October 26, 1963, Dylan sang a new song in public for the first time: "The Times They Are A-Changin'." Again, he addressed the issues of war, the growing gap between generations, and even racism. Particularly disturbing was the stanza that warned "senators, congressmen" that there was "a battle outside" that would "soon shake your windows and rattle your walls—For the times they are a-changin'."[149] Little did he know how prophetic the song was or how much the world would change in less than a month, when the walls of Camelot would come crashing down with the assassination of President Kennedy.

Meet The Beatles

The times were a-changin', but not just in the world of politics. Some of the biggest changes were in popular music, and those changes could largely be attributed to John Lennon, Paul McCartney, George Harrison, and Ringo Starr. The Beatles are the iconic rock group from the 1960s; the group that sparked Beatlemania and started the British Invasion; the group that, in a single decade, played a major
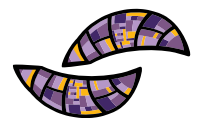
role in transforming the recording industry and changing the sound of rock and roll. Their rise to prominence in the UK was impressive, but the speed with which they became a nationwide phenomenon in the U.S. was amazing.

The boys from Liverpool had started rather slowly. There were several steps on the path to becoming The Beatles. The first two to work together were John Lennon and Paul McCartney, who both joined a local band in July 1957.[150] Paul's friend George Harrison joined the group in 1958. In 1960, after several name changes and permutations of personnel, the band prepared for an engagement in Hamburg, Germany, settling on the name of The Beatles, out of respect for Buddy Holly and the Crickets and as a pun on the word "beat."[151] In late 1961, after hearing them at the Cavern Club in Liverpool, Brian Epstein, a local record-store owner, became their manager. Following an unsuccessful audition at Decca Records early in 1962, Epstein got the band an audition for George Martin at EMI. Martin signed the group, but insisted that they replace drummer Pete Best. Local drummer Richard Starkey joined the band in August, using his stage name of Ringo Starr. The Beatles were complete.[152]

In September 1962, The Beatles made their first recordings for EMI, which released "Love Me Do" in October. The recording rose to number seventeen on the English pop charts. The next single released, "Please, Please Me," was their breakthrough, hitting number one, as did the follow up, "From Me to You."[153] By the time they were ready to release their fourth single, "She Loves You," they were so popular in England that the recording reached number one just on pre-sales. It stayed in the top spot for eight weeks.[154] After an October 1963 live television appearance at the London Palladium with an estimated 15 million viewers, one of the London papers coined the term "Beatlemania" to describe the reaction of the crowds at the theatre.[155]

The music that the Beatles were playing was based on American rock and roll, and George Martin believed they needed to break into the U.S. market to have even greater success. He was unable to persuade EMI affiliate Capitol Records to release The Beatles' music in the U.S., so he got a couple of small independent labels to release Beatles' singles, but with little success. Eventually he persuaded Capitol to set a date of January 1964 to release "I Want to Hold Your Hand" in the U.S.[156]

The Beatles were little known in the U.S. at this point, as independent labels were not able to break into the top 100. George Martin traveled to the U.S. to line up performances and television appearances for The Beatles and successfully

The Beatles wave to fans after their arrival at John F. Kennedy airport in New York in 1964.

persuaded two news organizations to run stories on The Beatles. On November 18, 1963, the NBC nightly news broadcast a condescending story about the craze. With the sound of screaming teenagers in the background, Reporter Edwin Newman quipped, "One reason for The Beatles' popularity may be that it is almost impossible to hear them." He also called a report in the *London Times* that they might travel to the United States "sobering" and joked about an artist who was planning to attempt to capture the phenomenon in a painting who was, "mercifully," deaf.[157]

Beatlemania also caught the attention of Alexander Kendrick, the London bureau chief for CBS news, whose report was more complimentary and included backstage interviews with the "Fab Four." CBS ran the report on the "CBS Morning News with Mike Wallace" on Nov. 22, 1963.[158] The Beatles were starting to get air time in the United States, and they were about to get their biggest break yet: The Kendrick spot was scheduled to air on the top news program in the United States, the "CBS Evening News" with the highly respected journalist Walter Cronkite. A nod from Cronkite could have given The Beatles just the boost they needed to break into the U.S. market—but it was not to be. Something else happened that day that changed the fate of The Beatles and the entire world.[159]

The Assassination of John F. Kennedy

On November 22, 1963, John F. Kennedy was shot and killed while traveling with his motorcade through Dallas, Texas. Most of the nation learned about the shooting and the President's passing from CBS and Walter Cronkite.[160] The Beatles would have to wait. The world's reaction was one of shock and horror. The torch that once had

been passed was now dimmed. Some authors have suggested that the assassination served "as a crucial pivot point marking the end of a golden age of optimism and confidence and the start of a period of disillusionment and conflict."[161] Bob Dylan's "The Times They Are A-Changin'" and "A Hard Rain's A-Gonna Fall" took on new meaning. Some people could put their reaction into words. Others could not. Depending on whose account you accept, Brian Wilson and Mike Love's "The Warmth of the Sun"[162] was either composed in reaction to the assassination, or at the very least finished just before the assassination and always associated with it. Either way, the happy-go-lucky atmosphere of the Beach Boys was now tempered by more melancholy songs.[163]

The early 1960s saw the rise of rock and roll, with dozens of artists selling a million or more albums. By the end of 1964, The Beatles' first album on Capitol Records, which came out at the beginning of the year, had sold over four million copies. That was nothing compared to the fastest selling album of all time. In December 1963, less than a month after the assassination, *John Fitzgerald Kennedy: A Memorial Album* sold more than four million copies in only six days.[164] The musical *Camelot*, which had begun its Broadway run barely a month before the inauguration of John F. Kennedy, closed in 1963, only a few months before Kennedy was assassinated. The parallel was striking. The "one brief shining moment" was over.

SECTION II SUMMARY

❋ The early 1960s was a time of optimism and idealism, particularly in the U.S. The Kennedy administration helped fuel this optimism and helped direct society's focus on youth culture.

❋ Television played an increasingly significant role in society and in disseminating music.

❋ The 1950s had seen substantial developments in classical music, jazz, and the birth of a new genre, rock and roll. Many musicians were comfortable building on the recent developments, but some were more interested in innovation.

❋ 1960 was, in many ways, the end of the "Golden Era" of musical theater, with the death of Oscar Hammerstein and the retirement of Frederick Loewe. At the same time, some of the first shows influenced by rock and roll, like *Bye, Bye, Birdie*, took the stage.

❋ By 1960, classical composers like John Cage

had significantly expanded the boundaries of what could be considered music. John Cage was an iconoclast and an innovator who contributed substantially to the avant-garde movement of the 1950s and 1960s.

❋ One of Leonard Bernstein's most important contributions to music was his series of *Young People's Concerts,* which reached huge audiences through the nascent medium of television and helped shape a generation's relationship with classical music.

❋ Composer Karlheinz Stockhausen was interested in combining live performers with pre-recorded sounds, but he sought tight control over the final result. In his 1960 work *Kontakte*, the timing was meticulously planned and carefully notated, so it could explore the relationship between the live and recorded sounds.

❋ Pierre Boulez's music in the 1950s was known for its strictly controlled serialism, so when his 1960 *Pli Selon Pli* included aleatoric techniques and groups of musicians moving at different speeds simultaneously, it combined previously separate and opposing streams of classical composition.

❋ Krzysztof Penderecki's *Threnody for the Victims of Hiroshima* was a groundbreaking work incorporating graphical and proportional notation as well us unorthodox playing techniques.

❋ As the 1950s ended, there were many different streams of jazz, including a number of innovations from the year 1959.

◈ John Coltrane's album *Giant Steps* expanded the technical limits of jazz and featured increasing harmonic complexity.

◈ Dave Brubeck's album *Time Out* expanded the rhythmic boundaries of jazz.

◈ Miles Davis' album *Kind of Blue* was one of the most important jazz albums of all time and popularized the technique of creating modal jazz compositions, emphasizing creativity and musicality over technical ability.

◈ Miles Davis and Gil Evans experimented with combining jazz and classical music, resulting in *Third Stream* jazz. *Sketches of Spain* demonstrates this idea while also popularizing the technique of recording

concept albums.

◈ Charles Mingus' *Fables of Faubus* addressed the Civil Rights Movement.

◈ Ornette Coleman's innovation of free jazz was one of the biggest developments of 1959. Harmonic, metrical, tempo, and even pitch boundaries were shattered.

✿ One of the main means of disseminating popular music was AM radio, which by 1960 was dominated by a "Top 40" format. Payola scandals showed that sometimes money and bribes outweighed actual talent.

✿ The rock music of 1960 seemed simply to be an extension of 1950s music. There was very little new. There were some glimmers of future developments in popular music. Berry Gordy was organizing a recording company in Detroit that would eventually become Motown.

✿ Film music was on the edge of big changes. Bernard Herrmann's score for *Psycho* epitomized the new style, incorporating many of the new compositional techniques developed in classical music.

✿ The music of African-American composers began to get more attention. Ulysses Kay incorporated many twentieth-century compositional techniques in his *Fantasy Variations* for orchestra.

✿ Dmitri Shostakovich was one of the most important symphonists of the twentieth century. His 1962 Symphony No. 13, with texts that acknowledged Russian anti-Semitism, might have been musically conservative, but it was politically bold.

✿ Composers continued to experiment with new sounds. Karlheinz Stockhausen's 1962 *Momente* was almost entirely experimental, requiring the vocalists to sing specific and unspecified pitches, whisper, shout, speak, clap hands, shuffle feet, babble incoherently, and play home-made percussion instruments.

✿ Benjamin Britten's *War Requiem* is one of the great choral works of the twentieth century. Britten juxtaposes liturgical texts with anti-war poems by Wilfred Owen and uses different combinations of instruments and voices for the two types of text to emphasize the dichotomy.

✿ In the early 1960s, jazz was struggling for an audience share. Jazz musicians tried different ways of reaching audiences. John Coltrane chose to improvise over recent popular music. Some musicians adopted a hard bop style that combined serious improvisation with simpler rhythms and harmonies resembling the newly popular rock style. Some musicians, such as Tito Puente and Stan Getz, combined Latin rhythms with jazz improvisation.

✿ The film version of Leonard Bernstein's *West Side Story* incorporated jazz, Latin music, and modern classical composition techniques. Two great movie themes date to this period: Henry Mancini's "Pink Panther Theme" and Monty Norman's "James Bond Theme."

✿ In 1962, Stephen Sondheim's first Broadway show as composer/lyricist, *A Funny Thing Happened on the Way to the Forum*, won six Tony awards.

✿ In the early 1960s, FM radio came to be associated with rock and roll, permitting artists to break free from the tightly controlled top 40 format of AM radio. Other technological developments from this time include the cassette tape and the Marshall amplifier.

✿ By 1961, Berry Gordy's Motown label had started to gain recognition. The Holland-Dozier-Holland trio of songwriters/producers helped propel Motown to the top of the charts.

✿ Phil Spector's *Wall of Sound* was a production technique that used layer upon layer and echo so that it sounded as if hundreds of instruments and singers were involved.

✿ Another new musical style in the early 1960s emanated from California. Jan and Dean and the Beach Boys were some of the first to pursue the "surfing" style.

✿ In 1961, Bob Dylan moved from Minnesota to New York to meet Woody Guthrie. Dylan's lyrics that urged political consciousness were in stark contrast to the love songs and surfing songs that dominated the airwaves.

✿ The Beatles developed slowly between 1957, when they first became involved in bands, and 1962, when they made their first recordings with their eventual personnel. From that point on, however, The Beatles' rise was nearly meteoric.
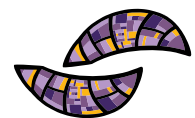
"A Change Is Gonna Come": The Heart of the 1960s

Sam Cooke, photographed in the recording studio in the early 1960s.

Photograph courtesy of Legacy Recordings.

INTRODUCTION

*It's been a long, a long time coming
But I know a change gonna come, oh yes it will.[165]*

The world changed rapidly in the early 1960s, but not as rapidly as the accelerating rate of change after the assassination of President Kennedy in 1963. The heart of the 1960s was a tumultuous time that left the world forever changed.

In late December 1964, RCA Victor released a single of music by the smooth-voiced Sam Cooke, featuring an anthem for the Civil Rights Movement: "A Change Is Gonna Come."[166] Cooke, the "ultimate Soul man," was not known for his political statements, but the times were changing, and he knew he needed to change with them.[167] Cooke viewed his composition as a response to Dylan's "Blowin' in the Wind."[168] More specifically, it was written in response to having been kicked out of a hotel and arrested for disturbing the peace when he and his band were refused entry on the basis of race, even though they had already reserved rooms.[169]

Cooke's anthem describes some aspects of racial prejudice, such as being unwelcome "downtown" or at the movies, among other indignities. In the end, however, he finishes with an uplifting message:

> *There have been times that I thought I couldn't last for long
> But now I think I'm able to carry on
> It's been a long, a long time coming
> But I know a change is gonna come, oh yes it will[170]*

The hopeful nature of the text is emphasized by the rich orchestration.[171] Strings, French horn, and timpani emphasize the seriousness of the text, giving it a weight and depth that it would not have had with a simpler accompaniment.[172]

Cooke would not have the opportunity to see the changes he predicted. In a tragic twist of fate, just a few days before the song was released, Cooke was shot to death by a hotel manager who claimed self-defense.[173] Despite questionable circumstances, the shooting was ruled a "justifiable homicide."[174] Questions persist to this day, and some authors imply that the shooting was racially motivated.[175] It was a tragic end to a promising career. The hopeful nature of the lyrics will always be intertwined with the story of the tragic end of Sam Cooke's life.

THE BRITISH INVASION

By December 1964, it was clear that popular music was changing rapidly. The short period from November 1963 to February 1964 represents a watershed in popular music.

BEATLEMANIA

During 1963, The Beatles' popularity in England had reached a fever pitch. By the time they gave a command performance for the Queen on November 4, The Beatles held seven of the top twenty spots on the British charts simultaneously. They held the top position for thirty-seven weeks that year.[176] After successful trips to Sweden and

France and record-breaking television appearances in England, The Beatles were ready to cross the pond.[177]

Although the Kennedy assassination had pre-empted Walter Cronkite's planned broadcast of the CBS story about The Beatles, two and a half weeks later, in an effort to "cheer up" a depressed nation, Cronkite aired the spot, and the seed of Beatlemania was planted in the United States.[178] America was ready for The Beatles. Capitol Records released "I Want to Hold Your Hand" on December 26, 1963,[179] just over a month after the assassination of John F. Kennedy. America was looking for a distraction, and The Beatles provided it. It took five weeks for the single to climb to the top of the Billboard charts, but once it reached number one on February 1, 1964, it stayed for seven weeks—until it was replaced by another Beatles hit, "She Loves You."[180]

The Beatles arrived in New York City on February 7, 1964. Kennedy Airport had just been renamed to honor the recently slain president.[181] Nearly five thousand screaming teenagers (mostly young girls) greeted the Fab Four at the airport.[182] What everyone was waiting for was The Beatles' appearance on the *Ed Sullivan Show*. The show was seen by the largest audience in television history. Music critic Ian Inglis suggests that, "it is no exaggeration to say that on February 9, 1964, Ed Sullivan also introduced a generation to its future."[183]

David Copeland, an expert on popular culture and media, suggested that "the Beatles changed the United States."[184] The *Ed Sullivan Show* changed The Beatles. Television had a power that radio did not. Radio stations were local. Even if The Beatles were in the number one position on the charts, it was not a simultaneous shared experience for the whole nation. One person might hear "I Want to Hold Your Hand" in the morning on Tuesday, while another person might hear it in the evening on Wednesday. There were dozens of radio stations to choose from in major markets, but there were only three national television networks. This meant that nearly 74 million excited viewers saw the performance at the same time, knew that many of their friends had seen it at the same time, and could discuss it the next day.[185] The result was an even greater intensification of Beatlemania in the U.S.

On March 28, 1964, The Beatles had fourteen singles in the Top 100, including the number one hit ("She Loves You") and the previous number one ("I Want to Hold Your Hand"). The following week, The Beatles held the top five positions on the pop charts. Sixty percent of the singles sold in the first quarter of 1964 were Beatles recordings.[186]

The Beatles with Ed Sullivan, February 1964.

CHART TOPPERS

By the summer of 1964, the British Invasion was in full swing. The British duo Peter and Gordon were the first British act other than The Beatles to hit number one, though their hit was a song by Paul McCartney: "A World Without Love."[187] Shortly thereafter, Eric Burdon and The Animals hit number one with a **cover** of an old folk song, "The House of the Rising Sun," which was familiar to some American audiences because it had been recorded earlier by Bob Dylan. Some say the Animals' "not cute" persona defied the impression Americans had of British bands and opened the door for the second wave of bands like the Rolling Stones.[188] Like the Stones, the Animals' style was deeply influenced by American blues.[189] The Animals took the folk song and performed it with an edgy, blues-influenced rock sound.[190]

The Kinks, formed in 1962, had their first British number one hit in 1964 with "You Really Got Me," which reached number seven in the U.S.[191] Their bad boy image was truly earned. Onstage fighting sometimes even resulted in injuries requiring stitches, and the American Federation of Television and Radio Artists banned them from touring in the U.S.[192] Despite the resulting lack of live exposure in the U.S., the Kinks continued to chart throughout the decade, building a solid U.S. following.[193]

Many white British musicians, like the Animals, Stones, and Beatles, were inspired by older black American musicians,

in particular Chicago blues musicians. On the other hand, many black American musicians, like Sam Cooke and Motown's Supremes, were trying to record music that would reach out to white audiences.[194] In 1964, Motown was successfully reaching white listeners.[195] Despite The Beatles' dominance of the charts, the Supremes held number one for seven of the last twenty weeks of 1964, with hits like "Baby Love" and "Come See About Me."[196]

Motown also charted with Martha and the Vandellas. "Dancing in the Street,"[197] co-written by Marvin Gaye, reached number two, second only to another chart-topping British group, Manfred Mann.[198] As the Civil Rights Movement gained momentum, "Dancing In the Street" became a call to action, with lyrics like "Calling out around the world," and "Summer's here and the time is right," followed by a list of cities: New Orleans, New York, Philadelphia, Baltimore, D.C., L.A., and "don't forget the Motor City (Detroit)." Whether purposeful or not, this was a list of hot spots, ready to explode, which they did, particularly in the long, hot summer of 1967.[199]

THE ROLLING STONES

If The Beatles represented one prong of the British "assault" on America, the Rolling Stones represented the other. Both in music and image, the Rolling Stones were rougher, more aggressive, more rebellious (at least at first), but also more basic. Rhythm and blues inspired the musicians who eventually became The Rolling Stones.[200] Formed in 1962, the band took its name from the title of a song ("Rollin' Stone") by the legendary Chicago blues singer and guitarist Muddy Waters. The new band caught the ear of George Harrison, who persuaded the Decca record company to sign them. In 1963, the first Rolling Stones single, a Chuck Berry song, "Come On," only reached number twenty-six. Try as they might, they could not swim against the tide that was The Beatles. If you can't swim against the tide, why not swim with it? Their more successful second single was "I Want to Be Your Man," a song dashed off for them by Lennon and McCartney.[201] When Stones guitarist Brian Jones added slide guitar, they felt they had something that would succeed.[202] The song made the top ten in Britain and received substantial airplay when the Stones performed it on the first-ever episode of the British pop music show "Top of the Pops."[203]

Touring the U.S. became the measure of success for a British rock group. With the Stones' debut album in the top spot in the UK, plans were made for a U.S. tour, which began in June 1964.[204] That is where the resemblance to The Beatles' first tour ends. Instead of thousands of

Trade ad for the Rolling Stones' 1965 North American tour.

fans greeting them at the airport, hundreds awaited the Stones. [205] Their first U.S. television appearance was on an obscure late night show, and their second appearance, on Dean Martin's show, was mostly an opportunity for the host to joke about his guests.[206] Concerts in the middle of the country drew only hundreds, and audiences were small until they played Carnegie Hall in New York.[207] Later that year, they toured the U.S. again, and this time they appeared on the *Ed Sullivan Show*, with crowds of excited teens inside and outside the theatre.[208] There were extensive complaints after the *Ed Sullivan* appearance, however, and the next day Sullivan declared to reporters, "I promise you they'll never be back on my show if things can't be handled. We won't book any more rock'n'roll groups and we'll ban teenagers from the theatre if we have to."[209] The Stones really were the "bad boys of rock"—in contrast to the polite Beatles.[210] The crowds they attracted were rougher than Beatles audiences. In Paris, 150 Stones fans were arrested for violence. Arrests also accompanied performances in England, Scotland, and Holland.[211]
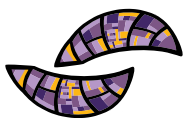
INNOVATIONS IN CLASSICAL MUSIC

The mid-1960s was a time of great creativity for classical musicians. Each composition was expected to demonstrate new and unique techniques and sounds. Operating under the shadow of Stravinsky's and Schoenberg's advances from the first quarter of the century and Cage's innovations of the 1940s and 1950s, composers of the 1960s found it challenging to surprise and fascinate audiences as well as fellow musicians and critics.

PHILOMEL

One composer who succeeded in creating new sounds was Milton Babbitt (1916–2011). Babbitt had been one of the first U.S. innovators in electronic music. Babbitt's interest in electronic music was largely based on his fascination with serialism.[212] Earlier Babbitt works serialized all aspects of the music: pitch, tempo, rhythm, dynamics, and even articulation and timbre.[213] Once he became involved with electronic (recorded) music, he had total control over the final result. His work with electronic music, however, led him to compose for live instruments again, with "a new vitality and color."[214]

In 1964, Babbitt combined these two aspects of his compositional development in *Philomel*, a work based on Greek mythology in which a soprano sings live, accompanied by taped sounds. This was not the first work to combine voice and tape (recall John Cage's *Aria with Fontana Mix* from Section II), but it did have some fascinating and innovative techniques.[215] The tape contained some purely electronic sounds, but also included manipulated recordings of the performer. This allowed the tape to represent the "disembodied entity" of Philomel, who has had her tongue ripped out, before the Gods permit her to metamorphosize into a nightingale.[216]

John Hollander, who wrote the text for *Philomel*, explained that they intended the live voice of the soprano to dominate, but that her performance would "be augmented, and perhaps echoed" by the taped sounds.[217] The text played with sound elements within the words, with alliteration and consonance. Just as Babbitt's serial method of composition would manipulate small units of sound (whether pitch or rhythm or timbre), Hollander manipulated small units of sound—phonemes—dissecting and reassembling the names Philomel and Tereus. The results include "feel a million trees," "not true trees, not True Tereus," "feel a million filaments," "families of tears," and "I feel a million Philomels."[218]

Composer Milton Babbitt, who was one of the first U.S. innovators in electronic music.

Babbitt manipulated the recorded soprano's voice with speed changes and the resulting pitch changes.[219] He used electronics to change the sound of the voice. He overdubbed so that the recorded soprano could serve as a Greek Chorus. As impressive as the huge vocal leaps required of the live soprano may be, the taped soprano could go even higher and lower. The result is an expressive and disturbing portrayal of the anguished story of Philomel.[220]

GYÖRGY LIGETI

Hungarian-born composer György Ligeti (1923–2006) was known for creating new sounds.[221] Ligeti had witnessed the terrors of the twentieth century up close, losing family members to Hitler's killing machine. Ligeti had been a forced laborer during World War II, required to wear the yellow armband denoting his Jewish heritage and assigned to carry heavy explosives.[222] His reaction, according to music critic Alex Ross, was to transcend the horror and compose music "of luminosity and wit," like his 1962 *Poème Symphonique for 100 Metronomes*.[223]

Ligeti's life experience left him at odds with a musical ideology that resembled totalitarianism in its certitude. This led him to seek his own musical paths, distinct from those being espoused by Stockhausen, Boulez, Berio, and Cage.[224] By the early 1960s, Ligeti's music had begun to focus primarily on texture and density, defying the norms of pitch, rhythm, and form. His harmonic language was densely chromatic, with as many as fifty independent lines moving simultaneously, a compositional technique known as **micropolyphony**.[225] Author Bryan Simms says that Ligeti's music constructs "sound areas" in several ways: "with tone clusters, hypercomplex polyphony
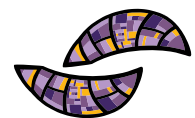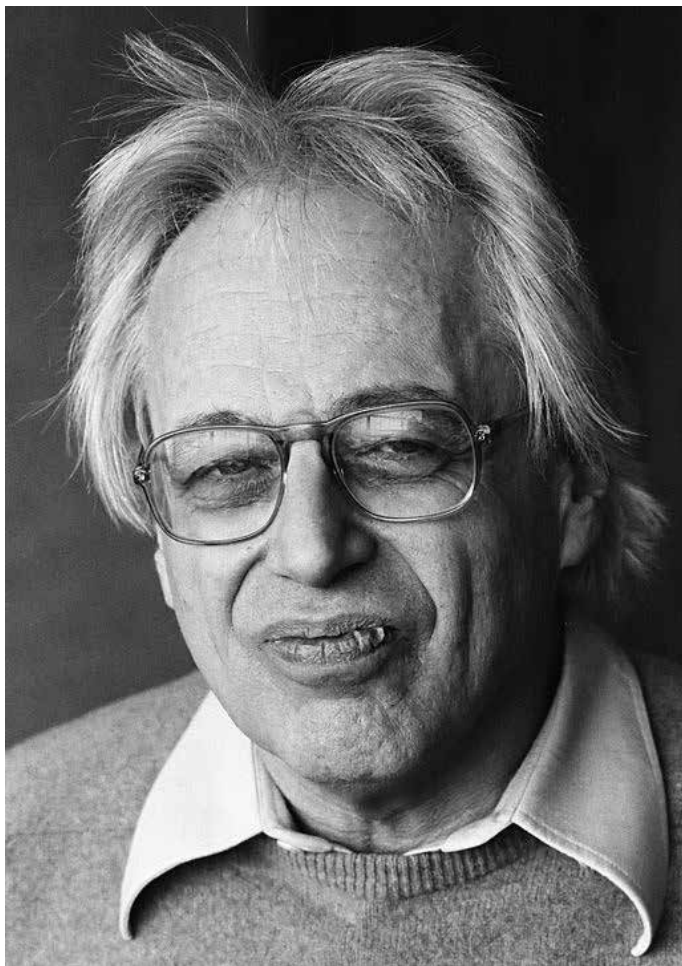
Composer György Ligeti, photographed in 1984.

Photograph: Dutch National Archives, The Hague, Fotocollectie Algemeen Nederlands Persbureau (ANeFo).

[micropolyphony], polyrhythms, noises, pointillistic textures, and improvisation by many performers."[226] These techniques are similar to what electronic composers were doing on tape in the 1950s, although the final result is certainly more haunting when produced directly by humans playing instruments or singing.

In 1965, Ligeti composed the *Requiem for Soprano, Mezzo-Soprano, 2 Mixed Choirs and Orchestra*, which Ross describes as "a twenty-five-minute battering of the senses . . . in which singers whisper, mutter, speak, shout, and shriek the Requiem text."[227] Micropolyphony results in unintelligible text, amorphous pitch collections, and strange timbres. It sounds, at times, as if the singers are just randomly murmuring, when they are actually singing specific pitches, and moving, mostly chromatically, in rhythms carefully notated to avoid lining up with each other. The feeling of randomness is not inaccurate, but it is carefully scripted. In many ways this resembles the thickly

layered entrances and exits of the string instruments in Penderecki's *Threnody*, except that pitches are meticulously specified, and rhythms are also explicitly notated.

The otherworldly nature of Ligeti's music caught the ear of important listeners. The American film producer, Stanley Kubrick, while working on his 1968 film *2001: A Space Odyssey*, chose pre-existing music to use as examples for the composer he had hired, Alex North. After North completed his score, Kubrick decided that the pre-existing musical examples worked better and kept them.[228] The result was that four of Ligeti's compositions from the 1960s, *Aventures, Atmosphères, Lux Aeterna*, and *Requiem*, are all used in the film.[229] The opening "*Kyrie*" of the *Requiem* recurs three times, accompanying the appearance of the frightening monolith that figures prominently in the film. Since this portion of the film is wordless, as are several other significant passages, the music and the visuals are entirely responsible for portraying the mood and carrying the action forward.[230] Ligeti was a brilliant author and lecturer and influenced generations of students.

ST. LUKE PASSION

Krzysztof Penderecki had astounded musicians and audiences with his innovative *Threnody* in 1960. His 1965 *St. Luke Passion* further demonstrated his understanding of compositional techniques and trends of the late mid-century and evinced his versatility and flexibility as a composer. Given the extent of Soviet influence in the Eastern Bloc at this time, expressions of religious faith were problematic and could be destructive to the career of a composer. Penderecki took advantage of his notoriety as the composer of *Threnody* and defied the threat of Soviet repression that might have quashed a lesser-known composer who dared broach a religious subject.

In 1965, Penderecki's *St. Luke Passion* was premiered in Germany to commemorate the anniversary of the cathedral in Münster. It soon received notable performances in the United States, the United Kingdom, and Poland, and is now considered one of the great choral masterpieces of the avant-garde.[231] On the surface, Penderecki's eighty-minute *Passion* bears some similarities to Britten's *War Requiem*. Penderecki calls for three solo voices (soprano, baritone, and bass), narrator, three mixed choruses and a boys' chorus, and a large orchestra. However, Penderecki's approach to the sacred text is quite different.

Author Constantin Floros says that the *St. Luke Passion* demonstrates both "a delight in experimentation and great expressive power."[232] *Passion* subsumes several different
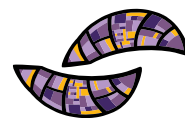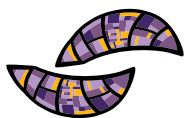
styles within the work, which Floros calls "polystylistic."[233] It uses triads, twelve-tone serialism, quotations from Gregorian chant, even the famous BACH motive (B♭-A-C-B♮), referring to the two famous *Passions* that Bach composed (*St Matthew Passion* and *St John Passion*).[234] Tone clusters and glissandi are reminiscent of *Threnody*, and the score occasionally uses the "highest note" symbol that figured prominently in *Threnody*. *Passion* incorporates non-traditional vocal techniques, such as choral babbling (which is, of necessity, aleatoric).[235] It has some similarities to the "*Kyrie*" of Ligeti's *Requiem*: unsynchronized chromatic motion and variations in density figure in both compositions. Penderecki's *Passion* often has a thinner texture, sometimes moving to a single voice, and other times resolving to octaves or open fifths. There are also clear differences from *Threnody*. Although there are passages where graphic placements of notes indicate the temporal relationships, there are also passages with specifically (and traditionally) notated meters and rhythms. There are many passages with pitches specified using traditional pitch notation. The result is a singular work that does not sound like Bach's famous *Passions*, Britten's *War Requiem*, Ligeti's *Requiem*, or even Penderecki's own earlier *Threnody*, but that instead creates its own unique combination of sounds to portray the religious text.[236]

The *Passion* won several prizes in Europe and garnered critical acclaim. Critic Alexander Carpenter, for example, calls the *Passion*, "an important work in the history of music in the twentieth century," suggesting that it "brings together and seemingly solves a number of stylistic problems, including the integration of tonal and non-tonal harmony and the blending of religious themes with modern soundscapes."[237] With the *St. Luke Passion*, Penderecki proved that avant-garde creativity could be a tool for expressivity, and that it could be used to complement a solid knowledge of earlier compositional techniques.

GEORGE CRUMB

George Crumb (b. 1929), a native of West Virginia, earned his doctorate from the University of Michigan in 1959.[238] Despite an early interest in serialism, Crumb's music tended to hint at tonal centers. He was particularly fascinated with timbre, incorporating sounds that are not usually associated with classical music and displaying what Eric Salzman calls a "special feeling for sonority."[239] After receiving minimal attention for his works in the first half of the 1960s, Crumb garnered important recognition in the second half of the decade. The Chicago Symphony Orchestra premiered Crumb's *Echoes of Time and the River* in 1967. The piece earned him the Pulitzer Prize for music the following year.[240]

Echoes was replete with unusual sounds, including whistling, shouting, whispering, blowing through brass mouthpieces without buzzing, long slow string glissandi, playing on the inside of the piano (plucking, scraping, strumming, or hitting the strings with mallets), unusual growling sounds on the woodwind and brass instruments, and extensive use of percussion—including the assignment of percussion instruments to string players. Crumb specified an elaborate stage design, with directions for the players to move around the stage in a ritual procession.[241] *Echoes* was more than just a piece of music—it involved visual aspects as well. Because of Crumb's fascination with unusual sounds, the texture of *Echoes* (and much of Crumb's music) was thinner and more delicate than much classical music of the twentieth century, exposing specific sounds.[242]

TERRY RILEY

Terry Riley (b. 1935) grew up in California and met other similarly minded musicians while studying at Berkeley. These musicians introduced Riley to trance-like music of sustained tones that avoided tonality. At the same time, Riley began using mind-altering drugs, including marijuana and mescaline. He experimented with tape loop composition, and his first completed piece was titled *Mescalin Mix*. As he continued to experiment with tape

Composer Terry Riley. Riley's In C *was a major influence on the trajectory of the music that came to be called minimalism.*
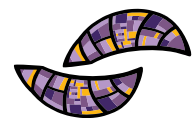
manipulation, he learned a technique that allowed him to record a sound on one machine and then play it back seconds later on another, which resulted in a type of improvisation not unlike sampling today. He experimented with these tape improvisations with the great jazz trumpeter Chet Baker, using Miles Davis' "So What" as the melodic, rhythmic, and modal framework.[243] With its minimal harmonic motion, the modal nature of "So What" seemed to align well with the slowly evolving nature of Riley's music. Riley's tape manipulation method would add layer after layer of the same material without synchronization.

Riley decided to see if a similar concept could be imposed on an ensemble of live musicians and began to work on a piece that incorporated improvisation, his layering technique where everything builds from the first fragment, and ideas he had gathered from his experience with tape manipulation. *New York Times* music critic Alex Ross suggested that Miles Davis' modal "So What" was "proto-minimalist," meaning that Davis' musical concept of extreme harmonic simplification helped lay the groundwork for the minimalist compositions that followed.[244] One Riley composition based on these ideas stands out as a major influence on the trajectory of the music that came to be called minimalism: *In C*.

LISTENING COMPANION—LISTENING EXAMPLE 5: *IN C* (1964)— TERRY RILEY

In 1964, the San Francisco Tape Music Center defied expectations and sponsored the premiere of a piece that did not use any pre-recorded sound, but was performed entirely by live musicians: Terry Riley's *In C*.[245] *In C* consisted of fifty-three short fragments of music, each made up of a few of the notes of the C Major scale, with the addition of the notes F♯ and, near the end, B♭.[246] The instrumentation was not specified and thus, like music of John Cage, not within the control of the composer.[247] The whole set of notes was not introduced at once, but rather revealed as each new fragment entered. Performers were at liberty to repeat the fragments any number of times, but were instructed to stay within two or three patterns from the rest of the ensemble. The result was a strange sort of canonic imitation, like the overlapping repetitions of a round (e.g. "Row, Row, Row Your Boat").

Each performer played the same fragments, in the same order, but not at the same time—and one, two, or even three earlier fragments might still be going while new fragments were introduced. This caused the music to have many characteristics of earlier aleatoric music, with sections that could be played in different orders by different musicians, but in this case, the order of sections was predetermined. Just the number of repetitions and the alignment of the fragments were left to chance. This meant that rhythms would overlap and combine in new, unusual, and interesting ways. Polyrhythms abounded. Pitches sometimes clashed and sometimes blended. At times a performance might be full of consonant triadic, chordal sounds, while another performance (or even another section of the same performance) was full of tone clusters and dissonance.

Although Riley had written specific recognizable rhythms for many of the fragments, he originally intended them to be played without a specific tempo designation. The result would have been an amorphously mutating blob of notes. Imitation would have been difficult to discern because of the different unrelated tempos. The work would probably not have been as intriguing for the listener. Then Riley's friend, fellow composer Steve Reich, suggested designating a specific tempo and adding reiterated high C eighth notes (the highest two Cs on the piano, an octave apart) to establish and maintain a tempo.[248]

With this adjustment, suddenly the rhythmic relationships and the imitation became distinct. The steady and unified tempo had the additional effect of directing the audience's attention to rhythms and pitches, now that the tempo was the same in every voice. One other surprise effect came from this adjustment. The repeated Cs, the aligned rhythms of the fragments, and the gradual rhythmic and pitch changes as the players moved from fragment to fragment resulted in an almost hypnotic, trance-like effect. It also gave the impression of a long improvisation (which, in a way, it was—just with specific pitches and rhythms) over a static harmonic structure, much like modal jazz, some Latin jazz, and many
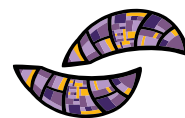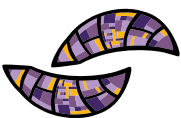
rock and roll guitar solos. Audience reaction was more positive than most experimental music could expect, and a new branch of classical music composition was born: minimalism.

This is not to say that there were not minimalist compositions before *In C*, but this was the piece that caught everyone's attention, in particular because the steady beat reminded audiences of rock and roll. Composers realized that they had a unique opportunity now. Improvisation combined with simplified harmonies, a discernible beat, and slowly morphing and mutating melodic and harmonic structures resulted in a hypnotic and trance-like calmness. Composers could create music that satisfied and challenged classical music performers and critics, while still being palatable, perhaps even attractive, to less discerning audiences whose primary listening experience was with rock and roll.

It was clear from the first few lines of instructions that *In C* was not an ordinary piece of chamber music. After specifying that the fifty-three fragments are to be played in order, Riley refused to specify the instrumentation: "Any number of any kind of instruments can play. A group of about thirty-five is desired if possible but smaller or larger groups will work. If vocalist(s) join in they can use any vowel and consonant sounds they like."[249] The recording on the USAD CD is a 1968 studio recording (remastered in 2009) that incorporates overdubs to increase the number of layers. Performers on this recording include Riley himself on saxophone, plus flute, clarinet, oboe, bassoon, trumpet, trombone, viola, marimba, and "the pulse" played on the top two Cs of the piano. This performance is approximately forty-two minutes in length. We will hear the first 5:04.

<table>
<tr><td colspan="2" align="center">**Listening Guide 5**
***In* C—1964**
Terry Riley (b. 1935)</td></tr>
<tr><td>**Time**</td><td>**Description**</td></tr>
<tr><td>0:02</td><td>The pulse begins (the two highest Cs on the piano) at a speed of approximately quarter note equals 130 beats per minute, two notes (eighth notes) per beat.</td></tr>
<tr><td>0:10</td><td>The marimba enters with fragment one, which consists of quarter note E-naturals, with C-natural grace notes. The combination of the notes C and E immediately alludes to the key of C major. While each performance may have many different and distinguishing aspects, all performances that follow the rules (all fragments should enter in order) will have this characteristic in common. As a result, everything that occurs after this point will be heard in relationship to the key of C major, in particular because the octave Cs continue throughout, and because the fragments continue to emphasize C, E, and G. All but two of the fifty-three fragments include at least one of those three pitches.</td></tr>
<tr><td>0:12</td><td>Now the soprano saxophone (Riley himself) has joined, playing fragment one, aligning rhythmically with the marimba. Gradually more instruments join (some overdubbed), all aligned with the marimba. You will notice that some instruments are in the left channel, while others are on the right. As the ensemble continues to emphasize a pattern that suggests a steady quarter-note beat, one dub of the marimba switches to the offbeat. This results in both C-naturals and E-naturals on every eighth note in the marimba part. It is as if the pulse has now been joined by the percussion, and every eighth note has both C and E. Listeners notice slight changes in balance and blend between the instruments since pitch and rhythm are not changing at this point.</td></tr>
<tr><td>1:10</td><td>At this point fragments 2 and 3 start to sneak in, adding the note F, but mostly between the Es that are on the beat.</td></tr>
<tr><td>1:18</td><td>Fragments 2 and 3 start to become stronger.</td></tr>
<tr><td>1:42</td><td>Players using fragments 2 and 3 start to overlap. The emphasis gradually shifts from 2, which tends to align rhythmically with fragment 1, to 3, which seems to syncopate against those who are still playing fragment 1.</td></tr>
</table>

1:48	Fragments 4 and 5 introduce the note G to the mix. The texture becomes denser as the various rhythms start to overlap.
2:02	Overdubs of like instruments playing one eighth note apart create canonic effects that sound like repeated eighth notes in some voices. Fragment 1 starts to disappear.
2:47	Fragments 2 and 3 become weaker as more versions of fragments 4 and 5 predominate.
3:29	Fragment 6 sneaks in with a sustained C. Fragments 1, 2, and 3, have now dissipated, and complex combinations of 4 and 5 predominate, with the sustained C in the background.
3:45	Gradually more instruments join the sustained C, and fragments 4 and 5 start to weaken.
4:08	Up to this point, all rhythms have been eighth note, quarter note, or the longer sustained Cs. Furthermore, rhythms have only had a few prescribed rests. Now, with the introduction of fragment 7, an easily recognized rhythm of three C sixteenth notes, surrounded by rests, adds rhythmic interest. It will also cause more variations in texture because of the specified rests. The groups of three sixteenth notes are passed around the ensemble, suggesting both anapestic (three notes with the emphasis on the first) and dactylic (three notes with the emphasis on the third) rhythms.
5:04	Our sample ends before the introduction of the notes B natural (fragment 9), F♯ (fragment 14), A (fragment 22), B♭ (fragment 35), and D (fragment 45).

STEVE REICH

Terry Riley's friend Steve Reich (b. 1936) was fascinated with the textures created by jazz improvisation. He appreciated the balance between the predictability of expected tempos, beats, rhythms, and the roles of the various instruments and the unexpected or surprising combinations of pitches and rhythms that occurred when one or more of the instruments improvised. He was particularly captivated by the music of John Coltrane and heard Coltrane live at least fifty times. He considered jazz music of the moment, music that did not need, or even permit, analysis. Before Reich began to compose minimalist music for live instruments, he burst onto the scene with two pieces of *musique concrète* using only a short sample of human speech as the sound source. In these first works, Reich established his minimalist concept of "music as a gradual process" through a very simple method of tape manipulation.[250]

LISTENING COMPANION—LISTENING EXAMPLE 6: "IT'S GONNA RAIN" (1965)—STEVE REICH

Steve Reich grew up commuting by train between his father's residence in New York and his mother's residence in California. Reich later suggested that his fascination with motoric, unrelenting rhythm formed while listening to the "clickety-clack" of the train.[251] Reich had a sensitive ear, attuned to what was going on around him. His interest in rhythm was also stimulated by his study of percussion. After earning a degree in philosophy at Cornell University, he studied music at Juilliard in New York City and at Mills College in California, where he earned a master's degree under the tutelage of both Darius Milhaud and Luciano Berio.[252]

In 1964, while pursuing sound samples for tape loop experiments, he came across a Pentecostal preacher in San Francisco's Union Square who was riffing on the story of Noah and the flood. With the Cuban missile crisis, the assassination of Kennedy, and Bob Dylan's "A Hard Rain's A-Gonna Fall" all fresh in Reich's ears, Brother Walter's invocation of a rain that would destroy the world struck a chord. Reich captured a sample of Walter's sermon and
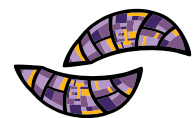
saved the tape to use later.[253]

Reich cued up two tape recorders, each with a copy of the key words of Walter's sermon: "It's gonna rain." He had a third machine connected to record the combined output. He was planning to rapidly **pan** (switch from one channel to the other) on the third machine, so that "It's gonna" would be in one ear and "rain" would be in the other. When he started the tapes, he realized that they were not quite going the same speed. Fascinated, he pursued it further.[254] Reich created a simple technique to cause the tapes to slowly get further and further apart. He simply put his thumb on one of the reels, slowing it down.[255] The resulting composition put a new twist on several older techniques. First, it resembled micropolyphony, in that the same material was moving at slightly different speeds. Second, it resembled canonic imitation, in that one voice was imitating what the other said, but at a different time. Third, the combining and separation of the two channels caused the rhythmic and pitch aspects of the speech to be emphasized, an idea that continued to be significant in Reich's composing throughout his career and was especially important in his 1988 composition *Different Trains.*[256] As the alignment of the two channels changed gradually, different rhythms were created by the intersection of the voices. This slow, gradual change was the process that fascinated Reich and that seemed to mesmerize listeners who became enamored with minimalism.

Composer Steve Reich, who experimented with the manipulation of recorded speech.

