

# SOUND



Filmmakers have always understood the power that sound and music have to enhance storytelling. Although silent films did not have dialogue or soundtracks as we know them, organists, pianists or full orchestras supplied live musical accompaniment in theaters, and often sound effects were created on the spot by sound-effects specialists. October 6, 1927, saw the debut of Warner Bros.' *The Jazz Singer*, a 90-minute film with a sound recording that featured a few synchronized songs and lines of dialogue, including Al Jolson's famous declaration "You ain't heard nothing yet!" Audiences raved and by 1931, the last silent feature-length films had been released.

Sound films drew viewers, but the new technology created new problems for filmmakers. Previously mobile cameras were confined to soundproof boxes and actors were forced to stay close to microphones concealed on the set. Thick accents or unpleasant voices ended the careers of many popular silent film stars. The visual pantomime used by silent film actors seemed overstated when sound brought an added layer of realism to the performance. In theaters, it was often difficult to keep the sound and film reels going at the same speed, which meant that sometimes viewers heard a man's voice when a woman spoke or other comical misalignments. Before long, devices such as the **blimp**, a sound-proof camera covering that muffled noisy cameras, brought action back to movies. Now, instead of speaking into a hidden microphone, actors moved about the set followed by an operator with a **boom**, a microphone on a long pole, held above the camera frame line.

Oscar-winning film and sound editor Walter Murch once said that we can focus on a maximum of two sounds at a time. In daily life, most people hear only the sounds that are important to them, tuning out the rest. In film, modern soundtrack is created and assembled in many interconnected stages by sound recordists, mixers, editors and music composers. Sound in film is primarily comprised of **dialogue**, **music**, and **sound effects**.

Dialogue consists of all the words spoken in a film, offscreen and onscreen, whether by the characters or by a narrator in a voiceover (monologue). **Automated Dialogue Replacement (ADR)** is used to record new dialogue if the live track is distorted, if it contains unwanted sounds, or if the director wants to change lines of dialogue or even an entire performance after filming is completed. During ADR, actors watch individual sections of a movie many times, trying to match new dialogue to the lip movements of the characters on screen.

Original music written specifically to accompany a film is known as the **score**. When songs completely or principally comprise the music, it is called a **compilation song score**. **Leitmotifs** are themes used for different characters and situations, with one of the best-known examples being the two-note theme that signals the appearance of the shark in *Jaws*. In musicals, songs function as a type of dialogue. The music and especially the lyrics of the songs are closely interwoven with the script, whether written expressly for the musical as in *Chicago* (2002) and the 1991 animated film *Beauty and the Beast*, or when contemporary popular songs are used, as in the 2001 film *Moulin Rouge*.

Sound effects include natural sounds such as birds, wind and rain, human sounds such as breathing or heartbeats, the mechanical sounds of engines or explosions, and sounds that identify the film's location. Footsteps, breathing, the rustle of clothes and the sound of props such as coffee cups or squeaky chairs are created on a **Foley stage**, named for Jack Foley, who pioneered the technique of recording live sound effects in synchronization with the picture.

While watching the projected film, the Foley team uses bodies, voices and props to replace or enhance live sound. Sound effects are manufactured in the recording studio, retrieved from a sound library or recorded in the real world by the sound effects editor. **Wild sound** recordings are made on the set when the camera is not running. If the movie takes place in a hospital, for instance, 20 or 30 seconds of the sounds in the room are recorded; wild sound often proves clearer or better timed than sound recorded during filming and can be cut into the soundtrack when needed, often to hide mistakes.

The final sound mix, called the **rerecording mix**, combines and balances separate dialogue, sound effects and music tracks into one final soundtrack. The rerecording mixer sets the level of each sound element to highlight the most important sounds. Generally, the mixer emphasizes dialogue and key sound effects while softening background noises like car engines or street sounds, unless the story demands that dialogue be difficult to hear, as in a battle scene. Contrast between sound and image or between sound and silence is effective to build tension or to deliver more information. Loud sound effects are more jarring if they are followed or preceded by soft sounds or by silence; this is known as a **smash cut**.

Because the film viewer cannot hear everything that is seen on the screen, sound mixers must direct the viewer's attention to the important elements. One way to do this is by using sound as it might be heard by a character in the film. This is called **point of audition**. At one point in the D-Day invasion scene in *Saving Private Ryan*, the sound-track is muffled because we are hearing sound from the perspective of a character temporarily deafened by the bombing. Just like a movie camera, sound can move the viewer from a long-shot to a close-up. By fading noisy background chatter in a crowded room, a filmmaker can direct the audience's attention to an intimate conversation between two people.

Movie sound is usually associated with the people and objects onscreen. When the film shows a woman walking a dog down a busy street, the audience hears her voice, the jingle of the dog's leash, and the roar of the passing cars. This is called **source sound**. Narration, voiceovers and musical scores are the most common examples of non-source sound. Other off-screen sounds can alert the viewer to a change in scene, mood or character. These techniques are known as **J-cuts** and **L-cuts**.

Overlapping sounds, called **sound bridges**, can serve as transitions and even connect unrelated settings, places or times. At the beginning of *Apocalypse Now*, the synthesized sound of helicopter blades is matched with that of a ceiling fan, taking the story from the main character's memories of fighting in the Vietnamese jungle to his present location in a Saigon hotel. Sound differs depending on a scene's mood, location, historical period and time of day. It can be used to enhance characterizations. When Michael Corleone kills his dinner companions in *The Godfather*, a train outside thunders past like an unuttered scream, mirroring his disturbed emotional state.

