

# 7 Sound in Film



© Summit Entertainment/Courtesy Everett Collection

*In the same way that painting, or looking at paintings, makes you see the world in a different way, listening to interestingly arranged sounds makes you hear differently.*

—Walter Murch (n.d., para. 7)

## Learning Objectives

*After reading this chapter, you should be able to*

- Describe how sound contributes to the overall impact of films.
- Discuss the history of sound from the Silent Era to today, including the impact of technology.
- Demonstrate how dialogue, sound effects, and music work individually and together in films.
- Examine the impact of sound on the ability to appreciate and analyze film.

## 7.1 What Does Sound Contribute to Films?

At the beginning of *Star Wars: Episode IV—A New Hope* (1977), we don't see Darth Vader, Luke Skywalker, Han Solo, or any of the other soon-to-be-iconic characters. No, instead, we see words. The backstory about the Empire and the resistance scrolls up the screen, telling us that we're watching a story set "a long time ago in a galaxy far, far away." It sounds like a rather dull start for what would become the most lucrative series of films in movie history. But it's not. Instead, it's exciting, making us anticipate what we're about to see (the first time we see it). It's not the visuals, certainly. What is it, then?

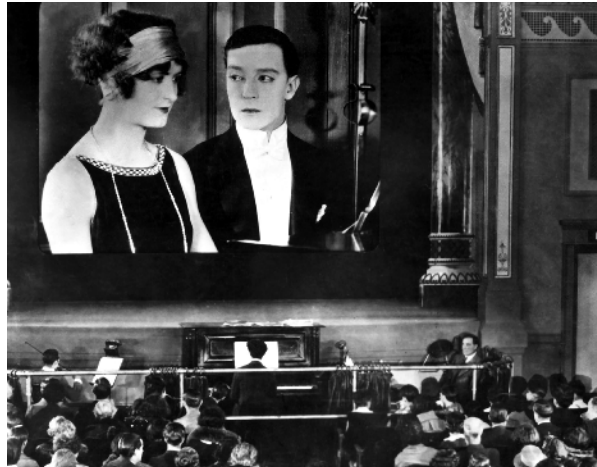
It is the music. John Williams's stirring **score** (the background music) demands our attention, drawing us in from practically the first note. Try watching the opening of any *Star Wars* film with the sound turned down, and you will be startled. Williams's score is our introduction to the film, and it is a magnetic one.

It's not always so clear cut, though. When you watch a film, the three categories of sound (dialogue, sound effects, music) all work to complete the picture we see on screen. Once the film starts, it's not just the music that thrills us. The sound effects are also essential to our enjoyment of *Star Wars*—the mechanical, menacing breathing of Darth Vader; the electronic hum of the light sabers; the roar of the enormous spaceships; even the silence of space. The same applies to the dialogue, which includes any number of memorable lines and helps to advance the plot, explain relationships, and establish characters. In fact, the personality of robot C3PO comes just as much from the dialogue and its delivery as from the movements of the actor in the distinctive costume.

The careful use of sound is essential in films. Whether it is something as challenging as creating the sound of space or something as seemingly simple as footsteps on pavement, sound is one of the movie industry's most expressive tools. Among the elements that make up the magic of movies, sound and its many varied uses is among the foremost. But to fully understand the different categories of sound and how they are used in film, let's turn our attention to the evolution of sound in film.

## 7.2 Sound in Film: A History of Innovation

Though the first films were silent, there was always a musical accompaniment to help interpret the moods for the audience, just as today's films often rely upon evocative music scores to intensify dramatic impact. But instead of being prerecorded, the music was played live



*Courtesy Everett Collection*

**Silent films such as *Sherlock Jr.* were accompanied by live music. Director and actor Buster Keaton was a master of deadpan reactions and physical comedy.**

at each showing in the theater. Many of these so-called “silent” films are without question great—Charlie Chaplin and Buster Keaton are among the geniuses who worked their comedy magic without the use of sound. Directors such as F. W. Murnau, Sergei Eisenstein, Abel Gance, and King Vidor created compelling visual dramatic masterpieces with no need for spoken dialogue or audible sound effects. But once the technology to marry sound with pictures became available, the medium of film was reborn. Recorded sound synchronized with movies began as a novelty, a gimmick to attract more ticket buyers, but once sound quality reached a certain point, audiences began to demand it. Hollywood added sound to its films in order to make more money, and the evolution of technology to provide better sound continued apace. And yet, for such an essential part of a film, audiences today often take sound and even music for granted. Certainly, they miss it if it’s not there, but it is far too easy to overlook the important role sound plays in movies.

## The Silent Era

We live in a world in which we can shoot and edit movies on our smartphones and send them to our friends. Moving pictures are an established part of our lives, a fact of our existence. But imagine a world in which images were stationary, in which pictures did not move. And then, one day, they did. This bit of magic alone was good enough for audiences, who at first were simply amazed at what they were seeing. When movies first moved from scientific experiment to entertainment product in the 1890s, it seemed like a miracle.

However, as with any art form, some people began to push further. Filmmakers began using the medium to tell stories. The invention of sound recording actually came well over a decade before the invention of motion pictures. However, during the first few decades of movies, the technology to synchronize sound with the picture was too inconvenient to make films with recorded sound practical. Instead, filmmakers embraced the technical limitations of the medium to tell stories visually; where dialogue was necessary, **title cards** were used—a character would speak, those in the audience would see his or her mouth move, and a card with whatever the character said would appear in print on screen.

Today, lack of sound would be considered an almost insurmountable obstacle; yet some of the filmmakers who worked during the **Silent Era**, when films didn’t have recorded sound (a time period that lasted from the invention of movies through approximately 1930), thought the lack of a need for carefully scripted dialogue was something of an opportunity. They enjoyed the freedom. “The great advantage of silent films was that they didn’t have words, so not everything was literal,” said the director King Vidor, whose sound films include *Duel in the Sun*, *The Champ*, and *War and Peace*. “The audience could make up its own words and dialogue, and make up its own meaning” (as cited in Stevens, 2006, p. 36).