The only sound material used in the construction of "It's Gonna Rain" was the recording of Brother Walter's voice and background noises captured at the same time. In other words, one must accept that human speech not originally intended as music can be made into music by a composer manipulating a recording. This, therefore, goes back to John Cage and his experiments that suggested that any sound could be music. Several common tape manipulation techniques can be heard in Reich's "It's Gonna Rain": panning; overdubbing (adding layers by playing multiple tapes at the same time and recording them onto a third machine); splicing (changing the length of samples by cutting and duplicating them); and particularly phase shifting (taking two recordings of the same material and moving them out of synchronization or "phase"). One technique that Reich specifically chose not to use was speed change. It was common for tape musicians to take a sound and speed it up or slow it down to make interesting and unusual sounds, but Reich wanted his piece to be an exploration of the speech rhythms and pitches of Brother Walter, so he chose not to alter the speed.[257]
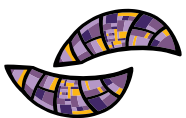
Listening Guide 6
"It's Gonna Rain"—1965
Steve Reich (b. 1936)

Time	Description
0:01	Reich began with Brother Walter telling his version of the story of Noah warning the people of the impending flood. Even in its unaltered state, complete with other people talking in the background, we hear pitch, rhythm, and repetition—and the sound of a pigeon taking flight. The flapping of the wings sounds like a drum being struck rapidly.[529] He began to warn the people. He said: After a while, it's gonna rain (pigeon flapping) After a while. (Pigeon flapping recedes) For forty days and For forty nights. And the people didn't believe him. And they began to laugh at him. And they begin to mock him. And they begin to say: It ain't gonna rain!
0:14	A brief silence, to separate the original text from the manipulated text.
0:15	As the "It's gonna rain" fragment starts to repeat, we start to hear a suggestion of the key of D Major, with the first word resembling the pitch E, the second word sounding like D, and the word "rain" hitting the pitch F♯. There is a background noise that sounds like it hits the note A at the same time as the word "rain" is on the F♯. We have several allusions to the key of D Major. We also feel an almost steady beat, with "It's gonn" splitting one beat, and "rain" occupying the other. The word "rain" receives the strongest emphasis and feels like a downbeat. A tempo, around 130 beats per minute, is implied, and the flapping of the pigeon wings seems to fit the tempo as well.
0:28	The balance shifts a little bit, and the voice seems to have moved a little more toward the left channel.
0:38	Reich cuts to a shorter sample, repeated: "It's gonn . . ." We feel almost as if we have gone to double-time, and although the tempo has not changed, there is an added urgency as the samples (being shorter) repeat twice as often.
0:42	With the "rain" removed, we feel as if each beat consists of the E ("it's") and an open fifth (D and A) between "gonn" and the higher background noise.
0:43	As the phase shifting begins in earnest, the second half of the vowel diphthong of the word "rain" gets slowly expanded into the full word.
0:50	"Rain" takes over from "It's gonn . . ."
0:55	A new phoneme creeps in. Within a few seconds, we realize it is "gonn . . ."
0:59	Now "rain" and "gonn" are layered over each other, although rain starts to devolve to just the opening consonant.
1:13	It sounds a lot like it did at :38. The samples continue getting shorter and choppier, although the tempo seems to remain the same.
1:25	The word "rain" starts to return.
1:32	Although "rain" seems to predominate, we start to hear "it's gonn" every beat as well.

1:50	"Gonn" takes over from "rain."
1:52	"It's" starts to sneak back in, and now we hear "it's gonn."
2:02	Just when we have become accustomed to the gradual rate of change, suddenly the whole word "rain" occurs. The phrase is once again intact.
2:08	The sound pans unmistakably from right to left, back across to right, and back to left.
2:40	By now it has settled into a mesmerizing repetition.
3:30	It is easier to notice that the two channels are separating.
3:50	The two channels are completely separated and creating polyrhythms.
4:00	Although the first section of "It's Gonna Rain" lasts another four minutes, the listening guide ends here.

"It's Gonna Rain" is divided into two parts. The remainder of the first part emphasizes phasing, which causes an echo effect. We perceive changing timbres, even though we know they are only caused by the combination of the sounds of this short sample. As the left and right channels separate further, the canonic nature of the recording becomes more readily apparent. Gradually, the two channels come back together, and it sounds like the beginning. Reich lets three more words sneak in ("after a while"), and then section one ends. The second part (not included on the CD) introduces new text from Brother Walter and lasts another nine minutes, during which the discernible text seems to disintegrate into pitch, rhythm, and timbre, without any textual meaning.[258]

Shortly after the premier of "It's Gonna Rain," Reich was asked to create some music for a benefit at Manhattan's Town Hall to assist with the legal defense of six young African-American men in Harlem who had been accused of murder, but were also victims of police brutality. Reich chose the words of Daniel Hamm, who was explaining how the police had beaten them, but only those who were bleeding were going to be taken to the hospital. Aware that he needed medical treatment, he decided to open his bruise: "I had to, like, open the bruise up, and let some of the bruise blood come out to show them."[259] Reich took the quote, excerpted the words "come out to show them," and applied similar sampling techniques to those he had used in "It's Gonna Rain." The resulting piece, "Come Out," received even more attention than "It's Gonna Rain," and Steve Reich was on his way to the forefront of the minimalist movement.[260]

The significance of Reich's experiments with the manipulation of recorded speech continued to reverberate for decades after the initial impact. Today's electronic technology for sampling is much simpler than what Reich had to deal with using magnetic tape in 1965, but the concept is the same, and decades of hip-hop, rap, and other sampling-dependent genres owe much of their success to Reich and his *musique concrète* predecessors. In 1999, Heidi Sherman, writing for *Rolling Stone Magazine*, called Reich "The Father of Sampling" and discussed his influence on the popular music styles that incorporate samples.[261]

After the success of "It's Gonna Rain" and "Come Out," Reich experiemented with applying a similar phasing technique to live musicians, resulting in the composition "Piano Phase."[262] While Reich's earlier tape pieces relied on recorded speech to determine what pitches were perceived by the audience, this new composition, which would be played on two pianos, required Reich to select the pitches in advance. Given the tendency in the mid-twentieth century to avoid all tonality, this was certainly a path that Reich could have taken. During his studies with Berio at Mills College, Reich had worked hard to master the twelve-tone system, but he seemed unable to avoid tonality. Finally, Berio said to him, "If you want to write tonal music, why don't you write tonal music?"[263] This permission led Reich to select a simple group of pitches for "Piano Phase." Reich began with the first five notes of the B minor scale, in an ambiguous pattern that minimized the emphasis on the B. About halfway in, he introduced the note A, shifting the emphasis from B minor to the first six notes of A major.[264] The music was simply tonal. "Piano Phase" was a success and took minimalism to a new level.[265]
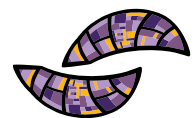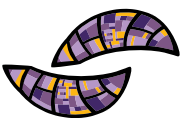
MINIMALISM MEETS ROCK AND ROLL

Steve Reich's live performance experience with "Piano Phase" led him to pursue additional opportunities to perform pattern music with a steady beat, a tonal center, and a slowly changing alignment of parts.[266] He began to perform with a group that was essentially a rock band without vocalists and ended up touring, including to Europe, much like a rock band. His former Juilliard classmate Philip Glass (b. 1937) was inspired by Reich's live music groups and began to perform with a live electronic group that resembled instrumental rock and roll.[267] Minimalism was absorbing some of the characteristics of the instrumental aspects of rock music, and soon rock musicians would be influenced by minimalism.

RETURN TO TONALITY

As minimalists like Reich, Riley, and Glass brought audience members back to the classical music realm with their tonal music with a predictable beat, few other classical musicians were brave enough to separate from the prevailing avant-garde techniques such as micropolyphony, serialism, tone clusters, indeterminism, and other techniques intended to avoid tonality and predictability. One musician who was confident enough to return to tonality without fear was Leonard Bernstein. With his reputation as a composer and conductor secure, Bernstein, in 1965, took a sabbatical from his time as director of the New York Philharmonic.[268] Bernstein was planning to work on a musical to follow the success of his 1957 *West Side Story*, as well as on twelve-tone and experimental music, but these ideas fell to the wayside. Instead, the major accomplishment of Bernstein's sabbatical was a work commissioned for the Chichester Cathedral in England.[269] Bernstein, in a poem sent to the *New York Times*, explained how his new piece broke from the mainstream of mid-twentieth-century classical composition:

> For hours on end I brooded and mused
> On materiae musicae, used and abused;
> On aspects of unconventionality,
> Over the death in our time of tonality...
> Pieces for nattering, clucking sopranos
> With squadrons of vibraphones, fleets of pianos
> Played with the forearms, the fists and the palms—
> And then I came up with the Chichester Psalms.
> . . . My youngest child, old-fashioned and sweet.
> And he stands on his own two tonal feet.[270]

Bernstein's *Chichester Psalms* may have been tonal and avoided the avant-garde techniques in vogue at the time, but it was not bland. Bernstein incorporated jazz rhythms

Leonard Bernstein conducts the London Symphony Orchestra in 1966.

and harmonies, mixed meters, and in an unusual twist chose the Hebrew versions of the Psalm texts.[271] *Chichester Psalms* premiered to a full house at Philharmonic Hall, and it has since become a staple of the choral/orchestral repertoire.[272] The success of the tonal *Chichester Psalms*, along with the rise of minimalism, helped open the door for more composers to return to tonality.

THE DAWNING OF THE AGE OF AQUARIUS

Even before *Chichester Psalms*, Bernstein had a significant impact on the music world with *West Side Story*, his groundbreaking 1957 composition for the musical theatre. The world of musical theatre was slow to change, however, and several of the most significant new works for the Broadway stage had only a modicum of ideas or techniques that would not have worked a decade earlier. As Brooks Atkinson, long-time theatre critic for the *New York Times*, said in his monumental *Broadway*, "In the sixties, the quality of music deteriorated into a kind of standard monotone . . . Music was standardized on the level of mediocrity."[273] Atkinson, whose career had been at its zenith during the heyday of Rodgers and Hammerstein, Frank Loesser, Meredith Willson, and Lerner and Loewe, was perhaps exaggerating the situation, but nonetheless, the Broadway musical did not seem like the place to look for bold experimentation.

A decidedly conservative musical became one of the biggest hits on Broadway in the mid-1960s. *Hello, Dolly!*,
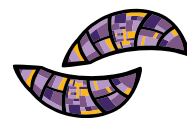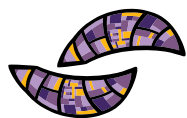
with music by Jerry Herman, achieved the Broadway "long run" record (previously held by *My Fair Lady*) with 2,844 consecutive performances.[274] Although the work was unadventurous by any standard, it did have several songs that went on to have a life outside the musical, in particular the title song, "Hello, Dolly!"

An even bigger hit was the Jerry Bock/Sheldon Harnick collaboration *Fiddler on the Roof.* Also conservative musically, *Fiddler* was a huge success, opening only months after *Hello, Dolly!* and running for 3,242 performances, a record unsurpassed until 1979.[275] With stories of old Russia, the plot laid bare the Russian anti-Semitism that still oppressed Jews in the modern Soviet Union and thus had a political bent. It also paralleled the rising women's movement in the U.S., as the increasing independence of Tevye's daughters is an important part of the plot. Although *Fiddler* might not be groundbreaking, there is no question that it was a well-crafted work of musical theatre. Kurt Gänzl, in *The Musical: A Concise History*, calls *Fiddler* "one of the twentieth century's outstanding musicals and a piece as unique in its way as *West Side Story.*"[276]

Similar musical conservatism is balanced by a somewhat risqué storyline in Mitch Leigh's *Man of La Mancha.*[277] The plot is based on Cervantes' *Don Quixote* and includes the sad story of a prostitute for whom "One pair of arms is like another."[278] When excerpted, the biggest hit from the show, "To Dream the Impossible Dream," sounds positive and nearly triumphant. In reality, Don Quixote is only tilting at windmills, and his dream is truly impossible.[279] The "visionary idealism" and the story of an idealistic

leader who does not live to see his dream come to fruition struck a nerve with American audiences still reeling after the assassination of John F. Kennedy, and the parallels must have been particularly striking on opening night, November 22, 1965, exactly two years after Kennedy's tragic death.[280] *La Mancha* was a great success, running for 2,328 consecutive performances, a record exceeded at that time only by *Hello, Dolly!*, *My Fair Lady*, and *Fiddler on the Roof.*[281]

Cabaret, by John Kander and Fred Ebb, again broke ground more with its subject matter than with its music. The show addressed the decadence of Berlin before the rise of Nazism.[282] The older style of music is appropriate for this show since the action takes place primarily in a Berlin nightspot, and much of the music is performed by the cabaret entertainers and the onstage band. Although its run of 1,165 performances only garnered tenth place among musicals of the 1960s, a 1990s revival ran for more than two thousand performances, making *Cabaret* one of Broadway's most successful revivals.

The show that brought the dawn of a new age to Broadway in the mid-1960s was *Hair*. Addressing the hippie movement, drugs, the antiwar movement, the sexual revolution, and the rise of rock and roll, *Hair* had a more significant impact than any other musical in the 1960s. Galt McDermot's show was subtitled "The American Tribal Love-Rock Musical" and was intended to represent "the fluid-abstract world of the 'Flower Children.'"[283] In many ways, *Hair* represented the dawning of a new age that the show called the "Age of Aquarius."

LISTENING COMPANION—LISTENING EXAMPLE 7: "AQUARIUS" FROM *HAIR* (1967)—GALT MCDERMOT

While *Bye, Bye, Birdie* told the story of an imaginary 50s-style rock idol and thus included 50s rock-style music, *Hair* was a 100 percent rock musical of the 1960s. The music incorporated the instrumentation of rock and roll—there was a horn section, but there were no orchestral strings, and the rest of the pit consisted of rock-style keyboards, drums and percussion, and electric (and acoustic) guitars. This was a real rock musical—a new genre. The vocalists sang in rock and pop styles, and the rhythms and harmonies were straight out of rock and roll. As a matter of fact, one of the things that brought *Hair* to the attention of the listening public outside of New York City was that the pop soul group the 5th Dimension released a cover of "Aquarius" that reached number one on the pop charts.[284] The recording became the second biggest hit of 1969, and the original cast album of *Hair* stayed on the charts for almost three years.[285]

One of the reasons *Hair* was so popular was because it was shocking and different. It was extremely controversial and thus garnered lots of publicity. Musically, it went against the grain of the conservative Broadway audiences. There were no soaring string melodies, no "Climb Every Mountain" anthems. The harmonies were mostly simple, and perhaps
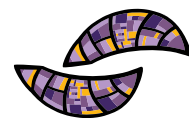
most musically offensive of all, the guitars, keyboards, and drums sounded like the rock music that many older Broadway patrons loathed. The subject matter was offensive to audiences who were accustomed to Rodgers and Hammerstein or Lerner and Loewe: Long-haired teenagers or early twenty-somethings, free love, drugs, rock and roll, antiwar protests, religious irreverence, and anti-government/anti-establishment rhetoric: "The draft is white people sending black people to make war on yellow people to defend the land they stole from red people."[286] *Hair* went even further to shock, with obscene language, casual use of racial epithets, and even nudity. *Hair* shocked its way to tremendous success, running for 1,750 performances on Broadway, making it the fifth longest-running musical on Broadway at that time.[287] Broadway would never be the same.

Composer Galt McDermot, who composed the musical Hair.

The opening song of the musical is "Aquarius," a song that establishes that this is going to be a show about the "flower power" generation. After singing that "peace will guide the planets" and "love will steer the stars," the singers declare that "this is the dawning of the Age of Aquarius." The form of the song is very simple. After the ethereal introduction, the soloist begins what sounds like a verse. It is followed by a refrain. There is a contrasting bridge, followed by a return of the whole first section, with the last two measures repeated, and then the last measure repeated one more time. It is basically an ABA form with a non-metered introduction to set the mood, and a slight extension at the end of the refrain.

	Listening Guide 7 **"Aquarius"—1967** **Galt McDermot (b. 1928)**	
Time	**Text**	**Description**
0:01		The song begins with an ethereal, arrhythmic, non-metrical opening, which the score indicates should be the "Outer Space Flying Saucer Pyramid" music in the style of Jimi Hendrix. No key is established. Random percussion, and other hard-to-identify noises sound almost like avant-garde classical music of the 1960s. Although we only hear the last few seconds of this improvisation, the bending electronic sustained chords clearly tell us that we are hearing something new to Broadway.
0:23		The guitars, keyboards, and drums begin a vamp, setting up a tempo of approximately 90 beats per minute in duple meter. The key of B♭ minor (with a bluesy minor 7th) is established. A sustained pitch (the minor 7th—A♭) from the introduction bends upward like a theremin, before turning into a siren and fading away. This helps establish a "trippy" atmosphere, floating without a beat above the tempo being established by the rock instruments.
0:44	When the moon is in the seventh house . . .	The voice of Ronny enters, with the sound of a bluesy rock singer. The repetitive three-chord accompaniment becomes more active, with a modicum of syncopation both in the accompaniment and the melody, sounding like much of the rock and roll of that era.
1:01	Love will steer the stars.	The relative major of D♭ becomes the IV chord, followed by E♭7 (V7), which makes the A♭ chord that follows sound like a major tonic.
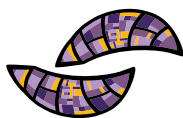
1:04	This is the Dawning of the	The "tribe" enters, unaccompanied, moving melodically (in parallel two-part harmony) within the key of A♭ major, but descending quickly to a G♭ major chord that makes it sound as if the A♭ were the V chord of D♭ major.
1:07	Age of Aquarius	The refrain begins. Horns join in, playing a rhythmic background on the G♭ major chord.
1:09	The Age of Aquarius	The previous two measures repeat, but instead of resolving to D♭, the chords resolve to the relative minor that we started out in, B♭.
1:14	Aquarius	The melody rises to E♭, accompanied by the E♭ chord (IV), but with an added 7th.
1:19	Aquarius	The melody falls (retrograde) to B♭, accompanied by a B♭ minor chord.
1:24		One measure of silence to separate the refrain from the bridge.
1:26	Harmony and understanding	Several measures of D♭ major, rocking between the V chord and I chord. Call and response between male and female voices.
1:33	Golden living dreams of visions	Return to B♭ minor. Women sing.
1:35	Mystic crystal revelation	Men sing. (Ronny on the upper octave)
1:38	And the mind's true liberation	All voices in unison.
1:41	Aquarius	The melody rises over an E♭ minor chord. As the final syllable is sustained over four measures, the voices add another harmony note on top during each measure, leading to a short break.
1:47	Aquarius	Like 1:19
1:52	When the moon is in the seventh house . . .	Like 0:44
2:08	Love will steer the stars.	Like 1:01, except that this time the chorus joins with Ronny, adding a descending harmony.
2:11	This is the Dawning of the	Like 1:04
2:14	Age of Aquarius	Like 1:07
2:17	The Age of Aquarius	Like 1:09
2:22	Aquarius	Like 1:14, but with the rising harmonization of 1:41.
2:27	Aquarius	Like 1:19
2:32	Aquarius	The preceding two sections repeat, rising and falling.
2:43	Aquarius	The descending "Aquarius" repeats one more time before the singing and accompaniment end.
2:49		A gong adds one last exotic touch.
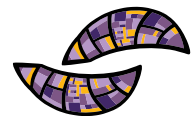
JAZZ: OLD AND NEW

Even in the middle of the 1960s, older styles of jazz (and older jazz musicians) were still having significant success. In 1964, Louis Armstrong took the popular theme song of the new musical *Hello, Dolly!* and performed it with his own inimitable jazz interpretation. His [version](#) made it to number one on the pop charts, unseating The Beatles after a fourteen-week run at the top. When the film of *Hello, Dolly!* was made in 1969, Armstrong was selected to sing the title song.[288] Armstrong's final album release (he died in 1971) was the **LP** that included his 1967 recording of Bob Thiele's "What a Wonderful World." "[What a Wonderful World](#)" was intended as an antidote to the racial and political strife that was wracking the country by the mid-1960s, but it never made it into the top 100 in the United States during Armstrong's life. It did make it to number one in the UK.[289] Its [ironic use](#) during the 1987 film *Good Morning Vietnam* brought it back into the spotlight, and it finally hit the top 100 in the U.S. in 1988.[290]

A more modern style of jazz was represented by the alto saxophonist Cannonball Adderley. Adderley was a blues, soul, and gospel-influenced player who had performed with Miles Davis as a counterbalance to the deep, serious improvisations of John Coltrane, including on *Kind of Blue.* In the 1960s, as a leader, Cannonball was known for being "at the forefront of the soul-jazz wing of hard bop."[291] Adderley brought an Austrian-born pianist into his group, Joe Zawinul (b. 1932, Vienna), who often played an electronic piano (the Rhodes piano) that had recently become popular in rock music, particularly through the influence of Ray Charles.[292] Zawinul composed one of Cannonball's most soulful hits, "[Mercy, Mercy, Mercy](#)," which reached number eleven on the pop charts in 1967, selling over one million copies.[293]

A LOVE SUPREME

Adderley's counterpart in the Miles Davis band, John Coltrane, was well known for his seriousness. Coltrane had undergone a spiritual transformation when quitting drugs in the late 1950s.[294] His quest was both musical and religious, and just as he sought scales and groupings of notes and rhythms from cultures around the world, he also sought spiritual enlightenment from many sources.[295] John Coltrane was on a musical quest and that meant he

Saxophonist Cannonball Adderley represented a more modern style of jazz.

was looking for greater depth and more meaning. After "Alabama" in 1963, Coltrane had really become jazz music's leader, moving the medium forward with his intense and serious improvisations.[296] In 1964, Coltrane recorded *A Love Supreme*, a four-movement composition. In his liner notes for the LP, Coltrane made it clear that this was an expression of his religious beliefs and related to his "spiritual awakening" from 1957.[297]

The quartet for the album was the same group that had recorded "Alabama" in 1963: Coltrane on tenor saxophone, McCoy Tyner on piano, Jimmy Garrison on bass, and Elvin Jones on drumset. These musicians had developed an incredible ability to communicate with each other during a performance and to make adjustments based on tiny cues from the other musicians' playing, with Coltrane always in charge.[298] Coltrane sketched out a four-movement form. Some portions of it had been played in club dates earlier, but much of it was developed that evening, December 9, 1964, in the recording studio. The four movements, "Acknowledgement," "Resolution," "Pursuance," and "Psalm" were not notated in the traditional manner, but certainly the musicians had some knowledge in advance of what they would be recording since Jones knew to bring a Chinese gong and a timpani.[299] The four movements take up the entire album, and last more than half an hour in total. Influences of modal jazz, blues, and free jazz abound. Coltrane's notes for the recording session are fascinating and clearly lay out his conception of the piece.

FIGURE 3–1

John Coltrane's notes for the A Love Supreme recording session.

Northwest Pa. Collegiate Academy - Erie, PA

LISTENING COMPANION—LISTENING EXAMPLE 8: *A LOVE SUPREME* (1964)—JOHN COLTRANE

The first movement, "Acknowledgement," consists of several sections. The first section is an unmetered introductory improvisation, with Coltrane restricting himself to the four rising notes with which he begins the improvisation.

FIGURE 3–2

Rising note pattern from A Love Supreme.

He manipulates those notes rapidly, into any number of configurations, but emphasizes a six-note pattern that, like so much of Coltrane's music, sounds speech-like.

FIGURE 3–3

Six-note pattern from A Love Supreme.

The four-note pattern also restricts the intervals used in the introduction: major second, perfect fourth, perfect fifth. Particularly distinctive is the fact that no thirds are present, and thus the key, centered on E, is left ambiguous. There are no moving chords, but rather a group of notes that can be played in any order, as in modal jazz. The second section establishes the tempo (about 118 beats per minute) and the harmonic framework (mostly F minor pentatonic, but again with some ambiguity and an emphasis on fourths—and again without chordal motion) with the rhythm section for sixteen measures propelled, in particular, by a syncopated ostinato four-note group in the bass, made up of a rising third and a rising fourth.

As the second section continues, Coltrane then enters and improvises with thematic material that expands on the four-note group of the introduction. After a lengthy improvisation, he adopts the four-note bass figure, revealing that it was a theme after all.

FIGURE 3–4

Bass figure from A Love Supreme.
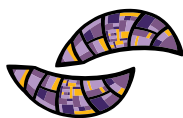
He manipulates it so that he plays it through all twelve keys, before returning to the original key. The next section is perhaps the most surprising. The four-note theme is now chanted to the text "A Love Supreme." Coltrane was not known for including vocals in his performances, so this chanting of the title of the entire work was particularly striking and emphasized the importance of both the text and the four-note theme.

	Listening Guide 8 *A Love Supreme*—1964 John Coltrane
Time	**Description**
0:01	From the first note—the stroke of a gong, along with an ambiguous chord of fourths and fifths in the piano—we know that this is not a standard jazz composition.
0:02	Coltrane enters with the four-note rising motif mentioned earlier. As Elvin Jones rolls on the cymbals with soft mallets, McCoy Tyner plays various chords suggesting E major pentatonic, but without establishing a tempo. Jimmy Garrison quietly sustains a low E, plucking the note over and over in rapid succession. Coltrane reveals the six-note pattern that will predominate in this short introduction and begins to manipulate it. He is moving quickly, and we have a slight feeling of a tempo, but not really related to the speed of the piano chords, and there is no tempo in the sustained cymbals and bass.
0:14	Coltrane fades out, repeating the last few notes. The other players continue as before except that Jones is now gently rolling on the cymbals with his sticks.
0:22	Tyner joins the sustained sounds in the drums and bass by playing a quiet tremolo.
0:30	Piano and bass drop out, leaving only the gentle cymbal roll.
0:31	The cymbal roll gets slightly louder, as if to tell us that something is about to happen.
0:32	Jimmy Garrison begins the four-note "A Love Supreme" motive while Jones continues to roll, changing his dynamics unpredictably. The four notes suggest F minor or B♭ Dorian. The gently syncopated rhythm establishes a four-beat meter.
0:42	Jones joins into the tempo (118 beats per minute) established by Garrison. He is playing a Latin beat.
0:50	Tyner joins in, playing chords set up in fourths, fifths, and seconds that suggest F minor pentatonic. They seem to float at their own speed: definitely in tempo, but almost never on the beat, and usually three or four chords every two measures, adding another layer of rhythmic interest. The chords do not suggest a set of changes, but rather different combinations of the notes of the F minor pentatonic. The harmony remains static as in modal jazz.
1:02	Jones changes the drum pattern, now emphasizing a bouncy but complex rhythm on the cymbal, giving a double-time feel.
1:05	Coltrane enters. He is now playing a three-note group of a rising fifth, followed by a falling second—basically the first three notes of the six-note theme, up a half step. This helps create a thematic unity that ties the two sections together, even though they seem very different in spirit.
1:08	He now plays the three-note group up a fifth (starting on the top note of the previous iteration). Just as the introduction was restricted to seconds, fourths, and fifths, this section begins with fifths and seconds only.
1:10	Coltrane repeats the first two measures, with subtle elaboration.
1:14	A slightly more decorated version of the two three-note groups. As he elaborates more, he seems to pull against the tempo more, rhythmically freer than the beat established by bass and drums.
1:17	A fourth note has been added, as if the tones of a **raga** were being introduced. Coltrane plays around with the notes that have been revealed so far, continuing to refer to the original pair of three-note groups.
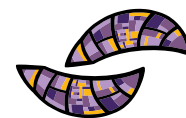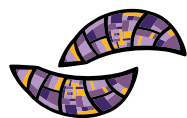
1:34	Coltrane extends the range into the **altissimo** register of the saxophone. Coltrane was one of the first jazz saxophonists to explore the highest notes on the saxophone and use them expressively.
1:44	Now Coltrane extends the range in the opposite direction, coming to within two notes of the bottom of the instrument.
1:47	Coltrane plays a rising flourish of notes, reminiscent of the "sheets of sound" for which he had become known almost a decade earlier.
2:08	Coltrane manipulates a small group of notes, modulating through several keys.
2:33	Coltrane extends into the altissimo again.
2:46	Manipulation of a small group of notes similar to 2:08.
3:12	Flurries of notes again, throughout the range of the instrument, and a return to the tonic.
3:55	As Coltrane rises back into the altissimo, it sounds almost as if the saxophone is chanting something, as if Coltrane were exploring all the possible inflections of the small group of notes.
4:15	Coltrane repeats quick three-note groups higher and higher while McCoy Tyner's chords also rise.
4:34	Coltrane begins to bring his improvisation down in rhythmic intensity, and returning to the tonic.
4:57	Coltrane takes up the four-note idea that was introduced in the bass-line back at 0:32.
5:01	Coltrane only plays it twice in the original key before starting to transpose it to other keys, with Tyner and Garrison following him brilliantly, as if each modulation were written out for them to follow.
5:24	As Coltrane continues modulating, the tension is built. Jones contributes, with complex polyrhythms. Tyner sometimes increases the number of chords per measure. The order of modulations is unpredictable, going up, or down, at all different intervals.
5:42	Now the order of modulations is no longer random, as each one is a step higher than the preceding one. The tension builds.
5:52	Coltrane returns to the original key and repeats the four-note group eight times.
6:07	Tyner plays strong octave Fs, demarking a new section, and Coltrane begins to chant "A Love Supreme" to the four-note group. There appears to be evidence that his voice was also overdubbed, so if you think you hear more than one voice chanting, you are probably correct.[530]
6:37	The chanting and the accompaniment move down a whole step, into E♭, the key of the next movement.
6:45	The voices drop out, leaving bass featured, playing a three-note variant of the four-note group, while the piano improvises.
7:10	Now the piano drops out, leaving bass and drums only. Garrison further deconstructs the four-note group.
7:25	Drums drop out, leaving Garrison to complete the transition to the second movement.
7:37	Garrison is no longer carrying the tempo.
7:43	Garrison resolves to a quietly plucked **double-stop** on the notes B♭ and E♭, followed by a softly strummed tremolo in a higher octave.
7:46	Our example fades to silence.

This musical representation of Coltrane's spiritual quest continues for three more movements. The final movement, "Psalm," is one of the most striking of Coltrane's compositions, reminiscent of the opening of "Alabama," with Coltrane improvising freely over a static harmony and splashes of color from the rhythm section. The entire movement is what Coltrane called a "musical recitation" of the prayer that he included on the liner notes of the album.[300] Interestingly enough, he did not specify that in the liner notes, nor did he tell his musicians before they recorded it.[301]

A Love Supreme was a hugely influential recording and remains so to this day. As author Eric Nisenson points out in his book about Coltrane, the year that Coltrane recorded *A Love Supreme* was the end of the "unique time of hope"
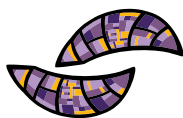
guided by Kennedy's "Camelot," LBJ's "Great Society" and "War on Poverty," and Martin Luther King Jr.'s dream.[302] The escalation of the war in Vietnam, the assassination of Malcolm X, and riots in Watts made 1965 a watershed year. It is no wonder that Coltrane's music moved from the hopeful, calm, purposeful sound of 1964's *A Love Supreme* to the more aggressive cacophony and dissonance of 1965's [Ascension].[303]

Jazz saxophonist and composer John Coltrane.

Coltrane was blazing new trails in free jazz that went even beyond those of Ornette Coleman. Perhaps Coltrane was ready to lead jazz in a new direction entirely. Sadly, it was not to be. By 1967, Coltrane was continuing to work but was suffering physically and in great pain.[304] Coltrane had liver cancer, and in July 1967 before reaching the age of forty, he succumbed. This was the end of an era.

ROCKING THE WORLD OF FILM

Like any medium, film music had its share of traditionalists, along with those who wanted to explore uncharted territory. It should come as no surprise that Disney's 1964 musical *Mary Poppins*, with music by Richard and Robert Sherman, was particularly conservative. That does not mean, however, that it was uncreative. *Poppins* was an unusual film musical in that it was created directly for film: it was based on a book series, but there was not a stage version of the musical before the film.

In the 1960s, the Italian composer Ennio Morricone (b. 1928) composed many successful scores for "spaghetti westerns" directed by Sergio Leone. Morricone added unusual sounds to his orchestral scores, including whistling, chanting, and [electric guitars]. These extra layers gave his scores a unique sound and brought further attention to recording techniques that were already being used in *musique concrète*, jazz, and rock.[305]

By 1967, it was still uncommon to hear a film score consisting entirely of rock music, with the exception of films featuring rock musicians, such as The Beatles' movies or the Elvis Presley movies. Mike Nichols' film *The Graduate* was one of the first films to use all rock background music (a mixture of new and old songs by Simon and Garfunkel) to set the mood for the film.[306] The strength of the film was buoyed by the popularity of the music ("The Sounds of Silence" had been a number one hit earlier that year), and Simon and Garfunkel benefited from the popularity of the film, with their tongue-in-cheek "Mrs. Robinson" hitting number one after the release of the film. The soundtrack spent nine weeks in the top spot.[307] The relationship between popular music and film

Film still from the 1964 film A Hard Day's Night.

was now even more significant.

THE BEATLES

Rock and roll was not entirely new in the movies. Elvis had been making films that included his singing and guitar playing since the mid-1950s.[308] The Beatles' manager, Brian Epstein, sensing an opportunity to reach new audience members, accepted an offer to make a film about his protégés. Even before their success on the *Ed Sullivan Show*, preparations were underway, and production began within weeks of the U.S. tour. The movie, *A Hard Day's Night*, was shot in six weeks. The threadbare plot was basically a comedic staged documentary of what a few days might be like for the Fab Four as they adjust to Beatlemania.[309]

Epstein had made a three-film deal with United Artists, so after the success of *A Hard Day's Night*, The Beatles almost immediately started working on their second film, *Help!*, which was released in 1965 to coincide with their U.S. summer tour that year. While the first film was a simple
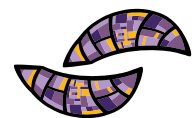
portrayal of a day in the life of The Beatles, the second film was a comedic spoof of popular spy movies of the day, like the James Bond franchise. By 1967, when The Beatles were supposed to make their third film for United Artists, they were less interested in being involved and basically ceded control of the film to the studio. Their participation was minimalized because the film would be animated, and thus they would not even need to be involved in the filming. Despite their lack of involvement, *Yellow Submarine* was successful and profitable for The Beatles.[310]

THE ROCKUMENTARY

In 1967, a new film genre was born: the **rockumentary**. A mash-up of the words rock and documentary (the term doesn't appear in print until 1969), a rockumentary is a film that documents a concert or some other aspect of the life of a rock group (or soloist). *A Hard Day's Night* was a scripted, comedic rockumentary, and even before *A Hard Day's Night*, Albert and David Maysles had filmed The Beatles' arrival in the United States in a behind-the-scenes documentary titled *What's Happening! The Beatles in the USA*. This film did not contain any performance footage and was not distributed widely.[311]

The first real rockumentary is D. A. Pennebaker's 1967 *Dont* (sic) *Look Back*, a chronicle of Bob Dylan's 1965 tour to Great Britain.[312] The film documents Dylan's last acoustic tour and gives a glimpse into the beginning of Dylan's transition from folk singer to rock musician.[313] If The Beatles were irreverently humorous in *A Hard Day's Night*, Dylan was outright nasty, condescending, and petulant in *Dont Look Back*. His music may still have been that of a politically engaged folk singer, but his persona was already that of a condescending, cocky, contemptuous rock star.[314] D. A. Pennebaker's success with *Dont Look Back* brought him to the forefront of rock documentary making.

THE TELEVISION SCENE

THE COMICS COME TO LIFE: BATMAN

Any study of the 1960s that fails to mention television is ignoring one of the greatest cultural influences of the time. Radio, film, and recordings were certainly important in the history of 1960s music, but television also played a significant role. Television theme songs became part of popular culture. The simple blues pattern with the "Batman" hook that Neal Hefti wrote for the *Batman* television series is one example. Hefti was one of the arrangers for the Count Basie orchestra and had also worked with Frank Sinatra and Harry James, but had never had a top ten hit

until 1966, when he composed the *Batman* theme. The theme was the "most recorded song in the world" that year and earned Hefti a Grammy.[315]

Argentinian-born Lalo Schifrin had studied in Paris and came to the U.S. as a pianist for jazz trumpeter Dizzy Gillespie.[316] Schifrin's breakthrough was his jazzy [theme] for the *Mission Impossible* television show. The five-beat-per-measure rhythm (like Dave Brubeck's "Take Five") caught on and was much imitated. His "Theme from Mission Impossible" earned Schifrin two trophies at the 1968 Grammy Awards: Best Instrumental Theme and Best Original Score Written for a Motion Picture or a Television Show.[317] Since then the theme has been used in the film franchise, adding to Schifrin's fame.[318]

THE ANIMATED BEATLES

Profit can motivate people to do strange things. There is no question that profit was behind the decision to franchise The Beatles for an animated cartoon series on Saturday mornings on ABC.[319] Although Beatles songs were used, and the cartoonish humor seemed to extend from the personalities established in *A Hard Day's Night* and *Help!*, The Beatles themselves were not involved in the production of the cartoon. Other voice actors portrayed them, and The Beatles themselves were skeptical at best. In the end, the show expanded their audience, bringing in younger listeners, as well as the parents of children who watched Saturday morning cartoons. The cartoons served as a workshop for producer Al Brodax, allowing him to experiment with the techniques and ideas that would eventually figure prominently in his production of The Beatles' animated film *Yellow Submarine*.[320]

CRASS COMMERCIALISM—THE MONKEES

The year after The Beatles' Saturday morning cartoon show went on the air, NBC decided to get in the act by creating a television show to rival The Beatles.[321] In late 1965, NBC advertised in *Daily Variety*, calling for auditions for "Folk and Rock Musicians-Singers for Acting Roles in a New TV Series. Running parts for four insane boys, ages seventeen to twenty-four."[322] The four who were cast included a British actor, a former child star, and a couple of folk singers. They used the sense of humor from *A Hard Day's Night*, cut their hair like The Beatles (moptop), and just when The Beatles were starting to experiment and get hard-edged, the Monkees were the lovable, cute alternative on Monday nights.[323]

The Monkees did not need to play their instruments well—studio musicians were engaged to record all the
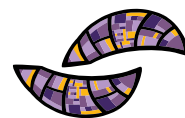
instrumental tracks.[324] They did not need to write their own songs: producer Don Kirshner brought in colleagues from his Brill Building days, Tommy Boyce and Bobby Hart, to write for the show. The Monkees' first hit, "Last Train to Clarksville," was a Boyce and Hart collaboration. Their 1967 hit "Pleasant Valley Sunday" was by Carole King, and the number one song in 1967, their recording of "I'm a Believer," was penned by Neil Diamond.[325] In 1967, the Monkees spent ten weeks at the top of the pop charts, while The Beatles only mustered three weeks.[326] Television proved that it had a powerful ability to influence the music industry.

Dick Clark had been a kingmaker since the late 1950s, when his Philadelphia-based rock and roll show went national, becoming the first nationally televised show to focus on this youth phenomenon. Clark's *American Bandstand* included both white and black talent, and he deserves some credit for helping break down racial barriers in the music industry.[327] On the other hand, he was also a shrewd businessman who made sure that he profited from the acts he promoted.[328] There was suspicion that he had profited improperly, and he was brought before the House of Representatives to testify concerning payola. Clark admitted to having a financial interest in 27 percent of the music played on his show.[329] In the end, though, he was not charged with any crimes, since he presented it as big business, rather than anything clandestine. *American Bandstand* was influential as the place for the younger generation to see the music they already liked and to hear some new music. Clark's audience, however, was primarily people who had already decided that they wanted to hear rock and roll. Ed Sullivan's show, on the other hand, might have been more influential because it brought in audiences who were not necessarily looking for rock music, including adults, and introduced them to music they had never been interested in before.

The Smothers Brothers Comedy Hour similarly attracted audience members who were not necessarily there for the music, but who ended up hearing Buffalo Springfield, Jefferson Airplane, Simon and Garfunkel, the Temptations, Ray Charles, The Beatles, and the Doors.[330] The 1967 performance by the Who included a song that emphasized the growing generation gap and became an anthem for disaffected youth—"[My Generation](#)." The Who, influenced by the broadening definition of music in the avant-garde movement, had a habit of ending their shows with random improvisation that gradually degenerated into random noise, leading to the eventual destruction of their instruments. The Who was widening the generation gap and bringing avant-garde performance art into rock and roll. The *Smothers Brothers Comedy Hour* helped disseminate these new values

to audience members who might not otherwise have sought out performances by the Who or similar rock groups.

EVE OF DESTRUCTION

By the mid-1960s, tensions were rising. The destruction that might take place onstage at a Who performance was a case of art imitating life. The war in Vietnam was escalating, and the antiwar movement was also gaining strength. Despite President Johnson's civil rights efforts, racial tensions were increasing. Although the Cuban missile crisis had been averted, "Cold War kids" still lived with the fear of nuclear holocaust. Along came a nineteen-year-old composer, P.F. Sloan, who encapsulated the feelings of many members of the younger generation and in some ways directed their attention to the festering problems and the growing gap between generations, with an apocalyptic folk-like ballad, "[Eve of Destruction](#)."[331] Both the lyrics and music were heavily influenced by Bob Dylan, and the performance by singer Barry McGuire was so effectively similar to the half-spoken, half-growled delivery style of Bob Dylan, with occasional harmonica interjections, that some listeners have mistaken "Eve" for a Dylan song.[332] Apparently the combination of the topic and the delivery struck a nerve, because it surged up the charts.

According to Todd Gitlin, author of *The Sixties: Years of Hope, Days of Rage*, it was "the fastest-rising song in rock history."[333] Soon it reached the top, displacing The Beatles and Bob Dylan himself.[334] This happened in the face of bans by broadcasting networks (ABC), the BBC, and many individual radio stations.[335] Sloan's song emphasized the generation gap and voiced the anger teens felt at the older generation:

> The Eastern world it is exploding, violence flaring and bullets loading,
> You're old enough to kill, but not for voting,
> You don't believe in war, but what's that gun you're toting?
> And even the Jordan River has bodies floating
> And you tell me, over and over and over again my friend,
> Ah, you don't believe we're on the Eve of Destruction.[336]

"Eve" also addressed the growing racial divide.[337] Authority figures were particularly concerned with the words, "Marches alone can't bring integration." This perceived call to violence was one of the reasons it was banned in Los Angeles during the Watts riots that happened shortly after the song's release.[338]

Bob Dylan performing with the Byrds at a Los Angeles nightclub.

BOB DYLAN HITS NUMBER ONE

The music of the 1960s both reflected and directed the mood of the youth. In the 50s and early 60s, rock music was mostly about love and romance, dancing, cruising the avenue, or hanging out at the beach: "I Want to Hold Your Hand," "Surf City, U.S.A.," "The Twist," "Stuck on You," "Please Mr. Postman," "Dancing in the Street," "Itsy Bitsy Teenie Weenie Yellow Polkadot Bikini," and "Baby Love." The grittier, more socially conscious music came in the folk music world, dominated by Bob Dylan. His 1963 "Blowin' in the Wind," for example, asked the questions:

> *How many deaths will it take 'til he knows that*
> *too many people have died?*
> *How many times must the cannon balls fly*
> *before they're forever banned?*
> *How many years must some people exist*
> *before they're allowed to be free?[339]*

Both civil rights and antiwar activists heard Dylan's music as espousing their cause. Like many folk singers, Dylan wrote songs with socially conscious lyrics, including "The Times They Are A-Changin'," "Masters of War," "Only a Pawn in Their Game," and "The Lonesome Death of Hattie Carroll."

For the most part, 1960s folk music consisted of a vocalist or small group of vocalists accompanied by one (or perhaps two) strummed acoustic guitars, maybe with interjections by a harmonica. Occasionally other acoustic string instruments (bass, banjo, mandolin, or ukulele) were used, and sometimes congas or bongos, but a drum set was out of the question. Amplification—electric guitars and basses, R&B-like amplified keyboard instruments—was anathema, and fancy studio production techniques were taboo.[340]

In 1964, a group of folk musicians from around the United States coalesced into a band led by Jim McGuinn and featuring vocalist David Crosby.[341] Inspired by The Beatles, McGuinn persuaded his band to take up electronic instruments and to add a drummer.[342] The Byrds were born—and so was folk-rock. The Byrds' first recording with Elektra was a flop, but on the basis of overflow crowds at their live performances in L.A., their producer managed to get them signed with Columbia.[343] They had begun rehearsing and refining an arrangement of Bob Dylan's as yet unreleased "Mr. Tambourine Man."[344] Dylan made a new recording of "Mr. Tambourine Man" in January (1964), accompanied only by his own guitar and harmonica playing, and a simple countermelody improvised by Bruce Langhorne on a gently amplified acoustic guitar, but that version was not released until March.[345]

When the Byrds went into Columbia's studio in January to record a rock version of the song, producer Terry Melcher, in the interest of saving time, had hired top L.A. studio musicians to cover all but McGuinn's jangling twelve-string guitar part: Larry Knechtel on bass, Hal Blaine on drums, and Leon Russell on guitar. The Byrds themselves were left to concentrate on their "lush and soaring harmonies."[346] With an instrumental line-up like that and vocalists like McGuinn and Crosby, this was no ordinary recording. The Byrds' rock version of Dylan's "Mr. Tambourine Man" was also released in March, but it rose more quickly than Dylan's version, hitting number one in June.[347] Bob Dylan finally had a number one record—but not as a singer or guitar player—as a composer.
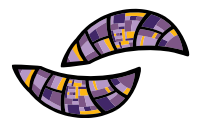
LISTENING COMPANION—LISTENING EXAMPLE 9: "MR. TAMBOURINE MAN" (1965)—THE BYRDS/BOB DYLAN

In traditional folk style, Bob Dylan's version of "Mr. Tambourine Man" begins with a short guitar introduction, just four measures of mostly strumming the tonic chord. His singing begins with the chorus. This is not a common way to begin a song, but neither was it unheard of. With four verses in between, the chorus appears five times in the version that Dylan released at almost the same time as the Byrds released their version.

