

## Careers in Film: Post-Production

After the development, pre-production, and production phases on a movie have been completed, it is time for the finished film to take shape. This phase of the production is referred to as post-production. During this phase of the production, the film footage, sound recording, and special effects are edited together to create the finished film. This is probably the most painstaking and laborious phase of filmmaking. Many films that didn't come out well have been saved in post-production. Lighting issues can be corrected, sound problems can be straightened out, and the film can be edited in ways that keep the story moving and highlight the drama. In many ways, post-production is the phase where movie magic really happens.

Consider the monumental tasks that the post-production team for *The Lord of the Rings* and the *Hobbit* trilogies was presented with following months of production with a cast and crew of hundreds. Post-production on the film began as soon as the film started shooting. During the lengthy post-production process, the film was edited, and elements such as sound effects, musical scoring, and visual effects were added. Some dialogue was re-recorded to replace dialogue recorded on the set. Post-production also included color correcting the film to ensure color continuity and adding subtitles in Spanish, French, German, and Italian.

In this lesson, we will discuss the process of post-production as well as post-production career opportunities.

## Objectives

- Describe the significance of digital technology, high-definition production and the required editing equipment.
- Describe skills required for editing.
- Explore film careers in post-production.
- Apply knowledge of post-production on a film project.

## Vocabulary

<b>CG process</b>	the computer graphics or digital side of filmmaking
<b>compositor</b>	constructs the final film image by combining layers of various film and sound tracks
<b>continuity</b>	the uninterrupted unity developed by careful observation of details during filming to be sure different takes will appear as one
<b>editing bay</b>	control room with editing equipment, computers, monitors, and sound system
<b>rendering</b>	the process used to combine scenes captured on film into a final cohesive and complete movie

## **Film Post-Production**

Post-production has changed from the early days when celluloid film was manually cut and edited into a finished film. Today, most films are digitally edited. The film footage is transferred to digital files, which the editor oversees and revises. The sound recording, or sound tracks, are converted to digital files and then edited. Digital special effects and music scores are also added during post-production.

When films are completed, the producers face another hurdle: finding distribution. Throughout film history, there have been few distribution outlets. There were theaters, television, and then video and later DVD. In today's digital era, there are many more film distribution outlets. A theatrical release is still the ultimate goal for filmmakers, but films are finding success through Internet distribution sites such as Netflix and other downloadable movie sites.

Post-production often begins when the production phase is completed. However, with digital animation and digital effects being a major part of today's film production, post-production can begin before the film starts shooting because of the complex nature of creating digital worlds and scenes infused with digital effects. In blockbuster films like *The Lord of the Rings*, digital effects artists and animators began crafting the cinematic world with the film's director and production team during pre-production. Since several scenes would require green screen photography, the cinematic world of the story was digitally created, and the cast was digitally inserted into the scene during post-production. This interaction with the pre-production and production teams ensured continuity, that is, uninterrupted unity in the film's look, throughout the production process.

The post-production team consists of several departments, each responsible for specific aspects of the film. Computer effects, for example, may be worked on in one section while the score, the music written for the film, is being recorded in another and sound effects are being created in a Hollywood studio. The director may spend months with the editor, looking at different takes and trying different versions of a scene to determine what is called the final cut. Let's take a closer look at post-production careers.

### **Film Editor**

The film editor is such an important person on a film that he is often hired before the cast and other crew. This editor is responsible for revising the filmed footage until it becomes the finished film. The editor begins by reading the script to get familiar with the story. It is important for the editor to know the script because film scenes are generally shot and edited out of sequence. When footage begins to come in, the editor reviews the footage and production notes provided by the director and production team. These notes contain details about the footage and the director's comments about the footage. The editor then uploads or transfers the footage to computers in the editing bay and begins editing the footage into finished scenes. The editing bay is the control room with editing equipment, computers, monitors, and sound system where film editors manipulate plot, sound, graphics, and score to produce a well-constructed scene. This is a painstakingly detailed and time-consuming task outlined in the workflow chart below.

Up to this point, movies have been disastrous can be saved in post-production. A good film editor can revise or improve a script in the editing bay. Lighting and sound can be adjusted, and with new digital technology, film angles can even be reversed or changed. Because editing is critical to a film's success, the director usually works with the editor throughout post-production.

Film editors should have a knack for storytelling. Editing and cutting film footage to create a film story takes a great deal of skill and time. When the editor first receives the footage, he first makes a back-up copy to use if footage is damaged or lost. In the past, editors actually cut the film footage. Today,

however, most editing is done on a digitized version of the film. The footage is first transferred to a digital file, and then the editor works with the digital file.