Such an idea may seem inconceivable now, when studios go to great lengths to ensure that audiences do not have to work much at all to understand what is going on, leaving nothing to chance. Yet Vidor and others, working in a new medium, used this latitude to their advantage. It also permitted them to give the actors precise directions while the cameras were actually rolling, as no sound was being recorded. Because audiences couldn’t hear what was said during films, actors often relied on overstated gestures and heightened mannerisms, especially early on, before filmmakers grew to trust the audience more and tone down theatrical-style performances for the more intimate camera. Thus, some dramatic silent films may seem almost comical today because of what appears to be overacting. But all of it was a distinctive

stylization, much of it following an accepted catalog of conventional gestures and movements—melodramatic facial expressions and more—that had been in use since the 19th century. Especially when coupled with an appropriate musical score, it is perhaps more akin to ballet or opera without words than to modern movie acting. It was all done with the knowledge that the audience would not hear what actors were saying but would instead rely on title cards, music, and long-established acting technique to follow the story.

Some of the greatest films ever made were produced during the Silent Era, including Vidor's *The Big Parade* and *The Crowd*, D. W. Griffith's controversial *The Birth of a Nation* and *Intolerance*, Chaplin's *The Gold Rush*, Keaton's *The General*, and Harold Lloyd's *Safety Last!* (in which he famously dangles from the hands of a clock high above the street). F. W. Murnau's *The Last Laugh* and Teinosuke Kinugasa's *A Page of Madness* managed to tell their stories without even using title cards.



Mary Evans/Kinugasa Productions/Ronald Grant/  
Everett Collection

**Films can lean on their images to evoke sound—as in this example from *A Page of Madness* from the Silent Era. The presence or absence of sound can be a powerful tool to understand meaning.**

As noted previously, “silent” films were not typically shown in complete silence. Most theaters employed at least a piano player to accompany the film. Better theaters installed pipe organs or added another instrumentalist or two with the pianist (often a violinist and a drummer, perhaps a few more) to have more of an orchestral sound.

Large theaters in major cities had full pit orchestras of 20 or more players and a large music library of specially composed “photoplay music” to match various moods, situations, and nationalities. Important Hollywood releases sometimes had custom-commissioned scores composed for them, with the sheet music sent out to the theaters. Whether or not a new original score was composed for a film, the filmmakers expected that theaters would provide appropriate music, and many moviegoers decided where to spend their money as much by the reputation of a theater’s music quality as by what film was playing. At theaters with a single accompanist (piano or organ), the live interaction between the musician and both the screen and the audience was never exactly the same twice, more akin to a live theater performance. Music became not just an added attraction but an integral part of the filmmaking process and moviegoing experience—which it remains to this day.

## Talkies

Technology would eventually catch up with movies, and sound would become a part of them. But sound wasn’t exactly the foregone conclusion that we assume it to be now. Some believed silent film to be the purer art form and had no interest in making the change to sound. Others had more businesslike interests. Wendy Ide, writing in the *Sunday Times*, reported that Jack Warner, the head of Warner Brothers Studios, declared in 1926 that **talkies**, as films with

recorded dialogue were called, would never succeed. According to Ide, he argued that silent films had “an international appeal, a visual language that transcended the spoken word. They allowed the audience to invest their own meanings, imagine their own dialogue” (2008, para. 1). Jack Warner recalled in his 1964 memoir *My First Hundred Years in Hollywood* that his brother Harry, when pitched the potential for sound films, retorted, “Who the hell wants to hear actors talk?” (Warner, 1965). Rarely would a studio executive be proven so wrong.



Mary Evans/MGM/Ronald Grant/Everett Collection

***Singin' in the Rain* follows the story of a silent film production company as it makes the challenging transition to talkies. Debbie Reynolds's character is hired to dub over an actor's voice while singing.**

Studios had experimented with **synchronized sound**, which matched the dialogue with the movement of the characters' mouths, in short films since the 1890s, and in the mid-1920s some feature-length films had rudimentary sound effects. Warner Brothers' Vitaphone technology was introduced in 1926 as a way to allow small towns the chance to experience full orchestra accompaniments with their movies, recorded on disks played in perfect synchronization with the film, and to present famous New York vaudeville acts as prologues before the feature, all much more affordably using film rather than hiring live performers. Audiences and theater owners weren't so sure about it, as recorded sound at the time could not come close to replicating the experience of live music. That is, until *The Jazz Singer*, released in October 1927—only a year after Warner made his mistaken pronouncement—finally managed to capture the public's imagination with its synchronized sound. The film inaccurately gained a reputation as the first true “talkie.”

Throughout 1928, theaters rushed to install sound systems. Studios rushed to add sound to silent films already in production, whether reshooting the entire picture or merely including dialogue or songs in a few scenes—“part-talkies,” as these hybrid films were called. By summer of 1928, the first 100% all-talking feature, *The Lights of New York*, was released. Sound now permitted faithful film versions of stage plays and created the brand-new genre of the movie musical, discussed in greater detail in Chapter 3. Viewers rushed to see films advertised as “all-singing, all-talking, all-dancing,” many of them with the added attraction of Technicolor for certain scenes or the entire films.

After sound was introduced, the behavior of the audience had to change. Before, as the piano, organ, or orchestra played, people watched with rapt attention. Vidor, the famous director, argued that the audience's attention waned when sound came to pictures:

In silent pictures, you couldn't turn away from the screen as much. When sound first came in, that's when popcorn and all the drinks started, and necking in the theater, because you could turn away and do all sorts of things and still hear. You wouldn't miss anything—the sound would take care of it. But in

silent pictures you had to just sit there and try to figure it out. (Stevens, 2006, p. 34)

Robert Sklar, in his book *Movie-Made America*, noted another interesting change. “During the silent era it was considered acceptable for members of the audience to express audibly their views about the action on the screen,” Sklar said. He explained further:

Sometimes this might cause disruption or annoyance, but it also had a potential for forging a rapport of shared responses, a sense of community with surrounding strangers. . . . With talkies, however, people who talked aloud were peremptorily hushed by others in the audience who didn’t want to miss any spoken dialogue. The talking audience for silent pictures became a silent audience for talking pictures. (Sklar, 1975, p. 153)

Despite the deep-seated love audiences had developed for silent movies, only two years after the release of *The Jazz Singer* the revolution was nearly complete in the United States, and a year or two later in much of Europe. In Asia and developing countries, filmmakers continued making silent films into the mid-1930s. Although a few American films would be released with little or no dialogue (Chaplin’s *City Lights* in 1931 and *Modern Times* in 1936 being the most famous), the last year mainstream silent movies were produced by major Hollywood studios was 1929. For the next couple of years, many films produced with sound had silent versions prepared for theaters that had not yet converted to the new technology (especially for foreign export), but from here on, there would be no looking back. Sound was here to stay.