The first line of the melody of the chorus descends an octave, from F to F, by scale-tones at first, then by chord tones (skips), with only one rising note before continuing to fall. The second line rises haltingly to the sixth note of the scale before falling back, by scale, to the second note of the scale, leaving an unresolved feeling. The third line, with text identical to the first, repeats the melodic shape of the first, with only one changed note. The fourth line rises in a manner similar to the first, but when it resolves by falling, it finishes on the bottom note of the scale, leaving the listener with a feeling of resolution.

FIGURE 3–5

8	8	7	6	5	5	3	3	5	5	3	1		
Hey	Mis-	ter	tam-	bou-	rine	man,	Play	a	song	for	me		

1	2	3	5	5	6	5	4	3	2	2	2		
I'm	not	slee-	py,	and there	is	no	place	I'm	go-	ing	to		

8	8	7	6	5	5	3	3	5	5	1	1		
Hey	Mis-	ter	tam-	bou-	rine	man,	Play	a	song	for	me		

1	2	3	6	5	3	4	3	2	1	2	3	2	1
In	the	jin-	gle	jan-	gle	mor-	ning	I'll	come	fol-	low-	ing	you.

"Mr. Tambourine Man" chorus scale degrees.

The first line of the verses parallels the first line of the melody of the chorus closely, descending from scale degree eight down to one. Then a short extension repeats the second half of the first line, with a slight variation. The third line of the verse parallels the second line of the chorus. This pattern repeats a second time, and then leads directly into the chorus. Thus, there is a very close relationship between the chorus and the verse, lending a sense of unity to the piece as a whole. At the same time, because of this unity, the piece, like much folk music, could become quite repetitive were it not for the interest of the text. Compare the scale degrees of the first line of the chorus and the first line of the verse. Compare the second line of the chorus with the third and sixth lines of the verse.
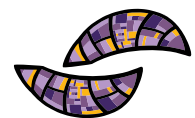
FIGURE 3-6

8	8	8	7	6	5	3	3	5	5	3	1
Though I	know that	eve-	nin's	em	pire	has	re-	turned	in-	to	sand
						3	6	5	3	1	
						van-	ished	from	my	hand	
1	2	3	6	5	5	6	5	4	3	3	2
Left	me	blind-	ly	here	to	stand	but	still	not	sleep-	ing
8	8	8	7	6	5	3	3	3	5	3	1
My	wear-	iness	a-	ma-	zes me,	I'm	brand-	ed	on	my	feet
						1	3	6	5	3	1
						I	have	no	one	to	meet
1	2	3	6	5	5	6	5	4	3	3	2
And	the	an-	cient	emp-	ty	Street's	too	dead	for	dream-	ing

"Mr. Tambourine Man" verse scale degrees.

Dylan uses one other technique to assure that his audience cannot just guess what is coming next. In each successive verse he adds one, two, or three new rhymes to the second and fourth half-lines, causing the form of each verse to be different and thus unpredictable. Further variety is added by the insertion of a harmonica solo before the final verse. The countermelody improvised by Bruce Langhorne adds some interest as well, but the interesting manipulation of text and images and rhymes carry the song much more than musical interest.

As might be obvious from having compared text repetition and melodic shape repetition, the chords are also quite simple and repetitive. Using only three chords (and a couple of one-finger alterations for interest in the introduction and between verses), the same pattern of chords repeats over and over for almost six minutes.[348]

The Byrds chose to shorten the song for their version. Singing the chorus, followed by the second verse, and then one more chorus, they did not give their listeners time to get tired of the repetition in their recording that lasted less than three minutes.
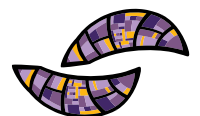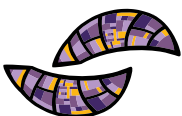
Listening Guide 9
"Mr. Tambourine Man"—1965
The Byrds/Bob Dylan

Time	Lyrics	Description
0:01		McGuinn's jangly twelve-string introduction sets up the song with a two-measure riff, much like the beginning of The Beatles' "Ticket to Ride" and George Harrison's twelve-string guitar riff.
0:05		The tambourine and bass enter, and the bass slides up to the fifth note of the scale, creating a memorable sound as well. The bass sound was more powerful than most recordings of the day, due to careful compression and production.
0:08		Drums set up the entry of the vocals.
0:09	Hey, Mr. Tambourine Man	As the instrumental accompaniment continues, the three vocalists (McGuinn, Crosby, and Gene Clark) harmonize the chorus.
0:23		A short instrumental and a drum fill set up the second half of the chorus.
0:25	Hey, Mr. Tambourine Man	Harmonization continues.
0:40		As the chorus ends, a rising line in one of the guitars leads into the verse.
0:43	Take me for a ride	McGuinn's voice, alone for the verse, was a purposeful middle ground between John Lennon and Bob Dylan.
1:10	I'm ready to go anywhere	The second half of the verse is a good time to hear that McGuinn still has folk influences in his singing, but is clearly more concerned about singing well than Dylan was.
1:29		Two measures of instrumental prepare for the return of the chorus, with a gentle drum setup.
1:33	Hey, Mr. Tambourine Man	Return of the three-part harmony for the chorus, as at the beginning.
2:04		As the chorus ends, the solo guitar riff from the beginning returns.
2:06		As it did at the beginning, the bass enters, and then slides up to the fifth note of the scale, but the tambourine does not enter.
2:10		The guitar and bass riffs continue to repeat and start to fade during the third repetition.
2:29		In less than two and a half minutes, this gem is complete.

Later that year, the Byrds also hit number one with the Pete Seeger adaptation of the famous section of the biblical Book of Ecclesiastes, "Turn, Turn, Turn." Unfortunately, personnel changes took a toll on the band, and their success was short-lived.[349] There is no question, however, of their impact on the new genre of folk-rock, and even on the composer whose music took them to the top spot—Bob Dylan.
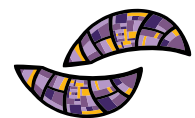
Bob Dylan performs with an electric guitar in 1978. When Dylan first performed with an electric guitar at the 1965 Newport Folk Festival, it was cause for controversy.

Photo Credit: CC BY-SA 2.0, .

"LIKE A ROLLING STONE"

In 1964, after four albums that belonged to the world of folk music, Bob Dylan was in Colorado, listening to The Beatles at a time when "eight of the Top Ten songs were Beatles songs." Dylan realized at that moment that, "a definite line was being drawn," and, "they were pointing in the direction where music had to go."[350] It was time for Dylan to bring the folkies, kicking and screaming, into the world of rock and roll.[351]

And kick and scream they did. When Dylan performed at the Newport Folk Festival on July 25, 1965, his "Subterranean Homesick Blues," with its drum set and electric guitars, had only been a minor hit (number thirty-nine in May 1965).[352] The new electric recording of "Like

a Rolling Stone" had only been released earlier that week.[353] The album from earlier that year that included "Subterranean" was only half electric—half of the songs were still traditional acoustic folk music.[354] It is doubtful that many in the audience had even heard the Byrds' version of "Mr. Tambourine Man" since a true folk music aficionado (of that day) would not have been listening to a rock and roll radio station.

While Dylan's diehard folk fans at the Newport Festival may have been aware that he was flirting with rock and roll, most of them assumed it was just a phase to get attention from pop music listeners and thought he would be faithful to folk strictures when appearing in this hallowed folk music setting. Imagine their consternation when Dylan strode onstage with an electric guitar and members of the Paul Butterfield Blues Band as his backup group. The reaction was harsh and immediate. The use of a drum set and amplified electronic instruments was seen as unacceptable. Audience members booed, hissed, and some authors suggest tensions increased to a near riot.[355] But controversy means publicity. For every purist at the folk festival booing, there were ten listeners who liked the combination of the power of rock and roll with the artsy lyrics of folk music. As evidenced by the Byrds' success, the world was ready for the two most important strains of youth music to combine, forming a hybrid: folk rock.

By mid-1965, Dylan was a major figure in popular music, and yet he had only had one Hot 100 single as a performer.[356] Peter, Paul, and Mary had taken two of his songs to the top forty, including their recording of "Blowin' in the Wind" that made it as far as number two and won a Grammy. As discussed earlier, the Byrds had hit number one with their version of "Mr. Tambourine Man."[357] In mid-June 1965, Dylan decided to take the next step. He went into the studio with a band that included guitarist Michael Bloomfield of the Paul Butterfield Blues Band (the group that joined him on stage at Newport a month later), keyboardist Al Kooper (playing organ on this recording despite being better known as a guitarist), Brill Building favorite Paul Griffin on piano, drummer Bobby Gregg and bassist Joe Macho Jr. (both of whom had worked with Dylan on his previous album), and percussionist/guitarist Bruce Langhorne (playing tambourine on this recording). The new song they recorded, "Like a Rolling Stone," was destined for greatness.[358]

"Rolling Stone" was genre busting because, like the Byrds' version of "Mr. Tambourine Man," it was a rock song with folk-like lyrics, performed by a mixture of folk, rock, and

blues musicians. It was also well over the normal three-minute time limit for singles and for radio play, lasting more than six minutes.[359] It was so long that, at first, it was cut into two halves for radio play.[360] But that didn't keep it from succeeding. "Like a Rolling Stone" rose to number two on the pop charts, only held from the number one position by The Beatles' "Help!"[361] Although "Rolling Stone" never hit number one, and was only on the rock charts for twelve weeks, its place in history looms large. In 1976, *New Musical Express*, the British music news magazine, called it the most important single of all time.[362] In 2011, *Rolling Stone* magazine ranked Dylan's "Rolling Stone" number one on their list of the "500 Greatest Songs of All Time," as they had earlier ranked it on their 2004 and 2010 lists.[363] In 2014, Sotheby's auction house sold Dylan's handwritten draft of the song for more than $2 million, making it the most valuable single lyric sheet ever sold.[364]

"Rolling Stone" starts with what Greil Marcus calls "a drum beat like a pistol shot."[365] Critic Stephen Scobie goes even further, suggesting that the "first sharp crack of the snare drum . . . inaugurated a new world."[366] It was immediately clear that this was not the old Bob Dylan. On the next beat we hear the simultaneous entrance of bluesy honky-tonk piano, electric guitar, bass, and drums, and Kooper's iconic organ background. After a short four-measure introduction, Dylan begins, as in any good parable, with the words, "Once upon a time."[367] Set against a simple rising line of four diatonic chords, Dylan starts the story of a young person who has given up a privileged lifestyle to pursue a counterculture dream.[368] At the chorus ("How does it feel? To be without a home, like a complete unknown, like a rolling stone?"), Al Kooper's organ lick predominates the accompaniment, with what rock critic Joe Stuessy calls "one of the most memorable keyboard riffs in rock."[369] The complex, artsy lyrics may reflect Dylan's folk roots, but the rocking accompaniment was something new.[370] Dylan had moved on. The folk rock movement was underway, and Dylan did not look back.

"SATISFACTION"

The Rolling Stones had not gotten much "satisfaction" out of their first U.S. tour in 1964, though a second trip to the U.S. was slightly more successful. The Stones were continuing to rise in popularity in the UK, hitting number one on the singles chart in early 1965 and shortly thereafter hitting the top of the singles chart, the EP (Extended Play) chart, and the LP chart simultaneously. The time had come for the Stones to conquer the U.S. market. The catalyst for that conquest came during their third U.S. tour, in the spring of 1965. Keith Richards came up with a simple repetitive

The Rolling Stones, photographed while on tour in Australia in 1966.

guitar riff, to which Mick Jagger improvised some words, and "Satisfaction" was born. "Satisfaction" quickly rose to number one in both the U.S. and the UK, although it took slightly longer in the UK because the suggestive lyrics got it banned by the BBC. Mick Jagger insisted that the song describes "a man's search for authenticity in a culture of commercialism."[371] It also suffered from censorship in the U.S., but nothing could stop that relentless riff from driving "Satisfaction" to the top of the charts.[372] Keith Richards calls it "the track that launched us into global fame."[373]

Richards' simple guitar lick provides the nucleus for the entire song. In two measures, the lick rises only three notes before falling back to the bottom note to begin the next repetition. Richards had originally intended the lick for horns and was unsatisfied with the Stones' first attempts at the song, until he added the new Gibson Fuzz box to his guitar, resulting in the immediately recognizable sound we now associate with "Satisfaction."[374] The band thought they were coming back into the studio to record with horns, but before they knew it, they heard their song on the radio and realized their manager had released the single. They thought it was a mistake at first, but within ten days, "Satisfaction" was number one. As Richards put it in his autobiographical *Life*, "I learned that lesson—sometimes you can overwork things. Not everything's designed for your taste and your taste alone."[375] Whether "Satisfaction" was exactly to the Stones' taste or not, it was definitely to their audience's taste and is still, to this day, is one of their best-known songs, occupying the number two spot on *Rolling Stone* magazine's list of the "500 Greatest Songs of All Time."[376]

Simplicity might indeed be the key. The simple three-note rising and falling guitar hook serves as the introduction, the accompaniment to the refrain, and the vamped accompaniment to the Dylanesque ***parlando*** interludes

between verses. The entire harmonic structure consists of four chords, played in only three different configurations. Only one chord moves beyond the basic diatonic chords of the E-major key signature. The beat is steady, four beats per measure, organized in groups of four four-measure phrases. It would be hard to get much simpler than that, but there is one important unexpected aspect. As described in Section 1 of this resource guide, the Stones add some blues flavor to "Satisfaction." The guitar riff and the bluesy touches are inarguably the catchiest aspects of the song. The high point of the chorus is the repetition of the phrase "I can't get no," and right at the highest note ("get"), Jagger invokes the blues by singing a *b3* against a major chord. The guitar riff itself adds a bluesy lowered seventh to the tonic chord at the very end of the first measure of the hook. The lowered seventh also appears as the top note of each of the first two phrases. The Stones' grounding in the blues was a factor in the success of "Satisfaction."[377]

In 1966, "Paint It Black" again earned the Rolling Stones the top spot on the charts. Brian Jones played sitar, encouraged by George Harrison, who had recently used the instrument with The Beatles.[378] Other than that, however, the hit was only slightly more complex than "Satisfaction." The sitar lick is simple in a similar manner to the lick in "Satisfaction." It serves as the introduction (though played by Keith Richards, on the guitar), and then (played on the sitar by Jones) accompanies the first half of the melody in a heterophonic texture. In the middle of the song, the accompaniment consists only of sitar, occasional guitar strums, and a tambourine roll.

Still later in the song, the vocalists hum along with the repeated sitar lick, while the drum part becomes more intense, adding bolero-like triplets.[379] At the end, the riff repeats for improvisation by Jagger, and then more humming over the riff, which eventually fades away. Like "Satisfaction," the form consists of four four-measure phrases, repeated over and over, four beats per measure. Simple, repetitive, but with the exotic instrument, the dark text, and matching minor mode, "Paint It Black" again captured the attention of the younger generation, and the Stones had another hit on their hands.

MUSIC CRITICISM

In 1955, author Norman Mailer founded *The Village Voice*, which became the newspaper that "defined what it was to be hip."[380] The paper was politically and socially conscious, but was also an important arbiter of public taste, with influential mentions of The Beatles,[381] Jimi Hendrix,[382] the musical *Hair*,[383] Velvet Underground,[384] Bob Dylan,[385]

and dozens of others, like the Grateful Dead and Jefferson Airplane.[386]

In 1967, the San Francisco-based music criticism newspaper *Rolling Stone* was established. Its name was based on Dylan's song title and the popular rock group's moniker.[387] Providing an alternative to the establishment "trade periodicals," like *Billboard*, *Rolling Stone* strove to be "the hippest magazine on the planet."[388] *Rolling Stone* became the source of some of the best music criticism on popular music.

MOTOWN AND ARETHA FRANKLIN (BUT NOT TOGETHER!)

Popular music in the mid-1960s was not just folk-rockers and British invaders. Soul and R&B flourished in the mid-sixties as well. Two of the biggest names in soul music were from Detroit: Aretha Franklin and Motown. It is important, however, not to assume that Aretha Franklin recorded with Motown. Berry Gordy did try to sign her in 1958, even before he started Motown Records, but Aretha's father intervened, opposed to the idea of his young daughter (she was only sixteen at the time) entering the music business. When she was eighteen, her father let her move to New York to start her music career, and Franklin was introduced to John Hammond, who signed her with Columbia Records. During her time at Columbia, she had several top hits on the R&B charts and jazz charts and in 1961 was even named "New Female Vocal Star of the Year" in the *Downbeat* magazine jazz critics' poll.

Despite Franklin's jazz and R&B success, only one Columbia recording broke the top forty on the pop charts.[389] It wasn't until her move to Atlantic in 1967 that Franklin was able to chart any higher. On Atlantic she became the "Queen of Soul" and within months had broken into the top ten.[390] By June of that year she had earned the number one spot on the pop charts with her version of an Otis Redding 1965 composition "Respect."[391] Franklin's version, with her sisters singing backup, made three important additions to the Redding version: the "just a little bit" backing vocals; a **stoptime** bridge spelling out R-E-S-P-E-C-T; and the "sock it to me" and "re-re-re-re" backing. The song had additional appeal as the feminist movement was gaining ground in the 1960s.[392] Over the next year and a half, she placed an additional seven hits in the top ten, and won the first of eight consecutive Grammy awards.[393] The Queen of Soul was hitting her stride.

Otis Redding was starting to see some success in Europe, and his agency was considering billing him as the "King

of Soul."[394] Nevertheless, only one man was seen as the Godfather of Soul: James Brown.[395] Known for producing "the loudest, the rawest, the most fundamental in-your-face soul," Brown did well on the R&B charts and began hitting the pop charts in 1958. [396] He reached the Top 40 in 1960.[397] His greatest success came in 1965, with the release of two funky songs that relied on the twelve-bar blues form. "Papa's Got a Brand New Bag" and "I Got You (I Feel Good)" both hit the Top 10, with "Bag" going all the way to number one on the R&B charts.[398] They ended up being two of only three Top 10 hits in his entire career (the other did not happen until 1986).[399] Both rely on short patterns from the horn section that interlock and repeat. Brown insisted on extreme precision, and his horn section could expect fines if they made mistakes.[400] These tightly interlocking syncopated repeated riffs helped create the style we now call funk.[401] The simple twelve-bar blues harmony is much less important than the execution of tight, syncopated rhythms.[402]

One of the special things about Motown was the collaboration among the artists. In addition to the great songwriting team of Holland-Dozier-Holland, some artists did songs by Marvin Gaye, while others sang hits written by Smoky Robinson and Ronald White. The Temptations' 1965 hit (released in late 1964) "My Girl" was by the latter pair, who also produced the recording. Starr and Waterman call the recording "as much a 'teenage symphony' as any of Phil Spector's most elaborate offerings."[403]

The Temptations and Smokey Robinson were important to Motown, but no one could top the Supremes, who had joined Motown records in 1961. By 1964, the Supremes were hitting the top of the charts.[404] Even in a year dominated by The Beatles and other British invaders, the

Aretha Franklin, the "Queen of Soul," had numerous hits on the R&B and jazz charts before she found success on the pop charts.

Supremes managed to elevate three songs to number one, a spot they occupied for seven of the final nineteen weeks of the year. The second of their three number one hits that year, "Baby Love," reigned supreme for four weeks, a feat that not even The Beatles had accomplished since Louis Armstrong ended their fourteen-week run in May.[405] The Supremes were now the most successful girl group. They were also unbeatable at Motown. No other group from Gordy's label had hit the top of the charts twice, and the Supremes managed to do so three times in four months.[406] With their smooth sound honed since their early days in church and school together and the backing of Motown's house band, the Funk Brothers, all the Supremes needed was some great song-writing by the team of Holland-Dozier-Holland to propel them to the top. One other factor seemed crucial to their meteoric rise: Gordy insisted that Diana Ross do all the lead singing.[407]

LISTENING COMPANION—LISTENING EXAMPLE 10: "STOP! IN THE NAME OF LOVE" (1965)—DIANA ROSS AND THE SUPREMES/HOLLAND-DOZIER-HOLLAND

In 1965, the Supremes continued their string of number one hits. The Supremes' success was not only due to the great singing and the musical support they had from H-D-H and the Funk Brothers. Maurice King was engaged to prepare the musical arrangements and taught the girls their harmonies. Gordy ensured that his stars had classy costumes and makeup and arranged for them to learn manners, even how to sit and eat in a cultured manner. Gordy insisted on speech training to help the Motown stars feel more comfortable in interviews and when introducing their songs.[408] The Supremes were a commodity that needed to be packaged properly.
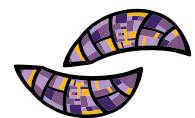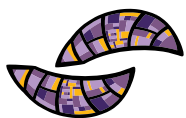
In March the Supremes again gained the top spot on the charts with another H-D-H composition, "Stop! In the Name of Love."[409] Although the music itself became famous, the choreography associated with the staccato delivery of the first word of the title was iconic: left hand on the hip, right hand extended in a stop sign gesture. The motion and text complemented each other perfectly, each making the other more memorable.

The Supremes finished the decade with twelve number one hits, just behind Elvis and The Beatles.[410] Largely on the success of the Supremes, Motown sold more singles during this period than any other label.[411] The Supremes became favorites on the *Ed Sullivan Show*, appearing sixteen times in a little over four years. When they appeared on *Sullivan* with the *Temptations* in 1967, reaction was so positive that they were invited by NBC to have a primetime special together, which further cemented their popularity.[412]

The Supremes (L–R Florence Ballard, Mary Wilson, and Diana Ross) perform on the Ed Sullivan Show *in 1966.*

Listening Guide 10 **"Stop! In the Name of Love"—1965** **The Supremes/Holland-Dozier-Holland**		
Time	**Lyrics**	**Description**
0:00		Organ swirls quickly from low dissonance, swelling up to the first note of the vocals at the top of an A minor chord.
0:02	Stop!	With almost no introduction, the singers intone the first word of the hook, staccato, while the horns and organ sustain the harmonies, one chord per measure. The beat is established immediately (approximately 116 beats per minute) by percussion playing on every beat, bass playing two notes per beat, and guitar strumming staccato on beats two and four. Vibraphone plays along with the melody, being sung in unison by all three Supremes.
0:12		Four-measure instrumental interlude, with even the melody notes on the beat. Vibraphone and organ carry a simple two-note melody that turns into a three-note melody when repeated. Brass eighth notes join the bass to respond to the melody—first up, then down. No syncopation. Guitar backbeat heard more easily. Harmony is C Major except the fourth beat of measures two and four, which is F Major.
0:19	Baby, baby, I'm aware of where you go	The first verse begins, with Diana Ross singing alone. The internal rhyme (aware of where) adds to the charm. The vibraphone, playing the chords on beats one and four, outlines the interesting chromatic descent that is achieved by following the guide tones (thirds and sevenths) of the seventh chords. This is a traditional jazz voicing that adds one more layer of both harmonic and melodic interest, without getting overly complicated.
0:28	I watch you walk down the street	For the next four measures, the harmony simplifies, rocking between two chords. The other two Supremes sing "hey he-e-ey" backgrounds.

0:36	But this time, before you run to her	The background vocals switch to descending "Ahhhh." The harmony returns to the C Major chord that started the verse. H-D-H want us to think they are going to repeat the first half of the verse. They even lower the root of the chord to B the way they did for the second chord at the beginning of the verse. The third chord is not the G minor chord we expect, but instead an F Major chord, which, in an effective moment of word painting, is quickly changed to F minor when she sings "hurt." They have now used nine different chords—more than the Rolling Stones would sometimes use in three entire songs.
0:44	Think it over	Now the other two Supremes take the lead, singing "Think it over" doubled by the baritone saxophone, to the accompaniment of what was the instrumental interlude back at 0:12. Ross responds with more pleading: "After I've been good to you. After I've been sweet to you."
0:53	Stop!	The chorus comes back, although this time the "Stop!" is on beat two instead of one. These little changes are what keep the song from being completely predictable, and thus boring. Yet there is enough repetition and similarity that it is familiar and memorable.
1:09	Think it over	The last four measures of the verse, which were clearly different from the rest of the verse (with the harmony changed and the lead singing changed) now appear as the second half of the chorus, but with all three Supremes singing "Think it over," and no response from Ross.
1:18	I've known of your—your secluded nights	Verse two. Baritone saxophone is a bit more prominent. Otherwise very similar to verse one.
1:43	Think it over	Ross's response changes to "Haven't I been good to you? Haven't I been sweet to you?"
1:51	Stop!	Return of the chorus.
2:16	I've tried so hard—hard to be patient	Verse three.
2:33	Stop!	Halfway through verse three, instead of setting up the "Think it over" transition, they return to the chorus. This denial of the expected form again adds to the interest, but by returning to familiar material.
2:41	Baby think it over	Now, responding to the already familiar hook, Ross adds a new line over the second half of each line of the chorus: "Baby think it over" refers to the "Think it over" transition, but is just different enough to keep the familiar chorus from becoming repetitive.
2:45	Think it over, Baby	Inverting the words again mixes familiarity with repetition. The studio fadeout begins.
2:52		Fades to nothing.

"GOOD VIBRATIONS—THE BEACH BOYS"

The Beach Boys had first reached the top of the pop charts in 1964 with "I Get Around."[413] The second of their four chart-topping hits was "Help Me, Rhonda," which peaked in the early summer of 1965, knocking The Beatles out of the top spot.[414] The Beach Boys had three more top-ten hits during 1965 and 1966, before releasing an album titled *Pet Sounds*, the pet project of the leader of the group, Brian Wilson.[415] Wilson had stopped touring with the Beach Boys in late 1964 due to a nervous breakdown and was concentrating on new musical ideas for the group. Inspired

The Beach Boys at work in the studio, with Brian Wilson at the piano.

by the unity he heard in Dylan's albums and The Beatles' Rubber Soul, he wanted to create an entire album with a theme, rather than a set of songs that would be unrelated hit singles. He considered every song on *Rubber Soul* first-rate and was inspired to develop something "new, daring, and profound," calling The Beatles' album "a complete statement," and announcing his intention "to make a complete statement, too!"[416] Wilson wanted to create something to compete with *Rubber Soul*. He worked on new compositions and new studio techniques to make the album unique. His goal was not just competitive, but also artistic: "My real ambition was to redraw the entire map of pop music. I wanted to move off the charts and onto a higher plateau."[417]

Wilson strove for greater artistry and creativity. He expanded the range of the Beach Boys by bringing in new instruments and new musicians to supplement the band. The melancholy nature of "I Just Wasn't Made for These Times" was underscored by the haunting voice of the theremin. "You Still Believe Me" included a musician plucking the strings inside a piano, a bicycle bell, timpani, and bicycle horns.[418] "I'm Waiting for the Day" featured timpani, English Horn, flutes, organ, ukulele, and a string quartet. "I Know There's an Answer/Hang on to Your Ego" included bass harmonica and Glen Campbell playing banjo.[419] For "God Only Knows," Wilson hired twenty-three studio musicians and featured horn and sleigh bells in particular.[420] Drummer Hal Blaine (who had been part of the Byrds' original "Mr. Tambourine Man" recording) fashioned a strange kind of bongo from empty plastic orange juice bottles, struck with marimba mallets and sent through reverb.[421] Strings, accordion, tambourine, and the high harmonies of the Beach Boys' vocals made the music of *Pet Sounds* unique.

These arrangements were complex and innovative. The title song, "Pet Sounds," even used Coke bottles as a

sound source, as well as traditional percussion instruments, including congas, guiro, tambourine, and triangle. A strange off-pitch reverbed guitar carried the melody in this instrumental, backed by brass and saxophones.[422] In the final piece on the album, "Caroline, No," Wilson had drummer Hal Blaine pounding on an empty bottle from a water cooler, with intense reverb, as a recurring percussion instrument.[423] The last sound on the album is where it got its title. After an argument during which one of the band members suggested the music was so high that only dogs could hear it, Wilson decided to have the whole album end with *musique concrète*: the sound of his dogs barking at a train passing by.[424] *Pet Sounds* was an album that could not be reproduced live on stage, and it expanded the parameters for studio album production.

Wilson's goal of redrawing "the entire map of pop music" was achieved. Just as The Beatles' *Rubber Soul* and *Revolver* influenced Wilson, *Pet Sounds* influenced The Beatles.[425] McCartney was so impressed that he brought *Pet Sounds* into Abbey Road Studios, asking his staff to try to emulate the clean sound Wilson had achieved, despite the complexity of the arrangements.[426] In 2012, *Rolling Stone* magazine ranked *Pet Sounds* as the number two album of all time— second only to The Beatles' *Sgt. Pepper*.[427]

One song that was originally intended for *Pet Sounds* was held back because Wilson didn't think it was ready yet. When it was finally finished, it had taken six months to complete, portions of it had been recorded at four different studios, there were eleven different versions, representing over ninety studio hours and costing more than $50,000, a fortune at that time.[428] Entire albums were recorded in substantially less time and much less expensively. In the end, though, it was worth it because "Good Vibrations" was a number one hit in both the U.S. and the UK and sold over a million copies.[429] Perhaps even more important to Wilson, it was an artistic and creative success.

"Good Vibrations" took the studio and composing techniques of *Pet Sounds* even further. One of the most famous aspects of the song is the haunting sound of the theremin that floats above the chorus. Bass harmonica, jaw harp, and unusual keyboard sounds (such as the tack piano) and percussion instruments add to the innovative character of the piece. Multiple organs are used to create different sounds in different sections.[430] Repeated cello triplets add intensity to the chorus. Flutes ranging in size from piccolo to bass flute form a chorus for several sections.[431] Each portion of this highly sectional piece seems to be carried by a different instrumentation, adding to the interest.
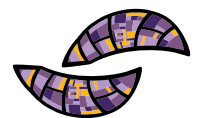
Harmonically, the song is substantially more complex than most of its predecessors. Even the first four chords are more inventive than most of the rock music of the time (though The Beatles had used similarly complex chord motion).[432] Moving from the minor of the verse to the major of the chorus was not necessarily unusual, but added one more degree of complexity to the harmony. At the same time as the harmony moves to major for the chorus, the voices move upward, as if the sun has come out when they sing "Good, good, good, good vibrations." As each repetition of the title moves higher and higher, each sequential chord further intensifies the harmonic complexity. New sections add to the complexity of the harmonic path, without ever using dissonance beyond that expected in tonal harmony. Wilson created a fascinating and unexpected harmonic framework, without using harmonic techniques that would alienate listeners.

The studio techniques that Wilson had perfected during the recording of *Pet Sounds* helped "Good Vibrations" become a technical masterpiece. Close miking allowed Wilson to bring quiet instruments, like the maracas, harmonicas, or jaw harp, into clear focus, even when played along with instruments that are normally much louder, like an organ or tack piano. Wilson's use of eight-track recording techniques (most other studios were still limited to two or four tracks) contributed the clarity of the sound. In addition to the sonic, harmonic, and timbral inventiveness, the form was unusual, with an episodic series of sections, some of which recurred and others which did not. Tempo and rhythmic changes further added to the complexity of the form. There is no question that "Good Vibrations" set a new standard for complexity and attention to detail.

FM, THE RISE OF THE ALBUM, AND THE COUNTERCULTURE

In October 1966, when "Good Vibrations" was released, it was not that common for AM radio stations to play songs that lasted much more than two minutes. As author Walter Everett points out, "Good Vibrations," almost four minutes in length, "was considered very long for AM radio's heavy-rotation hit formats in late 1966."[433] Bob Dylan's "Like a Rolling Stone," at six minutes, was another song that made it difficult for AM DJs to stick to their usual format. FM radio stations, on the other hand, and DJs like Tom Donahue in San Francisco, were not so tightly controlled and felt free to play album tracks, regardless of length. This aligned with the desire of many musicians, inspired by The Beatles' and Bob Dylan's experimentation, to pursue artistic expression, rather than danceability and commercial viability. Groups like the Grateful Dead often created extended improvisations that did not fit in the condensed AM format.[434]

At the same time, musicians who were seeking a larger canvas on which to express themselves, like Brian Wilson in *Pet Sounds*, started creating albums with greater unity, where the order of songs and the relationship between songs mattered. True fans of an artist bought not only the singles, but also the albums. By 1967, album sales exceeded singles sales for the first time, and record sales topped $1 billion.[435] Bob Dylan, aware that his fans were more interested in his albums than in singles, recorded the first studio double album, *Blonde on Blonde*.[436]

The rise in the popularity of the album allowed musicians whose interests were more artistic and less commercial to remain viable. A musician had to sell a lot of singles to equal the income from selling just one album. By the second half of the 1960s, there was a rise in the number of rock bands that seemed more concerned with fulfilling their musical interests than in making hits. With influences from classical music and the avant-garde movement, these groups coalesced into a genre called "art rock."

Although most of the early art rock musicians were British, one American group went even further than its British counterparts: Frank Zappa and the Mothers of Invention. Zappa was a well-educated (though primarily self-taught) musician who was especially enamored with classical composers Edgard Varèse and Igor Stravinsky. Zappa and his group were particularly interested in the element of surprise, defying expectations in much the same way as the music of Varèse and Stravinsky had defied norms. The Mothers had already developed an underground following in the counterculture community of their home base of Los Angeles before they produced their first album *Freak Out!* Rock authors call *Freak Out!* "an amazingly creative album" and call Zappa a genius.[437] In 2012, *Rolling Stone* magazine ranked *Freak Out!* among the top 250 albums of all time.[438]

The experimental nature of *Freak Out!* was most obvious in *Help, I'm a Rock*, the three-movement suite that ends the third side. The musicians had clearly been influenced by avant-garde classical music.[439] John Cage's aesthetic that anything could be music was evident in their freedom to incorporate strange sounds, change tempos and rhythms randomly, and permit extensive non-metrical improvisation. Varèse's interest in moving sound through space, even without pitch was a key factor in the middle section, called "In Memoriam, Edgard Varèse." The inventive vocals of the third section, "It Can't Happen Here," hardly resemble anything else in music up to that date, except perhaps a strange harmonized version of the early twentieth-century technique of **_sprechstimme_**, the cross between speech and singing associated with classical composer Arnold Schoenberg. Zappa was
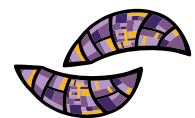
exploring new territory, and other musicians were taking note. A 1968 article in *Rolling Stone* specified that many groups were influenced by *Freak Out!, including* The Beatles, and suggested that Zappa's music was important not just for rock musicians, but for all musicians.[440]

Just like Zappa on the West Coast, the Velvet Underground was already a local favorite in New York City before they put out their first album, *Velvet Underground and Nico* in 1967.[441] Unlike Zappa, who was vehemently opposed to drug use, the members of the Velvet Underground were involved in the drug scene,[442] and drugs permeated the lyrics of their songs. The Velvet Underground were at the forefront of an emerging drug culture in rock and roll. The Velvet Underground had a particularly influential supporter in Andy Warhol, who designed their cover art and served as their manager in 1966–67.[443] Though not as experimental as Zappa, the Velvet Underground were still more willing to go outside expected norms than most rock groups of the time. Their songs were not standard AM radio fare[444]—as one author put it, "not only were they not in the mainstream, they were not in any stream but their own."[445] Although their record sales were not huge, they are considered important influences on the punk movement and on avant-garde techniques in rock music.

The Doors were another group that received most of their airplay, at first, on the progressive album-oriented FM radio stations. After a stint as the house band at L.A.'s legendary rock club Whiskey-a-Go-Go, they released their first album in 1967. When a seven-minute song, "[Light My Fire](#)," started to become popular, they released a shorter version that rose on the charts quickly and spent three weeks at number one in the middle of 1967.[446] "Light My Fire" was clearly a drug-related song, and when they were finally invited to perform on the *Ed Sullivan Show* in September, they were asked to change a line about drug use. Lead-singer Jim Morrison ignored the request and even the conservative *Ed Sullivan Show* now had broadcast references to drug use.[447] While the lyrics were hardly explicit compared to lyrics common in popular music today, in 1967 this was shocking. The Doors were known for songs in minor keys, songs about themes related to drugs and death, and before long, they were known for lead-singer Morrison's erratic behavior, alcoholism, and drug abuse.[448] The Doors were part of the sound of the growing counterculture.

Perhaps the most iconic group to come out of the counterculture was the Grateful Dead. The Grateful Dead were an eclectic band with aspects of folk music, influence from other rock groups, and the propensity for long involved improvised solos, like those of John Coltrane (who was particularly revered by Grateful Dead bassist Phil Lesh).[449] The Grateful Dead were known for longer songs that belonged on FM radio, but did not fit on AM. The band never charted until the 1970s and never had a hit higher than sixty-four until 1987.[450] Despite not being known for individual songs, the Dead developed extremely loyal fans. "Deadheads," as their enthusiasts were known, would follow the band on their tours around the country, insuring an enthusiastic crowd at every concert.[451] *Forbes* magazine pointed out that the Grateful Dead relied on word of mouth (and FM radio) for publicity and called the band "one of the highest-grossing live musical acts of its time" (it was still going in 2015 with three of the original members), despite the fact that "the band rarely had a hit song on the charts."[452]

The modern avant-garde movement was a strong influence on the Grateful Dead. Bass player Lesh had studied at Mills College with Berio, and Lesh has written about the influences of Berio, Stockhausen, and Cage on the band.[453] Members of the Grateful Dead and Jefferson Airplane, another important purveyor of San Francisco psychedelia, were enthusiastic attendees when Stockhausen lectured in Los Angeles in 1966 and 1967.[454] The rock and roll of the counterculture did not fit length-wise or musically on singles and did not fit on the commercial nature of AM radio. This was music for albums, for FM radio, and for the newly burgeoning hippie and psychedelic scene.

DEBUTS

As rock and roll continued to grow in popularity, more and more new groups formed, and the British Invasion continued. Some were converts from the blues or folk music; others were from jazz and classical backgrounds; some were from the avant-garde movement; some were just young enough that they had always listened to rock. The second half of the 1960s was a fertile breeding ground for new rock groups.

1967 saw the U.S. debut of Cream, the super-group that combined Eric Clapton, Ginger Baker, and Jack Bruce.[455] The group was short-lived, splitting up in 1968, but Clapton was able to use their notoriety as a springboard into a long and successful career and is still considered by many to be one of the greatest rock and roll guitarists of all time.[456]

It would be hard to know much about rock music without being aware of the long and successful career of Pink Floyd. Leaders of the London counterculture scene, they incorporated electronics more than their U.S. counterparts, and their songs were often about the supernatural or
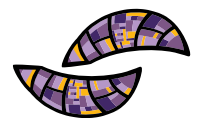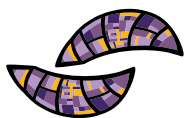
otherworldly.[457] By 1967, after only two years together, they dominated London's psychedelic music scene.[458] Their reception in the U.S. was less enthusiastic. Their U.S. debut album was a favorite of music critics, but produced no chart hits. No one could have predicted that this would be the band that would achieve gigantic album hits in the 1970s with *The Dark Side of the Moon* in 1973 and *The Wall* in 1979.[459]

Another artist who debuted in the second half of the 1960s is the highly respected vocalist from Belfast, Van Morrison.[460] "Brown-Eyed Girl," from 1967, is still one of his best-known songs, one of only two to make the top ten, and also his only charting hit from the 1960s.[461] Van Morrison is one of many artists whose careers become important later, but whose roots can be traced to the transformative decade of the 1960s.

SHEA STADIUM, RUBBER SOUL, *AND* REVOLVER

By the mid-1960s, The Beatles had established themselves as the leading band of rock and roll. After their two successful U.S. tours and the popularity of their films *A Hard Day's Night* and *Help!*, they undertook a third U.S. tour, which began with a concert at Shea Stadium in New York City. The screaming crowd of more than 55,000 made it hard to hear the music.[462] The Beatles were still on top.

There were several reasons for the success of The Beatles. Their lyrics were interesting, their melodies hummable, and their rhythms just different enough from the music of the 1950s to maintain our interest. Their singing voices blended well, and they played their instruments at a reasonable level. In some ways, their most significant asset was that they did this all with charm and a sense of humor. One would not necessarily have any indication, however, that they would be much more than what one author called an "incredibly successful rock and roll band with a distinctive but not shockingly creative sound."[463] The reason The Beatles dominated the music of the 1960s was because they did not stagnate or stick to their successful formula, but continued to absorb influences from throughout the music world and use them to make their music more interesting. Because of their extreme popularity, The Beatles had a luxury that few other musicians could risk. They were free to experiment and try new things, without fear of losing their huge and faithful fan base. As a result, their success within a formula was a factor that allowed them to move outside the formula and try new musical ideas—ideas that eventually would influence generations of musicians who followed them.

The Beatles perform before more than 55,000 fans at Shea Stadium in New York in 1965.

Photograph: AP.

At first the experimentation might not have seemed that bold. When "Yesterday" was recorded in 1965 with Paul singing and playing the guitar with a string quartet accompaniment, it was not jarring—as a matter of fact some critics suggested that it was hardly even rock and roll. Those criticisms did not stop it from rising to number one. It became the first step in The Beatles' expansion of musical resources.[464] The next Beatles album, *Rubber Soul*, in late 1965, continued the experimentation. George Harrison had been learning the sitar, an Indian classical string instrument, and used it in the song "Norwegian Wood." Although some groups had experimented with sitar before "Norwegian Wood," the use of the instrument by The Beatles had a greater impact. Sitars, tablas, and other Indian instruments began to appear more often in popular music (take the Stones' "Paint It Black," for example). For the instrumental feature in the middle of "In My Life," producer George Martin used speed adjustments to take a piano part he had recorded and make it sound like a harpsichord, bringing yet another unusual timbre and an unusual production technique into rock music. New four-track recording technology in the studio improved the sound quality that could be achieved as well, which helped the innovative sounds stand out better on the album.[465]

Other factors differentiated *Rubber Soul* from earlier Beatles recordings. One factor was that the album was recorded, released, and marketed as an album, without the benefit of a single released ahead of time to drum up interest.[466] Another aspect was that the group name did not appear on the cover. By then everyone knew the four faces in the photo on the cover, and that was sufficient to identify it as a Beatles album. Even without their name on the cover, even without a popular single to spur album sales, *Rubber*

Soul quickly climbed the charts, reaching number one in early 1966. The cover art itself was also unusual. The photo had been accidentally projected at an angle when they were previewing cover art, and the band members thought the distorted picture captured the psychedelic character of the album perfectly. Adding to the off-kilter nature of the cover was the bulging lettering used for the album title. The distorted letters became a standard font for the posters associated with the San Francisco counterculture bands and other psychedelic artists.[467]

By this point in 1965, John Lennon, in particular, had been affected by the lyrics of Bob Dylan. (The Beatles had all heard him live in London earlier that year.)[468] Lennon's lyrics and subject matter for the songs on *Rubber Soul* were no longer limited to romantic love. One of the greatest examples is "Norwegian Wood." At first it sounds like it is about a boy who meets a girl, and gets invited to her apartment, where she shows him the beautiful "Norwegian Wood" that decorates her apartment. However, there is a twist at the end:

> *And when I awoke, I was alone, this bird had flown.*
> *So, I lit a fire. Isn't it good—Norwegian Wood.*

Boy meets girl, boy gets girl, boy loses girl, boy sets apartment on fire—a new twist on popular music.

In its 2012 list of the "500 Greatest Albums of All Time," *Rolling Stone* magazine ranked *Rubber Soul* at number five, behind Bob Dylan's *Highway 61 Revisited* (#4), *Pet Sounds* (#2), and two other Beatles albums that had not been recorded yet.[469] There was no doubt, in 1965, that *Rubber Soul* was The Beatles' most important album yet.

