

MAKING A MOVIE, PART I

One of Uncle John's secret dreams is to write, direct, produce, and star in a big-budget Hollywood movie...plus compose the music, choreograph the stunts, design the costumes, program the special effects, cook for the crew, distribute the film....Hold on there, Uncle John! You may need some help.

LIGHTS...CAMERA...ACTION!

Making a big-budget Hollywood movie takes hundreds—even *thousands*—of dedicated people. You've read their names in the closing credits of every feature film you've ever seen. But what do they all do? How does a film actually get made? This article only scratches the surface of what goes into making a movie, but you'll get a good idea of how all of these skilled people work toward the same goal...and what can happen when the goals of some don't match the goals of others. It doesn't take much to turn what could have been a good movie into a bad one, and vice versa. Yet there's one thing that all movies have in common: Whoever comes up with the idea believes it'll be a *great* one.

STAGE ONE: CONCEPT AND DEVELOPMENT

Movies usually come from one of two places: A screenwriter may pen an original story and then find a producer or director who wants to make it, or a producer may come up with the idea—possibly to adapt a book, play, TV show, or an earlier film. The producer will then work up a very rough budget and pitch the concept to a movie studio or other financial backer. If approved, the producer will then *option* the story from the screenwriter or whoever owns the rights to the story or characters. This is a contractual agreement stating that the movie rights can only be sold to that particular studio.

Next, a general outline called a *treatment* is made while a somewhat more refined budget estimate is calculated. After those are done, the studio will make a final decision as to whether or not to put up the funds to make the movie. There are more factors in play than simply whether the film will be *good* or not. These days a big-budget movie must find more ways to recoup its high cost: sequel potential, merchandising opportunities, and DVD

Marlon Brando and James Gandolfini both got their "big breaks" in movies...

sales. Studios are more likely to finance a familiar story with well-known stars that already have a proven track record, thus guaranteeing a better return on their investment. This explains why so many films are sequels or remakes. For most studios, originality is too big a risk.

If the treatment is approved, the project is *green-lighted*. At this point the film is officially *in development*. But that's no guarantee that it will get made. Snags in the process due to creative differences, budget or location disagreements, or scheduling conflicts with the director or lead actor can send the project into "development hell," a condition from which many proposed movies never recover. (See page 71.) But if all goes well, the next steps are to put together a production department and finalize a workable shooting script.

THE MODERN SCREENPLAY: MOVIE BY COMMITTEE

In recent years, the number of people who get writing credits on a single movie has grown significantly. Why? Unless a movie is written and directed by the same person, the screenplay is at the mercy of many people: a producer (often under pressure by the studio) may want to add more action or more romance to make the film more marketable, a big-name actor may demand changes to his or her character, or the director may want to put his or her own stamp on the work. In those cases, *script doctors* are called in. Here are three movies that underwent major changes from conception to release.

CHARLIE'S ANGELS (2000). Based on the 1970s TV show, the screenplay reportedly went through 30 revisions and had 18 different writers. The movie didn't even have an ending when filming began. One major change: star Drew Barrymore (who also served as a producer) decided that only the bad guys would use guns; the Angels would rely solely on their martial arts skills.

Did it work? Yes and no. *Charlie's Angels* was critically panned, but the combination of three well-known female leads and a familiar premise helped the film earn over \$256 million worldwide, more than recouping its \$93 million budget.

I, ROBOT (2004). In 1995 screenwriter Jeff Zintar wrote a *spec*

...after appearing in stage versions of *A Streetcar Named Desire*.

script called *Hardwired* about a robot who murders a man. Studio after studio optioned it and then dropped it. After spending years in development hell, the project almost died completely until 20th Century Fox obtained the rights to Isaac Asimov's classic *I, Robot* short stories. The studio commissioned Zintar to rewrite his script adopting Asimov's themes—but they *still* wouldn't approve it because it was going to cost too much to make. When Will Smith became interested in the project, everything changed. Fox agreed to a bigger budget if *I, Robot* became a "Will Smith movie." So Smith brought in his favorite screenwriter, Akiva Goldsman, to rewrite the script to match the star's on-screen persona, changing it from a "talky mystery" into an action thriller.

Did it work? Yes. Although *I, Robot* received only mediocre reviews, the combination of Will Smith + sci-fi blockbuster + summer release = a critic-proof movie. It made \$345 million worldwide, more than twice its budget.

GROUNDHOG DAY (1993). Danny Rubin's original screenplay about Phil Connors (Bill Murray), a bitter weatherman who finds himself living the same day over and over...and over...until he finally figures out what's really important in life, was altered significantly by director Harold Ramis. Rubin's version began with Phil already stuck in the time loop. Ramis changed it so that Phil enters the time loop *after* the film begins—and the audience has to figure it out along with him. And in Rubin's script, one of Phil's ex-girlfriends wanted to teach him a lesson so she placed a voodoo curse on him. Ramis left the cause unknown and also shortened the time Phil was stuck in the loop from thousands of years to what he estimates is "about ten years." Ramis also put more emphasis on the love story.