## Further Innovations in Sound

It was the continually evolving technology of sound recording and reproduction that kept talking pictures in the experimental realm from the 1890s until the mid-1920s, as no system was compatible with any other. Just as with digital technology many decades later, once quality reached a certain level and standards were finally agreed upon, it became much easier to commercialize talkies and eventually to arrive at the movies filled with the digital surround sound that we expect today.

**Surround sound** involves placement of speakers all around the theater so that audiences get the impression that some sounds are coming from all around them. It was pioneered by Disney’s *Fantasia* in 1940, became an increasingly frequent option with CinemaScope’s magnetic stereo sound in the 1950s, was integral to Dolby’s optical stereo in the late 1970s, and remains an important part of our moviegoing experience. The 1974 film *Earthquake* built upon this and was shown in some theaters with accompanying **Sensurround**, which is basically a pumping up of bass sounds so that they would be felt as vibrations in the theater. This technology was used for a handful of other films, but it faded quickly. The concept later returned with the advent of digital technology and a separate subwoofer audio track that could create vibrations in the theater and more intense sound.

Digital recording systems use a process that results in the elimination of all background noise, whether a faint hiss from magnetic media, periodic clicks and pops from flaws or dirt on optical film, or a needle scraping against a disk. Digital recordings’ dynamic range from dead silence to the loudest possible recording was a drastic improvement over previous systems.

Filmmakers started to record digital audio in the 1980s, and theaters started adding digital sound playback capability in the 1990s. At this time, stereo and surround sound became popular enough that they soon were routinely used in home video systems, consequently motivating more theaters to install better sound to compete with the home experience.

The increased abilities of digital audio often inspire filmmakers to exploit them for truly spectacular soundtracks that seem to put the audience in the center of the action and have them literally feel the rumbles of thunder or blasts of explosions. But there's a downside to this: If the digital track becomes damaged or worn beyond the capacity of the system to recognize the ones and zeroes, there simply is no sound at all. Thus, all current digital film processes use the standard analog optical soundtrack as a backup. The shift toward digital cinema projection in the 2010s does away with film copies and puts the entire movie, both picture and sound, into a digital file played from a computer hard drive.

Knowing when a film was made provides us with some insight into the technical applications of sound available at the time. A movie released today may contain more realistic sounds than one released half a century ago but only because technological advances have allowed that to be so. And an outer space battle depicted in a film released in 1968 might sound very different from one in a film released today as a result of changing technology. But understanding and embracing a film's intentional effects is what really matters—regardless of how it actually sounds. In order to do that, we need to focus our attention on the three main categories of sound employed in film.

## 7.3 Three Basic Categories of Film Sound

Once sound became an established part of moviemaking, individual elements of it became increasingly important. During the Silent Era, the responsibility for adding music to films (and sometimes limited sound effects) lay with the theaters. Sound technology enabled filmmakers to have control over these elements, as well as adding audible dialogue.

Musical accompaniment that supports a film's moods and actions is really just an artificial convention to help guide and accentuate audience response. While heard by the viewers, it does not exist in the story world inhabited by the characters and thus is termed **non-diegetic**. Other non-diegetic elements in a film might include superimposed titles, title cards, or voiceover narration by someone who is not a character in the story. By contrast, sounds of spoken dialogue (or narration by a character in the story), natural sound effects matching sources seen on the screen, and any music that is being performed or heard by characters in the story is called **diegetic**. Today's films usually employ both sorts of sound, and filmmakers have the option of using only diegetic sounds, only non-diegetic sound, or a mix of both at once.

Knowing the difference between these two types of sound is important, though, as this can yield key insights into underlying themes and overall intention. For example, whatever non-diegetic music the audience hears as a character drives down the street is meant to evoke certain feelings and sentiments and set the tone for the scene—all things the character might not be aware of. This element of sound represents the difference between the world created in the film, the unfolding narrative and the motivations of the character, and the film as

an artifact in our world, one created to elicit specific effects and emotions. Analyzing non-diegetic sound can help us better understand what a film may be saying.

The three basic categories of film sound—dialogue, sound effects, and music—require careful balancing to serve the story; because of this, each category is typically recorded separately and mixed together during the final editing process. We will discuss the importance of each of these three elements and the function that they each serve.

## Dialogue

Characters talking to one another in films, known as **dialogue**, is now so much a part of the movie experience that audiences take it for granted. But creating scenes in which characters talk to one another as they do in real life is no easy task. This was especially the case early on, when filmmakers often used the new technology basically as a way to show it off. For a couple of years, background music was considered an old-fashioned relic of the Silent Era. Films exploited natural sound effects, but especially dialogue (hence the term “talking pictures”). Now that spoken dialogue could be heard, numerous films were quickly made of stage plays, but the results often looked more “stagey” than cinematic. Settings were generally limited to a few rooms instead of numerous indoor and outdoor locations as with silent films. The camera had to be confined within a soundproof booth so its mechanism wouldn’t be recorded, instead of free to move throughout the set like in silent films. Actors suddenly needed to stay close to the microphones instead of being free to move around.

As with most new art forms, the writing of dialogue improved quickly. Instead of using a formal, theatrical style, many films more closely reflected the everyday speech of their times. This, of course, may make films appear dated within a few years, but it also makes them a valuable record of cultural norms at the time they’re created. The popularity of films soon reached the point that films would eventually influence personal communication, instead of the other way around. Dialogue from movies has become so well known that it is often used as a form of cultural shorthand. Countless phrases uttered in movies have become a part of our everyday conversation. How many times have you said something like, “Go ahead, make my day,” “Hasta la vista, baby,” or “We’re not in Kansas anymore,” with the sure knowledge that the person you are talking to would recognize it and instantly know what you mean, no matter what the context?