As author Michael Frontani points out, "each new record was viewed as a progression in the band's artistic development and as an expansion of the parameters of popular music."[470] In May 1966, before they released their next album, The Beatles released a single consisting of "Paperback Writer" and "Rain."[471] Though the uninitiated listener might not notice it, there was a substantial amount of studio manipulation of the sounds on the single. One example is the vocal signature of the title that keeps coming back. If not listening carefully, it would be easy not to notice that, thanks to overdubbing, the vocals divide into six parts, even though there are only four Beatles. Similarly the tape echo used at the end of each refrain is not necessarily a new technique, but the fact that it is also slowed to make the echo sound different was new.[472] The powerful and unusual bass sound on "Paperback Writer" and "Rain" was also the result of a new miking technique.[473]New sound processing

techniques also helped create the "surrealistic atmosphere" of "Rain," including speed changes to alter the sound of the voice.[474] The end of "Rain" included a reversed tape of Lennon singing. This technique, known as **backmasking**, was common in *musique concrète*, but unheard of in rock and roll.[475] This recording showed that The Beatles were not content to stop with the innovations of *Rubber Soul*.

Before The Beatles returned to the United States for an August 1966 tour, John Lennon was interviewed in the British press, and one sentence was cause for controversy in the U.S.: "We're more popular than Jesus Christ right now."[476] Some radio stations refused to play The Beatles' music, churches held Beatles record burnings, and the KKK marched in opposition to The Beatles. The reporter who had interviewed Lennon came to his defense, pointing out that protestors had misunderstood the comment: "He was certainly not comparing the Beatles with Christ. He was simply observing that so weak was the state of Christianity that the Beatles were, to many people, better-known."[477] The culture wars were starting to heat up. The outrage over Lennon's comment came only months after *Time* magazine ran a cover story with the title "Is God Dead?"[478] Nevertheless, despite the furor, The Beatles' tour was a success. Perhaps the significance here was that youth culture was already starting to be subversive, refusing to "trust anyone over thirty" and believing that it was their job to "question authority." The church represented authority. Add to that a celebrity like Lennon questioning Christianity, and for some young Beatles fans, it only strengthened their connection to the Fab Four.[479]

The next album, released just before the August 1966 tour, went even further in the direction of a studio production that could not be duplicated live. With *Revolver*, the formula of two guitars, bass, and drums was gone.[480] New recording and production techniques (and new equipment) permeated the album, making it a textbook for other musicians to study before going into their studios to make their own recordings. Each song introduced new sounds. Even before the first song begins, there are strange sounds in the background of the count-off (which defied expectation by NOT being in the tempo of the first song), including voices and guitars played back at the wrong speed (like the tape manipulation of Steve Reich and Karlheinz Stockhausen), coughing, and background noises (like *musique concrète*). In some tracks the voices are tightly compressed using new recording techniques, in other tracks drum sounds were compressed. "Eleanor Rigby" was accompanied only by string octet. "Got to Get You Into My Life" incorporates a brass section like a
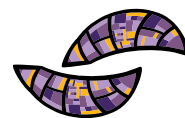
Motown recording, and "For No One" uses clavichord and a horn solo. Using another tape manipulation technique, George Harrison fit a backward guitar solo to "I'm Only Sleeping."[481] Tape speed changes were used to alter the timbre of voices and instruments. George Harrison's "Love You To" focused on Indian melodic, harmonic, and rhythmic techniques as well as Indian instruments, featuring not just Harrison's sitar playing, but also guests playing tamboura and tabla. "Yellow Submarine" was full of unusual sound effects, including the echo chamber, the incorporation of a brass band recording, sounds of water flowing, a party next door with voices and glasses clinking, and a series of background sound effects to make it sound as if the singers were in a submarine.

In its 2012 list of the "500 Greatest Albums of All Time," *Rolling Stone* magazine, ranks *Revolver* in third place (behind *Pet Sounds* and *Sgt. Pepper's*), calling Lennon's "Tomorrow Never Knows" the "most innovative track."[482] Lennon's attempt to "sound like the Dalai Lama chanting from a mountaintop" was achieved by running his voice through the rotating Leslie speakers usually used for the unique Hammond organ sound. This technique was also applied to another tape-reversed guitar solo. Five identifiable tape loops (and possibly a sixth), with speed and direction changes and other modifications, were faded in and out according to what was happening in the music.[483] This is effectively the same technique as sampling or scratching using tape. A relentless C major drone in the tamboura and bass is accompanied by a solid beat in the drumset.[484] The instrumental interlude begins completely with sounds that did not exist previously but were made by tape manipulation.[485]

The Beatles recorded short lip-synced films to promote "Paperback Writer" and several other songs that could not be performed live. These were then sent to television shows, such as the British *Top of the Pops* or the American *Ed Sullivan Show*. These films allowed The Beatles to promote their new songs without having to travel or deal with crowds, or deal with figuring out how to perform the songs in a satisfying manner without all the studio techniques that went into the original recording. As George Harrison said later, it was as if they had invented MTV.[486] Soon The Beatles would forego touring altogether.

1967—THE SUMMER OF LOVE (AND DRUGS): TURN ON, TUNE IN, DROP OUT

The summer of 1967 is often called the "Summer of Love."[487] A huge gathering of youth (sometimes estimated at over 100,000) descended on the Haight-Ashbury

In 1967, during the "Summer of Love," a huge gathering of youth descended on the Haight-Ashbury neighborhood of San Francisco.

neighborhood of San Francisco.[488] The counterculture scene in this part of San Francisco had been growing for several years and included drugs, sexual freedom, and a rejection of traditional capitalist values. Many of the "hippies," as they were called, lived together in communes.[489] Among the communal residents of Haight-Ashbury were the members of the Grateful Dead.[490] In January 1967, a "Human Be-In" attracted more than 20,000 hippies, who chanted, at the behest of LSD-guru Timothy Leary, "Turn on, tune in, drop out."[491] Local bands entertained the crowd as they celebrated their growing separation from mainstream society.

The psychedelic music scene in California and beyond was growing. More and more songs included psychedelic and drug-related words. In the San Francisco Bay area, there were nearly 1,500 rock bands, most working to attract these young hippies by performing songs that related to their lifestyle.[492] Three bands stood out among these groups. The Grateful Dead were discussed earlier in this section. Big Brother and the Holding Company featured an exciting lead singer, Janis Joplin, who would become famous in her own right. The Jefferson Airplane, with their great lead singer, Grace Slick, was also becoming increasingly popular, even beyond the San Francisco scene.

MONTEREY INTERNATIONAL POP FESTIVAL

In early 1967, inspired by the impressive turnout for the "Human Be-In," a group of musicians and producers started planning a summer music festival at Monterey, a coastal California town that had previously hosted jazz and folk festivals, just north of halfway between San Francisco and Los Angeles.[493] The organizers assembled an impressive
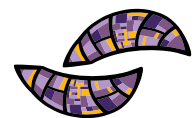
Soul singer Otis Redding.

roster. Some were well-known national acts, like Simon and Garfunkel, Buffalo Springfield, the Byrds, and the Mamas and the Papas. Some, like Jimi Hendrix and the Who, were just starting to be known throughout the country. Others, like Big Brother and the Holding Company, the Grateful Dead, and Jefferson Airplane, were more local. Even international acts, like Hugh Masakela (a trumpet player from South Africa) and Ravi Shankar (the great Indian sitar virtuoso) were on the schedule. Soul singer Otis Redding had been building relationships through a series of live performances in California, but it was still a bit of surprise when he was invited to participate in the festival.[494]

The festival took place on June 16–18 and attracted some 200,000 hippies for three days of peace, love, and rock and roll.[495] As one of the first festivals dedicated to rock and roll, Monterey served as the blueprint for many festivals that followed, including Woodstock two years later. While many artists got their "moment of fame" at Monterey, the festival was career changing for three of the artists: Janis Joplin, Jimi Hendrix, and Otis Redding.[496] Joplin's bluesy set on the first afternoon of the festival was such a hit that she and her band were invited to return for the final evening, which in turn led to a recording contract with CBS records.[497]

On the last day of the Festival, the Who, not as well known among the hippies attending the festival, started off with polite applause, but by the time they reached the finale of "My Generation," destroying their instruments and

descending into complete anarchic noise, they had also smashed the "peace and love" atmosphere of the crowd and had them worked into a frenzy.[498] The Grateful Dead were not up to the challenge, and followed the Who with a performance that failed to enhance their reputation.[499] Jimi Hendrix, who followed the Dead, was new to American audiences. After touring with rhythm and blues bands and playing backup for Sam Cooke, Hendrix developed his solo chops and leader skills in London, where he had moved in 1966.[500] The festival was his chance to show a hip American audience the techniques he had developed. Hendrix's performance of "Hey Joe" demonstrated his showmanship, including playing the guitar with one hand, picking the strings with his teeth, and playing the guitar behind his neck.[501]

The final number on Hendrix's set, "Wild Thing," went even further. Not only did he play the guitar with his teeth, with one hand, behind his back, he even did a backward somersault while playing. He used the whammy bar to extremes and utilized feedback like a theremin. He laid the guitar on the floor and pulled the strings up to bend the pitches violently. He rocked against the speakers with the guitar to make even more powerful feedback. The sounds he made were like nothing the audience had heard before (although they did resemble some of the *musique concrète* and other avant-garde music coming from the classical realm). He finished his set with something that could not be topped. He laid his guitar on the stage in front of him, sprayed it with lighter fluid, said a little prayer, and then sacrificed his guitar to the flames before smashing it to bits in front of his mesmerized audience and tossing broken pieces of guitar into the crowd.[502] This was worlds away from the polite rock and roll that the British Invasion had brought to the United States only three years earlier. The evolution was phenomenal, and Jimi Hendrix was now clearly the king of the rock guitar. As one author put it, this performance "set Hendrix on his trajectory to superstardom."[503] The only guitarist ranked above Eric Clapton on the 2015 *Rolling Stone* list of the 100 greatest guitarists of all time was Hendrix.[504]

The real surprise of the festival was the fish out of water—the soul musician at the rock festival. Monterey had the potential to be a real career-changer for Otis Redding, even more than for Hendrix and Joplin.[505] Redding, born in Macon, Georgia, in 1941, was raised in the Baptist church choir tradition and also absorbed influences from former Macon resident Little Richard and from country music popular in his hometown. He was particularly fond of Sam Cooke and had covered Cooke's "A Change Is Gonna Come" after Cooke's death. Redding had charted a few times in the early 1960s
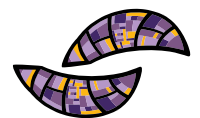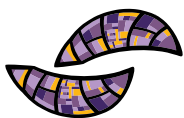
but did not reach the top half of the Hot 100 until April 1965. He continued to rise, taking his cover of the Rolling Stones' "Satisfaction" to number thirty-one a year later.[506] The zenith of his chart history before Monterey, however, came with Aretha Franklin's cover of "Respect."[507]

Redding was scheduled to be the closing act on Saturday night, the third night of the festival.[508] Redding caught the audience's attention right from the start with an up-tempo version of Sam Cooke's "Shake!" Redding cajoled the crowd to join him in shouting the repeated "Shake!" again and again, getting them involved and invested in his performance.[509] Redding's second selection was one that the audience knew, even if they might not have known that

he was the composer—"Respect." Since Aretha Franklin's version had just hit number one earlier that month, the audience was aware of the difference between his version and hers. Again, up-tempo and energetic, Redding's version kept the audience rapt.[510] Full of improvisation, Redding's version was strong, soulful, and exciting.

At the end of "Respect," Redding performed a slower, quieter love song saturated with emotion. The audience was barely finished cheering before Redding shouted "Jump again, Here we go!" and launched into familiar territory, once more. It was time to demonstrate the close affinity between the best of rock and roll and the best of soul. It was time for his rendition of the Rolling Stones' "Satisfaction."

LISTENING COMPANION—LISTENING EXAMPLE 11: "SATISFACTION" (1967)—OTIS REDDING/JAGGER AND RICHARDS

Redding had recorded his version of "Satisfaction" in 1965, and it rose to number thirty-one on the charts in 1966, his second-highest charting recording at that time.[511] The bluesy nature of the song has been discussed earlier in this section and in Section I. This was the perfect vehicle for the soul artist to display the affinity between his genre and the rock megastars the Rolling Stones.

<table>
<tr><td colspan="3" align="center">**Listening Guide 11**
"Satisfaction"—1967
Otis Redding
Keith Richards and Mick Jagger</td></tr>
<tr><td>**Time**</td><td>**Lyrics**</td><td>**Description**</td></tr>
<tr><td>0:00</td><td></td><td>With a pop on the snare drum, and a shout of "Ho!" the familiar two-measure guitar riff starts. In keeping with most of the rest of his set, Redding takes this at a faster tempo than the Stones, and a faster tempo than his own 1965 recording. This performance clips along at more than 170 beats per minute, as opposed to the Stones' version, which is closer to 136 per minute.</td></tr>
<tr><td>0:05</td><td></td><td>After twice through the guitar riff, the horns join in, fulfilling Keith Richards' original intention. The horn riff repeats twice.</td></tr>
<tr><td>0:12</td><td>I can't get no</td><td>The horns drop out, and the familiar lyrics begin, with organ, bass, and drums in the background and a steady quarter-note beat strummed briskly in the guitar part.</td></tr>
<tr><td>0:22</td><td>And I tried</td><td>Each repetition of "and I tried" is answered by a crash in the drums and a hit by the band.</td></tr>
<tr><td>0:27</td><td>I can't get me no, oh Lord!</td><td>By this point, he adds soul inflections and decorations to the original. Horns play their lick quietly in the background.</td></tr>
<tr><td>0:32</td><td>When I'm riding in my car</td><td>Redding sings the verse more rhythmically and with more specificity on the pitches than did Jagger. He does change some of the words, singing "mess up my imagination" instead of "fire my imagination" as in the original.</td></tr>
</table>
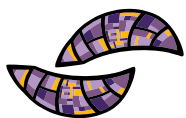
0:47	and I can't a-get me no	Back to a fragment of the chorus.
0:51		Drum break, like the original, with Redding, off the microphone, exhorting his band to be even more energetic.
0:53	Hey, hey, hey	
0:55	Got to, got to, we got to groove	Redding breaks off from the original here, going into a vamp of the guitar riff and improvising
0:59	Got to	Call and response between Redding improvising and the horns answering with two chords in quarter-note rhythm.
1:05	Keep on groovin'	A couple more repeats of the two chords, and then five repeated quarter-note dominant chords before three more bring the band back down the scale to the tonic for the chorus.
1:10	I can't get no	Like 0:12, voice with bass, drums, organ, and guitar accompanying.
1:20	And I tried	The organ response is now in a higher octave.
1:25	And I've tried, tried, tried	Redding also builds higher and higher before getting ready to return to the chorus.
1:27	I can't get no	The organ plays the guitar riff while Redding repeats the familiar text with his own little decorations.
1:32	Keep on movin'	Instead of going to the familiar "I can't get no . . . Satisfaction," Redding returns to a section like 1:05, with a repeated vamp, while he improvises text about "movin'" and "rollin,'" "rockin', rockin' baby."
1:40		Five repeated quarter-note dominant chords before they move up to the tonic.
1:43		A two-chord vamp allows Redding to improvise.
2:15	Bring it down	Redding asks the band to bring it down, and they get quieter and slow the tempo, approximately to the Stones' tempo.
2:21	Give it to me, let me have it	Cooling things down before the final build-up.
2:25	Gimme some, Want me some	Organ background comes in.
2:39	'faction	He starts speeding them back up.
2:46		Syncopated horn backgrounds add to the intensity.
2:50		By this point, the tempo is already faster than it was at the beginning. It continues to accelerate to the point where each measure goes by as quickly as a single beat did during the slow section.
3:05		The guitar strums as fast as possible to add to the intensity, but still changing the chords at the appropriate time.
3:09		The band plays an extended chord, with no beat, and improvisation by the guitar, bass, drums, and organ. Lots of cymbal crashes, while the cheers of the audience grow in intensity.
3:23		A breathless Redding thanks the audience humbly.
3:33		After one more "Thank you so much," the sample ends.

Sharon Monteith, in her book on American culture, says that Redding's performance "famously converted" the primarily white audience of rock fans to "his stomping soul and blues."[512] Perhaps even more important than the audience of 200,000 hippies was the fact that the whole thing was immortalized in D. A. Pennebaker's rockumentary *Monterey Pop*, which would earn Redding national attention when it was released in 1968.[513] Otis Redding was poised to transcend the R&B limitation that had kept most of his recordings out of the Top 40 up to this point. Monterey showed that he was ready to hit the pop charts.

Perhaps aware of this opportunity, while staying on a houseboat near San Francisco later that summer, Redding composed a ballad that sounded less like soul and more like pop—"(Sittin' on) The Dock of the Bay"—which he recorded in November. Sadly, Redding died in a plane crash on the way to a gig before the song was released. The single was released shortly thereafter and became his first number one pop hit.[514] The promise of the success at Monterey was realized, but only for a fleeting moment, and too late.

THE ACT YOU'VE KNOWN FOR ALL THESE YEARS

In 1966, after Lennon's inopportune "Jesus" comment, The Beatles undertook a summer tour of the U.S., finishing up at Candlestick Park in San Francisco in August. No one knew yet, but this was to be The Beatles' final live concert before a paying audience.[515] Following on the heels of a grueling early summer tour to Germany, the Philippines, India, and Japan, the U.S. tour was simply the straw that broke the camel's back. Certainly, the difficulty of touring was a factor, but another factor was the increasing reliance on the recording studio.[516]

Shortly after the final tour, the band went into the studio and began recording the album that would become Sgt. Pepper's Lonely Hearts Club Band. Released in June 1967, the album met with almost unanimous critical acclaim.[517] It is still considered by many to be one of the most important recordings of all time. The critics on the *Rolling Stone*'s panel selecting the "500 Greatest Albums of All Time" called it "the most important rock & roll album ever made, an unsurpassed adventure in concept, sound, songwriting, cover art and studio technology by the greatest rock & roll group of all time."[518] Needless to say, they also ranked it number one.[519]

The album spent more than three years on the U.S. charts, including fifteen weeks in the top spot. In England it spent more than six months at the top. It was the recipient of four Grammy awards in 1968 and was the first rock album ever to win the Grammy for Album of the Year. By 2017, it had sold more than 32 million copies, making it one of the best-selling albums ever.[520]

The concept of the album (and this was an undeniable concept album) was that The Beatles would take on the

The Beatles, photographed with disc jockey Jim Stagg, while on their final tour in August 1966.

persona of a fictional "Sgt. Pepper's Lonely Hearts Club Band." Each song would be an act presented in a variety show of sorts. The creative album cover (which won the Grammy for best album cover) helped set the atmosphere. Designed and executed by artists Peter Blake and Jann Haworth, the cover was a collage of famous historical figures—idols of The Beatles—and The Beatles themselves. Blake even arranged to borrow the wax figures of The Beatles in their original black suits from Madame Tussaud's wax museum in London.[521] The Beatles wore custom-made colorful brass band uniforms and had all grown mustaches reminiscent of the early twentieth century. More than sixty figures from pop culture were depicted behind The Beatles, ranging from Stuart Sutcliffe (one of their early Beatles bandmates, who had died shortly after quitting the group) to Mae West, Dylan, Stockhausen, and the champion boxer, Sonny Liston.[522] Even Edgar Allen Poe and Marilyn Monroe graced the cover. A hand-painted bass drum was built to further suggest the old-fashioned brass band

idea.[523] In keeping with the theme, a baritone horn sits to the right of John, who is holding an old French horn. George Harrison has a piccolo, and Ringo is holding a trumpet. Paul is holding an English horn, an instrument rare even in classical music and never used in brass band music or marching music. Their sense of humor extended even to the props they selected. To the right of the baritone is some tubing that does not belong to a musical instrument at all, but rather a hookah, a device that was used for smoking.

The collage on the front cover of the album was not the only unusual aspect of the packaging. Even though *Sgt. Pepper's* was a single album, the cover was the size of a double album, allowing it to fold open to reveal a larger picture of The Beatles inside. The back cover included lyrics to all the songs, also a first for a rock album. "Elaborate album packaging" was no longer just a way to catch the consumers' attention. It had also become part of the artistic statement.[524]

Even before the first note of the title song, The Beatles make us aware that this album is different. Audience noises, the sound of string instruments tuning up on stage, and a few warm-up notes from an accordion tell the listener that this is a (simulated) live show. By not using rock instruments, but instruments from older styles, they also suggest the character of the music to come. Then, about ten seconds in, a heavy beat starts an introduction by the traditional instrumentation of The Beatles: two guitars, bass, and drums. McCartney then enters with those famous words: "It was twenty years ago, today/Sgt. Pepper taught the band to play . . . So let me introduce to you/The act you've known for all these years: Sgt. Pepper's Lonely Hearts Club Band!" The persona was introduced, and the role-play had begun. McCartney, as the emcee, introduces the band, along with crowd noises and a horn quartet representing the brass band, laughter, cheering, and then, without pause, Ringo, in the guise of "Billy Shears," sings "With a Little Help From My Friends." Going directly from one song to the next without a pause was rare.

The next song, "Lucy in the Sky With Diamonds," was also unusual. The keyboard instrument at the beginning, modified to sound like a harpsichord, tells us right away something new is going on. The voices are sometimes close and without reverb, other times distant and with echo or overdubbing. Other strange sounds are hidden further in, as compressed and phase-shifted drums add to the psychedelic flavor. The lyrics resemble a description of a drug trip. The title itself is often interpreted as code for the initial letters of the three nouns: LSD. Meter and tempo changes make the piece undanceable, but The Beatles no longer aspired to be a

dance band. They were purposefully creating art.

Each song seemed to be different from the previous song. "Getting Better" sounds like a straightforward Beatles song, until Indian string and percussion instruments contribute an exotic character. "Fixing a Hole" starts with harpsichord. Following a classical harp introduction, Paul McCartney sings "She's Leaving Home" to an accompaniment of plucked harp and bowed orchestral string instruments. The song addresses the alienation of youth and the phenomenon of runaway teens so common during the "Summer of Love."

In a complete shift of mood, "Being for the Benefit of Mr. Kite" starts with bass harmonica and harmonium added to the rock instruments, with a loopy high flute-like organ sound carrying the melody. The big-top atmosphere is apparent right from the start since the song tells the story of a circus show. When the singers announce that "Henry the Horse dances the waltz," the beat switches to triple meter, and a ghostly descending chromatic scale is overlaid with fragmented tape loops of calliope and organ sounds. The second time this section appears, it is even more "freaky," complete with reversed tape loops and backward guitar. Nothing like "Kite" had ever been recorded before—but it totally fit with the theme of the album.

George Harrison's "Within You Without You" reminds us of some of his earlier excursions into Indian music, with Indian instrumentation, non-Western melodic and rhythmic structure, as well as lyrics expressing Eastern philosophy. Adding to the interest are classical string parts layered with the otherwise purely Indian instrumentation. After such a serious song, laughing crowd noise is a surprise, but it helps set up the next piece. McCartney sings the humorous "When I'm Sixty-Four" in an older jazzy style, accompanied by a group of clarinets and bass clarinet, his own bassline, a honky-tonk piano, chimes, and a little backup choir with echoes, oohs, and aahs.[525] As if they had not yet introduced enough unusual sounds into their "variety show," the humorous "Lovely Rita, Meter Maid" includes vocal percussion. The Beatles even harken back to their Liverpool **skiffle** roots and use the old make-shift instrument, humming through a comb with tissue paper over it. Strange vocal sounds add to the layers before the song comes to its climax.[526]

A crowing rooster (reminiscent of *Pet Sounds*) starts the song "Good Morning, Good Morning." The meters change often, making an extremely complex form although the beat remains steady throughout. Heavy saxophones accompany or comment on the singing. As the song fades out at the end, we hear the rest of the menagerie: dogs, cats, a horse, and finally the sound of dogs, hoof beats, and horn calls of
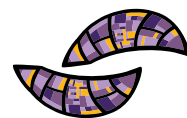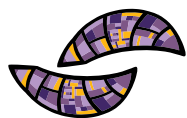
a fox chase panning from right to left. The sound of a goose leads us directly into the guitar notes that start the reprise of "Sgt. Pepper." The "Lonely Hearts Club Band" thanks the audience and says goodbye.

Having come full circle, we understand that the album is ending. The audience claps, but as the applause dies down, a strumming guitar, joined by piano, then bass, then shaker, takes us into the real ending of the album, "A Day in the Life." The first words of the song let us know that the silliness of the last couple of songs is gone: "I read the news today, oh boy." As you might guess, the news is not good. Lennon sings, "He blew his mind out in a car." The lyrics seem to descend into stranger and stranger depths ("Now they know how many holes it takes to fill the Albert Hall"), until the drug theme is explicitly stated: "I'd love to turn . . . you . . . on." At that moment, one of the strangest and most effective passages in the history of popular music begins. The Beatles, based on ideas they gleaned from the music of Cage and Stockhausen, hired forty orchestral musicians and gave them a twenty-four-measure time frame (one measure for each hour of the day in the life) to go from their lowest note to near their highest, ending on a high E. Since not all instruments were moving at the same speed, the conglomeration of rising notes was a strange and frightening expansion of extremely dissonant sound, similar to sounds found in works by Penderecki and Ligeti.

Before the unusual sound can fade, a steady beat begins in the piano, setting up the bridge. An alarm clock goes off (*musique concrète*), and the narrator (at this point McCartney) sings, "Woke up, got out of bed." Before long, however, the narrator has "a smoke" and goes "into a dream." Just as they have throughout the album, a chorus of "aahs" represents the drug-induced dream state. If earlier on the album we were unsure of what these wordless choruses meant, we certainly know now. The orchestral underpinning enriches the end of the bridge before Lennon's voice returns with "I read the news today, oh boy." After one more "news story," Lennon again sings, "I'd love to turn . . . you . . . on." The twenty-four-measure orchestral rising passage returns one more time, again reaching its climax on the high E. There is a slight pause, as if to take a breath, and then a crashing E major piano chord (which was played on three different pianos simultaneously and then overdubbed to sound like twelve pianos) ends the piece, with a forty-five-second sustain created by gradually increasing the volume of the piano sound on the control board.[527]

As timeless as its appeal might be, *Sgt. Pepper's Lonely Hearts Club Band* was very much a product of the 1960s.

It belongs to the "Summer of Love," as does the song recorded for the album, but released as a single instead, "All You Need is Love." 1967 was not, however, all about love. Five days of rioting in Detroit left several people dead and caused extensive damage.[528] The death tolls and troop levels in Vietnam were picking up, and opposition to the war intensified tension between generations. Increased drug use and liberal viewpoints about sex also widened the generation gap. The differences in musical taste only amplified the conflict. 1967 may have been the "Summer of Love," but the seeds were already sown for seasons of trouble ahead.

SECTION III SUMMARY

� The mid-1960s was a time of rapid change, which seemed to accelerate after the assassination of John F. Kennedy.

✖ Sam Cooke's 1964 recording "A Change Is Gonna Come" became an anthem for the Civil Rights Movement. Before the end of the year, Cooke was shot and killed under mysterious circumstances.

✖ The Beatles were extremely popular in England by the end of 1963, and the phenomenon of Beatlemania was already underway. By the beginning of 1964, The Beatles were climbing the popularity charts in the U.S., reaching the number one spot with "I Want to Hold Your Hand" on February 1, 1964. That same week, The Beatles arrived in New York to start their first U.S. tour, welcomed by a horde of screaming teenagers. Nearly 74 million viewers saw their performance on the *Ed Sullivan Show* on February 9.

✖ America could not get enough of The Beatles' music, and their songs dominated the pop music charts and record sales that year. The Beatles' success ignited a fervor for all things British, and the resulting British Invasion built American audiences for British musicians like Peter and Gordon, Eric Burdon and the Animals, and the Kinks.

✖ Motown managed to thrive in 1964, despite the British Invasion. The Supremes held the number one spot for seven weeks at the end of the year, and Martha and the Vandellas reached number two with a Marvin Gaye composition, "Dancing in the Street." "Dancing in the Street" became a rallying cry for African Americans protesting injustice in the inner cities, and became a popular cover tune for other groups.
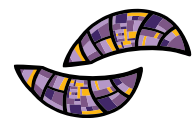
✿ Although the Rolling Stones rose to prominence on the coattails of The Beatles, their persona was quite different. The Stones were the "bad boys" of rock. Their performances were often accompanied by violence and arrests. The Stones' first U.S. tour was not an overwhelming success, but the songs "Satisfaction" and "Paint It Black" both hit number one, relying on repeated riffs and simple form.

✿ New and innovative sounds continued to be developed in the classical music world. Electronic instruments and electronic ways of developing and manipulating acoustic sounds provided inspiration to classical composers in the heart of the 1960s.

✿ Milton Babbitt's *Philomel* pits a soprano soloist against a recorded track, using, among other sounds, manipulated recordings of the soloist herself.

✿ By the mid-1960s, Hungarian-born composer György Ligeti was composing music more concerned with density and texture than with melody, rhythm, or form. Much of Ligeti's music included many voices moving simultaneously but independently within a small range of notes, causing extreme dissonance and obscuring the intelligibility of the text.

✿ Krzysztof Penderecki's prize-winning 1965 *St. Luke Passion* includes many different vocal sounds, as disparate as aleatoric choral babbling and individual solo singing. *Passion* proved that avant-garde creativity could be a tool for expressivity and that it could be used to complement and combine with earlier more traditional compositional techniques.

✿ George Crumb won a Pulitzer Prize for his 1967 composition *Echoes of Time and the River,* which was full of unusual sounds and techniques and required the players to move around the stage in a ritual procession.

✿ Composer Terry Riley began his composing using tape loops, but in 1964 created a work, *In C*, made up of fifty-three short fragments to be performed by any combination of instruments. Since Riley did not specify how many times each fragment is to be repeated by each instrumentalist before moving on, every performance is different. At first the piece was supposed to be free of tempo, but Riley's friend Steve Reich suggested that one player supply a steady beat by repeating eighth notes on the top two Cs on the piano. This allowed the overlapping fragments to create interesting polyrhythmic combinations. *In C* was one of the first pieces using trance-like calmness and repetition to move in the direction of minimalism.

✿ Steve Reich recorded a Pentecostal minister in San Francisco and used the tape to create a piece that, like *In C*, created a trance-like mood that moved toward minimalism. Reich's concept was to slowly shift the alignment of small samples of text repeating over and over. Reich's tape manipulation on "It's Gonna Rain" and "Come Out" helped pave the way for sampling techniques used in hip-hop and rap production. Reich's compositions incorporating the phasing technique extended to his live instrumental music. In these compositions, he used tonal pitch structures rather than the dissonant sounds popular among his contemporary classical composers. This led to his touring with instrumental groups that resembled a rock band, creating trance-like textures with the repetition of small groups of notes.

✿ Leonard Bernstein chose to make his 1965 *Chichester Psalms* tonal instead of dissonant.

✿ Broadway was not as quick to change as the popular or classical music worlds. Musicals like *Hello, Dolly!, Fiddler, Man of La Mancha,* and *Cabaret* reflected older musical traditions. The work that brought a new sound, look, and feel to Broadway was *Hair*. With its rock and roll music and its hippie characters, *Hair* was controversial and influential.

✿ In the heart of the 1960s, jazz included performers who clung to an older style, like Louis Armstrong, and those who broke new ground, like John Coltrane. Coltrane's *A Love Supreme*, a four-movement composition that explores the artist's spiritual awakening, demonstrated that jazz musicians could create expressive, serious art in an extended format. Coltrane's later works moved further into the world of dissonance and free jazz until his career was cut short by liver cancer in 1967.

✿ The world of film, like jazz, had plenty of composers who were content to continue older styles. Others, like Ennio Morricone, incorporated unusual sounds into their scores, including electric guitars. Films like Mike Nichols' *The Graduate,* with a soundtrack made up primarily of Simon and Garfunkel songs, strengthened the relationship between popular music and film. Rock and roll was not new in film,

as Elvis had been in many films, but the Beatles' *A Hard Day's Night* was the first documentary (albeit scripted and staged) of a rock band. D. A. Pennebaker's 1967 film about Bob Dylan, *Dont Look Back*, is considered the first true rockumentary.

� The rising importance of television in the 1960s resulted in several examples of memorable theme music with jazz or rock and roll instead of older styles, including *Batman* by Neal Hefti and *Mission: Impossible* by Lalo Schifrin. An animated cartoon series about The Beatles helped disseminate their music to young television watchers. The success of The Beatles cartoon led a rival network to create their own rock group and start a program about the Monkees. Other television rock bands followed. There were also television shows specifically to showcase recording artists, like Dick Clark's *American Bandstand*. Shows that were not just for music, like *The Smothers Brothers Comedy Hour*, helped provide exposure for contemporary popular music to viewers who might not otherwise have sought out the newer music.

✖ Bob Dylan's folk-based music demonstrated a social consciousness, which was common in folk music. In 1964, a group of former folk musicians formed a rock band, the Byrds, and recorded Dylan's "Mr. Tambourine Man" with a group of professional backup musicians. This recording resulted in the first number one hit by Bob Dylan and established the subgenre of folk-rock. At about the same time, Dylan was experimenting with bringing rock and roll instruments into his music, and he surprised (and angered) audiences at the Newport Folk Festival by performing with electric guitar, organ, and drum set. Dylan moved further in this direction with his recording of "Like a Rolling Stone" and his album, *Highway 61 Revisited*. Dylan embraced the folk-rock genre and has continued recording with rock instrumentation (as well as acoustically) ever since.

✖ While the Rolling Stones had enjoyed limited success on their first U.S. tour in 1964, their 1965 recording of the bluesy, riff-based tune "Satisfaction" earned them a number one hit in the U.S.

✖ Several publications were devoted to rock and roll music criticism, including *The Village Voice* in New York City and *Rolling Stone* in San Francisco.

✖ Detroit-based Aretha Franklin did not sign with the local label, Motown, but started her career with Columbia. When she moved to Atlantic in 1967, she broke into the top ten, and by June 1967, her version of Otis Redding's "Respect" hit the number one spot. She continued to place songs in the top ten and won several Grammy awards.

✖ James Brown's aggressive "in-your-face" soul music helped pave the way for funk music, with short, interlocking horn and rhythm section licks.

✖ The Supremes were the Motown group that managed to unseat the British invaders from the top of the pops charts in late 1964. The Supremes were propelled to the top by great songs written by Holland-Dozier-Holland and by Diana Ross's lead singing. By the end of the decade, they had recorded twelve number one hits, more than any other artist except Elvis and The Beatles.

✖ The Beach Boys were another group that had several number one hits, including "Help Me, Rhonda," which unseated The Beatles in the summer of 1965. Beach Boy Brian Wilson, suffering from a nervous breakdown, was not touring with the group, but experimenting in the studio and composing for their next album. Inspired by The Beatles, he decided that the next Beach Boys album should strive for creativity and artistry. The resulting album, *Pet Sounds*, is one of the most influential albums in popular music. *Pet Sounds* is full of unusual sounds, including the theremin, plucking the strings inside the piano, a bicycle bell, bass harmonica, jaw harp, strange keyboard sounds, all kinds of orchestral instruments, makeshift percussion instruments, special miking techniques, and even actual sounds of pets. The song "Good Vibrations," released separately, is a **_tour de force_** demonstrating Wilson's mastery of studio techniques and unusual style of composing in contrasting sections.

✖ FM radio helped overcome the "top 40" stagnation of AM radio using a freer format that permitted DJs to play longer selections and to feature entire albums. These stations were more popular with the youth who were starting to form a counterculture.

✖ Like the Beach Boys and *Pet Sounds*, musicians started to focus more on albums than on singles.

✖ As rock and roll matured as a genre, some musicians saw it more as a way to create art,

as Coltrane had done with jazz, and not simply popular music for dancing or background. Although at first most art rock musicians were British, one West Coast American group stands out: Frank Zappa and the Mothers of Invention. Their debut recording was a double album, *Freak Out!*, which included random pitches, non-pitched singing, unconventional forms, and surprising subject matter.

✿ On the East Coast, Andy Warhol's protégés, the Velvet Underground, were leaders in the New York counterculture. On the West Coast, the Doors started to gain attention with songs like "Light My Fire." San Francisco's Grateful Dead were known for their long improvisations and were associated with drug use.

✿ The Beatles stayed in the public eye not by continuing the formula that had brought them success in 1964 and 1965, but by moving forward. The album *Rubber Soul* moved toward psychedelia and relied more heavily on studio techniques that could not be replicated in live performance. The album *Revolver* was even more heavily laden with drug references and more dependent on studio techniques, in particular tape manipulation, *musique concrète*, and music recorded and then dubbed in backward.

✿ The summer of 1967 came to be known as the "Summer of Love," but it was also a summer of increasing drug usage, centered in San Francisco's Haight-Ashbury neighborhood. The biggest music event of the summer of 1967 was the Monterey International Pop Festival. With an all-star lineup, Monterey turned out to be a career-maker for several artists, including Jimi Hendrix and Janis Joplin. Otis Redding was a huge hit at the festival, and his next recording, "Sitting on the Dock of the Bay" showed him moving in a new direction. Unfortunately, he died in a plane crash just before the release of "Bay."

✿ After grueling tours to Asia, Europe, and the U.S. in 1966, The Beatles stopped touring and functioned solely as a studio band. Considered by many to be the most important album in rock history, *Sgt. Pepper's Lonely Hearts Club Band* built on the advancements of *Rubber Soul* and *Revolver*. *Sgt. Pepper's* was a concept album. The music of *Sgt. Pepper's* forms a cohesive whole, with the premise that it is a show staged by an old-fashioned "brass" band.

"I Read the News Today, Oh Boy": The End of the 1960s

INTRODUCTION

The 1960s were full of bad news: the Cuban Missile Crisis; the assassination of John F. Kennedy; the KKK church bombing in Alabama; riots touched off by racial tension in Harlem, Watts, and Detroit; the deaths of Sam Cooke and Otis Redding. There were also glimmers of hope: Camelot; the "I Have a Dream" speech; peace, love, and harmony in the hippie movement. The late 1960s however, were less balanced. When John Lennon, in 1967, wrote "I read the news today, oh boy," he had no idea how appropriate his words would be for the next few years.[531]

THE PRAGUE SPRING: KAREL HUSA—*MUSIC FOR PRAGUE 1968*

The Cold War had intensified in the beginning of the 1960s, with the building of the Berlin Wall in 1961.[532] The Cuban Missile Crisis meant that air-raid drills were common activities in American schools.[533] As uncomfortable as the Cold War was for Americans, it was nothing compared to the hardships faced by Eastern Europeans. During the late 1960s, though, some Eastern European countries saw minor improvements. In early 1968, following some loosening of the Communist Party's repressive control, Czechoslovakia replaced its conservative leader with a reformer, Alexander Dubček, who lifted censorship and began to institute other reforms.[534] The period of reform came to be known as the Prague Spring. Unfortunately, on the night of August 20–21, 1968, the Spring ended with a Soviet invasion, effectively crushing the reforms and ending (or at least delaying) any hopes for democratic reform in other Soviet-bloc countries.[535]

In August 1968, Prague-born composer Karel Husa, by then an American citizen, followed the news of the invasion with deep concern.[536] Realizing that the democratic reforms of the Prague Spring had been quashed, Husa quickly composed

Czechoslovaks carry their flag past a burning Soviet tank during the Soviet invasion of Czechoslovakia in August 1968.

a work to express solidarity with his homeland and indignation at the Soviet invasion. The resulting composition, *Music for Prague 1968*, is considered "one of the most significant works composed for concert band."[537] It has been performed and recorded more than ten thousand times and is still inspiring continued performances, recordings, and scholarship.[538] Although Husa's 1969 Pulitzer Prize was actually awarded for his earlier *String Quartet No. 3*, *Music for Prague 1968* is his best-known work.[539]

Husa's four-movement *Music for Prague* is symphonic in stature, lasting more than twenty minutes. Incorporating such disparate influences as twelve-tone or serial technique, atonal or freely dissonant music, passages of non-pitched percussion, aleatoric passages with indeterminate rhythms and pitches, percussive representation of Morse Code, and a fifteenth-century Czech resistance hymn, Husa created a moving response to Soviet aggression. Though the work ends with a unison statement of the resistance hymn, its juxtaposition with militaristic snare drums and its unresolved ending help portray the tense atmosphere of Prague in 1968.[540]
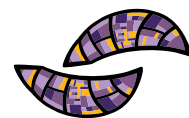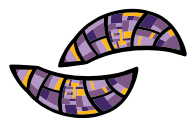
APOCALYPTIC VISIONS—*2001: A SPACE ODYSSEY*

In 1968, the score for Stanley Kubrick's science fiction film *2001: A Space Odyssey* rejuvenated interest in the use of more traditional orchestral music in film and inspired many directors in the decades that followed to use pre-existing music. Kubrick and science fiction writer Arthur C. Clarke expanded on one of Clarke's short stories to create a narrative of a dystopian future in which technology rules over humans.[541] America was fascinated with the Apollo space missions and the patriotic goal of beating the Russians to the moon that Kennedy had set at the beginning of the decade.[542] Kubrick and Clarke showed one path whereby such achievements could lead to destruction.[543]

Initially, Kubrick had hired Alex North to score the film. North was a four-time Oscar-nominated composer who had worked with Kubrick on *Spartacus* (1960).[544] While *2001* was in production, Kubrick paired various scenes with pre-existing recordings of orchestral music, both classical and avant-garde (see Ligeti discussion in Section III), for a type of score known as a temporary track, or temp track. A temp track can help a director pace the film as well as capture the kind of music desired for a scene. Eventually, Kubrick decided to keep the temp track, and he rejected North's score.[545] The result is one of the most famous film scores of all time. The film opens with a black screen for nearly three minutes while the viewer hears the unusual sounds of Ligeti's *Atmospheres*. Perhaps the most famous musical excerpt from the film appears approximately three minutes in, with the opening titles: the fanfare from Richard Strauss' *Also Sprach Zarathustra*. Large swaths of the film have no dialogue, just music or nothing but sound effects. The first human speech is not heard until more than twenty-five minutes into the film. The music takes on a significant role in carrying the storyline of the film, even though it was not composed for the film, telling us, for example, when ape has evolved to human, by bringing back the Strauss "Fanfare." [546]

A YEAR OF TURMOIL

The Prague Spring and the Soviet invasion of Czechoslovakia were only part of the turmoil of 1968. Students and workers in France paralyzed that nation for nearly a month with protests against the government.[547] At the same time, the war in Vietnam was intensifying due to the Tet Offensive undertaken by the North Vietnamese against the South Vietnamese and their American allies.[548] In the U.S., the mounting death toll and unpopular tactics,

such as the use of napalm and Agent Orange, resulted in greater opposition to the war.[549] Martin Luther King Jr. spoke out against the war in Vietnam, and protests increased.[550] Students for a Democratic Society (SDS) led protests on American college campuses.[551] The offshoot of SDS known as the Weathermen was more disruptive and planned major bombings in New York City.[552] On March 16, 1968, American soldiers committed atrocities at the Vietnamese village of My Lai, although details would not come before the public until the following year. Hundreds of unarmed civilians were mercilessly murdered.[553] On March 31, 1968, after poor showings in early primaries, President Johnson announced that he was withdrawing from the presidential race, throwing American politics into turmoil.[554] Within a few days, even more chaos would erupt.

THE ASSASSINATION OF MARTIN LUTHER KING JR.

On April 4, 1968, Martin Luther King Jr. was in Memphis supporting sanitation workers who had gone on strike.[555] While he was on his hotel balcony, a single shot from a sniper's bullet severed his spinal cord.[556] More than one hundred cities erupted into violence, looting, and arson.[557] King's dream had become, in the words of poet Langston Hughes, "a dream deferred."[558]

The world was shocked at the assassination of one of the greatest advocates of nonviolent social change and the winner of the 1964 Nobel Peace Prize. Musicians have been inspired to comment in song, so much so that there is now a 189-page catalog of works composed to honor Martin Luther King Jr.[559] Italian-born composer Luciano Berio had been living and teaching in the United States for most of the decade when King was assassinated.[560] Berio's homage to King was a work for mezzo-soprano and five instruments, entitled "O King."[561] This composition reflected his own earlier tape music techniques of cutting apart text and putting it back together in unusual ways, methods also reminiscent of the tape music of Steve Reich. In "O King," the only text is the word "O" and Martin Luther King's name. Berio has the soprano start with just the vowels of King's name, gradually add the consonants, and only toward the end combine them into words that we can recognize.[562] Berio also created a version for orchestra and eight voices.[563] The ending of that version takes great advantage of the eight voices, as all the syllables of the title are pronounced simultaneously to end the piece.[564]

Shortly after the completion of "O King," Berio incorporated it into a larger work he was composing for Leonard Bernstein and the New York Philharmonic.[565]
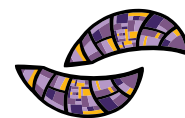
The work, *Sinfonia for Eight Voices and Orchestra*, was originally four movements in length but was expanded to five a year later.[566] It is now one of his best-known works.[567] The eight voices are, of necessity, amplified. The orchestration requires a full complement of orchestral winds and strings, a wide variety of percussion instruments, even saxophones, piano, electric organ, and an electric keyboard with a harpsichord sound. If that weren't enough, there is a third violin section required, and Berio provides a floor plan and instructions for microphone usage to ensure that balance is correct—timbre is important in Berio's *Sinfonia*.[568]

Berio, in his own notes, explains that *Sinfonia* is not to be compared to traditional symphonic form, but rather he is interested in the "etymological sense of 'sounding together' of eight voices and instruments or, in a larger sense, of 'sounding together' of different things, situations and meanings."[569] Although the work as a whole is fascinating, the third movement, in particular, warrants closer inspection, as it seems to encapsulate the entire history of twentieth-century music up to that point in time.