The film editor corrects, modifies, and cuts the film into scenes, and then combines those scenes for a finished, cohesive film, in a process called rendering. Even though the editor plays a large role in the process, there are several other positions on the editing team.

## **Other Positions in Film Editing – Color and Music**

### **Film Color**

Have you ever watched a older film, one made during the era when color film was just being developed? You probably noticed how odd, perhaps dim and unnatural some of the color looks. In today's digital world of filmmaking, color can be manipulated, brightened, quieted, the hue actually changed by professionals called colorists.

Colorist: A colorist in today's filmmaking world is responsible for adjusting the colors of a film during editing. Because scenes are shot inside (interiors) and outside (exteriors), sometimes colors need to be adjusted for the final film. This is mostly done digitally.

Compositor: Compositors are responsible for constructing the final image by combining layers of previously created material. A simple way of putting this — compositors combine the different layers or tracks of a film. This requires a good understanding of digital editing. Although it is primarily a 2D role within the 3D world of CGI and VFX (visual effects), compositors should have an artistic background as well as a thorough understanding of the CG process, which is what the computer graphics or digital side of filmmaking is called.

Education: Film editing is a highly specialized field that requires specialized training. Most film editors learn their craft through degree programs at film schools, colleges, and universities.

### **Music and Sound**

Many, if not most, films have a film score composed specifically for the project.

Composer: The director selects a composer based on style, which is often a signature though variable quality that gives a distinctive tone to the film. John Williams composed music for nearly eighty films in his career and is one of film's greatest living composers. He studied composition at college, played piano in clubs, and worked on music for films under other conductors before composing and conducting his first film score. Composing memorable movie themes, such as the theme for the Harry Potter films, which Williams wrote, is a powerful advantage for the success and longevity of a film.

### **Notebook**

What theme song or melody from a film do you recall as a moving part of your life? Write down the film and the bit of music that you can't forget. The music helps you remember where and when you first experienced the film and how strongly it affected you.

Film scores can include music not written by the composer but selected by him for scenes. Classical music, for example, may be excerpted and recorded by the orchestra and conducted by the film composer to create the soundtrack music for the film. Music arrangers work with film composers to take their compositions and prepare the parts on sheet music for each instrument in the orchestra. Composers and arrangers need a versatile and extensive background in composition and music history. A film score can include a wide variety of musical pieces, but it must have a cohesive feeling that helps

convey the emotions and actions of the film. They can compose right onto digitally recorded tracks as they create their original ideas with specially designed musical interfaces, computers, and monitors that allow them to view the unfinished film footage with time codes. Composers work in their own studios and in their own unique ways. The composer often works on the score through all the phases of production, conceiving of a type of mood or signature sound and developing all the necessary parts. Scoring, arranging, and recording are often part of the post-production process.

**Music Supervisors:** Music supervisors are not necessarily film composers and vice versa. Many films use songs either representative of a certain period, or written by recording artists specifically for the film. It is the music supervisor's job to select or commission all the songs used in the film. Having a song in a film can be beneficial to a musician or singer's career, and many write songs for upcoming films hoping theirs will be the one selected by the music supervisors. Music supervisors who work with specific musicians and songwriters can request a certain feel or lyrical content. This type of soundtrack may be used instead of having a film score, or music supervisors may contribute songs to a movie that also has a score.

**Music Editor:** Music editors are responsible for editing the film's music soundtrack and score during post-production. This is an important role because music editors are the link between the film and the composer. They structure the soundtrack so that the music complements, rather than distracts from, the film. The next time you watch a film, listen to the music score in the background. Does the music heighten the action or scene?

**Education.** Sound editing is a highly specialized field that requires specialized training. Most sound editors learn their craft through degree programs at film schools, colleges, and universities.

## **Other Positions in Film Editing – Sound**

In addition to the musical elements of sound, there are additional elements that must be carefully designed, recorded, and edited in post-production. In fact, much of the dialogue we hear is overdubbed in post-production because of poor sound quality on location or set. The actors must be good at recreating their lines in a studio while watching their acting on the monitor. The technicians who record this dialogue must be sure that it matches the dialogue in the film and does not suddenly jump out as overdubbed. We watch movies constantly without noticing that the elements were put together in post-production.

Sound design has become a highly crafted art. With technological developments in sound, such as surround sound, we can enable moviegoers, and even home systems, to separate sounds so they seem to be happening all around us as we watch a film.

**Sound Editor and Sound Designer.** Have you ever listened to the “real life” sounds in a movie? We hear the movie, but do we listen to all the sounds taking place in the movie? When a character is indoors and it is raining outside, how does the audience know it is raining? When a character knocks a glass off the counter as he rushes out the door, how does the audience know the glass broke?