WARNER BROTHERS/Album alb360571/SuperStock

**The film *The Shining* is perhaps best known for character Jack Torrance and his phrase, “Here’s Johnny!” Sometimes a catchphrase and the character who speaks it become interchangeable.**

There is no shortage of a desire among audiences to see action films; however, there have been and presumably always will be films in which dialogue is the most important element.



Perhaps the most distilled example of this is *My Dinner With Andre* (1981). It basically consists of Wallace Shawn and Andre Gregory playing versions of themselves, talking for nearly two hours over dinner. It sounds as if it would be a horrible bore, yet many found it a fascinating film; critical reception was glowing. *My Dinner With Andre* may well stand as the purest argument for dialogue in film. “It should be unwatchable,” critic Roger Ebert wrote, “and yet those who love it return time and again, enchanted” (Ebert, 1999, para. 1).

Although *Andre* is an extreme example, many films—you can practically name one at random—rely on dialogue to help establish character and advance the story. If well used, it can be a richer way to move the plot along than by simply showing what happens. This doesn’t mean it is more important than what we see—if that were true, we might as well read a book. But the dialogue and the visual action work together to create the entire film experience.

In film, there are three basic reasons to use dialogue:

1. to further the development of the plot
2. to enhance characterizations
3. to establish important **expository** information very quickly that the audience needs to know to understand the action (e.g., names, locations, dates, motivations, backstory)

The most effective dialogue often does two or all three of these simultaneously. Effective movie dialogue expands or creatively enhances what is visible on the screen and does not simply repeat in words what is already obvious in the action (which is what TV dialogue often does so viewers can easily follow programs while they’re doing something else).

See the following *You Try It* feature box for tips on how to assess dialogue in a film.

### *You Try It: Categories of Sound—Dialogue*

Just as certain scenes might emphasize one type of sound over another, one scene might employ more dialogue than another does. But, as we have noted, effective use of dialogue engages with all three listed criteria. Search for a clip online from a favorite movie—one you’ve seen before and know fairly well. As you watch the clip, focus particularly on the dialogue, keeping the three criteria in mind. After you’ve watched the clip, use these questions to aid your assessment of the dialogue:

- What aspects of the plot were referenced in the dialogue? How did this lead the film closer to its resolution?
- What did we learn about the characters solely *through their dialogue*—rather than through their actions?
- What information essential to understanding the context of the scene was revealed through dialogue—rather than through visual means?

Here is something to keep in mind about dialogue: What you hear coming out of the mouths of characters, which may appear to be perfectly synchronized with their lips, is often not what was recorded during filming. Instead, in a postproduction process called **automated dialogue replacement (ADR)**, or *looping*, actors often re-record their lines so that they can be heard more clearly. (Background noises during filming on location can make the originally recorded dialogue unusable.) The actor watches footage of the scene in a studio and recreates the dialogue, a process that often requires multiple efforts. Thus, what we see and what we hear may actually have been created at different times.



TM & © 20th Century Fox Film Corp./All rights reserved./  
Courtesy Everett Collection

**The unreliable narrator in *Fight Club* uses voiceover to lead the audience through the story and to explain how Tyler Durden inspires him to abandon his old life.**

Besides traditional dialogue, the **voiceover** is sometimes used in films. This is when a character's voice narrates the action to help the audience understand what is going on. The technique is often criticized as a shortcut to avoid depicting something visually, a way of not trusting the audience's intelligence, of spoon-feeding information that the film itself would make clear with time and thought. Among the most criticized examples is the 1982 theatrical release of *Blade Runner*, in which the protagonist, Deckard (Harrison Ford), provides narration throughout the film.

Other films revel in using voiceover as part of their style, letting the viewer in on character thoughts that cannot easily be dramatized, or, as in *Fight Club*, providing information by the narrator that the viewer later realizes is not always trustworthy. Through these examples, we can see that dialogue, seemingly the most straightforward of the categories of sound we are discussing, can be a powerful tool for influencing our understanding of what we see on screen.

## Sound Effects

In *Transformers: Revenge of the Fallen*, the hugely successful 2009 sequel to the first *Transformers* movie, in which cars and trucks are revealed to be aliens who have disguised themselves, the sounds of explosions might as well be a credited member of the cast, so ubiquitous are they. The bone-crunchingly loud, theater-rattling explosions serve one purpose only: to enhance the action. The sound of these explosions simply does not allow the audience to passively watch the film; it serves instead as a rush of adrenaline. The film received an Oscar nomination for Best Sound Editing (its only nomination); nevertheless, it was lambasted by critics for its reliance on incomprehensible effects.

The sound of explosions is also integral to another 2009 film, *The Hurt Locker*. This critically acclaimed movie tells the story of a U.S. military bomb-disposal unit working in Iraq. Explosions here mean something far different from what they do in an action-adventure movie. Here, they often mean death. The sound ratchets up the tension to an incredible degree, as the audience watches the soldiers do their work. One false move, one small mistake, and things

can end in tragedy—loud, violent tragedy. *The Hurt Locker* won the Academy Award for Best Sound Design, one of six Oscars it took home (including Best Picture). Both *The Hurt Locker* and *Transformers: Revenge of the Fallen* illustrate, in different ways, the importance of the use of sound effects in films. For all their varying quality, neither film would have been nearly as effective without the expert use of sound effects and sound editors.

In both of these examples, we are talking about realistic sound effects—effects that are paired in a seemingly realistic way to occurrences we see on screen. They are meant to heighten the realism of the filmed world, to immerse us more deeply in it by making it seem as grounded and true to life as possible. Films such as *Lord of the Rings: The Fellowship of the Ring* (2001) and the remake of *3:10 to Yuma* (2007) include explosions, but they have other scenes full of subtle sounds that establish the environment, carefully placed in the **stereophonic sound** field (sound coming from two or more sources) to enhance the viewers' identification with what they are seeing; sometimes, these sounds work to create a world that is subtly different from the reality of our own. Every film uses sound in some way to draw the audience into the movie and keep it there.

See the following *You Try It* feature box to explore realistic sound effects.