The Rev. Martin Luther King Jr. stands with other civil rights leaders on the balcony of the Lorraine Motel in Memphis on April 3, 1968, a day before he was assassinated at approximately the same place. With him are Hosea Williams, left, Jesse Jackson, and Ralph Abernathy.

Photograph: AP.

LISTENING COMPANION—LISTENING EXAMPLE 12: *SINFONIA, MVT. III, "IN RUHIG FLIESSENDER BEWEGUNG" (1968)*—LUCIANO BERIO

In his notes for *Sinfonia*, Berio calls the third movement "perhaps the most 'experimental' music I have ever written" and explains that he considers it "a tribute" to the early twentieth-century composer Gustav Mahler, whose music "seems to bear the weight of the entire history of music of the last two centuries."[570] Berio uses the third movement (Scherzo) of Mahler's Symphony No. 2 ("Resurrection") as a framework for a series of fragments and quotes of both music and text. As Berio describes it, the Mahler both frames and generates music of other composers, "Bach to Schoenberg, from Brahms to Strauss, from Beethoven to Stravinsky, from Berg to Webern, to Boulez, to Pousseur, to myself and others."[571] Other composers quoted include Paul Hindemith, Claude Debussy, Hector Berlioz, Maurice Ravel, Charles Ives, and Stockhausen. Mahler's Symphony No. 4 and his Symphony No. 2 will, at times, "sound together."[572] Sometimes quotes are overlaid on top of Mahler's Scherzo, at other points the quotes are obscured by the Scherzo. At still other points, the Mahler seems to disappear altogether, even though it is still running in the background, like "a river flowing through a constantly changing landscape, sometimes going underground and emerging in another altogether different place."[573] The title

Italian-born composer Luciano Berio, whose "O King" was an homage to Dr. Martin Luther King Jr.
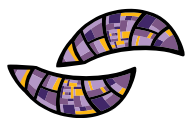
of Berio's movement, "In ruhig fliessender bewegung" (in calm flowing motion) comes from the tempo marking of the Scherzo, and Berio specifies that his movement should be in the tempo of Mahler's movement.[574] In keeping with the "flowing" character of Berio's movement and the idea of the river flowing through the piece, many of the musical and textual quotes relate to water.

In addition to the framework of the Mahler Scherzo and the orchestral references to other music of the twentieth century and earlier, the texts used also bear mentioning. Most of the texts that Berio selected are from the 1953 novel *The Unnamable* by the Irish-born avant-garde author Samuel Beckett.[575] Beckett is best known for his 1952 play *Waiting for Godot*, and shortly after the premiere of *Sinfonia*, Beckett was awarded the Nobel Prize for Literature.[576] Michael Hicks, in his study of the relationship between the text and the music in this movement of Berio's *Sinfonia*, calls it a "book turned into music."[577] Like Mahler's "Resurrection" symphony, Beckett's novel addresses issues of the artist exploring his own mortality. The Scherzo is based on an earlier work of Mahler, which in turn quotes pre-existing folk music. Beckett's main character is an artist unable to find his own identity and forced to express himself only by quoting others.[578] It is appropriate, then, that *Sinfonia* is replete with musical and textual quotations.

In addition to Beckett's novel, Berio quotes conversations with some of his friends and family members, students at Harvard, and even graffiti he saw during the French riots in Paris earlier that year.[579] In a humorous touch, near the end of the movement, Berio has the first tenor, who is acting as a narrator, introduce the other vocalists and thank the conductor by name.[580] The relationship of the text to the music is complex and fascinating. The depth of the relationships is so intricate that an entire book has been dedicated to the subject: *Playing on Words: A Guide to Luciano Berio's Sinfonia*.[581] Adding to the complexity of the text is the fact that three different languages are used: French, German, and English. Assembling all these textual and musical quotes is a lot like the layers and fragments of a tape composition, a process with which Berio was already quite familiar. With Mahler's tonal composition as the framework, though, the end result is surprisingly tonal and not hugely dissonant. Berio makes sure that the sounds he overlays "sound good together" and are not just a series of random dissonances.

The performance on the recording included on your USAD Music CD is Berio himself, conducting the New York Philharmonic at the premiere. The vocalists are the members of the Swingle Singers, a group formed and directed by Ward Swingle, who sings second tenor in the group.[582] The recording on the USAD CD consists of the first five minutes of this approximately twelve-minute movement and is remarkable not only as a composition, but also as a performance. The recording won Berio and the Swingle Singers the 1969 Grammy award for Best Choral Performance, Classical.[583]

Listening Guide 12 *Sinfonia*, Mvt. III, "In ruhig fliessender Bewegung"—1968 Luciano Berio (1925–2003)		
Time	**Text**	**Description**
0:01	Oh! Péripétie	The shouted "Oh" that begins Mvt. III is a surprise after the quiet ending of "O King." The quickly rising chromatic line in the trumpets against falling chromatic in the trombones is the first quote, from part of Schoenberg's *Five Pieces for Orchestra*, a section called "Péripétie." In the next measure, Berio has all eight singers enunciate the word "péripétie" (which can mean episode or wandering) on a cluster of pitches that includes some rather dissonant clashes, some of which are doubled by string instruments. The chord sounds jazzy, especially when the soprano and tenor voices add a common jazz inflection, the fall, at the end of the note. Upper woodwinds quote Mahler's fourth symphony.

0:04	Oh! Nicht eilen, bitte	The first soprano shouts a falling "Oh," with the instruction to sound "bewildered." The audience might feel the same way. At the same time, the first tenor ("detached") asks the orchestra, in German, not to rush, as strings take up the Schoenberg.
0:06	Les Jeux de Vagues	The soprano "tenderly" says, in French, "The Games of the Waves," which is the title of a section of Debussy's *La mer*, at the same time as the strings and winds are quoting from it. This is the first of many references to water in this movement.
0:07	recht gemä...	The first bass tries to say (in German) "very leisurely," but he says it so leisurely that he can't finish it before it is interrupted. Eventually the first tenor says, "not very leisurely" (in German), correcting him.
0:09	quatrième symphonie deuxième symphonie	Second soprano says, "fourth symphony" (in French), tensely, at the same time as the second alto says, "second symphony." At this moment, the winds and some of the strings begin playing the second symphony of Mahler, while the fragment of the fourth that was already playing ends.
0:09		With the entry of percussion, the meter and tempo become clear. Triple meter, approximately 160 beats per minute (just below 54 measures per minute), a tempo which, though it may be obscured, is present through the rest of our excerpt. The key of C minor is also established.
0:14	sol mi do re mi fa	For the first of many times, the singers (in this case the sopranos and altos) "stage whisper" the solfège (the do-re-mi note designation scheme described in Section I) of an instrumental part, in this case, the violins, who are playing the main melody of Mahler's "Scherzo."
0:18	Where now?	The first in a series of existential questions asked throughout.
0:20	Keep going!	Encouragement is given throughout.
0:2		An outburst from the orchestra, and laughter from the vocalists.
0:26	Ahh . . . Nothing more restful than chamber music.	An ironic comment from second tenor (Ward Swingle himself).
0:28	Than flute . . . Than two flutes	As tenor 1 and soprano 2 expand on tenor 2's comment, the flutes, appropriately, play the flute duet portion of Mahler's "Scherzo."
0:32		The solo violin responds by taking up a passage from Paul Hindemith's "Kammermusik No. 4" (German for chamber music). At the same time, flute and oboe play another fragment from Debussy's *La mer*. Instead of whispering the solfège, the vocalists are now singing the actual pitches to keep the Mahler background going when instruments drop out.
0:41		The violinist continues the virtuosic passage from Hindemith's chamber music. Vocalists solfège longer notes until gradually all vocalists are singing. At the same time, the winds sustain long chord clusters with fluctuating dynamics. Trumpets quietly hint at other famous pieces like Stravinsky's *Rite of Spring*.
0:50	No time for chamber music. You are nothing but an academic exercise.	The bass interrupts the violinist, in a "scolding" manner, while the tenor insults Hindemith's composition "condescendingly." The soprano uses an unusual vocal technique similar to **ululation**.

0:58	So after a period of immaculate silence, there seems to be . . . a violin concerto being played in the other room in three-quarters.	The E♭ clarinet plays Mahler's **klezmer**-like second theme. With six of the eight vocalists speaking overlapping text, it can be difficult, in a single hearing, to discern much of what is going on, yet each layer adds interest. Perhaps the most important is the second bass voice. The solo violinist responds to the bass' text by playing a fragment of Berg's Violin Concerto.
1:07	Two violin concertos	As the violinist switches to the Brahms Violin Concerto, the second alto corrects the bass about the number of violin concertos.
1:12	Keep going!	Another exhortation from the bass.
1:13		The orchestra returns to the Mahler.
1:29	This represents at least a thousand words (three thousand notes) I was not counting on.	Beckett's character, represented by tenor one, is instructed to be "defensive" and is interrupted by alto two. This brings in Ravel's *La valse*, which, like the Mahler "Scherzo," is in triple meter.
1:40	But seeing Daphnis and Chloé written in red	A fragment of Ravel's *Daphnis and Chloé* is played by the first flute.
1:45	While nothing has happened but the obsession with	Tenor two speaks Beckett's words, while the clarinets return to Mahler's second theme.
1:48	with the chromatic	Alto one interrupts, "impatiently," just as the clarinets and violins turn chromatic.
1:56	everything yields, opens, ebbs, flows	Berio has the first tenor quote Beckett.
1:59	like the play of waves	Then Berio interrupts with his own text, which brings in Debussy's "Game of the Waves" again, from *La mer*, in the woodwinds and third violins.
2:01	I feel the moment has come to look back	As he looks back, he uses music from the nineteenth century: The *idée fixe* (the fixed idea or obsession) of Berlioz' *Symphonie fantastique* plays in the flute and oboe.
2:11		As chromatic swirling permeates, we are losing both the key and the melody of the Mahler.
2:17		Suddenly the voices stop, for one measure, while nearly the entire orchestra plays three A naturals, in the signature rhythm and the octave descent of the Scherzo of Beethoven's Symphony No. 9.
2:23	Well, so there is an audience!	Berio has the tenor make the realization that composers needed to make to avoid going too far in their experiments: "There is an audience." Timpani and snare drum imitate the signature rhythm from 2:17, while fragments of Ravel's *La valse* and Berlioz' *Symphonie fantastique* overlap.
2:36		Trumpets hint at Stravinsky's "Dance of the Earth." Berio creates a strange sound by having the altos sing the notes C and G while articulating the consonant D as fast as possible, at the same time as the tenors sing the same notes on vowels.
2:43	Keep going!	Another exhortation will bring us back to a more unified presentation of the Mahler.
3:18		Stravinsky's "Dance of the Earth" starts to take over.

3:27	Keep going!	A slight pause in the "Dance of the Earth" causes the second tenor to shout aggressively. The orchestra acquiesces, briefly.
3:30	it is as if we were rooted, that's bonds if you like—the earth would have to quake	As the orchestral texture thins, the tenor responds with some of Beckett's text about being bound to the earth. The orchestra starts to return to Mahler.
3:41	maybe a kind of competition on the stage, with just eight female dancers and words falling	As the words fall, a mixture of Beckett and Berio, the composer introduces a quote from Stravinsky's ballet, *Agon*, at a spot where the choreographer had eight female dancers on stage.
3:53	But now I say my old lesson, if I can remember it.	Hints of *La mer* creep in. Mahler is almost completely gone. A castanet rhythm plays for five measures.
4:05		The voices stop. With an instruction of "Vorwarts," Mahler's equivalent of "keep going," Berio has the orchestra play a huge multi-measure cluster chord (for four measures) before anyone but percussion moves again, and motion is only gradually added into the other instruments over the next dozen or so measures, with fluctuating dynamics.
4:11		Horns call out a fanfare over the dense texture.
4:18		We have reached the densest and most dissonant portion of the piece so far. We lose all sense of key and tempo.
4:19		Tambourine shows us the tempo and is joined by the winds and strings.
4:25		For a second it sounds like the rising orchestral crescendo of The Beatles' "A Day in the Life," since both pieces were influenced by earlier avant-garde music.
4:23		A tiny pause allows the orchestra to play a pickup to a very loud chord that diminishes in intensity, and then crossfades to restore the tempo and bring the voices back in. They have been silent for almost half a minute.
4:37	I suppose the audience, well well, so there is an audience	The tenor, starting a long monologue, reminds us that there is an audience, and we go back in time, returning to tonality.
4:40		The strange 1960s-sounding electronic harpsichord makes Mahler's "Scherzo" sound almost Baroque.
4:52		Another pickup into a large chord that obscures the tempo and forces the vocalists to stop.
5:01		Six snare drum notes, aided by the strings, attempt to restore the tempo, as our excerpt comes to an end.

Berio's *Sinfonia*, with its homage to Martin Luther King Jr. in the second movement, and its summary of twentieth-century music in the third, is one of the most significant classical compositions in the 1960s, if not in the entire second half of the century.
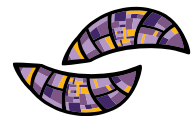
WHO KILLED THE KENNEDYS?

When incumbent President Lyndon Johnson declared his intention not to pursue re-election, this left a vacancy for a new leader in the Democratic Party. With the memory of the late John F. Kennedy fresh in voters' minds, it was not a surprise that Robert Kennedy was soon at the top of the list to become President during the 1968 presidential campaign. Many Americans imagined a new Camelot, a rebirth of the hope that had been associated with the presidency of Robert's older brother. It was not to be. On June 5, 1968, a Palestinian immigrant from Jordan named Sirhan Sirhan, upset by Kennedy's stance on Israel, assassinated the candidate.[584] America was once again plunged into sorrow and self-doubt by an assassin's bullet.

Musicians responded with increasing political engagement. The Rascals, whose previous hits had been love songs, had a number one hit with "People Got to Be Free," their response to the King and Kennedy assassinations.[585] Dion, probably best known for his 1961 hit, "Runaround Sue," sang "Abraham, Martin, and John."[586] At first the song sounds like it is about Abraham Lincoln, John F. Kennedy, and Martin Luther King Jr., but a fourth verse asks "Has anybody here seen my old friend Bobby? Can you tell me where he's gone? I thought I saw him walkin', Up over the hill, With Abraham, Martin, and John."

Although it can hardly be called a tribute, the Rolling Stones mention the assassinations of the Kennedys in their 1968 recording, "Sympathy for the Devil."[587] With some of the most intellectual lyrics used by the Stones, "Sympathy for the Devil" tells the story of the Devil in first person.[588] The Devil tells about all the havoc he has wreaked, from the crucifixion of Jesus Christ, to the Russian Revolution, World War II, and shouts "Who killed the Kennedys?" He answers his own question, explaining that, "after all, it was you and me." "Sympathy for the Devil" was a timely song for troubled, turbulent times.

RIOTS IN THE STREETS: THE 1968 DEMOCRATIC CONVENTION

The 1968 presidential campaign was itself turbulent. Richard Nixon, the candidate who had lost to John F. Kennedy in 1960, was representing the Republicans.[589] Former Alabama Governor George Wallace was running as an independent candidate, with his appeal based largely on his racist opposition to an integrated society.[590] The Democratic National Convention was sure to be dramatic. The early front-runner, incumbent President Lyndon Johnson, had withdrawn from the race. In June, the new frontrunner, Robert Kennedy, was assassinated.

The convention seemed destined to be a free-for-all. The Vietnam War had become the major issue, and protestors converged on Chicago to let their views be known. Chicago mayor Richard J. Daley's violent suppression of the rioters and the press attempting to cover the riots added one more layer of turmoil to 1968.[591]

I'D LOVE TO TURN YOU ON—DRUGS AND ROCK

The music scene was turbulent in 1968. The Rolling Stones' "Sympathy for the Devil" was controversial enough, but "Street Fighting Man," from the same album, hit too close to home in the era of race riots and violent clashes at the Democratic National Convention. It was banned in many radio markets for fear that it would incite further rioting.[592] The Stones were also at the forefront of the burgeoning drug culture among rock and roll musicians, with numerous arrests and fines, and several other high-profile musicians likewise struggled with drugs and alcohol and had run-ins with law enforcement due to their drug use.[593]

HELTER SKELTER AND CHARLES MANSON

The turmoil of 1968 bled over into 1969. A would-be rock musician and ex-convict named Charles Manson had formed a rock band and tried to get signed on with the Byrds' producer Terry Melcher.[594] Manipulating his followers, Manson brainwashed "the Family" to accept him as their leader.[595] They lived, for a short time, in the home of Brian Wilson, drummer of the Beach Boys.[596] The Beach Boys even recorded one of Manson's compositions (after editing it).[597] Manson claimed to have heard messages in rock music, particularly in the music of The Beatles' "White Album."[598] Manson imagined a race war that he called "Helter Skelter" after The Beatles' song. When the war didn't happen on its

Charles Manson, photographed while in custody in 1970.

Photograph: CSU Archives Everett Collection.
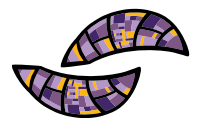
own, he took things into his own hands. He intended to incite the race war by murdering whites and making it seem like the murders had been racially motivated.[599]

On August 9, 1969, Manson and four members of his cult began their violent rampage, murdering seven people in Hollywood and Beverly Hills.[600] One of the homes where victims were found was the former home of Melcher, the Byrds' producer that Manson had been stalking.[601] The title of The Beatles' song "Helter Skelter" was scrawled in blood at the site of one of the murders, and it was also painted on the wall at the ranch where the cult lived.[602] The association of rock and roll with peace-loving dope-smoking hippies was shattered. As one author put it, the Manson rampage "exposed a darker side of the counterculture, one comprised not of harmless, peace-loving flowerchildren and hippies, but of drug-addled slackers and predatory killers whose notions of freedom had devolved into violent anarchy."[603] The troubled story of rock and roll of the late 1960s had reached a gruesome climax.

"LET IT BE"

Some critics felt that rock and roll was the cause of drug use and that it was leading youth to violent acts, like Manson's rampage. But that was not the whole story. Shortly after their names appeared among signatories on a full-page advertisement in the London *Times* criticizing British drug laws as overly strict and "immoral," The Beatles surprised their fans and critics by announcing that they were eschewing drug use and pursuing instead a life of peace, harmony, and Transcendental Meditation, under the tutelage of Maharishi Mahesh Yogi.[604] They even traveled to India, seeking greater enlightenment with the Yogi, but became disillusioned with him.[605] Soon the drug arrests and convictions returned.[606]

Despite their disillusionment with the Yogi, George Harrison continued a strong association with the Krishna movement, and John Lennon's interest in Eastern philosophy increased after he met Yoko Ono. Japanese-born Ono was an avant-garde conceptual artist and a protégé of John Cage, who in turn was deeply influenced by Chinese, Japanese, and Indian philosophy and culture.[607] The philosophy behind McCartney's song "Let It Be" (recorded in 1969) also fit with transcendental meditation and encouraged listeners to seek peaceful resolutions to their problems.[608]

The Beatles were starting to go their separate ways, to find individual personae, and to pursue separate projects. Lennon recorded an album (the controversial *Two Virgins*)

John Lennon and Yoko Ono on the first day of their Bed-In for Peace, at the Amsterdam Hilton Hotel, March 1969.

Photograph: Nationaal Archief, Den Haag, Rijksfotoarchief: Fotocollectie Algemeen Nederlands Fotopersbureau (ANEFO), 1945–1989.

with Ono, and in June 1969, during a ten-day counterculture "Bed-In" in Montreal, they recorded the song "Give Peace a Chance" in their hotel room.[609] This was not the first time Lennon had expressed his philosophy of nonviolence. One of the important songs from the White Album was Lennon's "Revolution." Lennon's lyrics made it clear that he understood the youthful desire for change ("You say you want a revolution . . . we all want to change the world")[610], but that violence was not the answer: "But when you talk about destruction/Don't you know you can count me out."[611] Though some authors have tried to conflate The Beatles and Beach Boys with Manson, there was still a strong peace-loving side to popular music.[612]

BEGINNINGS AND ENDINGS

Several authors describe the horrendous murders perpetrated by the Manson cult as marking the end of the 1960s.[613] There were other ways that the dream of the 1960s was coming to an end. Haight-Ashbury's counterculture disintegrated as the drug scene took its toll.[614] The death of Otis Redding after the 1967 Monterey Pop Festival and the cancellation of the 1968 festival weakened the impact of the peaceful 1967 festival.[615] In 1967, John Coltrane's death left the jazz world devastated and created a void in leadership.[616] The avant-garde movement of the earlier 1960s found itself crowded out by the rise of minimalism, the return to tonality, and the popularity of these tendencies in classical music because of their similarity to the popular music of the day.[617] At the same time as certain aspects of the 1960s were ending, other new ideas came out of the late 1960s.
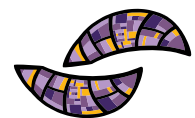
Wendy Carlos was one of the first musicians to use the newly developed keyboard-controlled synthesizer.

THE SYNTHESIZER: WENDY CARLOS AND ROBERT MOOG

Electronic music had its roots in the *musique concrète* developed in France in the 1950s and carried into the 1960s by Cage, Berio, Riley, Stockhausen, and Reich. Milton Babbitt and his contemporaries were able to create new sounds using electronic and computer-generated tones, filters, and manipulation. In 1964, an engineer named Robert Moog created voltage-controlled amplifiers and filters that were basically the first step toward building synthesizers.[618] Moog's keyboard-controlled synthesizer became commercially available in 1966.[619] One of the first musicians to use the new technology was Wendy Carlos, who had worked with Babbitt at the Columbia-Princeton Electronic Music Center and who worked alongside Moog to make the instrument composer-friendly and performer-friendly.[620] In addition to music in the more avant-garde tradition of electronic composers, Carlos recorded an album of synthesized versions of famous compositions by J.S. Bach (as the Swingle Singers had done with their voices), and had a hit with *Switched-On Bach*.[621] By 1969, the album hit the top ten on Billboard's album chart.[622] Before long, the synthesizer was as much a part of the sound of popular music as the guitar.[623]

LEONARD BERNSTEIN STEPS DOWN

In 1966, Leonard Bernstein had announced his intention to resign as conductor of the New York Philharmonic, effective in 1969, citing the need to focus on composition.[624] This was particularly significant because he had been the first important American-educated conductor of any major symphony orchestra, and few had yet followed his path.

He would still stay in the limelight, continuing to conduct the New York Philharmonic for their Young People's Concerts, but he discontinued those in 1972.[625] The era of Bernstein's most powerful influence on classical music in America was coming to an end.

There were two more major accomplishments in Bernstein's career, however, closely related to events from the 1960s. First, Bernstein completed the work that Jacqueline Kennedy had commissioned for the opening of the Kennedy Center in 1971, *Mass*.[626] The resulting piece (which Bernstein had started in 1969) was closely related to the 1960s. First, it was a memorial for Jackie Kennedy's late husband, John F. Kennedy, with whom Bernstein had been friends. Second, it was an eclectic product of sixties music, with strong influences from rock and roll, the musical *Hair*, jazz, soul, R&B, minimalism, and even avant-garde classical music and *musique concrète*. It was influenced theatrically by the multi-media spectaculars of John Cage and rock bands alike. It featured electric guitars, vibraphones, rock organ sounds, pop songs with acoustic guitar, a Swingle Singer-like scat-singing section, electronic tapes, and sounds that don't normally occur in classical music, like steel drums, or the sound of breaking glass. *Mass* may not have been completed or performed in the 1960s, but it was undeniably a product of the 1960s.

The second major accomplishment of Bernstein's later career came in 1989 during the celebrations following the fall of the Berlin Wall.[627] This accomplishment can also be traced to the 1960s. The Berlin Wall, constructed in 1961, had been an egregious symbol of the Cold War.[628] To celebrate the reunification of Berlin, Bernstein conducted a combined orchestra of musicians from both East and West Germany in a televised performance of Beethoven's *Symphony No. 9*[629] that was broadcast from Berlin by satellite to more than twenty countries.[630] Bernstein changed the words of the "Ode to Joy" (*Freude*) to make it an "Ode to Freedom" (*Freiheit*).[631] Less than one year after the performance, Bernstein suffered a fatal heart attack.[632] One of his last major public appearances, and his most famous, was the performance celebrating the demise of a hated symbol of the 1960s, the Berlin Wall.

THE BIRTH OF JAZZ FUSION

Jazz musicians had been struggling for a way to compete with the intense audience appeal of rock music. Attempts to make the music more attractive to audiences without extensive jazz backgrounds, while still remaining interesting to jazz performers and aficionados, had not met with great success. In 1969, Miles Davis, who had been at the
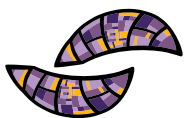
forefront of so many other important developments in the history of jazz, decided that swimming against the stream was not going to be fruitful. He decided to incorporate characteristics of rock music into jazz, creating a hybrid that came to be known as jazz fusion, or simply fusion.[633]

Davis took small steps at first—asking his bassist to use electric bass instead of acoustic and asking his keyboard player to use the electric piano (as Joe Zawinul had used with Cannonball Adderley) instead of a concert grand. He simplified the harmonies and insisted on a more easily discernible beat. In his 1968 album, *Les Filles de Kilimanjaro,* he even had one song based on a Jimi Hendrix tune.[634] Although jazz had often used melodies and harmonic structures of popular music as a basis for improvisation, performing a rock song in a jazz style was unusual, as were the timbre of the bass and the keyboard. Despite these innovations, the music still sounded primarily like mainstream jazz.

In 1969 Davis recorded the album that is considered the first jazz-fusion record, *In a Silent Way.*[635] This album took several more steps that brought the music closer to rock. First, Davis brought an electric guitarist into the group. John McLaughlin had serious rock credentials, having worked with Ginger Baker and Jack Bruce of Cream.[636] As you will hear on your USAD Music CD, McLaughlin was an important player on this recording. Later, starting in 1970, he became an important leader in jazz-rock fusion, tempered with influences from Indian classical music, leading his own band, the Mahavishnu Orchestra.[637]

Davis decided to use three electronic keyboardists for this recording—Chick Corea, Herbie Hancock, and Joe Zawinul (all three of whom became important jazz fusion musicians in the 1970s and beyond).[638] Not only did this resemble the multi-keyboard rock heard as far back as Bob

Jazz trumpeter and composer Miles Davis incorporated characteristics of rock music into jazz, creating a hybrid that came to be known as jazz fusion.

Dylan's "Like a Rolling Stone," but Davis also asked them to use some unusual techniques, playing with the volume and tone controls on the keyboard just like rock guitarists had been doing on their instruments. While Corea and Hancock played the electric piano that had been used increasingly in rock over the past few years, Zawinul concentrated on the organ, which had become extremely popular in rock.[639]

Davis also worked with producer Teo Macero to edit studio material into a finished work that might be substantially different in form from what was originally recorded in the studio. In addition to rearranging the order of sections of the music, some of the repetition was created using tape loops like those developed by Steve Reich and then popularized by The Beatles.[640] The entire album consisted of one song on each side, although Side B is more like a suite: The title song, "In a Silent Way," moves directly into "It's About That Time" without a break, and then "In a Silent Way" returns.

LISTENING COMPANION—LISTENING EXAMPLE 13: "IN A SILENT WAY" (1969)—MILES DAVIS

The rock and roll instrumentation and editing techniques were not the only aspects of *In a Silent Way* that proved to be influential. Coltrane had already developed the ethereal ambient sound of improvisation over a sustained pedal harmony, but *In a Silent Way* now extended the concept to greater length. The open form of the sections was also significant, since the musicians had no idea how long each section would end up being—those decisions were made later by Davis and Macero. The album exhibited some of the dreamy trance-like feeling of minimalism. The lengthy improvisations over a repeated harmonic background worked like the extended guitar solos of bands like the Grateful Dead or Cream. Guitar was not new to jazz, but the way it was used—and the sound used—was like a rock instrument,
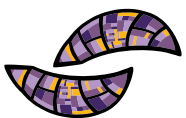
not the more traditional sound of the jazz guitar. "In a Silent Way" was the first clear foray for jazz musicians into the world of jazz fusion.

Most of the musicians for the *In a Silent Way* session were familiar members of Miles Davis bands. Saxophonist Wayne Shorter, pianist Herbie Hancock, bassist Dave Holland, and drummer Tony Williams had played many sessions with Davis. Chick Corea had played with Davis a few times. Joe Zawinul had only worked with Davis on a few as yet unreleased sessions when they worked together on *In a Silent Way*. John McLaughlin was added to the session at the last minute. Davis and McLaughlin had only met a couple days earlier, and McLaughlin was visiting Davis's house for the first time when Davis told McLaughlin to bring his guitar to the studio the next day.[641] This spur-of-the-moment decision by Miles Davis changed the character of the album, and, as a result, the sound of jazz fusion.

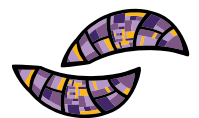The recording on your USAD CD consists of a little more than the first four minutes of the B side of *In a Silent Way*, which consists of the section (attributed to Zawinul) that gave the album its title.

Listening Guide 13 **"In a Silent Way"—1969** **Miles Davis (1926–91)**	
Time	**Description**
0:00	Holland, playing acoustic bass with the bow, sustains the lowest note on the bass, E. One of the keyboardists enters with the E major chord.
0:02	McLaughlin strums a chord, moves up a note, then moves up another note to strum the chord again in a higher inversion. We soon realize that the top notes are the first three notes of a melody. Keyboardists react gently, in E major, in the background, using volume controls to simulate reverb. With bass, electronic keyboards, and electric guitar, the sound is surprising for the first notes of a jazz album and sounds more like a mellow section of a rock album.
0:08	With no percussion to supply a steady tempo, and bass not providing a beat, McLaughlin states the melody freely (*rubato*), sometimes strumming along with one note of the melody, or adding other chord tones (often the E, doubling the bass), as decorations, above or below the melody notes, but clearly subservient and secondary.
0:17	While McLaughlin is pausing, one of the pianists adds a non-chord tone (or a tone from a chord other than the tonic), F♯.
0:28	Piano interjections are becoming slightly more complex, but are still in the background.
0:42	Piano timbre continues to be manipulated using the tone and/or volume controls.
0:48	The two pianists are now adding more ethereal texture behind the melody.
0:57	McLaughlin finishes the first statement of the melody. Guitar and pianos gently (and still without a tempo) decorate the E major harmony.
1:09	McLaughlin starts a second statement of the melody, slightly louder, and with a slightly more active accompaniment by the pianos. After the first five rising notes on the melody in the guitar, one of the pianists imitates the rising notes with rising chords.
1:33	Timbre modifications using the volume and tone controls on the pianos.
1:52	A three-note pattern within the melody is emphasized—falling a step from the first note to the second and then back up.
1:54	The three-note pattern is imitated in the piano.
2:03	McLaughlin finishes his second time through the melody. The accompaniment becomes very calm.

2:09	Wayne Shorter takes over the melody, on soprano sax, with a little reverb added to the saxophone sound. McLaughlin has now joined the non-metrical ethereal accompaniment.
2:24	One of the pianists adds a more dissonant tone, A♯, a tritone from the sustained E in the bass.
2:43	When the melody moves to the second scale degree (F♯), one of the pianos and then the guitar follow in quick succession.
2:50	One of the pianists plays a quick upward run, in a harp-like manner.
2:56	When the melody ends on the fifth scale degree (B), both guitar and piano land on the same note.
2:58	With no melody note playing, the accompanying instruments stick strictly to the E major chord tones, emphasizing the static nature of the harmony. Though McLaughlin played the melody twice, Shorter only gets one featured trip through the melody. Is this decision to emphasize guitar instead of saxophone part of Davis' effort to emphasize the relationship to rock?
3:03	Miles Davis now enters, playing in a very restrained and quiet manner, with a little bit of reverb in the trumpet sound.
3:22	More tones outside the E major scale (A♯, G♮) appear in the accompaniment.
3:26	The intensity of the accompaniment seems to ebb and flow.
4:00	As Davis hits the last note of the melody (also only once through), the accompaniment starts to fade away, leaving only the sustained E in the bass.
4:09	Our sample ends.

A faster section follows, sounding a lot like an extended instrumental improvised portion of a rock and roll song, lasting approximately eleven minutes before the first section returns—literally. Macero spliced the first section on at the end to create an ABA form to the twenty-minute recording.[642]

Many of the musicians on this recording would have significant careers in both fusion and more traditional forms of jazz. John McLaughlin broke into the rock and roll market with his Mahavishnu Orchestra. Wayne Shorter and Joe Zawinul were core members of Weather Report, one of the leading fusion groups over the next dozen years. Before they took off on their own, however, all of the musicians from *In a Silent Way* (except Herbie Hancock) returned to the studio, along with additional musicians, to record Miles Davis' best-selling 1970 album *Bitches Brew*.[643] *Bitches Brew* took the techniques explored on *In a Silent Way* to the next level and sold half a million copies during its first year.[644] Jazz fusion was to predominate jazz for decades to come.

THE MESSIAH IS COMING: ANDREW LLOYD WEBBER

Some fans of musical theatre consider Andrew Lloyd Webber (b. 1948) the savior of Broadway. Before he had even turned twenty, Lloyd Webber had teamed up with his friend Tim Rice to compose a short musical on a biblical subject for a London boys' school.[645] The musical was reviewed favorably in London's *Sunday Times*, leading to a critically successful album. Rice and Lloyd Webber began working on a show that would change everything—for them, and for the musical theatre stage: *Jesus Christ Superstar*. The history of *Superstar* is a bit convoluted. The musical premiered on Broadway in 1971 with only modest success. The London production that followed, however, was so successful that it took over the record for longest run in London.[646]

How does this story belong to the 1960s? Before *Jesus Christ Superstar* opened on Broadway, it had been released as a double album.[647] In 1969, even before the cast recording was completed, Lloyd Webber and Rice released a single of the title tune, "Jesus Christ Superstar."[648] Neither *Superstar* nor Lloyd Webber were big successes during the 60s, but their popularity in the 1970s clearly had its roots in the 60s. Andrew Lloyd Webber revived and re-energized musical theatre. Geoffrey Block called Lloyd Webber "simply the most popular Broadway composer of the post–Rodgers and Hammerstein era and probably of all time."[649] The 1969
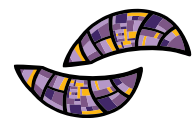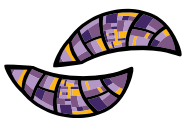
release of the title tune, "Jesus Christ Superstar," was a harbinger of a new era in musical theatre.

Although preceded by *Hair*, which was undeniably a rock musical, *Superstar* went even further in the direction of combining rock aspects with classical composition, incorporating mixed meter in many sections, for example. *Superstar* was also a rock opera in that there was no spoken dialogue.[650] Lloyd Webber gave the musical a modern sound by composing synthesizer parts, which he performed on a Moog keyboard for the original recording.[651] *Superstar* changed the way musicals were marketed, having made obvious the importance of cross promotion with the early release of the title tune and the cast album.[652]

ROCK AND ROLL BEGINNINGS AND ENDINGS

The late 1960s was a time of beginnings and endings. Many aspects of music that had flourished during the 1960s were not able to survive into the 1970s. Other groups and individuals that were important in the 1970s got their start in the late 1960s.

Superstar was not the first rock opera, nor was it the first to have success as a recording before it was ever staged. The roots of The Who's *Tommy* can be traced back to 1968, when Pete Townshend told *Billboard* magazine that they were working on a rock opera about a "deaf, dumb, and blind pinball player."[653] By April 1969, the song cycle was complete. The recording would be the first Who album to sell a million copies in the U.S. and became the standard by which all rock concept albums were judged.[654]

Motown experienced some disharmony in the late 1960s, largely due to lack of financial transparency. The Holland-Dozier-Holland composing team left Motown and sued Berry Gordy for $22 million.[655] The successful Motown formula was further disrupted when Diana Ross left the Supremes in 1969 and when Gordy moved the headquarters to Los Angeles in 1971. It wasn't the end of Motown by any stretch, but Detroit certainly lost its significant position in American popular music, and Motown lost one of the aspects that made it different from other record companies.[656]

The news was not all bad for Motown. Marvin Gaye had achieved some success during the 1960s as a Motown drummer, songwriter, solo artist, and duet partner, but his first big hit was a remake of Gladys Knight's "I Heard It Through the Grapevine."[657] It ended up spending seven weeks at number one in the U.S. in late 1968 and early

The Jackson 5 perform on the Ed Sullivan Show *in December 1969.*

1969.[658] After the success of "Grapevine," Gaye placed five more songs in the top five, including two more number one hits, over the next ten years.[659]

In 1969, Motown added an important new group to their roster—the Jackson 5.[660] To ensure success, Gordy had Diana Ross introduce them to a crowd of invited guests in Beverly Hills in August.[661] Continuing the Diana Ross endorsement, Gordy titled their first album *Diana Ross Presents the Jackson 5*. The ploy must have worked, because the album, released in December, sold more than half a million copies.[662] It also helped that the Jacksons were invited to perform on the Ed Sullivan show in December, where they sang, among other songs, the tune that would become their first number one hit, "I Want You Back."[663] By the end of January 1970, the song hit number two in England and number one in the U.S.[664] Michael Jackson was barely eleven years old.[665] The end of the 1960s was the beginning of his amazing career.

Three British-born brothers, Robin, Barry, and Maurice Gibb, formed a band while they were living in Australia. The group, which they called the Bee Gees, had its U.S. debut in 1968.[666] The Bee Gees became the leaders of the disco movement in the 1970s, especially after their contributions to the soundtrack of *Saturday Night Fever*.[667] The double-album soundtrack to *Fever*, which included six songs featuring the falsetto harmonies of the brothers, outsold all previous soundtrack albums, with more than 25 million copies.[668] The brothers had three number one hits from the album, three more from albums later in the 1970s, and produced two more top-ranked albums before the bright lights of disco started to fade in the early 1980s.[669]
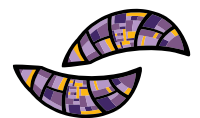
Jazz-rock bands also had their start in the late 1960s. Al Kooper, the organist for Bob Dylan's "Like a Rolling Stone" joined with other rhythm section players and several highly trained New York-based jazz horn players (trumpet, sax, trombone) to form Blood Sweat & Tears. Their 1968 debut album was not a big hit, but with revised personnel and a new Canadian lead singer, David Clayton-Thomas, the band had a number one eponymous album late in 1968, and three number two singles. The band was nominated for ten Grammy awards and won three, including Album of the Year.[670] Unfortunately, after additional acclaimed albums in 1970 and 1971, the departure of Clayton-Thomas interfered with the band's success, and they never again achieved the popularity that they had attained in 1969 and the early 1970s.[671]

A group that followed a similar path got its start and its name in Chicago. After working as a local band in the Midwest, their college friend, James Guercio, who had produced Blood Sweat & Tears, encouraged the group to move to Los Angeles where he helped them get a job as the house band at the famous Whisky a Go-Go and a recording contract with Columbia. Their first album, *Chicago Transit Authority* (which was the name of the group at the time—later shortened to Chicago), was a double album. Despite the more expensive price for a double album, *Chicago Transit Authority* earned Gold album status, selling over half a million copies.[672] Chicago lasted much longer than Blood Sweat & Tears, with a Grammy award in 1976 and chart hits all the way into the 1990s, including number one hits in 1982 and 1988.[673]

Some of the top groups of the 1960s did not outlast the decade. The power trio of Eric Clapton, Ginger Baker, and Jack Bruce, known as Cream, was famed for its long instrumental improvisations, similar to those of the San Francisco bands like the Grateful Dead. Some authors consider them an influence on the nascent rock style of heavy metal and certainly on hard rock.[674] Despite two singles in the top ten in late 1968 and the double platinum success of their double album *Wheels of Fire*, Cream disbanded at the end of the year, and the three musicians went their separate ways.[675]

Before he joined Cream, Eric Clapton had performed with another blues-based British rock band, the Yardbirds. After Clapton left, the Yardbirds continued to have outstanding guitars players including Jeff Beck and Jimmy Page. The Yardbirds folded in 1968, and Page formed a new group called Led Zeppelin.[676] Zeppelin is considered an even stronger influence on the development of heavy metal, in
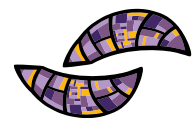
particular the song "Whole Lotta Love" from their 1969 number one album *Led Zeppelin II*.[677]

Steppenwolf first came to prominence in Los Angeles, but it had an international pedigree, having been formed by a German-born musician who joined his first rock band while living in Canada.[678] Their music was used on film soundtracks—*Candy* from 1968 and *Easy Rider* from 1969. "Magic Carpet Ride," used in *Candy*, reached number three, but not until after "Born to be Wild," featured in *Easy Rider*, hit number two.[679] "Born to Be Wild" was ideal for *Easy Rider*, with its lyrics referring to "heavy-metal thunder," and the main characters riding their thundering motorcycles heading "out on the highway."[680] Some authors link the use of the phrase "heavy metal" with the eventual association with the style of rock made popular by groups like Steppenwolf and Led Zeppelin.[681]

Jethro Tull, the group easily recognized by Ian Anderson's jazzy flute playing and their consistent use of mixed meter, had started to build a following in England before they released their first album in early 1969.[682] Most of their success came in the 1970s, with several top ranked albums.[683] They were extremely popular live and ended up being the highest-grossing band of the 1970s.[684]

In 1968, three of the best singers from the folk-rock tradition came together and formed one of rock's first super groups: David Crosby from the Byrds, Stephen Stills from Buffalo Springfield, and Graham Nash from the Hollies.[685] Neil Young, who had sung with Stephen Stills in Buffalo Springfield, joined in 1969, forming one of the most famous groups of the late 1960s and 1970s—Crosby, Stills, Nash, and Young.[686] Known for their four-part harmonies, the group played at many festivals and recorded number one albums, becoming what one author called "the most sophisticated vocal group of the early 1970s."[687]

In 1968, seeking greater control over their product, The Beatles had formed Apple Records. The famous "White Album" was their first album released on the new label.[688] The first single released by Apple Records, "Hey Jude" backed by "Revolution," hit number one in both England and the United States.[689] In the U.S., it held the top spot for a record-setting nine consecutive weeks.[690] By 1969, it was becoming more and more clear that The Beatles were not going back on the road—they had not appeared live since 1966. Aware that they were drifting apart, McCartney encouraged them to make another film. It was in the process of working on the music for the film (which became both the movie and the album *Let It Be*) that The Beatles presented their final live performance—an impromptu

concert on the roof of Abbey Road studios.[691] With the story of The Beatles coming to an end, the story of the music of the 1960s was also coming to an end.

THE FESTIVALS

The first real rock festival was the 1967 Monterey Pop Festival where Jimi Hendrix and Otis Redding had their breakthroughs. Increasing the influence of the festival was the D. A. Pennebaker film *Monterey Pop*, released in 1968.[692] Portraying an atmosphere of "peace, love, flowers, great music," the film inspired many organizers to pursue similar events in 1969 and made audience members excited to attend these festivals.[693]

Not all the rock festivals of 1969 were well planned or even safe. An Easter weekend festival in Palm Springs did not have capacity to handle the crowd. As unruly youngsters outside the venue clashed with police, the violence escalated, resulting in the destruction of a nearby gas station, whose owner shot two people in the crowd. The festival ended with 146 hospitalized, thousands of dollars in damage, and over 250 arrests.[694] Two weeks later at a free festival in Venice, just outside of LA, crowd members reacted to over-zealous policing, resulting in 116 arrests before the music even started.[695] The following month, Canadian Mounties had to be called in to restore order at a festival in British Columbia after a motorcycle gang "raided the show."[696]

There were also festivals in Toronto, Atlanta, and Atlantic City that successfully handled huge crowds safely. England got in the act with a festival on the Isle of Wight where the audience, including members of The Beatles and the Stones, was almost as star-studded as the lineup on stage, which included the Who, the Moody Blues, and Bob Dylan with his new rock-style backup group the Band.[697]

NEWPORT JAZZ FESTIVAL

By 1969, the Newport Jazz Festival had been presenting live jazz each summer with much critical acclaim for a decade and a half. The producers decided to take advantage of the relationships between jazz, soul, and rock by augmenting the usual roster of familiar jazz artists with a selection of important rock and soul musicians. In addition to scheduling traditional jazz superstars like Freddie Hubbard, Miles Davis, Herbie Hancock, and Dave Brubeck, the producers invited Frank Zappa and the Mothers of Invention, Jethro Tull, James Brown, Sly and the Family Stone, BB King, and Blood Sweat & Tears.[698] Led Zeppelin was scheduled to be the closing act. When attendance exceeded the amount permitted by the city council, and sporadic violence erupted, organizers announced the cancellation of Led Zeppelin. After thousands of rock fans left town angry and disappointed, Led Zeppelin was put back on the schedule.[699] Both audience members and organizers were left with bad feelings.