Did it work? Yes. Rubin was reportedly upset about the changes, but they paid off: *Groundhog Day* made \$70 million domestically (it cost less than \$15 million to make) and has been included on many "Top Comedies of All-time" lists.

The lesson: No screenplay is safe in the Hollywood system. Still, a working draft must be completed before the rest of the pieces can be added.

*What are the rest of the pieces?
Turn to Part II on page 232.*

MAKING A MOVIE, PART II: THE PRODUCERS

Now we focus our attention on the plethora of producers and their many tasks—including the most important one: divvying up the money. (Part I is on page 116.)

FROM ASSOCIATES TO EXECUTIVES

Once the shooting script is finalized, the producer begins putting together the production department. That includes producers, executive producers, associate producers, co-producers, and line producers. But what do all of these people actually *do*? Their tasks often overlap on the same project, but not only that—people with the same title on another project often have completely different duties. For this reason, the Producers Guild of America (PGA) is currently working to streamline these terms and make the duties more consistent.

- **Producer.** A movie will have several producers; the one in charge of all the others is simply called “producer.” Although he or she wears many hats, the primary duties consist of staying with the film from development to release, making sure that every department has everything they need in order to complete their jobs. For a more technical definition, the PGA states: “A producer initiates, coordinates, supervises, and controls all aspects of the motion-picture production process, including creative, financial, technological, and administrative.” More and more big-name directors and actors want to be producers as well, allowing them more control (but not all) over how the story will be told.
- **Executive producer.** He or she oversees all the business and legal aspects of the film—negotiating contracts, securing rights, insuring the picture, hiring the core filmmaking team, and sometimes even financing the movie. The creative work can’t be started until this process is complete. On some projects, the writer/creator is given an executive producer credit, even though they didn’t do a lot of work on the actual film. In other cases, the studio heads who secured rights and approved financing of a film may be given executive producer credits.

The cellulose in celery is impossible for humans to digest.

- **Associate producer.** He or she works at the producer's side, doing the legwork that the producer doesn't have time for. A mentor/student relationship often results, as most associate producers are working to become full-fledged producers themselves. This is also one of the most common "gift" credits given out as favors to stars or financiers who in reality performed no producer duties at all.
- **Co-producer.** Another confusing term, this title is often awarded for different duties depending on the project and is mostly used in television. On a big-budget film, however, a co-producer credit may be given to a team of production executives who act as liaisons between the producer and the cast and crew.
- **Line producer/unit production manager.** These two terms are often used to describe the same job, depending on the project. What they have in common is that each is the keeper of the budget. If a film is financed for \$40 million, the line producer will read the script and then figure out how to divvy up the money—line by line on a 100-page budget—so that every department will have the funds to carry out their duties. After that, it becomes the unit production manager's job to tell the director that there isn't enough money for, say, shooting at an exotic location. If the director insists, the line producer will break down the budget a second time and try to free up money from other departments to fund the location shoot. Compromises such as this are the norm. For example, if the visual effects look weak, it's often because the studio had to pay the star more money than the initial budget could afford.

REEL-LIFE EXAMPLE: SPIDER-MAN 2

Here's a very simplified version of how the money was spent on the 2004 superhero movie, one of the most expensive—it had a \$200 million budget—and highest-grossing movies of all time.

Story rights: \$20 million. Marvel Comics owns the character and charged a hefty price to Sony, the studio that made the film. Marvel has since opened its own film division.

Screenplay: \$10 million. *Spider-Man 2* went through many of the same kinds of story changes documented in the section on screenplays. In the end, the money was divided between the men who

created the character, Stan Lee and Steve Ditko, plus a host of other screenwriters who wrote drafts. The bulk of the money, however, went to Alvin Sargent who (along with director Sam Raimi) finalized the script and was given the sole writing credit.

Producers: \$15 million. That's only the "up front" money. According to Archie Thomas, the movie writer who compiled much of this information for *The Guardian* in 2004, "including performance-related bonuses, or 'bumps' from *Spider-Man* reaching box-office targets, producer Laura Ziskin is rumored to have pocketed over \$30 million. The escalating fees paid to actors are often reported, but the producers are among the richest people on the set."

Director: \$10 million. Bringing in Sam Raimi to direct the first *Spider-Man* movie was a risk, as he had directed mostly low-budget horror movies, but it paid off big-time...and he was able to negotiate for a much higher salary for the sequel.