### *You Try It: Categories of Sound—Realistic Sound Effects*

Sometimes, a scene in a film uses sound effects in some unrealistic way—either raising one or more sounds to a much louder volume than you'd expect from the camera position (e.g., a loud clock ticking in a long shot, heartbeats, or breathing) or completely eliminating sounds you'd expect to hear. For example, in *Saving Private Ryan* (1998), much of the invasion of Normandy is conducted in silence. Visit the following link, type "Omaha Beach" in the search bar, and watch the first clip titled "Omaha Beach – Saving Private Ryan" to view a sequence from the scene: <https://www.youtube.com/user/movieclips>.

Notice the effect that silence has on the beginning of the scene, and consider why the director made this choice.

### *Foley Artists and Unconventional Sound Effects*

Recording natural sound in a usable way while filming a movie can prove almost impossible. Many movies are shot on large **soundstages**—vast warehouses in which sets are built—which are not exactly the places to find realistic sound. Additionally, often a clear recording might be impossible without a microphone in the shot. Thus, sound effects typically have to be recorded separately and added into the final film in postproduction. Before their use in film, sound effects were used in radio for years to add realism to the broadcast. Crumpling cellophane may have been used to make the sound of fire, a doorbell in the studio might indicate the arrival of a visitor, and more. This process was adapted and used to add everyday sound to films and is now referred to as *Foley*, after Jack Foley, who developed a studio for creating appropriate sounds while watching the film projected on a screen. People who make these everyday sound effects are now called **Foley artists**.

Indeed, Foley artists and sound editors often go to unusual, sometimes humorous lengths to achieve the effects they are after. Producer Frank Spotnitz said that the sound of the boulder from which Indiana Jones flees in the opening of *Raiders of the Lost Ark* (1981) is actually a recording of the sound editor's Honda Civic rolling down his driveway (Spotnitz, 1989). In *Terminator 2: Judgment Day* (1991), the T-1000 robot is made of a sort of liquid metal that allows it to change shape and absorb blows and bullets and such. According to sound designer Gary Rydstrom, the sound of the T-1000 going through metal prison bars is actually dog food being sucked out of a can:

A lot of that I would play backward or do something to. . . . But those were the basic elements. What's amazing to me is . . . Industrial Light & Magic using millions of dollars of high-tech digital equipment and computers to come up with the visuals, and meanwhile I'm inverting a dog food can. (Kenny, 2000, p. 30)



© 20th Century Fox/Courtesy Everett Collection

**The sound of the lightsabers in the *Star Wars* films was created by recording and processing the hum of a projector motor found at the University of Southern California, where director George Lucas had been a student.**

See the following *Behind the Scenes* feature box for a glimpse into the creative sound process in *Star Wars*.

### ***Behind the Scenes: Ben Burtt on Star Wars***

Visit the following link to watch a short video from the Lucasfilm archives in which sound designer Ben Burtt discusses the creation of the iconic lightsaber sound effect first heard in *Star Wars*: [https://www.youtube.com/watch?v=TJQ3\\_tipGEY](https://www.youtube.com/watch?v=TJQ3_tipGEY).

Burtt relates the creative process he goes through in terms of conceiving and creating a sound effect that is entirely new while exploiting a connection to reality, thus enhancing the film's world.

### ***Popular Sound Effects***

There is also a need for more mundane effects, of course. What about the murmur of a crowd in the background of a scene, heard mostly as unintelligible sounds? That is known as **walla**, and it dates back to radio days. In films, background crowds are usually instructed to keep completely silent so that clear recordings of the actors' dialogue can be made. The crowd noises are recorded separately and mixed in during postproduction and the sound editing process.

In addition to sound recordings made for individual movies, there are certain stock sound effects that editors use repeatedly. These may be nature sounds, mechanical noises, door creaks, and many sounds that might otherwise require new Foley or ADR recordings. One of the more unusual, and most interesting, is the *Wilhelm scream*, a sound effect of a man screaming. Since its original recording in 1951, the Wilhelm scream has been used in more than 200 films, including *Star Wars*, *Toy Story*, *Reservoir Dogs*, *Raiders of the Lost Ark*, *Iron Man*, and *Iron Man 2*, becoming a kind of inside joke in the industry. Visit the following link to listen to a clip of the Wilhelm scream used in different films: <https://www.youtube.com/watch?v=W0V-2WdubTs>.

## Music

Music has been a crucial part of the moviegoing experience since before the advent of recorded sound in films. So important was its use that over time directors began inserting indications for specific music to be played at specific times. After the conversion to talkies, music became a basic element of constructing a movie, as essential an element as lights and cameras. However, sometimes even the best directors have a hard time keeping that in mind. There is a famous story about the making of Alfred Hitchcock's 1944 film *Lifeboat*, set at sea. Author Tony Thomas, in his book *Music for the Movies*, related the incident:

An intermediary informed the composer, "Well, Hitchcock feels that since the entire action of the film takes place in a *Lifeboat* on the open ocean, where would the music come from?" Replied (composer David) Raksin, "Ask Mr. Hitchcock to explain where the cameras come from, and I'll tell him where the music comes from." (Thomas, 1997)

Hitchcock knew, of course, the importance of music and would use it to brilliant effect in later films such as *Psycho*. Any good filmmaker knows how important music is to the success of a film.

At the end of *Fight Club*, director David Fincher's film about an office drone (Edward Norton) who becomes friends with a soap salesman (Brad Pitt) through underground fighting, we learn that the protagonist's friend is really the protagonist and is a creation of his own imagination. Yet it is too late for him to stop his army of followers from bombing office buildings. After a suicide attempt, he sits in the dark with his girlfriend, holding her hand, as the explosives go off and skyscrapers all around them crumble. Simply by description, this scene is pretty creepy.



TM & Copyright © 20th Century Fox Film Corp./  
Courtesy Everett Collection

**Without background music in the scenes that take place at sea, Hitchcock's *Lifeboat* would have taken on a completely different tone. The score adds depth and meaning to the film.**

However, Fincher ratchets up that feeling considerably by his choice of music for the final scene. As the protagonist and his girlfriend watch the destruction of the world around them, the atmospheric, almost drone-like “Where Is My Mind,” by the band the Pixies, plays. It is an unusual choice—the Pixies are more of a cult favorite than a mainstream band, and “Where Is My Mind” is far from their most popular song. Yet the selection is perfect, with the haunting vocal sounds, the cacophony of the drums, the repeated refrain, “Where is my mind.” It is, one might say, the perfect soundtrack for the end of the world.