A California festival with a similar name, sometimes called the "Newport 1969 Pop Festival," brought in a crowd of over 150,000. The acts included Jimi Hendrix, Steppenwolf, and Jethro Tull. Crowd control was less successful—there were three hundred injuries, more than seventy-five arrests, and over $50,000 in property damage.[700] A crowd of 50,000 in Denver shortly thereafter heard a similar lineup, but altercations brought in police using billy clubs and tear gas.[701]

WOODSTOCK

One of the most famous musical events of the 1960s is the rock festival held near Woodstock, NY, in August 1969. Books have been written, documentaries have been filmed, and songs have been sung (e.g., Joni Mitchell's "By the Time We Got to Woodstock," sung by Crosby, Stills, Nash, and Young).[702] You might remember from Section II that Woodstock, NY, was the location of the first performance of John Cage's seminal *4'33"*. After multiple venue changes, the "Woodstock Music & Arts Fair" actually took place about seventy miles southwest of Woodstock, closer to the village of Bethel, on the dairy farm of Max Yasgur.[703]

The organizers had not really thought everything through and originally intended to charge admission, having sold upward of 100,000 tickets. Days before the festival began, though, crowds had started to gather, and since the organizers had not put substantial security in place, thousands of young people simply walked in without paying. By the afternoon of the day before the festival, before any ticket takers were in place, there were already approximately 60,000 people who had set up camp in front of the stage. Woodstock had become, by default, a free festival.[704] By the time it was over, most accounts suggest that nearly half a million music lovers had attended the festival we call "Woodstock."[705]

Whatever logistical aspects the organizers might have overlooked in organizing the festival, their carefully selected musical lineup made up for it. The "Aquarian explosion" of "three days of peace and music," as the organizers billed it, took place on August 15–17, 1969.[706] The first day was folk and world music oriented, with folk musicians like Joan Baez and Arlo Guthrie, and Ravi Shankar representing the music of India. The second day featured the San Francisco-based

Latin rock band Santana, well known in their home base, but largely unknown to the rock crowd at Woodstock since they had not yet released their first album. This was the beginning of national exposure for Santana, who played a set that "electrified the crowd."[707]

Canned Heat, the Grateful Dead, and Creedence Clearwater Revival were some of the best-known groups to perform on the second day. One of the biggest surprises of the second day was Sly and the Family Stone. Another San Francisco-based band, known for its mixture of funk, soul, and psychedelia, Sly re-electrified the crowd with songs like "I Want to Take You Higher" and "Dance to the Music."[708] The band's "fiery performance" at Woodstock is credited with boosting their national profile.[709]

The band that was supposed to perform last on Saturday night was not even able to get on stage until more than eight hours after their scheduled time. Jefferson Airplane was supposed to have been the "big finish" to the Saturday lineup. They ended up as almost an afterthought, playing to a totally exhausted crowd sometime after 7:00 AM. Jefferson Airplane's set for Woodstock included "acid rock" from their 1967 breakthrough album *Surrealistic Pillow* as well as songs from their newest album *Volunteers* (which had not been released yet). The title song from the latter album was a call to revolution, espousing and encouraging the antiwar sentiment that was prevalent among the Woodstock attendees. After all, the festival was intended to be "three

One of the most famous musical events of the 1960s was the rock festival held near Woodstock, New York, in August 1969.

days of peace and music." The other common denominator at the festival, however, was drugs, and Jefferson Airplane was well suited to this theme, as the group was straight out of the psychedelic scene of San Francisco.

LISTENING COMPANION—LISTENING EXAMPLE 14: "WHITE RABBIT" (1967)—JEFFERSON AIRPLANE

Grace Slick had actually composed the song "White Rabbit" even before she joined the band Jefferson Airplane. Grace and her husband Jerry had started a band called the Great Society, and she wrote a few songs for the band. According to an interview she gave some fifty years later, "White Rabbit" came from two important sources of inspiration. One was the idea that the older generation disapproved of drug use, but read their impressionable children books, like *Alice in Wonderland* and *The Wonderful Wizard of Oz*, with drug references in them. She began to write lyrics using characters and drug references from *Alice in Wonderland*. When it came time to compose the music, she was inspired by a musical experience she had while listening to Miles Davis' *Sketches of Spain* over and over.[710] The result was that she used a rising half-step chord motion for the introduction and the A section of the song, lending it a Spanish Phrygian

Jefferson Airplane performing at the Woodstock music festival in August 1969.

flavor. The snare drum and bass played a bolero-like pattern that also added to the Spanish flavor. As in Ravel's *Boléro*, one of the most important characteristics of "White Rabbit" was the increasing intensity throughout, full of variations on the same musical idea, leading up to a finish that is noticeably different from anything that happened earlier in the song. Grace Slick's vocal ornamentation of the melody helps keep this otherwise simple tune interesting.[711] The recording we will hear on the USAD CD is the studio version from the 1967 album, *Surrealistic P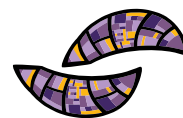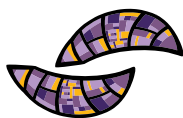illow.* Compare this recording with the [video] of the live performance at Woodstock, and you will be impressed with the band's ability to perform so consistently, even under the adverse conditions at the outdoor venue.

Listening Guide 14
"White Rabbit"—1967
Jefferson Airplane

Time	Lyrics	Description
0:02		The bass plays a four-beat rhythmic ostinato on F♯ and C♯ and repeats it twice before the snare drum joins and the bass moves up a half-step to G.
0:11		Now the guitar joins in with an exotic near eastern sound. The chords are rocking back and forth between F♯ and G, each one lasting two measures. As each instrument adds in, the intensity grows.
0:29	One pill makes you larger, and	Slick begins to sing, with obvious drug references. The melody, like the chords, also rocks by half steps, although with quicker motion than the chords. During the F♯ chord, the melody starts on C♯ (the fifth of the chord) and alternates with D. She plays around with the beat and decorates the word "and" with a Middle-Eastern-sounding ornament, reminding us that Spanish music was in turn influenced by Moorish music.
0:34	one pill makes you small	When the chord rises to G, the melody falls to the B (the third of the chord), which provides contrary motion.
0:37	and the ones that mother gives you	Similar melodic and harmonic motion as 0:29 and 0:34.
0:46	Go ask Alice	As the harmony rises to A, the melody falls to A, and we feel as if we are in major, rather than Phrygian.
0:55	And if you go chasing rabbits	Slick begins the second A section with the highest notes yet (E) before falling back down to the C♯ for the melody. The second verse begins more intensely than the first had.
1:00	and you know you're going to fall	Similar to 0:29–0:37
1:05	a hookah smoking caterpillar	The text again points to the drug references in *Alice in Wonderland.*
1:14	Call Alice	Same as Go ask Alice at 0:46.
1:24	When the men on the chessboard	The bridge moves to an E major chord, suggesting the five chord of A major. The melody now has a higher principal note of E. The music is both higher and louder.
1:27	Get up and tell you where to go	"Tell" is on the note F♯, the highest note she has sung so far in the song. Talking chessmen are not part of reality, but a psychedelic image. The harmony moves to the expected A chord.

1:32	And you've just had some kind of mushroom	Psilocybin mushrooms, or "shrooms" in drug culture, were a hallucinogenic substance. Musically similar to 1:24.
1:36	And your mind is moving low	Musically similar to 1:27, except that she reaches an even higher note, A, on the word "and." Referring to the ups and downs of drug-induced states.
1:41	Go ask Alice	Now the melody is centered on F♯, the highest main note yet, with a few G-natural grace notes.
1:44	I think she'll know	Slick adds a very rapid vibrato to the sustained notes of "Alice" and "know," giving another exotic flavor to the sound.
1:50	When logic and proportion	We are back at the two-measure alternating chords of 0:29, but now Slick is singing the melody even higher, with F♯ and G being the main notes instead of C♯ and D. The intensity is growing.
1:58	And the white knight	Now she sings even higher, rising to B before returning to F♯.
2:01	is talking backwards	The lyrics refer to the psychedelic sound of playing a spoken voice backwards, which was originated by the *musique concrète* composers and popularized by The Beatles.
2:07	Remember	Now the central note has risen to A. Bass, rhythm guitar, and drums pound two notes per beat, supporting the increased intensity.
2:11	what the dormouse said,	Now the B predominates, giving us the feeling of rising even higher.
2:16	"Feed your head!"	The B is now the main note, and the song has reached its maximum intensity before the melody resolves to the A of the tonic chord.
2:20	"Feed your head!"	The repeated idea is extended for a second measure, and just as the song is coming to an end, Slick, who has been singing at full volume and with intense vibrato, adds a scoop below the pitch and back up to it right as the cymbal crash indicates the last note of the song.
2:30		Our sample ends.

At about 9:00 ᴀᴍ on Monday morning, the featured closing act of Sunday night, Jimi Hendrix, finally came on stage to close out the festival. Some estimates put the crowd size as low as 30,000 by that time, though others have suggested that nearly 200,000 might have heard the Hendrix performance.[712] Hendrix and the recently-assembled band he called "Gypsy Sun and Rainbows" played for almost two hours. The most famous part of Hendrix's performance, and possibly the most famous aspect of the entire Woodstock festival, was his riff on "The Star-Spangled Banner." Hendrix was known for his guitar pyrotechnics (including literally lighting his guitar on fire at Monterey)—specifically for using feedback and effects to make unique sounds with his instrument. Walter Everett, in his book about the musical aspects of rock, lists some of the techniques, including "Fuzzface, Univibe, feedback, wrist vibrato, trills, string bends, wah, and whammy bar."[713]

The dawn's early light had already dissipated before Jimi Hendrix, about two-thirds of the way through his set, **segued** into a guitar improvisation of the anthem that, when sung, begins with the words "O say, can you see, by the dawn's early light . . ." This was not the first time that Hendrix had performed a version of "The Star-Spangled Banner" in public, nor was it the last, but it certainly was the most famous.[714] Hendrix's choice to deconstruct "The Star-Spangled Banner" was appropriate for the antiwar crowd present that day. What might be surprising to learn is that Hendrix was a former U.S. Army paratrooper and had occasionally expressed views in support of the war in Vietnam. In a 1967 interview with the Dutch magazine *Kink*, Hendrix was quoted as having said, "The Americans are fighting in Vietnam for a completely free world. . . Of course, war is horrible, but at present it's still the only guarantee of peace."[715] That said, his intent and the
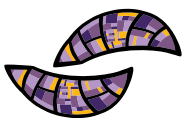
Jimi Hendrix flashes a peace sign while on stage at the Woodstock music festival in August 1969.

reception of the performance might have been different. The audience (and critics for decades thereafter) certainly heard his treatment of "The Star-Spangled Banner" as being antiwar and anti-government.

The performance, utilizing many of the advanced guitar techniques he had developed over the past few years, was a combination of music and noise, not unlike something John Cage or one of the electronic music composers would have created. Starr and Waterman, in *American Popular Music*, call Hendrix "a sound sculptor, who seemed at times to be consciously exploring the borderline between traditional conceptions of music and noise, a pursuit that links him in certain ways to composers exploring electronic sounds and media in the world of art music at around the same time."[716]
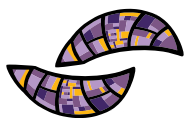
Hendrix moved smoothly from a medley of his standards "Voodoo Chile" and "Stepping Stone" into the beginning of the "Banner." At first he presented a fairly calm and straightforward rendition of the "Banner," with drums adding only texture and depth, without locking in the tempo. But then, just over a minute in, he let loose. After the part where the words would have been "rockets' red glare," he bent a note up and then down, as if suggesting the trajectory and whistle of a piece of munitions. The "bomb" hit the ground, and Hendrix depicted an explosion and chaos, playing lower on the strings, with lots of distortion. The drummer contributed, with noisy bass drum and cymbals. Hendrix bent the pitch higher on the strings to depict the anguished cries of the victims. Suddenly, as if nothing ever happened, the melody returned. Despite all the interruption in between, Hendrix had kept careful track of where he left off. Hendrix's addition of musical comments in between the expected

sections of music reminds us of troping, just like when Benjamin Britten added vernacular poetry in between the expected Latin sections of the mass.[717]

Many authors and critics consider this performance emblematic of the antiwar movement of the 1960s. Hendrix historian Charles Shaar Murray calls it "the most complex and powerful work of American art to deal with the Vietnam War."[718] Referring to other artistic statements about the war, Murray suggests that "one man with one guitar said more in three and a half minutes about that peculiarly disgusting war and its reverberations than all the novels, memoirs and movies put together."[719] Whether Hendrix intended it that way or not, his performance of "The Star-Spangled Banner" at Woodstock was an important part of the repudiation of U.S. involvement in Vietnam.

The Woodstock festival did not go off without a hitch, but overall, it was a success. The farmer who rented the land, Max Yasgur, was impressed that "half a million kids can get together for fun and music and have nothing but fun and music."[720] The *New York Times* called Woodstock "a phenomenon of innocence."[721] Another author suggested that the entire festival had gone off "without so much as a fistfight."[722] To this day, those who were there (and many who weren't) claim to be part of the "Woodstock Nation."[723] As one author put it, "There were problems—bad trips, cut feet, dehydration, drug busts outside the festival grounds, even three deaths (two overdoses, a ruptured appendix)," but there were also three births.[724] Today, we can hardly imagine what it must have meant for a culture to have nearly half a million people have a shared musical experience.

One of the reasons that the Hendrix performance of "The Star-Spangled Banner" at Woodstock became so important was that the festival was filmed and made into a rockumentary that featured Hendrix's solo. The film *Woodstock*, released in 1970, was the sixth highest grossing film of the year and substantially multiplied the number of people who had seen or heard the festival.[725] The soundtrack was the top-selling album in the U.S. for four weeks in 1970.[726] Add to that radio airplay of recordings from the soundtrack; re-releases of the film and soundtrack; additional documentaries; copycat festivals (A Day in the Garden Festival, Woodstock II, Woodstock '99); and recordings released by the individual artists (there are soundtrack recordings and DVDs of Jimi Hendrix's performance at Woodstock, for example), and the reach and influence of Woodstock is nearly universal.[727] However, as influential as it may have been, Woodstock was not really "the beginning of a new era of peace, love,
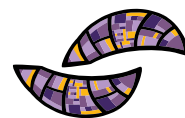
and understanding," as some might have hoped.[728] It was more "the climax of hippy culture"[729] or the "last hurrah of the love and peace era."[730] What came next was not exactly three days of peace and music.

ALTAMONT—SYMPATHY FOR THE DEVIL—NO SYMPATHY FROM HELL'S ANGELS

The last year of the 1960s was not the greatest year for the Rolling Stones. Brian Jones was becoming a liability. After a string of drug arrests and missed gigs due to drugs and alcohol, the Stones decided to let Jones go in June.[731] On July 3, he was found face down in his swimming pool; the drowning was attributed to large amounts of drugs and alcohol.[732] The Stones were also dealing with some financial difficulties and took their December U.S. tour in support of a newly released album, prophetically titled: *Let It Bleed*.[733] This was the Stones' first U.S. tour since 1966, and large crowds turned up to hear the reigning kings of British rock, now that it was clear that The Beatles would no longer be touring.[734]

As the tour built momentum, the Stones decided that they needed a big finish. After having chosen not to participate in Woodstock, they decided to create their own West Coast version—a free concert in California.[735] The planning was rushed, the expected venue fell through at the last minute, and they ended up scheduling the one-day festival at the Altamont Speedway, inland from San Francisco.[736] The lateness of the arrangements prevented the crew from building a substantially elevated stage, and this meant that extra security was needed to keep the audience from climbing up and disrupting the concert.[737] Arrangements were made with the Hells Angels to provide security.[738]

The mistakes made in setting up for the Altamont festival were substantial. The largest crowd the speedway had previously accommodated was seven thousand. The site was one-tenth the size of Yasgur's farm, and producers were expecting a crowd nearly one-quarter the size of the Woodstock audience. Had these predictions been accurate, the crowds would have put a dangerous strain on the facilities and resources.[739] With publicity that included *Rolling Stone* magazine, however, the attendance far exceeded predictions.[740] Hours before the music started, there were nearly 300,000 on hand.[741] Nor was the audience the peaceful Woodstock crowd. By mid-afternoon, fueled by drugs and plentiful alcohol, fights were flaring up.[742] The Hells Angels seemed to contribute more to the violence than they did to the security, daring


The Rolling Stones on stage with Hells Angels at the Altamont festival in 1969.

Photograph: AP.

anyone to approach the stage and taking their mandate to protect the stage to extremes.[743]

The bands that played during the day—including Woodstock veterans Santana, Jefferson Airplane, and Crosby, Stills, Nash, and Young—struggled with the violent situation. The Stones considered not performing but were afraid of what the crowd reaction might be and decided they had to go on. When they did finally take the stage, their performance was constantly interrupted by skirmishes with the Hells Angels in front of the stage and even on the stage. Jagger and Richards both called for calm, but to no avail. The music was interrupted several times.[744] A huge altercation broke out right in front of the stage, and Jagger stopped the band and appealed for calm, with only moderate (and temporary) success.

What happened next was gruesome. During the subsequent song, a young black man near the stage got into an argument with one of the Hells Angels. The young man tried to get away, and the "Angel" and his fellow gang members began chasing eighteen-year-old Meredith Hunter. Hunter appeared to pull a gun, but was unable to deter his attackers. One of the "Angels" brutally and repeatedly stabbed Hunter, and other "Angels" joined in the fatal beating.[745] This event was immortalized because Albert and David Maysles were filming the concert for the Rolling Stones rockumentary with the ironic title *Gimme Shelter* (the title of one of the songs from the album, *Let It Bleed*).[746] The death of Meredith Hunter was a low point in the history of rock and roll. Two more audience members were killed in a hit-and-run accident, and another concertgoer drowned. The number injured was tremendous, including dozens of skull injuries from beatings administered by the Hells Angels.[747]
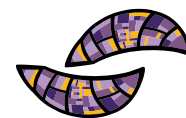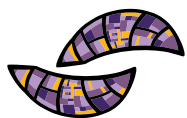
After Altamont, an article titled "The End of the Age of Aquarius," published in a far-left antiwar newspaper, decried the end of the era of peace and love.[748] The 1960s had met an ignominious end. Any remnants of the "peace and love" decade that had survived the assassinations, the riots, the Vietnam War, the Manson murders, and the drugs were eradicated by Altamont.
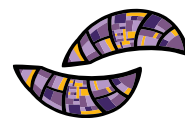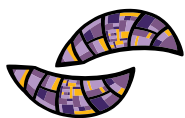
POSTLUDE—EARLY 1970s

The world of 1959 could not possibly have imagined the world of 1970. The new reality of the 1970s seemed much more like an extension of Altamont than Woodstock. Antiwar protests continued, but became more violent. Several of the most iconic musicians of the era died almost as soon as the 1970s began, victims of the rock and roll lifestyle. Jimi Hendrix was first—his death was attributed to barbiturate intoxication.[749] Jim Morrison died in Paris on July 3, 1971. Although the death certificate lists a heart attack, the twenty-seven-year-old singer was a severe abuser of alcohol and drugs.[750] Janis Joplin's cause of death in October 1971 was a drug overdose.[751]

The Beatles, as individuals, all outlasted the 1970s, though John Lennon barely made it into the 1980s. In December of 1980, Lennon was shot at close range by a deranged fan.[752] George Harrison outlasted the entire century but succumbed to cancer in 2001.[753] Ringo Starr and Paul McCartney, as recently as 2018, were still performing, recording, and touring. The Beatles as a collective, however, did not survive more than a few months into the 1970s. With the April 1970 release of the *Let It Be* film and the accompanying album, The Beatles were ready to call it quits. By this time, they each were starting to go their own ways, releasing their own recordings, and not interested in doing the work to get the *Let It Be* album ready for release. Phil Spector was brought in to organize the studio material into an album. In his usual fashion, he felt compelled to add additional instruments, creating his "Wall of Sound."[754] McCartney didn't appreciate these lavish arrangements and cited them as one of the reasons that he left the band in April 1970.[755] The Beatles, the musical group that represented the 1960s more than any other, were now history. The 1960s were over.

SECTION IV SUMMARY

❈ The 1960s had plenty of bad news—the Cuban Missile Crisis; the assassination of John F. Kennedy; the KKK church bombing in Alabama; riots sparked by racial unrest in Harlem, Watts, and Detroit; the deaths of Sam Cooke and Otis Redding. But there were also glimmers of hope—the "I Have a Dream" speech; peace, love, and harmony in the hippie movement. The late 1960s were more troubling and less promising.

❈ In early 1968, Czechoslovakia replaced its conservative leader with a reformer. The period of reform came to be known as the Prague Spring. On August 20, however, Soviet troops invaded, restoring Soviet-style repression. Prague-born composer Karel Husa, by then an American citizen, composed *Music for Prague 1968* to express his solidarity with the repressed Czechs.

❈ Stanley Kubrick's 1968 science fiction film *2001: A Space Odyssey* used preexisting music to portray an apocalyptic future. The fanfare from Richard Strauss' *Also Sprach Zarathustra* became particularly well known after the film. *2001* also elevated the profile of György Ligeti, whose music was used at the beginning and at several other dramatic points during the film.

❈ Italian-born composer Luciano Berio composed a work in Dr. Martin Luther King Jr.'s memory, using only the syllables of King's name as text. The piece was expanded into the second movement of Berio's 1968 *Sinfonia for Eight Voices and Orchestra*. The main inspiration for the music of the third movement was the third movement of Mahler's *Symphony No. 2*. Many other musical sources generate some of the fragments that are overlaid with the Mahler, including significant twentieth-century composers like Boulez, Stockhausen, Ravel, Debussy, and Ives. The main inspiration for the text is Samuel Beckett's 1953 novel *The Unnamable*. *Sinfonia* is complex and full of layers of meaning.

❈ Following the assassination of Robert F. Kennedy, some musicians who were previously only interested in love songs felt compelled to respond with political music.

❈ The connection between drugs and rock and roll became increasingly obvious, with high-profile drug arrests and explicit drug references.

- The synthesizer was developed during the 1960s. Robert Moog was the technical developer, and Wendy Carlos had the first popular hits using the new equipment.

- Leonard Bernstein had, for more than a decade, represented the apogee of American involvement in classical music. When he stepped down from his position as conductor of the New York Philharmonic, it was the end of an era in American classical music.

- Miles Davis stepped up to fill the void left by the passing of John Coltrane. Working with some of the finest jazz rhythm musicians, he combined elements of jazz and rock, creating the hybrid style known as jazz fusion, or simply fusion.

- Musical theatre composer Andrew Lloyd Webber got his start in the 1960s but did not achieve fame until the 1970s. His first big hit, *Jesus Christ Superstar*, was released as a rock concept album in 1970 before it was ever produced on stage, and a single of the title song, "Jesus Christ Superstar," was released in 1969.

- The Who produced a rock opera double album, *Tommy*, which was premiered in England in 1969.

- Motown struggled in the late 1960s, with the Holland-Dozier-Holland composing team leaving Motown and suing Berry Gordy. When the '60s ended, Motown moved from Detroit to Los Angeles. Motown did have big hits with Marvin Gaye singing "I Heard It Through the Grapevine" and with the Jackson 5's 1969 debut album, which sold more than half a million copies.

- Jazz-rock bands had their start in the late 1960s. Two of the most successful were Blood Sweat & Tears and Chicago.

- Cream was known for its monumental instrumental improvisations, featuring guitarist Eric Clapton. The band was considered an influence on the nascent style of heavy metal and certainly on hard rock. The group that Clapton had been with before

Cream, The Yardbirds, morphed into Led Zeppelin. Zeppelin is credited with being an even stronger influence on the development of heavy metal. The band Steppenwolf gained recognition through appearances on the soundtracks of the films *Candy* and *Easy Rider*. Their song "Born to Be Wild" includes the lyrics "heavy-metal thunder" and is also thought to have been an influence on heavy metal.

- In 1968, three of the best vocalists from some of the top folk-rock groups, David Crosby from the Byrds, Stephen Stills from Buffalo Springfield, and Graham Nash from the Hollies, joined forces to create one of rock's first super groups—Crosby, Stills, and Nash. In July 1969, Neil Young joined, forming CSNY.

- Rock festivals received a boost when the D. A. Pennebaker film *Monterey Pop*, released in 1968, portrayed the festival in a positive light. Festivals multiplied all over the U.S. and Canada. The famous "Woodstock Music & Arts Fair"—the "Aquarian explosion" of "three days of peace and music," as the organizers billed it, with an impressive musical lineup, drew a crowd of nearly half a million. The final act of the festival was Jimi Hendrix, whose solo version of "The Star-Spangled Banner" included trope-like interruptions representing the horrors of the Vietnam War. Hendrix's performance is seen as a compendium of avant-garde guitar techniques.

- Late in 1969, the Rolling Stones decided to have a Woodstock-like free concert—held at Altamont Speedway—to end their tour. The venue was insufficient for the crowd of 100,000 that organizers predicted and was completely overwhelmed when more than triple that number showed up. The Stones had hired the Hells Angels to provide security, but they served to perpetuate rather than stem the violence.

- In 1970 and 1971, Jimi Hendrix, Jim Morrison, and Janis Joplin all died of drug-related causes. The Beatles broke up in April 1970.
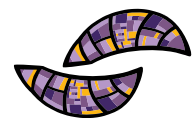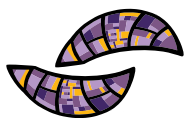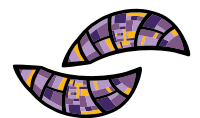
Conclusion

The 1960s witnessed substantial developments in music. In classical music, Penderecki's graphic notation and Ligeti's micropolyphony blazed new trails. Britten's *War Requiem*, though not as discordant as Penderecki's *Threnody*, offered new expressive possibilities to composers. Terry Riley's *In C* advanced aleatoric group improvisation while employing a simpler harmonic language. Steve Reich, in *It's Gonna Rain*, demonstrated tape-looping procedures that influenced the concept of sampling for generations to come. Reich and Philip Glass created rock-influenced ensembles. Together, Riley, Reich, and Glass shaped minimalism, a style that has predominated in classical music ever since. Berio's 1968 *Sinfonia* showed composers how to apply electronic music layering and *musique concrète* techniques to live performance. Wendy Carlos and Robert Moog refined the synthesizer, which became even more important in popular music than in classical music.

World music influences became more prominent in the 1960s. Stan Getz popularized the incorporation of Brazilian Samba into jazz. John Cage's interest in Chinese music and philosophy was passed on to his protégé Yoko Ono, who in turn influenced her partner John Lennon. Indian sitar master Ravi Shankar worked with musicians in all genres, including Philip Glass in classical music, George Harrison in rock music, and John Coltrane in jazz.

Ornette Coleman introduced free jazz with his 1959 album *The Shape of Jazz to Come*, and his 1960 album *Free Jazz* brought the concept to fruition. John Coltrane, in his 1963 composition "Alabama," demonstrated some of the ways that free jazz could be used in a more accessible manner, and his 1964 album *A Love Supreme* incorporated these techniques throughout a multi-movement composition. After Coltrane's death, Miles Davis reinvigorated jazz by incorporating aspects of rock music, fusing the genres in his 1969 album *In a Silent Way*.

Film music innovations included the adoption of rock instruments (e.g., electric guitar in James Bond films), the use of rock music in films (e.g., *The Graduate*), and the use of preexisting classical music (e.g., *2001: A Space Odyssey*). Films and television shows about rock bands (e.g., *Help!*, *The Monkees*) cultivated new audiences. The rise of the rockumentary (e.g., *Monterey Pop*, *Woodstock*) was also influential. Musical theatre first incorporated older 1950s-style rock (*Bye, Bye, Birdie*) and then embraced 1960s rock (*Hair*, *Jesus Christ Superstar*).

By the end of the 1960s, rock and roll had been transformed into the dominant musical style. Dylan's cerebral lyrics and gruff performing style changed folk music and, along with the Byrds, he awakened the folkies to folk-rock and eventually rock. The Beatles and the Rolling Stones represented two paths of the British Invasion. The Stones stayed truer to their blues roots, while The Beatles continued to change and develop musically, influencing studio techniques with innovative albums like *Sgt. Pepper's*. Similarly, the Beach Boys pursued increasingly complex studio recordings that could not be reproduced on stage with live musicians. Motown also advanced production techniques and developed more complex musical arrangements. Acid rock and psychedelia reflected changes in society, and San Francisco groups like the Grateful Dead and Jefferson Airplane rose to prominence. Many musicians protested the Vietnam War, culminating in Jimi Hendrix's influential "Star-Spangled Banner" at Woodstock. Woodstock demonstrated the potential for a huge peaceful gathering of music fans, but Altamont exposed the inherent danger in a large crowd of people using mind-altering substances. The 1960s changed music forever, and in the dominant musical style of the 1960s, rock and roll, it is hard to imagine a more transformative decade.

TIMELINE

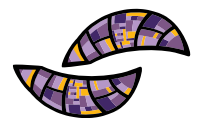|	
1959	Stockhausen combines live music with recorded *musique concrète* in *Kontakte*.
1959	John Coltrane records *Giant Steps*, his first album as a leader.
1959	Dave Brubeck records his album *Time Out*, exploring unusual metrical combinations such as five beats per measure in the song "Take Five."
1959	Miles Davis records his album *Kind of Blue*, which introduces the style of modal jazz and moves jazz in the direction of greater harmonic simplicity.
1959	Charles Mingus' song "Fables of Faubus" protests the racist policies of Arkansas governor Orval Faubus.
1959	Ornette Coleman introduces the concept of Free Jazz with his album *The Shape of Jazz to Come*.
1959	Rodgers and Hammerstein's *The Sound of Music* opens on Broadway. It wins the 1960 Tony for Best Musical.
1959–1960	Miles Davis and Gil Evans collaborate on *Sketches of Spain*, one of the original examples of Third Stream jazz and one of the first concept albums.
1960	The Charles Strouse musical (lyrics by Lee Adams) *Bye, Bye, Birdie* is one of the first Broadway musicals to feature rock and roll music and electric guitar.
1960	John Cage's *Aria with Fontana Mix* combines two of his earlier pieces, resulting in a unique blend of aleatoric nontraditional singing and electronic sounds.
1960	Penderecki's gut-wrenching *Threnody for the Victims of Hiroshima* introduces advancements in avant-garde string techniques and graphic notation.
1960	Ornette Coleman's album *Free Jazz: A Collective Improvisation* expands on the concept of Free Jazz.
1960	Television plays a significant role in the U.S. presidential election of 1960. John F. Kennedy becomes the youngest President to be elected in U.S. history.
1960	Lerner and Loewe's *Camelot* opens on Broadway.
1961	The Berlin Wall is built to separate East and West Berlin.
1961	John Cage's book *Silence* is published.
1961	The film version of Leonard Bernstein and Stephen Sondheim's *West Side Story* wins ten Academy Awards, including Best Picture.
1961	The first stereo FM radio stations are licensed.
1961	Motown has its first number one pop hit with the Marvelettes' recording of "Please Mr. Postman."
1961	Bob Dylan moves to New York, is discovered by John Hammond, and signs with Columbia Records.
1961	Brian Epstein becomes the manager of The Beatles.
1962	Shostakovich's Symphony No. 13 defies Soviet repression and broaches the subject of Russian anti-Semitism.
1962	Stockhausen's *Momente* expands the spectrum of sound possibilities, even employing cardboard tubes as percussion instruments.
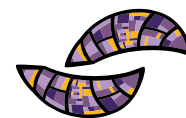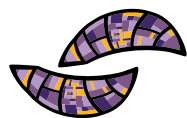
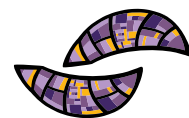| 1962	Sondheim's first Broadway musical as a composer, *A Funny Thing Happened on the Way to the Forum*, runs for more than two years and wins six Tony awards.
1962	The Marshall amplifier is introduced.
1962	The Beatles sign with George Martin of EMI, replace Pete Best with Ringo Starr, and release their first recordings to hit the record charts in England.
1962	Electric guitar figures prominently in theme music for the James Bond series.
1963	Henry Mancini composes the theme for the *Pink Panther* film series.
1963	John Coltrane's "Alabama" memorializes the victims of the bombing of the 16th St. Baptist Church in Birmingham.
1963	The first cassette tape is introduced by Phillips.
1963	Britten's monumental *War Requiem* expresses the composer's pacifist beliefs by alternating the English poetry of Wilfred Owen with the Latin Mass texts.
1963	Stevie Wonder hits number one for the first time with "Fingertips, Part 2."
1963	Phil Spector's "Wall of Sound" tops the charts with "He's a Rebel" by the Crystals.
1963	Dylan first performs "The Times They Are A-Changin'."
1963	The Beatles' "She Loves You" spends eight weeks at the top of the British charts.
1963	U.S. President John F. Kennedy is assassinated (Nov. 22).
1963	*John Fitzgerald Kennedy—A Memorial Album* sells four million copies.
1963	The musical *Camelot* closes on Broadway.
1963	The Beatles receive their first television coverage in the United States.
1964	Milton Babbitt combines serial techniques with electronic music in *Philomel.*
1964	Terry Riley's *In C* premieres, paving the way for minimalism.
1964	The Beatles hit the number one spot on the U.S. charts for the first time on Feb. 1, with "I Want to Hold Your Hand."
1964	The Beatles appear on the *Ed Sullivan Show* (Feb. 9), reaching what was, at the time, the largest television audience in history.
1964	The Beatles dominate the pop music charts for months, at one point holding the top five positions simultaneously. Sixty percent of the singles sold in the first three months of 1964 are Beatles recordings.
1964	Louis Armstrong knocks The Beatles out of the number one spot on the pop charts with his rendition of the title tune from the new musical *Hello, Dolly!*
1964	Other British bands follow the success of The Beatles with number one hits, including Peter and Gordon and Eric Burdon and The Animals.
1964	The Rolling Stones embark on their first U.S. tour.

1964	John Coltrane records his groundbreaking album *A Love Supreme*, demonstrating the expressive possibilities of modern jazz.
1964	The Disney film musical *Mary Poppins* and the film adaptation of *My Fair Lady* dominate the musical theatre categories at the Academy Awards.
1964	The Beatles release their first film, *A Hard Day's Night*, a comedic depiction of a day in the life of The Beatles.
1964	The Beach Boys hit number one for the first time with "I Get Around."
1964	The Supremes put Motown on top of the charts for seven weeks in late 1964.
1964	Stan Getz' recording of "The Girl from Ipanema" helps popularize the combination of jazz and Brazilian *bossa nova.*
1964	Sam Cooke records his civil rights anthem "A Change Is Gonna Come." Just days before the release, Cooke is killed by a hotel manager who claims self-defense.
1965	György Ligeti's innovative *Requiem for Soprano, Mezzo-Soprano, 2 Mixed Choirs and Orchestra* extends choral compositional techniques.
1965	Penderecki's monumental polystylistic *St. Luke Passion* premieres in Germany.
1965	Steve Reich's tape composition "It's Gonna Rain" premieres, demonstrating the looping techniques that lead to sampling in popular music.
1965	The Beatles cartoon TV series is created, with little input from the Fab Four.
1965	Bob Dylan records "Like a Rolling Stone" with a mix of folk, rock, and blues musicians.
1965	The Rolling Stones strike gold with "Satisfaction."
1965	Bob Dylan shocks folk audiences when he performs with electric guitar, drums, and keyboards at the Newport Folk Festival.
1965	James Brown hits the top ten with "Papa's Got a Brand New Bag" and "I Got You (I Feel Good)."
1965	The Supremes continue their string of number one hits with "Come See About Me" and "Stop! In the Name of Love."
1965	The Beatles perform to 55,000 screaming fans at Shea Stadium in New York City.
1965	The Beatles album *Rubber Soul* introduces a number of technical and musical innovations, including the use of sitar.
1965	Bob Dylan's "Mr. Tambourine Man" hits number one, when sung by the Byrds.
1965	P.F. Sloan's Bob Dylan-like "Eve of Destruction," sung by Barry McGuire, taps into the anger teens feel toward the older generation.
1966	The Beach Boys release their groundbreaking studio album *Pet Sounds*.
1966	Robert Moog's keyboard-controlled synthesizer becomes available for purchase.
1966	Neal Hefti has a top-ten hit with the theme from the television show *Batman*.

1966	The Beatles' single "Rain" incorporates several techniques from *musique concrète* and introduces the technique of backmasking into popular music.
1966	Controversy erupts when John Lennon is quoted as having said that The Beatles are "more popular than Jesus Christ right now."
1966	The Beatles release *Revolver*, a studio album using techniques that cannot be replicated in live performance.
1966	The Beatles' last public performance for a paying audience takes place at Candlestick Park in San Francisco.
1966	*The Monkees* television show capitalizes on the popularity of The Beatles.
1966	Frank Zappa records his debut double album *Freak Out!*
1967	The Chicago Symphony Orchestra premieres George Crumb's *Echoes of Time and the River*, which earns him the Pulitzer Prize for music the following year.
1967	Reich's *Piano Phase* adapts his tape music concept of phasing to live musicians.
1967	The musical *Hair* brings rock music and the hippie generation to Broadway.
1967	Cannonball Adderley brings jazz back to the pop charts with his recording of Joe Zawinul's "Mercy, Mercy, Mercy."
1967	John Coltrane dies of liver cancer.
1967	Mike Nichols' film *The Graduate* is one of the first films to use rock songs as the score (a mixture of new and old songs by Simon and Garfunkel).
1967	D.A. Pennebaker's 1967 *Dont Look Back*, a chronicle of Bob Dylan's 1965 tour to Great Britain, is the first real rockumentary.
1967	The Who shock mainstream U.S. television audiences when they smash guitars and blow up their drum set on the *Smothers Brothers* television show.
1967	*Rolling Stone* magazine gets its start in San Francisco.
1967	Aretha Franklin hits number one with "Respect."
1967	Album sales exceed singles sales, and record sales top $1 billion.
1967	Andy Warhol's protégés, the Velvet Underground, release their first album.
1967	The Doors release their first album and hit number one with "Light My Fire."
1967	The "Summer of Love" brings groups like the Grateful Dead, Jefferson Airplane, and Janis Joplin's Big Brother and the Holding Company to national prominence.
1967	The Beatles release one of the most important albums of all time, *Sgt. Pepper's Lonely Hearts Club Band*.
1967	Monterey Pop invents the rock festival format and propels Jimi Hendrix and Otis Redding to fame.
1967	Brian Epstein, The Beatles' manager, dies of a drug overdose at the age of thirty-two.
1967	Otis Redding records "(Sittin' on) The Dock of the Bay." Less than a month later, Redding dies in a plane crash on the way to a gig.

1968	The Prague Spring brings democratic reform to Czechoslovakia.
1968	The North Vietnamese launch the Tet Offensive against the South Vietnamese and their American allies, resulting in increased casualties. American soldiers slaughter hundreds of unarmed civilians at the village of My Lai.
1968	President Johnson withdraws from the presidential race.
1968	Martin Luther King Jr. is assassinated in Memphis. Riots ensue throughout the U.S.
1968	Students and workers in France paralyze the country for nearly a month with protests against the government.
1968	Sirhan Sirhan assassinates Robert F. Kennedy.
1968	Soviet tanks roll into Prague, quashing the Prague Spring.
1968	Stanley Kubrick incorporates the music of Ligeti in his science fiction film *2001: A Space Odyssey*, which also popularizes the use of existing classical music in film.
1968	Chicago police violently suppress antiwar protests at the Democratic National Convention.
1968	Luciano Berio's *Sinfonia* includes a movement dedicated to Martin Luther King Jr. with text consisting solely of syllables from the slain leader's name.
1968	Marvin Gaye's version of "I Heard It Through the Grapevine" spends seven weeks at number one.
1968	Karel Husa composes *Music for Prague 1968* in solidarity with the Czech people.
1969	Wendy Carlos' Moog-synthesized Bach recordings reach the top ten on the pop charts.
1969	Leonard Bernstein retires from the New York Philharmonic.
1969	The Who give the first performance of their rock opera *Tommy* in Bolton, England.
1969	Karel Husa wins the 1969 Pulitzer Prize for his *String Quartet No. 3*.
1969	John Lennon and Yoko Ono record "Give Peace a Chance" during their counterculture "Bed-In" in a Montreal hotel room.
1969	Guitarist Brian Jones, having recently been fired from the Rolling Stones, drowns in his swimming pool, likely due to high levels of drugs and alcohol.
1969	The Newport Jazz Festival incorporates rock music, including Frank Zappa, Jethro Tull, James Brown, Sly and the Family Stone, and Led Zeppelin.
1969	Miles Davis records *In a Silent Way*, ushering in the era of jazz fusion.
1969	Charles Manson and four of his followers murder seven people. Manson claims he was following instructions hidden in The Beatles' song "Helter Skelter."
1969	The Woodstock Festival attracts a crowd of nearly half a million for "three days of peace and music."
1969	Jimi Hendrix's feedback-drenched version of "The Star-Spangled Banner" is one of the most memorable and influential moments of Woodstock.

1969	Andrew Lloyd Webber's international career is launched with the release of the title song from the musical *Jesus Christ Superstar*.
1969	The Jackson Five sell more than half a million copies of their first album.
1969	The Rolling Stones' Altamont free rock festival ends up as a terrible fiasco. The murder of a young black man in the audience by Hells Angels acting as security guards is captured on film as part of the rockumentary *Gimme Shelter*.
1970	Paul McCartney leaves The Beatles, resulting in the end of the most popular rock group of the 1960s.
1970–1971	Jimi Hendrix, Jim Morrison, and Janis Joplin all die at young ages of drug-related causes.

Glossary

45 rpm record – a two-sided phonograph disc, with one song recorded on each side; also sometimes just known as "45s" or "singles" because they contain only one song on each side. The number 45 and the abbreviation rpm refer to the number of "revolutions per minute" of the turntable upon which the disc spins. Traditionally there is a featured song on the "A" side and a song less likely to be a hit on the "B" side. While songs were not strictly limited to three minutes, few songs exceeded the three-minute mark until the later 1960s.

Altissimo – (Italian) the highest range of an instrument; usually refers to extended range reached only by the most advanced players of the instrument. The term is applied particularly to saxophones and clarinets.

Avant-garde – (French) art that is purposefully forward-looking or experimental; avant-garde musicians value innovation, invention, creativity, and novelty. Artists with these values are often referred to collectively as the avant-garde.

Backmasking – a *musique concrète* technique that takes a recorded sound and plays it backward; this was originally a tape manipulation technique but can now be achieved using digital media.

Changes – the series of chords (chord changes) repeated for each chorus of a jazz improvisation; usually the changes for an improvisation are the same as the series of chords for the original melody of the piece.

Concept album – a long-playing recording (see *LP*) featuring selections organized around a particular "concept" or theme that form a cohesive whole; examples include *Pet Sounds*, *Sketches of Spain*, *Sgt. Pepper's*, *Tommy*, and *In a Silent Way*; similar to a song cycle in classical music.

Covers – songs by one artist recorded or performed by another, such as when the Byrds recorded Bob Dylan's "Mr. Tambourine Man"

Dorian mode – a mode used in jazz; similar to the natural minor, but with a raised sixth degree

Double-stop – when a string player bows two notes at once on adjacent strings by placing the bow at an angle that allows it to activate both strings simultaneously

Eponymous – self-titled: named for the artist or artists; examples include the albums called *Bob Dylan*, *The Beatles*, or *Blood Sweat & Tears*.

Klezmer – (Yiddish/Hebrew) a style of Eastern European secular Jewish folk music mixing scales not normally found in Western classical music (often including an augmented second) with traditional classical and folk harmonies and instrumentation (clarinet, violin, bass, drums, guitar, or accordion)

LP – a long-playing recording, usually recorded at 33 revolutions per minute, approximately twenty or twenty-five minutes per side; also known as an album. In classical music, this might be used for an entire symphonic work. In popular music and jazz, an LP would often consist of five or six songs per side, usually not specifically related.