Audiences know the answers to these questions because they hear the thunder and the rain pattering outside the house, and they hear the glass shatter on the floor. They know this because the sound editor and sound designer created the sound and inserted it into the film.

Sound editors and sound designers are charged with editing the recorded dialogue and sound from the actual production, as well as re-recording dialogue and creating sound effects for the film. Today's sound editors and sound mixers rely on digital technology during the editing process, so a background in digital technology and digital sound recording will prepare a person for a career in sound editing and sound design.

Sourcing sounds for effects is a very creative process. For example, recording exotic animals then vocalizing and manipulating their noises in pitch or tone, may design the growl of a science fiction film animal on another planet. Even the sound designer who records the background sounds, such as birds, rain, or wind, must use special microphones and recording gear. They must be out collecting sounds at unusual times and sometimes, remote places. They may find they can record something in a house that would be undetectable with regular hearing, using special microphone, and use it for an otherworldly sound effect. The keys to professionals who create sound are creativity and ingenuity in using specific equipment to come up with the right sounds.

While the film is in production, sound designers are working on their sound libraries and recordings, and in post-production it all has to come together. While the sound editor is responsible for the final product and spends long hours in post-production editing, they may have others gathering sounds and working on other sound elements.

Did you know?

There is an Academy Award category for sound editing? In past years, this has been called Best Sound Effects, Best Sound Effects Editing, and is now called Best Sound Editing. There is also an award for the category of Best Sound Mixing. These are two separate categories.

**Foley artists.** Foley artists have specially honed skills and studios with unusual equipment, such as different kinds of doors and different floor surfaces. The name ‘Foley’ comes from Jack Foley, who first developed the art of inserting ordinary sounds into film back in the earliest days of sound pictures. Foley artists are responsible for creating and recording many sounds; for example, footsteps, door slams, and the sound made when someone is slapped or punched. They are adept at timing and imitating different surfaces so that when the actor on screen is running on gravel, the sound is perfectly matched to their footsteps, type of shoe, and how far away they appear in the shot. It takes highly developed skills to be Foley artists. They traditionally work separately, with their own studios, to supply that part of the sound to the sound editor.

**Mastering engineer.** As in musical recordings, mastering engineers are involved with the sound editing to make sure all the tracks play well in a soundtrack sequence, with cohesive equalization and volume. The sound editor uses these professionals as needed in the post-production phase, consulting with the director, to create the sound quality and effects of the film. Millions of fans expect today’s 3D movies to have sound design that feels as interactive as the film looks. The spatial quality of sound design, meaning how each sound is mixed to come out of a specific speaker area and move through it with the action, is a major element in a film’s quality. Without excellent sound design, movies would fall flat.

**Education.** Sound editing is a highly specialized field that requires specialized training. Most sound editors learn their craft through degree programs at film schools, colleges, and universities.

### **Putting It All Together**

The industry saying “we’ll fix it in post” is often said as a joke, but in reality it happens every day. While audiences remember the actors, maybe the director, and a cool effect or a hit song from a film, most do not recognize the talents of those who work in the post-production phase. The professionals who create computer-generated graphics, effects, backgrounds, whole fantasy locations, and armies of CG simulated aliens, work in teams. They work under supervisors who interact with the director and editors to complete all the elements that go with production footage. Actors still have work to do, and there may even be re-takes along with the dialogue “looping” we have studied. Months can be spent editing it all together, including trying new endings after pre-screening market research comments

indicate poor audience reception. Problems with the sound, the coloring, or even the voice of an actor are addressed, as well as the way the story itself is told. Each minute detail and element can make a difference. Whether the director and editor use a close-up or a reaction shot, how long the camera holds before cutting away, how quickly action scenes are cut together, and how dynamically the sound design captures intense action are just a few of the decisions made in editing.

If you are interested in working in film, you may have a job in which you never see the inside of a soundstage or movie set. Post-production employs thousands of skilled professionals who blend highly developed technical knowledge with artistic skills and training to create the films the world is eager to buy and watch. The exciting world of 3D films and the capabilities of digital technology in creating virtual worlds is only beginning, and will make this industry an increasingly fascinating place to work.

## Let's Review!

In this lesson you have learned:

- post-production can make or break a film because all of the elements come together during this phase of filmmaking;
- film editors are responsible for the final look of the film and the way the story flows;
- • most editing is done on a digitized version of the actual film footage, after the footage is transferred to a digital file;
- sound editors and designers are charged with editing the recorded dialogue and sound from the actual production, as well as re-recording dialogue and creating sound effects for the film;
- music editors structure the soundtrack so that the music complements the film rather than distracts from it; and
- most positions in film post-production require specialized training that can be obtained in film school or through a film program at a college or university.