These examples illustrate two different types of music used in film: the *score* (in *Lifeboat*) and the *soundtrack* (in *Fight Club*). As discussed previously, the film’s music score is what plays in the background of a scene while action takes place. It is *not* the film’s soundtrack (which includes all dialogue, music, and sound effects), and it is not even the “soundtrack recording” or album, though the two are often confused. What is popularly known as the **soundtrack** is a collection of songs used in the film (or, sometimes, “inspired” by the film, if they are included on the soundtrack but not heard in the movie). We will examine the use of scores and soundtracks and their effects on filmmaking, and we will see how contemporary films could not exist without them.

### Score

The score is music usually written—though not always—specifically for a film. Most often, it is played by a full symphonic orchestra, but it may be played on a synthesizer, by one solo instrumentalist, or by a small group of instrumentalists.

Sometimes, a film’s background music has a recognizable style; at other times, it has an almost anonymous feel, perceived more on a subconscious level. David Bondelevitch, who taught film at the University of Southern California’s School of Cinematic Arts from 1993 to 2008, made scoring a film sound almost like refereeing a basketball game—if done correctly, no one notices. “Most composers would say if you notice the music, something is wrong,” Bondelevitch said. “And most people don’t think about what they’re hearing; we’re trained to notice what we’re seeing” (Nilsen, 2008, para. 6). But just because we might not notice it while we are engrossed in watching a film, that doesn’t mean it isn’t having an effect on us.

See the following *You Try It* feature box to explore the topic of film scores further.

#### *You Try It: Categories of Sound—The Score*

Watch a scene from a film made before 1960 and listen to the score—the orchestrated music that accompanies the action in the film. Now do the same for a scene in a film made after 1980. Are the scores produced any differently? What differences do you notice?

For examples, visit <https://www.youtube.com/user/movieclips>, and type the following clips, in order, in the search bar: “Leaving for Battle” (from *Gone With the Wind*, 1939); “Across the Moon” (from *E.T. the Extra-Terrestrial*, 1982); “Dream a Little Bigger” (from *Inception*, 2010).

At its root, film is a visual medium. But scores are not just tossed-off ditties; some become classics in their own right, and composers become important assets to interpreting the film. Some Blu-ray and DVD editions of movies include a listening option of an isolated music score without the dialogue or sound effects. These can be instructive in illustrating how a composer approaches a scene and how the music enhances the action. As noted earlier, background music was not used in many early sound films, as it was considered unnatural and old-fashioned, but the success of Max Steiner's evocative scores to *The Most Dangerous Game* and *King Kong*—both released in the early 1930s—helped revive the tradition. Herbert Stothart, who wrote the Oscar-nominated score for *Mutiny on the Bounty* (1935), was quoted in the book *Music and Cinema* from his writings about that work:

I saw in the scope and magnitude of the story an opportunity for something new in music of the screen. I approached the task with the intention of having the score actually tell the story in psychological impressions. The listener can, without seeing the picture, mentally envision the brutalities at sea, the calm, the storms, the idyllic tropics, mutiny, clash of human wills, retribution. I drew on ancient ship chanteys, music of old England, carols, and other authentic sources, and used these as a pattern to weave together my musical narrative. (Altman, Jones, & Tatroe, 2000, p. 189)

Some scores actually prove so important to a film that they become well known themselves. That is certainly the case with Bernard Herrmann's score for Alfred Hitchcock's *Psycho*. The famous scene in which Marion Crane is stabbed to death in the shower—certainly one of the most famous murders ever committed on screen—could not be nearly as effective without Herrmann's famous strings, which seem to stab at the air itself, the short, rhythmic notes of screeching high-pitched violins mimicking both the jabs of the knife and the screams of the victim. So memorable was the music that it is used as a kind of pop-culture shorthand in other films and television shows, relating in just a few notes a feeling of terror. "The shrieking dissonance of 'The Murder,' surely the most imitated and instantly recognizable film cue, is the cinema's primal scream," Jack Sullivan wrote in *The Wall Street Journal* (Sullivan, 2010, para. 1).

Some scores contain music that was not written specifically for the film. Yet sometimes they work so perfectly with the movie that they become forever identified with it. This is certainly the case with Stanley Kubrick's 1968 masterpiece *2001: A Space Odyssey*. One well-known sequence shows spaceships docking set to the Johann Strauss waltz "On the Beautiful Blue Danube," written in 1866. Even more famous, and forever identified with the film, is Richard Strauss's symphonic poem "Thus Spake Zarathustra," written in 1896, which is used during the opening titles and then throughout the film during crucial scenes.

### **Soundtracks**

The soundtrack, technically, is the band of optical, magnetic, or digital data containing the sound for the film. In this section, however, we will discuss the more common musical genre definition. The *soundtrack*, as we discussed earlier, differs from the score in that it consists of a selection of songs (and sometimes dialogue) used in the film. And the films for which soundtrack recordings are released are not necessarily musicals, which obviously rely on songs. Soundtrack albums for non-musicals contain popular songs, usually not orchestral music; though, to confuse things further, selections from the score are sometimes included in

soundtrack compilations. Again, as with scores, some songs on a soundtrack are written specifically for a film and some are previously existing songs used because the director believes that they fit the tone or mood of a particular scene. Occasionally, the soundtrack includes music inspired by rather than included in a film, as with the extra songs by Madonna on the *Dick Tracy* soundtrack album.

This concept of commercializing a film's music separately from the film itself goes as far back as the Silent Era. The love theme composed for D. W. Griffith's 1915 *The Birth of a Nation* became a popular hit under the title "The Perfect Song," and much later it was used as the theme song for the radio sitcom *Amos and Andy*. The song "Whistle While You Work" is an integral part of the 1937 Walt Disney film *Snow White and the Seven Dwarfs*. For the 1942 classic *Casablanca*, rather than composing an original love theme for his Oscar-nominated score, Max Steiner used the 1931 show tune "As Time Goes By" that was indicated in the script (which suddenly became a huge hit after the film), as well as incorporating many other then-current pop songs. Motifs from "As Time Goes By" are interwoven throughout the entire score, and that song is now inextricably connected with *Casablanca* rather than the stage show it was originally written for. See Table 7.1 for a sample of films with hit songs throughout the decades.