Mass – the Catholic order of the Latin liturgy; in music this term is usually used to refer to a setting of the Ordinary of the Mass—the texts that remain the same for all masses, regardless of the occasion or time of year. Some settings will also include sections of the Proper—the parts of the Mass that are for a specific holiday or occasion. Others will include additional texts (see *tropes*) that are not from the liturgy, but relate to the adjacent sections of the Mass.

Melismatic – singing (or composing a vocal part) that includes many pitches per syllable of text; this is as opposed to syllabic music that aligns each syllable with a pitch (and vice versa).

Micropolyphony – a densely chromatic compositional technique, associated primarily with Hungarian-born composer György Ligeti, with as many as fifty independent lines moving simultaneously, often within
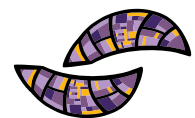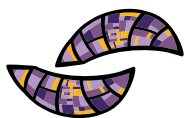
a very small pitch range, resulting in expanding and contracting tone clusters

Modal jazz – a system of jazz composition and improvisation that relies on modes instead of chords; instead of selecting a series of chords, each with its own corresponding scale, that define the shape of the melody and improvisations in a jazz composition, a single mode provides the note choices for the entire composition.

Mode – a group of seven notes within an octave, used much like a scale, but with a different order of whole- and half-steps; some modes will have one or two intervals of a step and a half, which requires fewer whole steps and more half steps.

Musique concrète – (French) music consisting of the manipulation of recorded sounds, whether played by musical instruments or found in nature; originally the manipulation was accomplished using magnetic tape, which could be cut and spliced back together in different combinations. Common manipulations included duplication and layering of fragments (samples), speed changes, and reversing the recording (see *backmasking*).

Octatonic – an eight-note scale of alternating whole- and half-steps; the symmetrical nature of the scale negates any sense of tonality.

Pan – to manipulate stereophonic recorded sound so that it switches from one channel (right or left) to the other

Parlando – (Italian) music performed in the style of speech, with rhythmic flexibility, and, in some cases, with less concern for exact pitch and with more of a speech-like vocal quality

Payola – the illegal scheme whereby record companies provide financial inducements to radio stations or disc jockeys to encourage them to play a specific recording or artist on the air

Quarter tones – pitches that are halfway between the half-steps of the chromatic scale

Raga – (Sanskrit) in Indian music, a group of pitches or pattern of intervals, similar to a scale or mode in Western Music, but with extra-musical meaning that can indicate a specific occasion, mood, or sentiment

Requiem – (Latin) a Catholic Mass for the dead, or a musical setting of the Mass for the dead

Rockumentary – a documentary film (or television show) that chronicles a rock music performer, group, or event; prominent examples from the 1960s include *Dont* [sic] *Look Back*, *Monterey Pop*, *Woodstock*, and *Gimme Shelter*.

Segue – (Italian) to move directly from one movement or song to another without a pause in between

Sideman – a supporting musician who plays "alongside" a better-known leader

Single – a recording featuring only one piece of music (per side); see entry for *45 rpm recording*.

Skiffle – a popular music style blending jazz and blues, using a mixture of basic instruments, like guitar and drums, as well as homemade and improvised instruments; skiffle was popular in Liverpool in the 1950s and provided a musical basis for The Beatles.

Sprechstimme – (German) a cross between speech and song; pitches are approximated instead of exact; rhythms, however, are exact, and the sung vocal quality is maintained.

Standard – a musical composition that has become part of the established repertoire, particularly in jazz; professional musicians are expected to know all the "standard" songs, such as "Summertime," "Mack the Knife," "Watermelon Man," and "Birdland."

Stoptime – a rhythmic device in a section of a piece of music (usually jazz or popular music) when the accompaniment presents a repeated unison rhythm, usually simplified with silences between the beats, while the soloist continues in tempo; examples include the accompaniment playing one beat per measure, playing on beats one and three, or even playing once every eight beats.

Stretto – (Italian) the section of a fugue when the theme appears in closely overlapping repetitions

Third Stream music – a musical style developed in the 1950s that combined jazz improvisation, embellishments, and harmonies with classical musical materials and orchestration

Threnody – a song (or poem) of lamentation or mourning, usually associated with wailing

Tour de Force – (French) a remarkable achievement or performance not likely to be replicated

Tremolo – a "trembling" achieved on string instruments by moving the bow back and forth on the string on a single
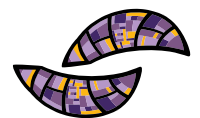
note as fast as possible

Trope – a non-liturgical section added to a Mass (or Requiem) between the liturgical (Ordinary or Proper) sections of the Mass; tropes are often in the vernacular (local) language instead of in Latin.

Ululation – a loud high-pitched vocal wailing or howling sound associated with Middle Eastern funerals and mourning and accomplished by rapid tongue movements
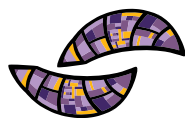
Vibrato – an ornament on a single note, adding a slight rise and fall of the pitch at a moderate to rapid rate, making the note "vibrate"; vibrato enriches or "warms" a tone, and it may be used throughout a note or added over the course of a long tone. The speed of vibrato may be increased to add intensity or slowed to diminish intensity.
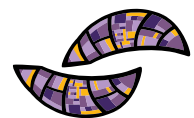
Notes

1. Arnold Schoenberg, Style and Idea (Berkeley and Los Angeles: University of California Press, 1975), 91.

2. The second bar of tonic can be replaced with four beats of IV, or the progression ii-V (two beats each). The fourth bar, with the addition of a minor seventh above the root of the chord, sometimes does double-duty as a dominant 7th to the IV chord coming at the beginning of the next line. In bar ten, the harmony often stays on the dominant instead of moving down to IV. And, finally, the last tonic is often either replaced by a dominant 7th, or shortened to two beats, so a V7 can be added to help transition back into the next repetition of the entire progression.

3. Christopher Small, Musicking: The Meanings of Performing and Listening (Middletown, CT: Wesleyan University Press, 1998).

4. Theodore H. White Personal Papers. Camelot Documents. "For President Kennedy: An Epilogue," by Theodore H. White, Life, 6 December 1963. THWPP-059-009. John F. Kennedy Presidential Library and Museum.

5. David L. Snead, John F. Kennedy, The New Frontier President (New York: Nova Science Publishers, 2012), xii.

6. David Ryfe, Presidents In Culture (New York: Peter Lang, 2005), 112.

7. Snead, 57.

8. Victor Brooks, Last Season of Innocence (Lanham, Maryland: Rowman & Littlefield, 2012), 7.

9. UNESCO, Statistics on Radio and Television: 1950-1960 (Paris: UNESCO, 1963), 22-24.

10. William J. Rorabaugh, "The Election of 1960" in A Companion to John F. Kennedy, ed. Marc J. Selverstone (Malden, Massachusetts: John Wiley & Sons, 2014), 58.

11. Kayla Webley, "How the Nixon-Kennedy Debate Changed the World," in Time, September 2010.

12. Keith Negus and John Street, "Introduction to 'Music and Television' Special Issue," in Popular Music, Vol. 21, No. 3, Music and Television (Oct., 2002), 245.

13. e.g. Corinne J. Naden, The Golden Age of American Musical Theatre (Lanham: Scarecrow, 2011).

14. Frederick W. Nolan, The Sound of Their Music (New York: Applause, 2002), 256-265.

15. Kurt Gänzl, The Musical: A Concise History (Boston: Northeastern University Press, 1997), 335.

16. Gänzl, 311-317.

17. Listen to the simple Elvis-like song structure (with more erudite Broadway modulations) and the use of electric guitar in "Honestly Sincere" from the 1963 film version of the musical—youtu.be/5JXUA8oFWCc.

18. Corinne J. Naden, The Golden Age of American Musical Theatre (Lanham: Scarecrow, 2011).

19. Listen to "Ed Sullivan" (youtu.be/yRLe6MfGsDo) and note that the rock and roll style is not used in the song representing the conservative McAfee family; instead a more classical style is featured.

20. Paul Griffiths, Modern Music and After (Oxford: Oxford University Press, 2010), 70-73.

21. Barry Seldes, Leonard Bernstein: The Political Life of an American Musician (Berkeley: University of California Press, 2009), 2, 81-82.

22. Seldes, 82.

23. Seldes, 82-83.

24. For more detail, see johncage.org/pp/John-Cage-Work-Detail.cfm?work_ID=29.

25. Here is a link to a performance by Cathy Berberian, the avant-garde mezzo-soprano to whom the work is dedicated: youtu.be/a15xkowPEPg. This video shows the 1958 composition date of "Aria" without "Fontana Mix" rather than the 1960 composition date of the combined work.

26. Alex Ross, The Rest Is Noise (New York: Picador, 2007), 499.

27. Robin Maconie, Avant Garde: An American Odyssey from Gertrude Stein to Pierre Boulez (Lanham: Scarecrow Press, 2012), 72. Listen to a bit of Kontakte here: youtu.be/lxRcr-eWe-E.

28. Ross, 533.

29. Maconie, 178.

30. Ton de Leeuw, Music of the Twentieth Century (Amsterdam: Amsterdam University Press, 2005), 37, 39, 140.

31. Griffiths, 338.

32. Richard Taruskin and Christopher H. Gibbs, The Oxford History of Western Music (Oxford: Oxford University Press, 2013), 1043; Ray Robinson, Krzysztof Penderecki: A Guide to His Works (Princeton, NJ: Prestige Publications, 1983), 1, 3, 17.

33. Arved Ashby, The Pleasure of Modernist Music (Rochester, NY: University of Rochester Press, 2004), 351.

34. www.merriam-webster.com/dictionary/threnody

35. Krzysztof Penderecki, Threnody for the Victims of Hiroshima (Warsaw: Panstwowe Wydawnictwo Muzyczne, 1961), 3.

36. Krzysztof Penderecki, quoted in David Cope, New Directions in Music (Prospect Heights, IL: Waveland Press, 2001), 42.

37. Maciej Gołąb, Musical Modernism in the Twentieth Century (Frankfurt: Peter Lang, 2011), 154. To understand the piece better, you can view a video created to explain the unusual notational techniques: youtu.be/2DD7gzDYBgY. To see the unusual notation and hear how the symbols represent the sounds, view the animated score at courses.lumenlearning.com/musicapp_historical/chapter/video-penderecki-threnody-animated-score-2/.

38. To get an idea of Coltrane's technical ability, watch this video of a transcription of Coltrane's spontaneous improvisation to these complex chord changes www.youtube.com/watch?v=2kotK9FNEYU.

39. Richard Williams, The Blue Moment: Miles Davis's Kind of Blue and the Remaking of Modern Music (London: W.W. Norton, 2009).

40. John Fordham, "How Miles Davis's Kind of Blue shaped 50 years of music," in The Guardian, August 2009.

41. To hear an example of a Miles Davis/Gil Evans Third Stream interpretation of a classical guitar concerto, please listen to youtu.be/CsWidlDldVk. You could compare it to the original version (for classical guitar and orchestra) by the twentieth-century Spanish composer Joaquin Rodrigo: youtu.be/x4QrJc3VQDo.

42. Ross, 520.

43. Ellis Cashmore, The Black Culture Industry (London: Routledge, 1997), 65.

44. Listen to the performance and learn more about the relationship between
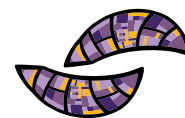
jazz and the Civil Rights movement here: www.npr.org/sections/ablogsupreme/2011/05/05/135920869/instruments-of-change-music-of-the-freedom-riders-50-years-later.

45. Ingrid Monson, *Freedom Sounds: Civil Rights Call Out to Jazz and Africa* (Oxford: Oxford University Press, 2007),183.

46. Fred Kaplan, *1959: The Year Everything Changed* (Hoboken, NJ: John Wiley & Songs, 2009), 198.

47. Nicholas Zurbrugg, *The Parameters of Postmodernism* (Carbondale, IL: Southern Illinois University Press, 1993), 44.

48. Nicholas Gebhardt, *Going for Jazz: Musical Practices and American Ideology* (Chicago: University of Chicago Press, 2001), 157.

49. Kaplan, 199.

50. Ross, 260-263.

51. Francis Davis, "Ornette's Permanent Revolution," in *The Atlantic Monthly*, September 1985.

52. Kaplan, 199.

53. Henry Martin and Keith Waters, *Essential Jazz: The First 100 Years* (Boston, MA: Schirmer, 2009), 168-169; www.nytimes.com/2015/06/12/arts/music/ornette-coleman-jazz-saxophonist-dies-at-85-obituary.html.

54. www.billboard.com/archive/charts/1960/hot-100.

55. Ed Ward, Geoffrey Stokes, Ken Tucker. *Rock of Ages: The Rolling Stone History of Rock & Roll* (New York: Simon & Schuster, 1986), 203.

56. Hickman, 261-270.

57. Eric Salzman, *Twentieth-Century Music* (Englewood Cliffs, NJ: Prentice Hall, 1988), 59-60; Robert P. Morgan, *Twentieth-Century Music* (New York: WW Norton, 1991), 162-163.

58. Carl B. Schmidt, *Entrancing Muse: A Documented Biography of Francis Poulenc* (Hillsdale, NY: Pendragon Press, 2001), 445-462.

59. Samuel A. Floyd, Jr., *The Power of Black Music* (Oxford: Oxford University Press, 1995), 207; Ulysses Kay, *Fantasy Variations*. Score pages available online at exhibitions.cul.columbia.edu/exhibits/show/kay/orchestral-music/fantasy-variations

60. Karl Kroger, "Orchestral Music," in *Notes* (Middleton, WI: Music Library Association), 363.

61. Lucius R. Wyatt, "Ulysses Kay's *Fantasy Variations*: An Analysis," in *The Black Perspective in Music,* (Cambria Heights, NY: Foundation for Research in the Afro-American Creative Arts, 1977), 75.

62. Floyd, 207.

63. Wyatt, 76.

64. John Cage, *Silence* (Hanover, NH: University Press of New England, 1961).

65. Kyle Gann, *No Such Thing As Silence* (New Haven: Yale University Press, 2010), 17, 55, 207

66. Eric Gilder, *The Dictionary of Composers and Their Music* (New York: Wings Books, 1985), 317-319.

67. Laurel Fay, *Shostakovich: A Life* (Oxford: Oxford University Press, 2000), 256-279.

68. Fay, 288-290.

69. Salzman, 179-180.

70. www.karlheinzstockhausen.org/moment_preface_english.htm.

71. Stockhausen's extensive (and fascinating) instructions are available in English on his web page: www.karlheinzstockhausen.org/moment_preface_english.htm. You can listen to Mvt. III of the 1972 version here: youtu.be/9jbnQQgWsB0.

72. Philip Brett, *Music and Sexuality in Britten: Selected Essays* (Berkeley, CA: University of California Press, 2006), 176-177.

73. Brett, 188.

74. Philip Rupprecht, *Britten's Musical Language* (Cambridge: Cambridge University Press, 2001), 187.

75. Taruskin and Gibbs, 1150.

76. Taruskin and Gibbs, 11-12.

77. Taruskin and Gibbs, 190-191, 1159.

78. Rupprecht, 187-188.

79. Rupprecht, 191, Taruskin and Gibbs., 1004.

80. Ross, 473.

81. Benjamin Britten, *War Requiem* (London: Boosey & Hawkes, 1997), xv.

82. Salzman, 83.

83. Britten, v.

84. Britten, v.

85. Taruskin and Gibbs, 1004.

86. You can listen to the full work conducted by Britten himself at the Royal Albert Hall in 1964: youtu.be/HwBEtfXXsvU.

87. For more on Benjamin Britten and the *War Requiem*, visit brittenpears.org/ and www.warrequiem.org/.

88. coltrane.room34.com/thesis.

89. Listen to this recording, www.openculture.com/2013/01/john_coltrane_and_his_great_quintet_play_my_favorite_things_1961.html, made for German television in 1961, where you will not only hear Coltrane on the tenor saxophone and McCoy Tyner on piano, along with drummer Elvin Jones and bassist Reggie Workman, but also the fantastic young multi-woodwind player, Eric Dolphy, on flute.

90. Martin and Waters, 209.

91. Watch Puente perform live, many years later, at the 1990 Newport Jazz Festival: youtu.be/L0ilS-3rqqg.

92. Martin and Waters, 209.

93. Astrud Gilberto's smooth Portuguese singing matches perfectly in this recording from a 1964 television program: www.openculture.com/2011/10/monday_therapy_getz_and_gilberto_perform_the_girl_from_ipanema.html.

94. Eric Nisenson, *Ascension: John Coltrane and his Quest* (New York: St. Martin's Press, 1993), 143.

95. www.youtube.com/watch?v=aiJ_0gp-T9A&t=38s.

96. In this live performance from later that year, you can hear these characteristics, and observe the seriousness with which Coltrane and his musicians approached their music: youtu.be/saN1BwlxJxA. You can view a short documentary about the piece here: www.youtube.com/watch?v=aiJ_0gp-T9A&t=38s.

97. Hickman, 271, 282.

98. Hickman, 278. *Breakfast at Tiffany's* opening sequence: youtu.be/1JfS90u-1g8. *Days of Wine and Roses* opening sequence: youtu.be/vi0TullZ-p4.

99. Hear the title music here: www.artofthetitle.com/title/the-pink-panther/.

100. www.artofthetitle.com/title/dr-no/

101. Hickman, 281; www.billboard.com/articles/chartbeat/474775/top-10-james-bond-theme-songs-ever.

102. Joan Peyser, *Bernstein: A Biography* (New York: Ballantine Books, 1987), 236-239.

103. Gänzl, 297-298.

104. www.grammy.com/grammys/news/grammytony-awards-pedigree.

105. Gänzl, 327; Steve Swayne, *How Sondheim Found His Sound* (Ann Arbor: University of Michigan Press, 2005), xiv, 2-3.

106. broadwaymusicalhome.com/shows/forum.htm.

107. Swayne, *57*.

108. David Lachenbruch, "Equipment Newsletter," in *Billboard Magazine*, May 25, 1963, 50.

109. Theo Cateforis, *The Rock History Reader* (New York: Routledge, 2013), 103.

110. www.theguardian.com/music/2013/aug/30/cassette-store-day-music-tapes.

111. www.rollingstone.com/music/pictures/24-inventions-that-changed-music-20140317/phillips-compact-cassette-tape-1963-0793840.

112. reverb.com/news/a-history-of-marshall-amps-part-i.
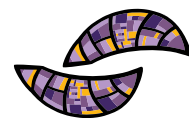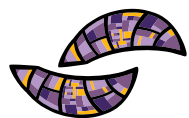
113. Stuessy, 163.

114. youtube/425GpjTSlS4

115. Stuessy, 163.

116. Sharon Monteith, *American Culture in the 1960s* (Edinburgh, Scotland: Edinburgh University Press, 2008), 66; Ward, 296-299.

117. Ward, 296-299.

118. Stuessy, 165.

119. Stuessy, 163-164.

120. Ward, 296.

121. Monteith, 65.

122. youtube/k3ubgVjp3CY

123. Stuessy, 166.

124. Tenley Williams, *Stevie Wonder: Overcoming Adversity* (Philadelphia: Chelsea House Publishers, 2002), 27-30.

125. Stuessy, 166.

126. Monteith, 63-64.

127. Ward, 226.

128. Virgil Moorefield, *The Producer as Composer: Shaping the Sounds of Popular Music* (Cambridge, MA: MIT Press, 2005), 9-13.

129. Noyer, 65.

130. Noyer, 61; Ward, 236-242. "He's a Rebel" was marketed as if it were recorded by the Crystals. Spector was actually in Los Angeles, in a hurry to get this song recorded, and the Crystals could not get there in time for the sessions, so Spector brought in a trio called the Blossoms, but sold it as a Crystals recording, since they were much better known. Typical Spector.

131. Ward, 240.

132. Ward, 240.

133. Stuessy, 75. youtube/N5V3wcREqcI.

134. Stuessy, 75; Noyer, 54. youtube/l2sfev-gu3I.

135. Ward, 250-251.

136. www.billboard.com/artist/419239/surfaris/chart.

137. Stuessy, 137-138.

138. Bob Dylan, *Chronicles: Volume One* (New York: Simon & Schuster, 2004), 78-79.

139. Dylan, 3-5; Michael Gray, *Bob Dylan Encyclopedia* (New York: Continuum International Publishing, 2006), 291-292.

140. Robert Shelton, "Bob Dylan: A Distinctive Folksong Stylist," in the *New York Times Arts Section*, (New York: *New York Times*, September 29, 1961) 31.

141. Stuessy, 138.

142. youtube/T5al0HmR4to

143. Gray, 243-244; Stuessy, 138. youtube/G58XWF6B3AA.

144. Stuessy, 138; www.billboard.com/artist/331058/peter-paul-and-mary/chart.

145. Noyer, 59.

146. Noyer, 59; www.edsullivan.com/bob-dylan-on-the-ed-sullivan-show/.

147. Noyer, 50; Gray, 490.

148. Gray, 490.

149. bobdylan.com/songs/times-they-are-changin/.

150. Kenneth Womack, *The Cambridge Companion to The Beatles* (Cambridge, England: Cambridge University Press, 2009), xviii.

151. Womack; Stuessy, 86-87.

152. Stuessy, 88-89. Womack, xviii-xix.

153. Stuessy, 90. Womack, xix.

154. Stuessy, 90.

155. Ian Inglis, *Performance and Popular Music: History, Place and Time* (Burlington, VT: Ashgate Publishing Company, 2006), 11. Here is footage from that performance: youtu.be/QoF-7VMMihA.

156. Stuessy, 91.

157. The video from the broadcast has been lost, but the audio may be heard here: youtube/SY9PoR7-XGA.

158. www.cbsnews.com/news/cbs-news-reports-on-the-beatles-in-1963/. The footage from that broadcast has been preserved here: youtube/ehNn4v9QxB0.

159. www.cbsnews.com/news/cbs-news-reports-on-the-beatles-in-1963/.

160. youtube/6PXORQE5-CY.

161. Selverstone, 506.

162. www.rollingstone.com/music/pictures/16-inspiring-songs-that-honor-jfk-20131119/the-beach-boys-warmth-of-the-sun-0350365.

163. www.rollingstone.com/music/pictures/16-inspiring-songs-that-honor-jfk-20131119/the-beach-boys-warmth-of-the-sun-0350365; www.huffingtonpost.com/mike-love/jfk-warmth-of-the-sun_b_4318208.html; Jeff Sellars, *God Only Knows* (Eugene, OR: Cascade Books, 2015), 14.

164. Noyer, 60.

165. Sam Cooke, *A Change Is Gonna Come*: www.archives.gov/exhibits/documented-rights/exhibit/section4/detail/change-is-gonna-come-lyrics.html

166. Bruce Pollock, *Rock Song Index* (New York: Routledge, 1997), 112-113.

167. Pollock, 112.

168. Monteith, 40.

169. Pollock, 112; www.newyorker.com/culture/culture-desk/the-unlikely-story-of-a-change-is-gonna-come.

170. Cooke, *A Change Is Gonna Come*.

171. www.npr.org/2014/02/01/268995033/sam-cooke-and-the-song-that-almost-scared-him

172. Listen, in particular, for tremolo strings, suggesting a time of discomfort and unease, when the lyrics describe going to his "brother," asking for help, and getting knocked back down. Also notice the power of the brass punctuation during the last verse (www.vevo.com/watch/sam-cooke/a-change-is-gonna-come-(official-lyric-video)/USAB21610000).

173. Ward, 290.

174. www.nytimes.com/1964/12/17/shooting-of-sam-cooke-held-justifiable-homicide.html

175. Craig Hansen Werner, *A Change Is Gonna Come: Music, Race, and the Soul of America* (Ann Arbor: University of Michigan Press, 2006), 32.

176. Stuessy, 90.

177. Inglis, 1.

178. Inglis, 14; www.cbsnews.com/news/three-things-that-helped-spark-beatlemania-in-1964/.

179. Stuessy, 91.

180. www.billboard.com/artist/383540/beatles/chart?page=6&f=379&sort=date; Stuessy, 91-92.

181. André Millard, *Beatlemania* (Baltimore: Johns Hopkins University Press, 2012), 22.

182. Stuessy, 91.

183. Inglis, 1, 14.

184. David A. Copeland, *The Media's Role in Defining the Nation*, (New York: Peter Lang, 2013), 242.

185. What did this famous broadcast sound like? Here is a link to their performance of the chart topping "I Want to Hold Your Hand": www.vevo.com/watch/the-beatles/i-want-to-hold-your-hand-performed-live-on-the-ed-sullivan-show-2-9-64/USUMV1600133.

186. Stuessy, 92.

187. Stuessy, 128; www.billboard.com/archive/charts/1964/hot-100. youtube/v_IJPUKTchI.

188. Ward, 270-271.

189. Ward, 271; Stuessy 128.

190. youtube/hRXb7K7k7bQ.

191. Bill Harry, *British Invasion* (New Malden, UK: Chrome Dreams, 2004), 74.
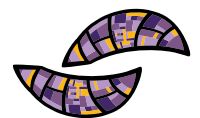
192. Ward, 285-287.

193. Harry, 160.

194. Ward, 288.

195. Russell Sanjek, *American Popular Music and its Business* (New York: Oxford University Press, 1988), 384.

196. www.billboard.com/archive/charts/1964/hot-100.

197. www.rockhall.com/digital-classroom-martha-vandellas-dancing-street.

198. Mark Kurlansky, *Ready for a Brand New Beat: How "Dancing in the Street" Became the Anthem for a Changing America* (New York: Penguin Books, 2013), 93; Stuessy, 163; Harry, 160.

199. Kurlansky, *Ready*, xii; Cashmore, 108; www.pbslearningmedia.org/resource/amex26-soc-64dancing/1964-dancing-in-the-street/ - .WYk3-dPyvR0.

200. Stuessy, 119.

201. Stuessy, 120.

202. Keith Richards, *Life* (New York: Little, Brown and Company, 2010), 141. Listen to the difference between the two versions to get an idea of the different character of the Beatles (youtube/1YEyFhYueOc) and the Stones (youtube/DJCkbbMnEPg).

203. Stanley Booth, *True Adventures of the Rolling Stones* (Chicago: Chicago Review Press, 2014), 134; Patrick Humphries, *Top of the Pops 50th Anniversary* (Carmarthen, UK: McNidder and Grace, 2013), 188.

204. Noyer, 67.

205. Stuessy, 121.

206. Richards, 151.

207. Stuessy, 121.

208. Booth, 161.

209. Noyer, 69.

210. Stuessy, 126.

211. Noyer, 69.

212. Salzman, 150-154.

213. Simms, 330-331.

214. Salzman, 154.

215. Simms, 377.

216. Griffiths, 348.

217. John Hollander, "Notes on the Text of Philomel" in *Perspectives of New Music* (Seattle, WA, 1967), 135.

218. Hollander, 136-137.

219. Listen to the wordplay and its interplay with Babbitt's unusual sounds in this recording featuring the fabulous soprano Bethany Beardslee, for whom the work was composed: (youtube/6Rd5_9hyWm0).

220. Salzman, 154.

221. Salzman, 185.

222. Ross, 566-567.

223. Ross, 485, 508.

224. Ross, 508.

225. Simms, 117-119.

226. Simms, 340.

227. Ross, 509.

228. Julie Hubbert, *Celluloid Symphonies* (Berkeley, CA: University of California Press, 2011), 372.

229. Gilder, 209; Hickman, 302–3.

230. This excerpt from the film (youtu.be/5zYm76kkNQk) is the second appearance of the monolith, when humans discover it on the moon. The unfamiliar, slowly changing, alien landscape of Ligeti's burbling vocalizations seems to match perfectly with the anticipation of the unknown, the otherworldly surroundings, and the uncertainty of the astronauts as they approach the monolith. Kubrick had selected the right music.

231. Alexander Carpenter, "St. Luke Passion," in *All Music Guide to Classical Music* (San Francisco: Backbeat Books, 2005), 990.

232. Constantin Floros, *New Ears for New Music* (Mainz, Germany: Peter Lang, 2006), 162.

233. Floros, 149.

234. Simms, 398; Ross, 502.

235. Salzman, 186.

236. youtube/0G41KmDsN5s.

237. Carpenter, 990.

238. Edward Strickland, *American Composers: Dialogues on Contemporary Music* (Bloomington, IN: Indiana University Press, 1991), 160.

239. Salzman, 170.

240. Gilder, 99; www.pulitzer.org/winners/george-crumb.

241. www.thomasconlin.com/echoes.html; www.naxos.com/mainsite/blurbs_reviews.asp?item_code=FECD-0008&catNum=FECD-0008&filetype=About this Recording&language=English.

242. youtube/kfv2A2TVTkc.

243. Ross, 539-540.

244. Ross, 518.

245. Ross, 535-536.

246. thirdcoastpercussion.com//downloads/2015/04/Terry-Riley-In-C-concert2.pdf.

247. The score and instructions can be found here: thirdcoastpercussion.com//downloads/2015/04/Terry-Riley-In-C-concert2.pdf.

248. Ross, 540.

249. thirdcoastpercussion.com//downloads/2015/04/Terry-Riley-In-C-concert2.pdf.

250. Ross, 520, 542.

251. Ross, 541.

252. Strickland, 34.

253. Ross, 543.

254. Steve Reich, interview, in Ann McCutchan, *The Muse That Sings*, (Oxford: Oxford University Press, 1999), 39-41.

255. www.npr.org/sections/deceptivecadence/2015/01/27/381575433/fifty-years-of-steve-reichs-its-gonna-rain.

256. www.youtube.com/watch?v=1E4Bjt_zVJc.

257. www.stevereich.com/articles/Jonathan_Cott_interview.html.

258. www.stevereich.com/articles/Jonathan_Cott_interview.html.

259. Click here to hear "It's Gonna Rain" in its entirety: youtube/vugqRAX7xQE.

260. Robert Adlington, *Sound Commitments: Avant-Garde Music and the Sixties* (Oxford: Oxford University Press, 2009), 126-128.

261. Click here to hear Steve Reich's influential "Come Out": youtube/g0WVh1D0N50.

262. www.rollingstone.com/music/news/the-father-of-sampling-speaks-19990327.

263. Steve Reich, interview, in Michael Nyman, "Steve Reich: An Interview with Michael Nyman," in *The Musical Times*, (London: The Musical Times Publications, 1971), 229-231.

264. Ross, 542.

265. Ross, 545.

266. Detailed instructions and score are available here: www.ciufo.org/classes/sonicart_sp09/readings/SteveReich-PianoPhase.pdf. To hear how the patterns combine when one pianist moves one sixteenth note ahead, follow the score and listen to this recording: youtube/57TuvksMR70. To hear how the piece sounds with the gradual speed increase, listen to this recording: youtube/7P_9hDzG1i0.

267. Salzman, 217.

268. Ross, 547-550; Salzman, 218-219.

269. John Canarina, *The New York Philharmonic* (Milwaukee, WI: Hal Leonard, 2010), 53.

270. leonardbernstein.com/works/view/14/chichester-psalms.
271. leonardbernstein.com/works/view/14/chichester-psalms.
272. Gilder, 50.
273. leonardbernstein.com/works/view/14/chichester-psalms.
274. Brooks Atkinson, *Broadway* (New York: Macmillan, 1974), 462.
275. Gänzl, 318; Geoffrey Block, *Enchanted Evenings* (Oxford: Oxford University Press, 2009), 260.
276. Atkinson, 290; Gänzl, 319, 324; Scott Miller, *Sex, Drugs, Rock & Roll, and Musicals* (Boston: Northeastern University Press, 2011), 33.
277. Gänzl, 324.
278. Gänzl, 335.
279. Stacy Wolf, *Changed for Good: A Feminist History of the Broadway Musical* (New York: Oxford University Press, 2011), 86-88.
280. John Bush Jones, *Our Musicals, Ourselves: A Social History of the American Musical Theatre* (Waltham, MA: Brandeis University Press, 2003), 241.
281. Jones, 238.
282. Block, W32.
283. Jones, 241-242, 245; Gänzl, 326
284. Galt McDermot, *Hair* (New York: Tams-Witmark, 1966), 2.
285. Sanjek, 599; Fred Bronson, *The Billboard Book of Number One Hits* (New York: Billboard Books, 2003), 253.
286. Bronson, 253; Sanjek, 599.
287. Atkinson, 463.
288. Block, W32.
289. Bronson, 146.
290. Alyn Shipton, *Jazz Makers: Vanguards of Sound* (Oxford: Oxford University Press, 2002), 18-19.
291. www.billboard.com/artist/308288/louis-armstrong/chart.
292. DeVeaux and Giddins, 360, 376.
293. DeVeaux and Giddins, 482.
294. Thomas E. Larson, *The History and Tradition of Jazz* (Dubuque, IA: Kendall/Hunt, 2002), 194.
295. Nisenson, 40.
296. Nisenson, 153.
297. Nisenson, 151.
298. John Coltrane, "Dear Listener," Liner Notes for *A Love Supreme* (Santa Monica, CA: Impulse, 1964).
299. Kahn, 92-94.
300. Kahn, 82-94.
301. Kahn, 104.
302. The video linked here does a good job of showing how Coltrane played the text through his horn (youtube/BmbWRZfOgwc).
303. Kahn, 123-124.
304. Nisenson, 154-158.
305. DeVeaux and Giddins, 392; Kahn, 180-183.
306. Nisenson, 214.
307. Tonks, 38-39.
308. David R. Shumway, "Rock 'n' Roll Sound Tracks and the Production of Nostalgia" in *Cinema Journal* (Arlington, TX: University of Texas Press, 1999), 36.
309. Stuessy, 144-145.
310. Tonks, 39.
311. David E. James, *Rock 'N' Film: Cinema's Dance With Popular Music* (Oxford: Oxford University Press, 2015), 148-149. An interesting documentary on the making of the 1964 film is available here: https://youtube/5C93gRZEsqc.
312. Frontani, 157.
313. James, *Rock 'N' Film*, 141-142.
314. James, *Rock 'N' Film*, 21.
315. Ward, 311-313.
316. Gray, 187.
317. www.nealhefti.com/.
318. Hubbert, 367.
319. www.grammy.com/grammys/artists/lalo-schifrin.
320. Tonks, 40; www.chicagotribune.com/entertainment/movies/ct-mission-impossible-composer-lalo-schifrin-20150730-column.html
321. Frontani, 89, 119.
322. www.rollingstone.com/music/news/revisiting-beatles-wonderfully-wacky-cartoon-series-50-years-later-20150925.
323. Noyer, 85; Frontani, 119.
324. Ward, 321.
325. Ward, 321-322; Frontani, 119.
326. Stuessy, 307.
327. Ward, 322.
328. www.billboard.com/archive/charts/1967/hot-100
329. Ward, 166-167.
330. Austen, 31.
331. Noyer, 49.
332. www.smothersbrothers.com/episodes.htm.
333. Todd Gitlin, *The Sixties: Years of Hope, Days of Rage* (New York: Random House, 2013), 196, *et passim.*
334. Larry Starr and Christopher Waterman, *American Popular Music: The Rock Years* (Oxford: Oxford University Press, 2006), 145-146.
335. Gitlin, 195.
336. Brooks, 140.
337. Gitlin, 195; Noyer, 79-80.
338. Copeland, 240.
339. Gitlin, 196.
340. Noyer, 80.
341. Stuessy, 73.
342. Stuessy, 74-75.
343. Stuessy, 140.
344. Ward, 303-304.
345. Ward, 304; Richie Unterberger, *Eight Miles High* (San Francisco: Backbeat Books, 2003), 11.
346. Ward, 304.
347. Gray, 395.
348. Ward, 304.
349. Stuessy, 139.
350. The full text of Dylan's version can be followed on Dylan's website: bobdylan.com/songs/mr-tambourine-man/.
351. Stuessy, 140-141; Noyer, 84.
352. Greil Marcus, *Like a Rolling Stone: Bob Dylan at the Crossroads* (London: Faber and Faber, 2005), 4-6.
353. Gitlin, 199.
354. Gray, 187; www.billboard.com/artist/293235/bob-dylan/chart?page=1&f=379; Noyer, 78.
355. Marcus, 25; Stuessy, 139; Noyer, 78.
356. Stuessy, 139.
357. Marcus, 25; Noyer, 78.
358. www.billboard.com/artist/293235/bob-dylan/chart.
359. Gray, 63; Noyer, 77.
360. Stuessy, 139.
361. Stuessy, 139; Marcus, 3.
362. www.rollingstone.com/music/features/how-bob-dylan-made-rock-history-on-highway-61-revisited-w436776.

363. Marcus, xi; Stuessy, 139; www.billboard.com/archive/charts/1965/hot-100.

364. Peter James, *Warehouse Eyes: The Albums of Bob Dylan* (Lulu.com: 2006), 37.

365. www.rollingstone.com/music/lists/the-500-greatest-songs-of-all-time-20110407.

366. www.nme.com/news/music/bob-dylan-42-1245068.

367. Marcus, 3.

368. Stephen Scobie, *Alias: Bob Dylan Revisited* (Markham, Ontario: Red Deer Press, 2004), 122.

369. Marcus, vii.

370. Dylan's complete lyrics, telling the story of a generation out on the street, struggling to find its way, are available on his website: bobdylan.com/songs/rolling-stone.

371. Stuessy, 192.

372. The original recording, as included on the album *Highway 61 Revisited* (ranked number four on *Rolling Stone*'s list of the 500 best albums), can be heard here: vimeo.com/149690323.

373. https://www.eden.rutgers.edu/~webautha/Lyrics/rollingstones.htm.

374. Stuessy, 122; Jon Kutner and Spencer Leigh, *1,000 UK Number One Hits* (London: Omnibus Press, 2005), 202-203; Noyer, 79.

375. Richards, 176.

376. Richards, 176-178; Kutner and Leigh, 202.

377. Richards, 177.

378. www.rollingstone.com/music/lists/the-500-greatest-songs-of-all-time-20110407.

379. The official video can be viewed here, complete with lyrics: youtube/nrIPxlFzDi0. By the way—if you watch this video to the end, you will notice fans rushing the stage and practically attacking the Stones. This is video from a Stones rockumentary, *Charlie Is My Darling* (youtube/5M3doLtMF2c), which was not released until 2012. This type of behavior was common among Stones fans and fit with the group's bad boy image.

380. Noyer, 82.

381. Walter Everett, *Foundations of Rock* (Oxford: Oxford University Press, 2009), 87.

382. Greene, 100; Monteith, 13.

383. Frontani, 134.

384. Steven Roby, *Hendrix on Hendrix* (Chicago: Chicago Review Press, 2012), xiii.

385. Elizabeth L. Wollman, *The Theatre will Rock* (Ann Arbor: University of Michigan Press, 2006), 63.

386. Richard Witts, *Velvet Underground* (London: Equinox Publishing, 2006), 113.

387. James, *Warehouse*, 55.

388. Devon Powers, *Writing the Record: The Village Voice and the Birth of Rock Criticism* (Boston: University of Massachusetts Press, 2013), 115, 117, *passim*.

389. Baron Wolman, *The Rolling Stone Years* (New York, NY: Omnibus Press, 2011), 10; Marcus, 87-88.

390. Wolman, 11.

391. Mark Bego, *Aretha Franklin: Queen of Soul* (New York: Skyhorse Publishing, 2012), 35, 42-51.

392. Rudinow, 10; www.billboard.com/artist/279868/aretha-franklin/chart?page=6&f=379&sort=date.

393. Ward, 380-381.

394. Bego, 78-79.

395. Stuessy, 158.

396. Mark Ribowsky, *Dreams to Remember: Otis Redding, Stax Records, and the Transformation of the Southern Soul* (New York: WW Norton, 2016), 107-109.

397. Rudinow, 233; Brown did not actually earn the moniker until 1972, when he provided music for a film with a mafia theme (Shumway, 67).

398. Stuessy, 159-160.

399. Stuessy, 159-160.

400. www.billboard.com/articles/columns/chart-beat/7633288/rewinding-charts-james-brown-i-feel-good-hot-100.

401. Ward, 302.

402. Shumway, 53.

403. Rudinow, 111, 124.

404. All this is apparent in a medley of the two songs that the band performed on *Ed Sullivan*: youtube/gJgkuyJ8NLo.

405. Starr and Waterman, 102-104.

406. Monteith, xii.

407. www.billboard.com/archive/charts/1964/hot-100.

408. Noyer, 68.

409. Cashmore, 95-96.

410. Cashmore, 89.

411. Stuessy, 167.

412. Stuessy, 167.

413. Noyer, 81; Stuessy, 162, 167.

414. www.edsullivan.com/artists/the-supremes.

415. www.billboard.com/artist/383448/beach-boys/chart.

416. Sellars, 38.

417. Stuessy, 76.

418. Sellars, 37.

419. Sellars, 37, 40.

420. Sellars, 48.

421. Phillip Lambert, *Inside the Music of Brian Wilson* (New York: Continuum Books, 2007), 237.

422. Sellars, 44.

423. www.rollingstone.com/music/news/beach-boys-pet-sounds-15-things-you-didnt-know-20160516.

424. Sellars, 54.

425. Pat Graham, *Instrument* (San Francisco, CA: Chronicle Books, 2011), 108.

426. Sellars, 45.

427. Noyer, 99; Womack, 235.

428. Millard, 173. The excerpt from the PBS *Soundbreaking* series available here (youtube/JqojzPT5gvE) discusses the friendly competition between the Beatles and the Beach Boys and gives some insight into the production of *Pet Sounds* and "Good Vibrations."

429. www.rollingstone.com/music/lists/the-500-greatest-songs-of-all-time-20110407.

430. Stuessy, 76.

431. Stuessy, 76-77; Kutner, 226.

432. Everett, 73.

433. Everett, 95.

434. Everett, 240.

435. Everett, 326.

436. Cateforis, 103.

437. Noyer, 100.

438. www.rollingstone.com/music/features/inside-dylans-blonde-on-blonde-rocks-first-great-double-album-20160516.

439. Stuessy, 216; Everett, 6.

440. www.rollingstone.com/music/lists/the-500-greatest-songs-of-all-time-20110407.

441. youtube/KOH7o8Vw6Mc.

442. www.rollingstone.com/music/news/frank-zappa-the-rolling-stone-interview-19680720.

443. Chris Stodder, *The Encyclopedia of Sixties Cool* (Santa Monica, CA:

Santa Monica Press, 2007), 58.

444. Witts, 29.

445. Witts, 13-14.

446. Noyer, 73.

447. Stuessy, 358.

448. Stuessy, 183; Noyer, 94.

449. Noyer, 95.

450. Stuessy, 183-184; Noyer, 51.

451. David Malvinni, *Grateful Dead and the Art of Rock* (Lanham, MD: Scarecrow Press, 2013), 115.

452. www.billboard.com/artist/303090/grateful-dead/chart.

453. Stodder, 273, 278.

454. www.forbes.com/2009/07/21/phish-widespread-panic-camp-bisco-opinions-contributors-grateful-dead.html.

455. Malvinni, 115-134.

456. Ross, 516.

457. Noyer, 83, 92.

458. In 2015, *Rolling Stone* magazine conducted a poll of sixty rock and roll musicians, critics, and historians to select the 100 greatest guitarists of all time, and Clapton was ranked number two. www.rollingstone.com/music/lists/100-greatest-guitarists-20111123/jimi-hendrix-20120705.

459. Noyer, 73.

460. Stuessy, 250; Noyer, 92.

461. Stuessy, 251.

462. Everett, 123, 162.

463. Noyer, 94; www.billboard.com/artist/277711/van-morrison/chart.

464. Noyer, 78.

465. Stuessy, 93.

466. Stuessy, 93.

467. Stuessy, 94.

468. Ward, 315.

469. Ward, 315.

470. Noyer, 77.

471. www.rollingstone.com/music/lists/the-500-greatest-songs-of-all-time-20110407.

472. Frontani, 17.

473. Womack, 21.

474. Everett, 151, 341.

475. Gordon Thompson, *Please Please Me* (New York: Oxford University Press, 2008), 127.

476. Aaron Krerowicz, *The Beatles & The Avant Garde* (Hartford, CT: AK Books, 2014) 29-30.

477. Krerowicz, 31.

478. Noyer, 87.

479. Frontani, 95-96.

480. Frontani, 99.

481. Frontani, 100.

482. Frontani, 112.

483. Frontani, 110.

484. www.rollingstone.com/music/lists/the-500-greatest-songs-of-all-time-20110407.

485. Krerowicz, 13.

486. Womack, 94-95.

487. The PBS Soundbreaking series discussed some of the techniques used in "Tomorrow Never Knows" here: www.youtube.com/watch?v=WGeF5Rxlpal.

488. Doyle Greene, *Rock, Counterculture, and the Avant-Garde, 1966-1970* (Jefferson, NC: McFarland & Company, 2016), 34.