© Universal/Courtesy Everett Collection

***Mamma Mia!* is one of the highest-grossing movie musicals of all time. Its soundtrack, based on Abba songs, includes previously released music as well as new compositions created for the film.**

**Table 7.1: Movies with hit songs through the decades**

<i>The Birth of a Nation</i> (1915)	"The Perfect Song"
<i>What Price Glory?</i> (1926)	"Charmaine"
<i>The Wizard of Oz</i> (1939)	"Over the Rainbow"
<i>Holiday Inn</i> (1942)	"White Christmas"
<i>High Noon</i> (1952)	"Do Not Forsake Me"
<i>The Graduate</i> (1967)	"The Sounds of Silence"
<i>Saturday Night Fever</i> (1977)	"Stayin' Alive"
<i>Rocky III</i> (1982)	"Eye of the Tiger"
<i>Top Gun</i> (1986)	"Take My Breath Away"
<i>The Little Mermaid</i> (1989)	"Under the Sea"
<i>Robin Hood, Prince of Thieves</i> (1991)	"I Do It for You"
<i>Above the Rim</i> (1994)	"Regulate"

(continued)



**Table 7.1: Movies with hit songs through the decades (continued)**

<i>8 Mile</i> (2002)	“Lose Yourself”
<i>Dreamgirls</i> (2006)	“Love You I Do”
<i>Twilight</i> (2008)	“Decode”
<i>Selma</i> (2014)	“Glory”
<i>La La Land</i> (2016)	“City of Stars”

Indeed, soundtracks are often closely identified with the movies they support, and vice versa. *Easy Rider*, Dennis Hopper’s seminal 1969 film about two hippie bikers riding from Los Angeles to New Orleans “looking for America,” makes the music heard on the soundtrack an essential part of the film. So important was the music to the film that securing rights to the songs used up more of the movie’s budget than anything else. It was also something of a happy accident. Laszlo Kovacs, the director of photography on *Easy Rider*, told MovieMaker,

The editor, Donn Cambern, . . . transferred contemporary rock and roll songs to magnetic tape, and synched it randomly to the film, so every shot had music behind it. Originally, he was just making it more interesting, but the music became inseparable from the pictures. When the film was cut there was a discussion about who was going to score it. They ended up licensing the music that Donn was using. They spent \$1 million licensing music, which was about three times the budget for shooting the rest of the film. (Fisher, 2004, para. 18)



Mary Evans/Ronald Grant/Everett Collection

**Some films, like *Easy Rider* from 1969, use contemporary music to help establish a tone—in this case, the brash and freewheeling sounds of psychedelic rock.**

Another influential soundtrack was the one for *A Hard Day’s Night*, the 1964 film loosely based on the crazy experience of living inside Beatlemania, starring the Beatles themselves and directed by Richard Lester. The John Lennon and Paul McCartney songs written for the film would become some of the band’s best-loved hits. The album’s popularity (it spent 14 weeks at No. 1 in the United States) as well as the quality went a long way toward establishing the soundtrack as an accepted musical endeavor for bands, not just a tossed-off side project. This was certainly the case by the time *The Graduate*—directed by Mike Nichols and starring Dustin Hoffman as a recent college graduate—was released in 1967. Songs such as “Mrs. Robinson” and, especially, “The Sounds of Silence,” written by Paul Simon and performed by Simon & Garfunkel, were integral to the film. They helped to establish the feelings of confusion and dissatisfaction Hoffman’s character feels throughout the movie. They also became major hit songs, which in turn promoted both the film and the band.

*Saturday Night Fever*, director John Badham's 1977 film about a young, disaffected Brooklyn man whose only escape from his dead-end life is dancing in discos on the weekend, used its soundtrack to capture not only the film's moods but also a moment in both music and society. Soon would-be dancers were wearing white suits with wide lapels in homage to Tony Manero, the character played by John Travolta in the film. Besides immensely helping the emotional content of the film, the soundtrack also sold more than 15 million copies and for a time was the bestselling soundtrack album of all time.

Soundtrack songs enjoy a unique place in popular culture, in that the best of them can stand alone as art in their own right, yet when a soundtrack fits with a movie just right, both the music and the film become better than they would be alone.

## 7.4 The Impact of Sound: Appreciations and Analysis

As we watch a film, we need to consider what each category of sound brings to a film, noting which category might be more important at which time. Sometimes a film relies more on dialogue (perhaps because characterization is important) or on sound effects (because there's something important we need to pick up on in terms of tone or mood). Some scenes may fade out all dialogue to emphasize sound effects, such as a beating heart or a noisy environment, while other scenes will use only music to carry the action, just as with silent films.

But keep in mind that even though dialogue, sound effects, and music are separate categories, there are times when they overlap with each other. When you hear the iconic theme from *Jaws* (1975), the music of the score becomes a type of sound effect signaling what is happening on screen—or, rather, what is about to happen. Skillful use of the soundtrack adds immensely to the power of a film, supporting and enhancing the visual elements. If two characters are talking and all music fades, the audience is invited to more intensely focus on the character's reactions to each other; perhaps silence is the only score that is needed.

Special audio effects might suggest characters' subjective points of view, flashbacks, dreams, or intoxication, or a scene may have completely realistic sounds. Sound can be edited independently from the picture, so that the sound for one scene can begin slightly before the previous scene has finished or continue after the next scene has started. Repetition of sounds may give the audience audio flashbacks, reminding them of scenes that already happened, or audio flash-forwards, which may be confusing until the scene they match finally appears. How these techniques are applied can vary from film to film, from director to director, and even from genre to genre. The important lesson is that, just as you have trained your eyes to pay attention to visual cues on screen, it is equally important to keep your ears alert for what they can tell you.

See the following *You Try It* feature box to explore sound and meaning further.

### *You Try It: Sound and Meaning*

Using an action film of your choice, cue up an intense action sequence—but do not watch the screen. Instead, listen only to the sound, and think about how it shapes the scene. Then play it again, watching the clip with the sound turned off, and again with both sound and picture, and compare the three. Does the version without sound have the same impact as the version with it? Could you tell what was occurring in the sequence when you could hear the sound only and not see the picture? Try playing the same clip again, but this time, mute the clip's sound and play another sound file. Try some whimsical carnival music, the theme from a children's show, or the latest popular song. Notice how the music affects what you see on the screen!

Try this exercise with the scene from *Jaws* when beachgoers scramble to get out of the ocean upon seeing a shark. Visit the following link, type "Get Out of the Water" in the search bar, and watch the clip titled "Jaws (1975) – Get Out of the Water Scene (2/10)": <https://www.youtube.com/user/movieclips>.

Brian DePalma's *Blow Out* (1981) showcases how movies use sound creatively with a plot about a film sound technician (John Travolta) who believes he has accidentally recorded a murder while recording **wild sounds** (sound recorded while no picture is being photographed). Films such as *Twister* (1996) might almost be considered demonstration films for spectacular digital stereo sound mixes, and if seen on a TV set or computer with a single tiny speaker, the entire intent of the film may be lost. No matter what's happening in the film, these intentional effects have real value in terms of how the story is told. We are used to paying attention to what we hear in a film because that's largely how the story unfolds. But now we can make ourselves alert to a wider array of sounds, including how and when they are used in the film. When analyzing the impact of a film, it is important to consider how the director's use of sound (or lack of it) intensifies, manipulates, and possibly even defines the film's overall content.

## Summary and Resources

### Chapter Summary

Sound is one of the most overlooked elements of making a movie—and one of the most important. Filmmakers can control the sounds audiences hear while they're watching the picture, using only natural diegetic sounds such as dialogue and sound effects, using complementary non-diegetic sounds such as background music or enhanced sound effects to intensify the moods, or using unrealistic sounds for dramatic or comic counterpoint to the image.

Even during the Silent Era, films were not truly silent. Acting and filmmaking styles took into account the absence of audible dialogue and sound effects, but a musical accompaniment was always expected. Theater musicians played scores that helped audiences become emotionally involved in the story. When recorded sound was finally introduced, the spoken word and sound effects would become central to the story of almost every movie. Audience demand for "talkies" was so great that silent film production was abandoned by about 1930 (with a few

## Summary and Resources

notable exceptions). Sound recording technology evolved quickly, allowing the vast array of effects we experience today.

The three categories of movie sound—dialogue, sound effects, and music—work together with the picture but are treated separately during production. Good movie dialogue may become so popular that it enters everyday conversation as a cultural shorthand. While dialogue conveys much story information, the best dialogue enhances the image rather than replacing it. Sound effects, likewise, can be used merely to intensify action or to enhance the sense of environment. Music, as it has since the Silent Era, pulls viewers into the mood of scenes, but it may also be used to identify characters and situations with popular songs. Movie soundtrack recordings, the music used in or inspired by a film, would become key marketing elements; soundtracks would often become bestselling albums, CDs, and, eventually, downloads.

Sounds from each category may be added, subtracted, and manipulated to suggest states of mind, to anticipate or recall other events of the story, or any other reason a filmmaker decides upon. In sum, it is almost impossible to overstate the importance of sound in film—and equally difficult to explain why it is so rarely given its proper due. The contemporary film is inconceivable without it.

### Questions to Ask Yourself About Sound and Music When Viewing a Film

- What kind of sound (dialogue, sound effects, music) is present in the film?
- Whose dialogue do you hear in the film?
- When and where do sound effects appear? Would you judge these to be realistic in nature, or to add a different layer to the visuals?
- What kind of music is present? When does it appear? What effects does it have on the visuals?
- Is there a voiceover narrator, and if so, is it one of the film's characters or some omniscient storyteller? What effect does this have on your understanding of the film?

### Key Terms

**automated dialogue replacement (ADR)** Computer-based postproduction process for re-recording dialogue that for some reason is unsatisfactory.

**dialogue** Spoken words by two or more characters in a scene.

**diegetic** Sound existing within a film's story world, such as spoken dialogue, natural sound effects, or music performed or heard by the characters; its opposite is non-diegetic.

**expository** Relating to exposition; in film, it refers to conveying information and detail that develops the context of the narrative.

**Foley artist** Someone who watches a scene and makes appropriate noises that are recorded close up, permitting better clarity than is possible with live recordings when microphones are out of range.

**non-diegetic** Sound not existing within a film's story world; experienced by the audience but not the characters (such as background mood music or title cards). Its opposite is diegetic.

**score** The background mood music that accompanies the action on the screen, usually composed specifically for a film but sometimes partly or entirely compiled from existing music.

**Sensurround** Short-lived technical process for providing extra-loud low-frequency sound effects to movies.

**Silent Era** A period from approximately 1893 to 1930, when commercial movies did not include recorded sound. Music scores and sometimes limited sound effects were performed live in the theaters at each showing.

**soundstage** A large, soundproof, warehouse-like building used for building movie sets that require live sound recording.

**soundtrack** The part of a film containing all the recorded sound (music, dialogue, and sound effects), typically recorded to a digital, analog optical, or magnetic format that may be on the film itself or played in synchronization with the picture. Also used as a term for a separate compilation of songs and music selections used in a film and sold as a promotional tool for both the film and the songs.

**stereophonic sound** Sound that comes from two or more sources, creating a more realistic sound field in which the ears can locate the direction from which sounds are coming. Stereo sound for films typically has

three speakers behind the screen (left, center, right) and two or more surround speakers on the auditorium walls.

**surround sound** Movie sound that comes from speakers throughout the auditorium rather than from behind the screen.

**synchronized sound** Sound played back in perfect synchronization with the picture, whether or not it was recorded at the same time.

**talkies** The first movies with recorded sound. Silent movies always had had music scores and sometimes sound effects (performed live), but talkies introduced audible dialogue. Short for “talking pictures.”

**title cards** Printed words that appear on the screen between shots of the action, often used to introduce scenes and in the case of Silent Era films to display critical lines of dialogue; also called *subtitles* or *inter-titles*.

**voiceover** Words spoken by a narrator not seen on the screen, who may or may not be a character in the film.

**walla** Generic crowd noises.

**wild sound** Sound recorded when no picture is being photographed and for which precise synchronization is unnecessary (e.g., crowd noises, wind, traffic), added to the film during postproduction.