489. Brooks, 170.

490. Jones, 249-250.

491. Noyer, 91.

492. Stuessy, 178.

493. Noyer, 91.

494. Stuessy, 175.

495. Ward, 374-376.

496. Inglis, 28, 62.

497. Strodder, 31.

498. Inglis, 28.

499. Ward, 375.

500. Ward, 376.

501. Malvinni, 59.

502. Starr and Waterman, 163; www.jimihendrix.com/jimi/.

503. youtube/ZwhtwqkCfYQ.

504. Starr and Waterman, 163. youtube/D4LnpDj24hI.

505. Inglis, 32.

506. www.rollingstone.com/music/lists/100-greatest-guitarists-20111123/jimi-hendrix-20120705.

507. Starr and Waterman, 163.

508. www.billboard.com/artist/320562/otis-redding/chart?page=1&f=379&sort=date.

509. Ward, 380-381.

510. Inglis, 33.

511. vimeo.com/45157591.

512. youtube/7BDw-H_hUzw.

513. www.billboard.com/artist/320562/otis-redding/chart?sort=position&f=379.

514. Monteith, 70.

515. Inglis, 63-65.

516. Stuessy, 157.

517. Stuessy, 95.

518. Frontani, 94, 114.

519. Frontani, 17.

520. www.rollingstone.com/music/lists/the-500-greatest-songs-of-all-time-20110407.

521. www.rollingstone.com/music/lists/the-500-greatest-songs-of-all-time-20110407.

522. www.billboard.com/articles/columns/rock/7809424/beatles-sgt-peppers-lonely-hearts-club-band-anniversary.

523. Frontani, 131-132.

524. Stuessy, 99; Ross, 516.

525. Frontani, 133.

526. Stuessy, 99.

527. vimeo.com/10898084.

528. www.vidio.com/watch/68693-the-beatles-lovely-rita-lyrics.

529. www.rollingstone.com/music/features/beatles-a-day-in-the-life-10-things-you-didnt-know-w459398. An official Beatles film is available online (youtube/usNsCeOV4GM), but it is not the final mix of the recording. To get the full effect, with the alarm clock and the proper balance, you would need to purchase a recording.

530. Farber, 246.

531. "A Day in the Life," *Sgt. Pepper's Lonely Hearts Club Band,* Beatles, Capitol Records, 1967.

532. Christopher B. Strain, *The Long Sixties* (Malden, MA: Wiley Blackwell, 2017), 50.

533. Strain, 64.

534. history.state.gov/milestones/1961-1968/soviet-invasion-czechoslavkia; www.npr.org/templates/story/story.php?storyId=93720234.

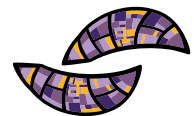535. history.state.gov/milestones/1961-1968/soviet-invasion-czechoslavkia.
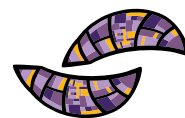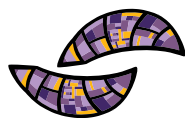
536. Byron Adams, "Karel Husa's *Music for Prague 1968*," *Instrumentalist Magazine* (Evanston: Instrumentalist, October 1987), 19; Zachary Cairns, "*Music for Prague 1968*: A Display of Czech Nationalism from America," Studio Musicologica (Budapest: Akadémiai Kiadó, 2015), 444-448.

537. Cairns, 443-444.

538. Adams, 20; www.nytimes.com/2017/01/04/arts/music/karel-husa-pulitzer-prize-winning-composer-dies-at-95.html.

539. www.pulitzer.org/winners/karel-husa.

540. youtube/oyB3h6lPCuA.

541. Hickman, 302; Strain, 161.

542. Greene, 53, 98.

543. Robert Kolker, *A Cinema of Loneliness* (Oxford: Oxford University Press, 2011), 116.

544. Hickman, 200, 302.

545. Hubbert, 372.

546. Hickman, 302. The entire film is available here: archive.org/details/video_20160419.

547. www.npr.org/templates/story/story.php?storyId=90330162.

548. Farber, 42.

549. Strain, 109-114.

550. Greene, 162.

551. Farber, 211.

552. Gitlin, 391-392, 400-402.

553. Greene, 128, 131.

554. Strain, 115.

555. Greene, 162.

556. erlc.com/resource-library/articles/5-facts-about-the-assassination-of-martin-luther-king-jr.

557. Greene, 162.

558. www.poetryfoundation.org/poems/46548/harlem.

559. Anthony McDonald, *A Catalog of Music Written in Honor of Martin Luther King, Jr.* (Lanham, MD: Scarecrow Press, 2012).

560. Simms, 360.

561. www.lucianoberio.org/node/1402?413753443=1.

562. www.lucianoberio.org/node/1402?413753443=1.

563. www.pcmsconcerts.org/composer/luciano-berio/.

564. Luciano Berio, *Sinfonia for Eight Voices and Orchestra* (London: Universal Edition, 1969), 34.

565. Berio, *Sinfonia*; www.pcmsconcerts.org/composer/luciano-berio/.

566. Simms, 397.

567. www.theguardian.com/news/2003/may/28/guardianobituaries.artsobituaries2.

568. Berio, *Sinfonia*.

569. www.lucianoberio.org/node/1494?1683069894=1.

570. www.lucianoberio.org/node/1494?1683069894=1.

571. www.lucianoberio.org/node/1494?1683069894=1.

572. Michael Hicks, "Text, Music, and Meaning in the Third Movement of Luciano Berio's *Sinfonia*" in *Perspectives of New Music* (Seattle, WA, 1967), 200-207.

573. www.lucianoberio.org/node/1494?1683069894=1.

574. Berio, 35.

575. Hicks, 207.

576. www.nobelprize.org/nobel_prizes/literature/laureates/1969/beckett-facts.html.

577. Hicks, 207.

578. Hicks, 207-210.

579. Hicks, 211.

580. Berio, 93, 97.

581. David Osmond-Smith, *Playing on Words: A Guide to Luciano Berio's Sinfonia* (New York: Routledge, 2015).

582. Swingle's octet was well known for their jazzy versions of classical music, especially Bach. In 1963, they released a recording of scat-sung versions of Bach music with only a bass and drum set as accompaniment. youtube/V_7NQkhR1Ac.

583. www.grammy.com/grammys/artists/luciano-berio.

584. Strain, 155.

585. Noyer, 103.

586. Farber, 235.

587. www.rollingstone.com/music/lists/the-500-greatest-songs-of-all-time-20110407.

588. Stuessy, 123.

589. Greene, 163-164.

590. Farber, 337.

591. Farber, 337 – 340.

592. Stuessy, 123.

593. Noyer, 101.

594. Unterberger, *Eight Miles*, 176; Nadya Zimmerman, *Counterculture Kaleidoscope : Musical and Cultural Perspectives on Late Sixties San Francisco* (Ann Arbor: University of Michigan Press, 2010), 158.

595. Zimmerman, 159.

596. Zimmerman, 160.

597. Zimmerman, 161.

598. Stuessy, 103.

599. Jedidiah Sklower, *Countercultures and Popular Music* (Abingdon, UK: Routledge, 2016), 141-142.

600. Strain, 155.

601. Unterberger, *Eight Miles*, 176.

602. Sklower, 142.

603. Strain, 155.

604. Frontani, 225.

605. Frontani, 176.

606. Noyer, 108.

607. Strodder, 48.

608. Womack, 125.

609. Noyer, 107-108. youtube/RkZC7sqImaM.

610. youtube/BGLGzRXY5Bw.

611. The Beatles, *The Beatles* ("The White Album"), Apple Records, 1968.

612. Monteith, 68.

613. Sklower, 19; Strain, 155; Zimmerman, 157.

614. Zimmerman, 157.

615. Noyer, 95, 102.

616. DeVeaux and Giddins, 480.

617. Salzman, 204-221.

618. David Ernst, *The Evolution of Electronic Music* (New York: Schirmer Books, 1977), 56.

619. Ernst, 188.

620. Salzman, 149; www.wendycarlos.com/.

621. Ernst, 74. soundcloud.com/mikekraze/bach-switched-on-full-album.

622. www.billboard.com/artist/7027185/walter/chart.

623. Stuessy, 122.

624. Canarina, 59.

625. Alicia Kopfstein-Penk, *Leonard Bernstein and His Young People's Concerts* (Lanham, MD: Rowman and Littlefield, 2015), xxv.

626. Seldes, 117.

627. Seldes, 164.

628. Strain, 50; Seldes, 166.
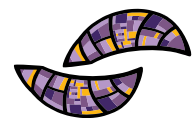
629. youtube/8xPuSzvCSQA.

630. www.nytimes.com/1989/12/26/world/upheaval-in-the-east-berlin-near-the-wall-bernstein-leads-an-ode-to-freedom.html?mcubz=3

631. George Andrews Fischer, *Beethoven* (London: Andrews, 2010), 106; Maynard Solomon, *Beethoven* (New York: Schirmer, 1998), 408-409; Gail K. Hart, "Schiller's 'An die Freude' and the Question of Freedom," *German Studies Review,* (Baltimore: Johns Hopkins University Press: 2009), 479-493.

632. Lazo, 105.

633. DeVeaux and Giddins, 481.

634. DeVeaux and Giddins, 482.

635. Victor Svorinich, *Listen to This: Miles Davis and Bitches Brew* (Jackson: University of Mississippi Press, 2015), 43.

636. DeVeaux and Giddins, 482-4.

637. DeVeaux and Giddins, 483.

638. Svorinich, 38.

639. Jarno Kukkonen, *Early Jazz-Rock: The Music of Miles Davis, 1967-1972,* Doctoral Thesis (Helsinki, Finland: Sibelius Academy, 2005), 20.

640. George Grella, *Miles Davis' Bitches Brew* (New York: Bloomsbury, 2015), 53.

641. Svorinich, 71.

642. Martin and Waters, 327.

643. www.billboard.com/artist/311267/miles-davis/chart.

644. DeVeaux and Giddins, 483.

645. Block, 384.

646. Gänzl, 342.

647. Gänzl, 342.

648. Pollock, 195.

649. Block, 386.

650. Wollman, 3, 95.

651. Wollman, 92.

652. Wollman, 93.

653. Noyer, 103.

654. Clayson, 45.

655. Monteith, 66-67.

656. Starr and Waterman, 103.

657. Stuessy, 164, Noyer, 104-105.

658. Noyer, 105, 107.

659. www.billboard.com/artist/309807/marvin-gaye/chart?f=379.

660. Noyer, 109.

661. Noyer, 109; Cashmore, 181.

662. Cashmore, 181.

663. www.billboard.com/artist/416643/jackson-5/chart. youtube/aASwsMOy-pA.

664. Cashmore, 30.

665. Cashmore, 180.

666. Noyer, 100; Stuessy, 312.

667. Starr and Waterman, 224-225.

668. Stuessy, 312-313.

669. Stuessy, 313.

670. Stuessy, 193; www.grammy.com/grammys/awards/12th-annual-grammy-awards.

671. Stuessy, 196.

672. Noyer, 110.

673. www.billboard.com/artist/299102/chicago/chart?sort=date&f=379; www.grammy.com/grammys/artists/chicago.

674. Starr and Waterman, 164; Stuessy, 231.

675. Noyer, 104-105; Stuessy, 231.

676. Stuessy, 290.

677. Stuessy, 290. youtube/HQmmM_qwG4k.

678. Stuessy, 294.

679. www.billboard.com/artist/280528/steppenwolf/chart?page=1&f=379&sort=date.

680. Noyer, 103.

681. Noyer, 103.

682. Ward, 481; Noyer, 110.

683. Stuessy, 252; www.billboard.com/artist/304588/jethro-tull/chart?f=305.

684. Cashmore, 176.

685. Stuessy, 262.

686. Stuessy, 262; Noyer, 110.

687. Stuessy, 262.

688. Stuessy, 102.

689. Noyer, 103.

690. www.billboard.com/archive/charts/1968/hot-100.

691. Noyer, 107.

692. Ward, 427.

693. Ward, 427.

694. Ward, 428-429.

695. Ward, 429-430.

696. Ward, 430.

697. Noyer, 111.

698. whatsupnewp.com/wp-content/uploads/2016/07/1969-Newport-Jazz-Festival.jpg.

699. woodstockwhisperer.info/tag/1969-newport-jazz-festival/.

700. Ward, 430.

701. Ward, 430.

702. youtube/1sH0uR2u7Hs.

703. Inglis, 52-54.

704. Kevin Hillstrom and Laurie Collier Hillstrom, *Defining Moments: Woodstock* (Detroit: Omnigraphics, 2013), 71.

705. Starr and Waterman, 165; Strain, 149.

706. Hillstrom, 39. The complete lineup of more than thirty bands (as well as lots of other information about the festival) can be seen on the web page of the company that organized the festival: (www.woodstock.com/lineup/).

707. Hillstrom, 61; Stuessy, 255.

708. Stuessy, 236.

709. Starr and Waterman, 221.

710. Grace Slick, quoted in "How Jefferson Airplane's Grace Slick wrote 'White Rabbit,'" by Marc Myers, *Wall Street Journal (Online)*, Arts Section, May 31, 2016.

711. To get an idea of her ability to sing in tune and her creative ideas for decorating the original melody, listen to this isolated vocal track: (www.openculture.com/2017/03/listen-to-grace-slicks-hair-raising-vocals-in-the-isolated-track-for-white-rabbit-1967.html).

712. Hillstrom, 66.

713. Everett, 647.

714. www.wpi.edu/news/woodstock.

715. Jimi Hendrix, quoted in *Jimi Hendrix: Electric Gypsy,* by Harry Shapiro and Caesar Glebbeek (New York: St. Martin's Griffin, 1995), 387.

716. Starr and Waterman, 163.

717. https://youtu.be/vgyGJl_xm6o.

718. Charles Shaar Murray, *Crosstown Traffic: Jimi Hendrix and the Post-War Rock 'N' Roll Revolution* (New York: St. Martin's, 1991), 24.

719. Murray, 24.

720. Hillstrom, 79.

721. Ward, 431.
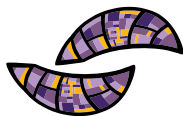
722. Booth, 72.
723. Greene, 177.
724. Ward, 431.
725. Hillstrom, 93.
726. www.billboard.com/archive/charts/1970/billboard-200.
727. Hillstrom, 101-105.
728. Noyer, 111.
729. Clayson, 46.
730. Inglis, 57.
731. Ward, 443.
732. Richards, 272.
733. Stuessy, 123.
734. Ward, 444.
735. Stuessy, 124.
736. Ward, 445.
737. Ward, 445.
738. Strain, 155.
739. Ward, 445.
740. Gitlin, 406.
741. Stuessy, 124.
742. Stuessy, 124.
743. Ward, 445.
744. Stuessy, 124.
745. www.rollingstone.com/music/news/the-rolling-stones-disaster-at-altamont-let-it-bleed-19700121.
746. Christopher Gair, *The American Counterculture* (Edinburgh: Edinburgh University Press, 2007), 176.
747. www.rollingstone.com/music/news/the-rolling-stones-disaster-at-altamont-let-it-bleed-19700121.
748. Gitlin, 407.
749. Stuessy, 186.
750. Ward, 478.
751. Ward, 462.
752. Stuessy, 106.
753. Stuessy, 106.
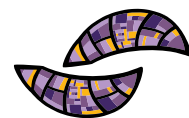754. Stuessy, 105.
755. Noyer, 65, 96.

Bibliography

Abjorensen, Norman. *Historical Dictionary of Popular Music.* Lanham, MD: Rowman and Littlefield, 2017.

Adams, Byron. "Karel Husa's *Music for Prague 1968.*" *Instrumentalist Magazine.* Evanston: Instrumentalist, October 1987.

Adlington, Robert. *Sound Commitments: Avant-Garde Music and the Sixties.* Oxford: Oxford University Press, 2009.

Andersen, Christopher. *Mick: The Wild Life and Mad Genius of Jagger.* New York: Simon & Schuster, 2012.

Ashby, Arved. *The Pleasure of Modernist Music.* Rochester, NY: University of Rochester Press, 2004.

Atkinson, Brooks. *Broadway.* New York: Macmillan, 1974.

Austen, Jake. *TV-a-Go-Go.* Chicago: Chicago Review Press, 2005.

Beatles, The. *The Beatles, "The White Album."* Apple Records, 1968.

Bego, Mark. *Aretha Franklin: Queen of Soul.* New York: Skyhorse Publishing, 2012.

Berio, Luciano. *Sinfonia for Eight Voices and Orchestra.* London: Universal Edition, 1969.

Block, Geoffrey. *Enchanted Evenings.* Oxford: Oxford University Press, 2009.

Booth, Stanley. *True Adventures of the Rolling Stones.* Chicago: Chicago Review Press, 2014.

Brett, Philip. *Music and Sexuality in Britten: Selected Essays.* Berkeley, CA: University of California Press, 2006.

Britten, Benjamin. *War Requiem.* London: Boosey & Hawkes, 1997.

Bronson, Fred. *The Billboard Book of Number One Hits.* New York: Billboard Books, 2003.

Brooks, Victor. *Last Season of Innocence.* Lanham, Maryland: Rowman & Littlefield, 2012.

Brown, Leonard. *John Coltrane and Black America's Quest for Freedom: Spirituality and the Music.* Oxford: Oxford University Press, 2010.

Cage, John. *Silence.* Hanover, NH: University Press of New England, 1961.

Cairns, Zachary. "*Music for Prague 1968*: A Display of Czech Nationalism from America." Studio Musicologica. Budapest: Akadémiai Kiadó, 2015.

Canarina, John. *The New York Philharmonic.* Milwaukee, WI: Hal Leonard, 2010.

Carpenter, Alexander. "St. Luke Passion." *All Music Guide to Classical Music.* San Francisco: Backbeat Books, 2005.

Cashmore, Ellis. *The Black Culture Industry.* London: Routledge, 1997.

Cateforis, Theo. *The Rock History Reader.* New York: Routledge, 2013.

Clayson, Alan. *Keith Moon: Instant Party.* New Malden, UK: Chrome Dreams, 2005.

Coltrane, John. "Dear Listener." Liner Notes for *A Love Supreme.* Santa Monica, CA: Impulse, 1964.

Cooke, Sam. *A Change Is Gonna Come*: www.archives.gov/exhibits/documented-rights/exhibit/section4/detail/change-is-gonna-come-lyrics.html.

Cope, David. *New Directions in Music.* Prospect Heights, IL: Waveland Press, 2001.

Copeland, David A. *The Media's Role in Defining the Nation.* New York: Peter Lang, 2013.

Davis, Francis. "Ornette's Permanent Revolution." *The Atlantic Monthly*, September 1985.

de Leeuw, Ton. *Music of the Twentieth Century.* Amsterdam:

Amsterdam University Press, 2005.

DeVeaux, Scott and Gary Giddins, *Jazz*. New York: WW Norton, 2009.

Dylan, Bob. *Chronicles: Volume One*. New York: Simon & Schuster, 2004.

Ernst, David. *The Evolution of Electronic Music*. New York: Schirmer Books, 1977.

Everett, Walter. *Foundations of Rock*. Oxford: Oxford University Press, 2009.

Farinaccio, Vincent. *Nothing to Turn Off: The Films and Video of Bob Dylan*. Philadelphia, PA: Vincent Farinaccio, 2007.

Fay, Laurel. *Shostakovich: A Life*. Oxford: Oxford University Press, 2000.

Fischer, George Andrews. *Beethoven*. London: Andrews, 2010.

Floros, Constantin. *New Ears for New Music*. Mainz, Germany: Peter Lang, 2006.

Floyd, Jr., Samuel A. *The Power of Black Music*. Oxford: Oxford University Press, 1995.

Fordham, John. "How Miles Davis's Kind of Blue shaped 50 years of music." *The Guardian*, August 2009.

Gair, Christopher. *The American Counterculture*. Edinburgh: Edinburgh University Press, 2007.

Gann, Kyle. *No Such Thing As Silence*. New Haven: Yale University Press, 2010.

Gänzl, Kurt. *The Musical: A Concise History*. Boston: Northeastern University Press, 1997.

Gebhardt, Nicholas. *Going for Jazz: Musical Practices and American Ideology*. Chicago: University of Chicago Press, 2001.

Giddins, Gary. *Weather Bird: Jazz at the Dawn of Its Second Century*. Oxford: Oxford University Press, 2004.

Gilder, Eric. *The Dictionary of Composers and Their Music*. New York: Wings Books, 1985.

Gitlin, Todd. *The Sixties: Years of Hope, Days of Rage*. New York: Random House, 2013.

Gołab, Maciej. *Musical Modernism in the Twentieth Century*. Frankfurt: Peter Lang, 2011.

Gottfried, Martin. *All His Jazz: The Life and Death of Bob Fosse*. Cambridge, MA: Da Capo Press, 190.

Graham, Pat. *Instrument*. San Francisco, CA: Chronicle Books, 2011.

Gray, Michael. *Bob Dylan Encyclopedia*. New York: Continuum International Publishing, 2006.

Greene, Doyle. *Rock, Counterculture, and the Avant-Garde, 1966-1970*. Jefferson, NC: McFarland & Company, 2016.

Greene, John. *America in the Sixties*. Syracuse, NY: Syracuse University Press, 2010.

Grella, George. *Miles Davis' Bitches Brew*. New York: Bloomsbury, 2015.

Griffiths, Paul. *Modern Music and After*. Oxford: Oxford University Press, 2010.

Harry, Bill. *British Invasion*. New Malden, UK: Chrome Dreams, 2004.

Hart, Gail K. "Schiller's 'An die Freude' and the Question of Freedom." *German Studies Review*. Baltimore: Johns Hopkins University Press: 2009.

Hickman, Roger. *Reel Music: Exploring 100 Years of Film Music*. New York: WW Norton, 2006.

Hicks, Michael. "Text, Music, and Meaning in the Third Movement of Luciano Berio's *Sinfonia*." *Perspectives of New Music*. Seattle, WA, 1967.

Hillstrom, Kevin and Laurie Collier Hillstrom. *Defining Moments: Woodstock*. Detroit: Omnigraphics, 2013.

Hollander, John. "Notes on the Text of Philomel." *Perspectives of New Music*. Seattle, WA, 1967.

Hubbert, Julie. *Celluloid Symphonies*. Berkeley, CA: University of California Press, 2011.

Humphries, Patrick. *Top of the Pops 50th Anniversary*. Carmarthen, UK: McNidder and Grace, 2013.

Inglis, Ian. *Performance and Popular Music: History, Place and Time*. Burlington, VT: Ashgate Publishing Company, 2006.

James, David E. *Rock 'N' Film: Cinema's Dance With Popular Music*. Oxford: Oxford University Press, 2015.

James, Peter. *Warehouse Eyes: The Albums of Bob Dylan*. Lulu.com: 2006.

Jones, John Bush. *Our Musicals, Ourselves: A Social*

History of the American Musical Theatre. Waltham, MA: Brandeis University Press, 2003.

Kahn, Ashley. A Love Supreme: The Story of John Coltrane's Signature Album. New York: Viking, 2002.

Kałużny, Jan A. "Krzysztof Penderecki And His Contribution To Modern Musical Notation." The Polish Review, Vol. 8, No. 3 (Summer, 1963).

Kaplan, Fred. 1959: The Year Everything Changed. Hoboken, NJ: John Wiley & Songs, 2009.

Kay, Ulysses. Fantasy Variations. Score pages available online at exhibitions.cul.columbia.edu/exhibits/show/kay/orchestral-music/fantasy-variations.

Kolker, Robert. A Cinema of Loneliness. Oxford: Oxford University Press, 2011.

Kopfstein-Penk, Alicia. Leonard Bernstein and His Young People's Concerts. Lanham, MD: Rowman and Littlefield, 2015.

Krerowicz, Aaron. The Beatles & The Avant Garde. Hartford, CT: AK Books, 2014.

Kroger, Karl. "Orchestral Music." Notes. Middleton, WI: Music Library Association.

Kukkonen, Jarno. Early Jazz-Rock: The Music of Miles Davis, 1967-1972, Doctoral Thesis. Helsinki, Finland: Sibelius Academy, 2005.

Kurlansky, Mark. "How Martha and the Vandellas Started 'Dancing in the Street.'" Slate: www.slate.com/articles/arts/culturebox/2013/07/dancing_in_the_street_history_of_the_song_from_mark_kurlansky_s_ready_for.html.

---. Ready for a Brand New Beat: How "Dancing in the Street" Became the Anthem for a Changing America. New York: Penguin Books, 2013.

Kurtti, Jeff. The Great Movie Musical Trivia Book. New York: Applause Books, 1996.

Kutner, Jon and Spencer Leigh, 1,000 UK Number One Hits. London: Omnibus Press, 2005.

Lachenbruch, David. "Equipment Newsletter." Billboard Magazine, May 25, 1963.

Lamb, Evelyn. "Uncommon Time: What Makes Dave Brubeck's Unorthodox Jazz Stylings So Appealing?" Scientific American, December 2012.

Lambert, Phillip. Inside the Music of Brian Wilson. New York: Continuum Books, 2007.

Larson, Thomas E. The History and Tradition of Jazz. Dubuque, IA: Kendall/Hunt, 2002.

Lazo, Caroline Evensen. Leonard Bernstein: In Love with Music. Minneapolis: Twenty-First Century Books, 2002.

Littleproud, Brad and Joan Hague. Woodstock: Peace, Music, and Memories. Iola, WI: Krause Publications, 2009.

Maconie, Robin. Avant Garde: An American Odyssey from Gertrude Stein to Pierre Boulez. Lanham: Scarecrow Press, 2012.

Malvinni, David. Grateful Dead and the Art of Rock. Lanham, MD: Scarecrow Press, 2013.

Marcus, Greil. Like a Rolling Stone: Bob Dylan at the Crossroads. London: Faber and Faber, 2005.

Martin, Henry and Keith Waters. Essential Jazz: The First 100 Years. Boston, MA: Schirmer, 2009.

McCutchan, Ann. The Muse That Sings. Oxford: Oxford University Press, 1999.

McDermot, Galt. Hair. New York: Tams-Witmark, 1966.

McDonald, Anthony. A Catalog of Music Written in Honor of Martin Luther King, Jr. Lanham, MD: Scarecrow Press, 2012.

Millard, André. Beatlemania. Baltimore: Johns Hopkins University Press, 2012.

Miller, Scott. Sex, Drugs, Rock & Roll, and Musicals. Boston: Northeastern University Press, 2011.

Monson, Ingrid. Freedom Sounds: Civil Rights Call Out to Jazz and Africa. Oxford: Oxford University Press, 2007.

Monteith, Sharon. American Culture in the 1960s. Edinburgh, Scotland: Edinburgh University Press, 2008.

Moorefield, Virgil. The Producer as Composer: Shaping the Sounds of Popular Music. Cambridge, MA: MIT Press, 2005.

Morgan, Robert P. Twentieth-Century Music. New York: WW Norton, 1991.

Murray, Charles Shaar. Crosstown Traffic: Jimi Hendrix and the Post-War Rock 'N' Roll Revolution. New York: St. Martin's, 1991.

Nachman, Gerald. *Right Here On Our Stage Tonight! Ed Sullivan's America.* Berkeley, CA: University of California Press, 2009.

Naden, Corinne J. *The Golden Age of American Musical Theatre.* Lanham, MD: Bowman & Littlefield, 2011.

Negus, Keith and John Street, "Introduction to 'Music and Television' Special Issue." *Popular Music*, Vol. 21, No. 3, Music and Television (Oct., 2002).

Nichols, Peter M. *The New York Times Guide to the Best 1,000 Movies Ever Made.* New York: Macmillan, 2004.

Nisenson, Eric. *Ascension: John Coltrane and his Quest.* New York: St. Martin's Press, 1993.

Nolan, Frederick W. *The Sound of Their Music.* New York: Applause, 2002.

Nyman, Michael. "Steve Reich: An Interview with Michael Nyman." *The Musical Times*, London: The Musical Times Publications, 1971.

Ode to Freedom: Beethoven Symphony No. 9, directed by Humphrey Burton, conducted by Leonard Bernstein (EuroArts Music International, 2009) DVD.

Osmond-Smith, David. *Playing on Words: A Guide to Luciano Berio's Sinfonia.* New York: Routledge, 2015.

Penderecki, Krzysztof. Threnody for the Victims of Hiroshima. Warsaw: Panstwowe Wydawnictwo Muzyczne, 1961.

Peyser, Joan. *Bernstein: A Biography.* New York: Ballantine Books, 1987.

Pollock, Bruce. *Rock Song Index.* New York: Routledge, 1997.

Powers, Devon. *Writing the Record: The Village Voice and the Birth of Rock Criticism.* Boston: University of Massachusetts Press, 2013.

Read, Gardner. *Pictographic Score Notation.* Westport, CT: Greenwood Press, 1998.

Ribowsky, Mark. *Dreams to Remember: Otis Redding, Stax Records, and the Transformation of the Southern Soul.* New York: WW Norton, 2016.

Richards, Keith. *Life.* New York: Little, Brown and Company, 2010.

Roberts, Randall. "Why Was Ornette Coleman So Important?" *Los Angeles Times*, June 2015.

Robinson, Ray. *Krzysztof Penderecki: A Guide to His Works.* Princeton, NJ: Prestige Publications, 1983.

Roby, Steven. *Hendrix on Hendrix.* Chicago: Chicago Review Press, 2012.

Rorabaugh, William J. "The Election of 1960." *A Companion to John F. Kennedy*, ed. Marc J. Selverstone. Malden, Massachusetts: John Wiley & Sons, 2014.

Ross, Alex. *The Rest Is Noise.* New York: Picador, 2007.

Rupprecht, Philip. *Britten's Musical Language.* Cambridge: Cambridge University Press, 2001.

Ryfe, David. *Presidents In Culture.* New York: Peter Lang, 2005.

Salzman, Eric. *Twentieth-Century Music.* Englewood Cliffs, NJ: Prentice Hall, 1988.

Sanjek, Russell. *American Popular Music and its Business.* New York: Oxford University Press, 1988.

Schmidt, Carl B. *Entrancing Muse: A Documented Biography of Francis Poulenc.* Hillsdale, NY: Pendragon Press, 2001.

Scobie, Stephen. *Alias: Bob Dylan Revisited.* Markham, Ontario: Red Deer Press, 2004.

Seldes, Barry. *Leonard Bernstein: The Political Life of an American Musician.* Berkeley: University of California Press, 2009.

Sellars, Jeff. *God Only Knows.* Eugene, OR: Cascade Books, 2015.

Selverstone, Marc J. *A Companion to John F. Kennedy.* Chichester, England: John Wiley & Sons, 2014.

Shapiro, Harry, and Caesar Glebbeek. *Jimi Hendrix: Electric Gypsy.* New York: St. Martin's Griffin, 1995.

Shelton, Robert. "Bob Dylan: A Distinctive Folksong Stylist." *New York Times Arts Section.* New York: *New York Times*, September 29, 1961.

Shipton, Alyn. *Jazz Makers: Vanguards of Sound.* Oxford: Oxford University Press, 2002.

Shumway, David R. "Rock 'n' Roll Sound Tracks and the Production of Nostalgia." *Cinema Journal.* Arlington, TX: University of Texas Press, 1999.

Sklower, Jedidiah. *Countercultures and Popular Music.* Abingdon, UK: Routledge, 2016.
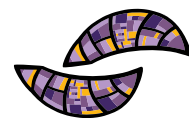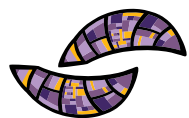
Myers, Marc. "How Jefferson Airplane's Grace Slick wrote 'White Rabbit.'" *Wall Street Journal (Online)*, Arts Section, May 31, 2016.

Snead, David L. *John F. Kennedy, The New Frontier President.* New York: Nova Science Publishers, 2012.

Solomon, Maynard. *Beethoven.* New York: Schirmer, 1998.

Starr, Larry and Christopher Waterman. *American Popular Music: The Rock Years.* Oxford: Oxford University Press, 2006.

Stodder, Chris. *The Encyclopedia of Sixties Cool.* Santa Monica, CA: Santa Monica Press, 2007.

Strain, Christopher B. *The Long Sixties.* Malden, MA: Wiley Blackwell, 2017.

Strickland, Edward. *American Composers: Dialogues on Contemporary Music.* Bloomington, IN: Indiana University Press, 1991.

Svorinich, Victor. *Listen to This: Miles Davis and Bitches Brew.* Jackson: University of Mississippi Press, 2015.

Swayne, Steve. *How Sondheim Found His Sound.* Ann Arbor: University of Michigan Press, 2005.

Taruskin, Richard and Christopher H. Gibbs. *The Oxford History of Western Music.* Oxford: Oxford University Press, 2013.

Thompson, Gordon. *Please Please Me.* New York: Oxford University Press, 2008.

Tonks, Paul. *The Pocket Essential Film Music.* Harpenden, England: Pocket Essentials, 2001.

Tropiano, Stephen. *Cabaret: Music On Film Series.* Milwaukee: Limelight, 2011.

UNESCO, *Statistics on Radio and Television: 1950-1960.* Paris: UNESCO, 1963.

Unterberger, Richie. *Eight Miles High.* San Francisco: Backbeat Books, 2003.

Ward, Ed, Geoffrey Stokes, Ken Tucker. *Rock of Ages: The Rolling Stone History of Rock & Roll.* New York: Simon & Schuster, 1986.

Webley, Kayla. "How the Nixon-Kennedy Debate Changed the World." *Time,* September 2010.

Werner, Craig Hansen. *A Change Is Gonna Come: Music, Race, and the Soul of America.* Ann Arbor: University of Michigan Press, 2006.

White, Theodore H. Personal Papers. Camelot Documents. "For President Kennedy: An Epilogue." by Theodore H. White, Life, 6 December 1963. THWPP-059-009. John F. Kennedy Presidential Library and Museum.

Williams, Richard. *The Blue Moment: Miles Davis's Kind of Blue and the Remaking of Modern Music.* London: W.W. Norton, 2009.

Williams, Tenley. *Stevie Wonder: Overcoming Adversity.* Philadelphia: Chelsea House Publishers, 2002.

Witts, Richard. *Velvet Underground.* London: Equinox, 2006.

Wolf, Stacy. *Changed for Good: A Feminist History of the Broadway Musical.* New York: Oxford University Press, 2011.

Wollman, Elizabeth L. *The Theatre will Rock.* Ann Arbor: University of Michigan Press, 2006.

Wolman, Baron. The Rolling Stone Years. New York, NY: Omnibus Press, 2011.

Womack, Kenneth. *The Cambridge Companion to The Beatles.* Cambridge, England: Cambridge University Press, 2009.

Wyatt, Lucius R. "Ulysses Kay's *Fantasy Variations*: An Analysis." *The Black Perspective in Music.* Cambria Heights, NY: Foundation for Research in the Afro-American Creative Arts, 1977.

Yaffe, David. *Bob Dylan: Like a Complete Unknown.* New Haven, CT: Yale University Press, 2011.

Zimmer, Dave. *Crosby, Stills, & Nash.* Boston, MA: Da Capo Press, 2008.

Zimmerman, Nadya. *Counterculture Kaleidoscope: Musical and Cultural Perspectives on Late Sixties San Francisco.* Ann Arbor: University of Michigan Press, 2010.

Zurbrugg, Nicholas. *The Parameters of Postmodernism.* Carbondale, IL: Southern Illinois University Press, 1993.
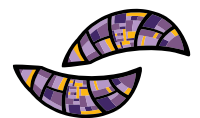
ONLINE SOURCES

awardsdatabase.oscars.org/search/results.

bobdylan.com/songs/times-they-are-changin/.

broadwaymusicalhome.com/shows/forum.htm.

coltrane.room34.com/thesis.

erlc.com/resource-library/articles/5-facts-about-the-assassination-of-martin-luther-king-jr.

history.state.gov/milestones/1961-1968/soviet-invasion-czechoslavkia.

history.state.gov/milestones/1961-1968/soviet-invasion-czechoslavkia.

leonardbernstein.com/works/view/14/chichester-psalms.

reverb.com/news/a-history-of-marshall-amps-part-i.

thirdcoastpercussion.com//downloads/2015/04/Terry-Riley-In-C-concert2.pdf.

whatsupnewp.com/wp-content/uploads/2016/07/1969-Newport-Jazz-Festival.jpg.

woodstockwhisperer.info/tag/1969-newport-jazz-festival/.

www.billboard.com/archive/charts/1960/hot-100.

www.billboard.com/archive/charts/1964/hot-100.

www.billboard.com/archive/charts/1965/hot-100.

www.billboard.com/archive/charts/1967/hot-100.

www.billboard.com/archive/charts/1968/hot-100.

www.billboard.com/archive/charts/1970/billboard-200.

www.billboard.com/archive/charts/1971/billboard-200.

www.billboard.com/articles/chartbeat/474775/top-10-james-bond-theme-songs-ever.

www.billboard.com/articles/columns/chart-beat/7633288/rewinding-charts-james-brown-i-feel-good-hot-100.

www.billboard.com/articles/columns/rock/7809424/beatles-sgt-peppers-lonely-hearts-club-band-anniversary.

www.billboard.com/articles/news/958003/ray-charles-on-the-charts.

www.billboard.com/articles/news/grateful-dead/6641779/grateful-dead-farewell-concerts-total-earnings.

www.billboard.com/artist/277711/van-morrison/chart.

www.billboard.com/artist/279868/aretha-franklin/chart?page=6&f=379&sort=date.

www.billboard.com/artist/280528/steppenwolf/

chart?page=1&f=379&sort=date.

www.billboard.com/artist/293235/bob-dylan/chart.

www.billboard.com/artist/299102/chicago/chart?sort=date&f=379.

www.billboard.com/artist/299785/crosby-stills-nash-young/chart?sort=position&f=379.

www.billboard.com/artist/303090/grateful-dead/chart.

www.billboard.com/artist/304588/jethro-tull/chart?f=305.

www.billboard.com/artist/308288/louis-armstrong/chart.

www.billboard.com/artist/309807/marvin-gaye/chart?f=379.

www.billboard.com/artist/311267/miles-davis/chart.

www.billboard.com/artist/320562/otis-redding/chart?page=1&f=379&sort=date.

www.billboard.com/artist/320562/otis-redding/chart?sort=position&f=379.

www.billboard.com/artist/331058/peter-paul-and-mary/chart.

www.billboard.com/artist/383448/beach-boys/chart.

www.billboard.com/artist/383540/beatles/chart?page=6&f=379&sort=date.

www.billboard.com/artist/416643/jackson-5/chart.

www.billboard.com/artist/419239/surfaris/chart.

www.billboard.com/artist/7027185/walter/chart.

www.broadway.org/info/what-are-the-longest-running-broadway-shows/.

www.cbsnews.com/news/cbs-news-reports-on-the-beatles-in-1963/.

www.cbsnews.com/news/three-things-that-helped-spark-beatlemania-in-1964/.

www.chicagotribune.com/entertainment/movies/ct-mission-impossible-composer-lalo-schifrin-20150730-column.html.

www.edsullivan.com/artists/the-supremes.

www.edsullivan.com/bob-dylan-on-the-ed-sullivan-show/.

www.forbes.com/2009/07/21/phish-widespread-panic-camp-bisco-opinions-contributors-grateful-dead.html.
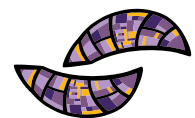
www.grammy.com/grammys/artists/chicago.

www.grammy.com/grammys/artists/henry-mancini.

www.grammy.com/grammys/artists/lalo-schifrin.

www.grammy.com/grammys/artists/luciano-berio.

www.grammy.com/grammys/artists/ray-charles.

www.grammy.com/grammys/awards/12th-annual-grammy-awards.

www.grammy.com/grammys/news/grammytony-awards-pedigree.

www.huffingtonpost.com/mike-love/jfk-warmth-of-the-sun_b_4318208.html.

www.ibdb.com/broadway-cast-staff/tim-rice-8890.

www.jfklibrary.org/Research/Research-Aids/Ready-Reference/JFK-Fast-Facts/I-Have-a-Rendezvous-with-Death.aspx.

www.jimihendrix.com/jimi/.

www.josephthemusical.com/uktour/about/.

www.karlheinzstockhausen.org/moment_preface_english.htm.

www.lucianoberio.org/node/1402?413753443=1.

www.lucianoberio.org/node/1494?1683069894=1.

www.merriam-webster.com/dictionary/threnody.

www.naxos.com/mainsite/blurbs_reviews.asp?item_code=FECD-0008&catNum=FECD-0008&filetype=About this Recording&language=English.

www.nealhefti.com/.

www.newyorker.com/culture/culture-desk/the-unlikely-story-of-a-change-is-gonna-come.

www.nme.com/news/music/bob-dylan-42-1245068.

www.nobelprize.org/nobel_prizes/literature/laureates/1969/beckett-facts.html.

www.npr.org/2014/02/01/268995033/sam-cooke-and-the-song-that-almost-scared-him.

www.npr.org/sections/deceptivecadence/2015/01/27/381575433/fifty-years-of-steve-reichs-its-gonna-rain.

www.npr.org/templates/story/story.

php?storyId=90330162.

www.npr.org/templates/story/story.php?storyId=93720234.

www.nytimes.com/1964/12/17/shooting-of-sam-cooke-held-justifiable-homicide.html.

www.nytimes.com/1989/12/26/world/upheaval-in-the-east-berlin-near-the-wall-bernstein-leads-an-ode-to-freedom.html?mcubz=3.

www.nytimes.com/1995/05/24/obituaries/ulysses-kay-prolific-composer-and-educator-is-dead-at-78.html.

www.nytimes.com/2008/04/13/weekinreview/13Itzkoff.html?mcubz=3.

www.nytimes.com/2015/06/12/arts/music/ornette-coleman-jazz-saxophonist-dies-at-85-obituary.html.

www.nytimes.com/2017/01/04/arts/music/karel-husa-pulitzer-prize-winning-composer-dies-at-95.html.

www.nytimes.com/2017/06/05/arts/music/bob-dylan-nobel-prize-lecture-literature.html?mcubz=3.

www.pbslearningmedia.org/resource/amex26-soc-64dancing/1964-dancing-in-the-street/ - .WYk3-dPyvR0.

www.pcmsconcerts.org/composer/luciano-berio/.

www.playbill.com/article/see-andrew-lloyd-webber-with-leads-of-his-4-broadway-shows.

www.poetryfoundation.org/poems/46548/harlem.

www.pulitzer.org/winners/george-crumb.

www.pulitzer.org/winners/karel-husa.

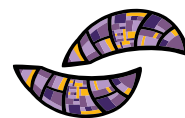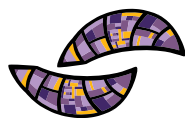www.raycharles.com/RC/RC-AchievementsAwards.html.

www.rollingstone.com/music/features/beatles-a-day-in-the-life-10-things-you-didnt-know-w459398.

www.rollingstone.com/music/features/how-bob-dylan-made-rock-history-on-highway-61-revisited-w436776.

www.rollingstone.com/music/features/inside-dylans-blonde-on-blonde-rocks-first-great-double-album-20160516.

www.rollingstone.com/music/lists/100-greatest-guitarists-20111123/jimi-hendrix-20120705.

www.rollingstone.com/music/lists/the-500-greatest-songs-of-all-time-20110407.

www.rollingstone.com/music/news/50-moments-that-changed-rock-and-roll-townshend-smashes-it-up-20040624.

www.rollingstone.com/music/news/beach-boys-pet-sounds-15-things-you-didnt-know-20160516.

www.rollingstone.com/music/news/frank-zappa-the-rolling-stone-interview-19680720.

www.rollingstone.com/music/news/revisiting-beatles-wonderfully-wacky-cartoon-series-50-years-later-20150925.

www.rollingstone.com/music/news/the-father-of-sampling-speaks-19990327.

www.rollingstone.com/music/news/the-rolling-stones-disaster-at-altamont-let-it-bleed-19700121.

www.rollingstone.com/music/pictures/16-inspiring-songs-that-honor-jfk-20131119/the-beach-boys-warmth-of-the-sun-0350365.

www.rollingstone.com/music/pictures/24-inventions-that-changed-music-20140317/phillips-compact-cassette-tape-1963-0793840.

www.smothersbrothers.com/episodes.htm.

www.stevereich.com/articles/Jonathan_Cott_interview.html.

www.theguardian.com/music/2013/aug/30/cassette-store-day-music-tapes.

www.theguardian.com/news/2003/may/28/guardianobituaries.artsobituaries2.

www.thomasconlin.com/echoes.html.

www.wendycarlos.com/.

www.woodstock.com/lineup/.

www.wpi.edu/news/woodstock.

www.youtube.com/watch?v=1E4Bjt_zVJc.

www.youtube.com/watch?v=aiJ_0gp-T9A&t=38s.

www.youtube.com/watch?v=gJxvm5zbeBc#t=59.429642.