Casting: \$30 million. (Tobey Maguire: \$17 million, Kirsten Dunst: \$7 million, Alfred Molina: \$3 million, the rest of the cast: \$3 million.) Negotiating these deals is often intense. Maguire—earning more than four times his salary from the first film—was reportedly fired during preproduction after showing up with a nonchalant attitude and complaining of a hurt back. When producers offered the part to Jake Gyllenhaal, Maguire's reps had to convince the producers that Maguire was indeed ready for the role and would submit to medical tests to prove it. And along with their salaries, the main stars receive such "perks" as personal assistants, trainers, chefs, first-class travel and accommodations, and anything else their clout can get them. All of the expenses so far are what's called *above-the-line*, paid to actors, writers, producers, and the director.

Production costs: \$45 million. Called *below-the-line*, this is the money that goes into paying and feeding the crew, renting the equipment, fees for location shooting, and all the raw materials needed for building the sets. This is the money that the line producer/unit production manager must divvy up. (On smaller films, this is also where the most corners are cut, starting with food and housing for the crew.)

Visual effects: \$65 million. Not only can this be the most expen-

sive part of big-budget movies, it's usually the one that causes projects to go over budget. It takes an army of highly skilled programmers months to create, animate, render, and fuse the digital effects into the film. The more complex the shots, the more they cost. For example, one scene in 2007's *Spider-Man 3*—when Sandman is “born”—took three years to complete and cost nearly as much as the *entire* effects budget for *Spider-Man 2*.

Music: \$5 million. Danny Elfman wrote most of the score, but after disagreements with director Sam Raimi, Christopher Young and John Debney were brought in to write additional themes. This is actually quite common. In addition to paying the composers, they had to pay an orchestra to perform the score. In addition to that, part of this budget goes to purchasing rights to songs used in the soundtrack.

Marketing and Distribution: These costs aren't usually added into the film's budget—the studios take care of this and won't disclose how much money is spent on promos and corporate tie-ins, but it's usually in the tens of millions of dollars. The cost for “prints and advertising” on *Spider-Man 2* was reportedly around \$75 million.

EXTRA HELP

A recent trend is to get advertisers to pay for a share of the movie in return for product placement. The modern era of product placement began in 1982 when sales of Reese's Pieces skyrocketed after appearing in *E.T.: The Extra-Terrestrial*. A company will now pay millions if the product is displayed prominently and in a good light. There's even a new practice of tailoring the product to the country in which the movie is being shown. In *Spider-Man 2*, North American audiences saw a Dr Pepper logo behind Peter Parker when he got fired from his job; in Europe the logo was digitally replaced with Mirinda, a popular European fruit drink that's also distributed by Pepsico.

But no matter who provides the money, all of the expenses must be budgeted and divvied up before the real work on the movie can begin.

For Part III, go to page 330.

MAKING A MOVIE, PT. III: PREPRODUCTION

Wow, we've already reached the third part of this article and are only now getting to preproduction? You see, Uncle John? Making a movie does take a lot of work. (Part II is on page 232.)

GATHERING THE TALENT

Now that the script and budget have been approved and the director is onboard, every aspect of the project must be thoroughly planned out in advance. Every film is a “business” in its own right, so first a production company is formed. Then the director (alone or with an illustrator) turns the script into *storyboards*, rough sketches of every planned shot. Those are then sent to each department head so that they can begin the conceptualizing work, such as how the sets and costumes will appear. A rough filming schedule will also be set. Here are the people and departments who start putting it all together.

CASTING

Often a director will have specific actors in mind for the lead parts. It is the *casting director's* job to find and then begin negotiations with those actors. Alternatively, the director may give a detailed description of the roles' requirements. The CD will then advertise the parts in industry trade publications, look at hundreds or even thousands of 8x10 photos, and then schedule auditions, presenting the director with only the best candidates. The CD is usually in sole charge of casting the smaller parts and remains with the production during filming, acting as a liaison between the production company, the actors, and their agents. Sometimes, a CD must get creative to find the perfect person for a role.

Reel-Life Example: When looking for an 11-year-old boy to play the son of Daniel Plainview (Daniel Day-Lewis) in *There Will Be Blood* (2007), casting director Cassandra Kulukundis auditioned hundreds of kids from New York and Los Angeles, but they were all a little too “polished” to play a simple West Texas boy who could shoot a gun. So Director Paul Thomas Anderson sent

Kulukundis to Texas to look for the real thing. There, she found a 6th grader named Dillon Freasier who'd never acted before but otherwise had all of the desired attributes. Kulukundis recorded a screen test in Freasier's living room and sent it to Anderson, who flew out to meet the boy...and knew he was perfect "the minute he laid eyes on him." That's what directors and CDs strive for: the "Eureka!" moment when they know they've found the perfect marriage between actor and role.

Did it work? *There Will Be Blood* made nearly three times its \$25 million budget during its theatrical run and went on to receive an Oscar nomination for Best Picture. And critics agreed that Freasier's performance was one of the reasons the film was so powerful.

PRODUCTION DESIGN

The *production designer* is the "architect" of the film, in charge of every object on the screen that isn't an actor. If the screenplay calls for grit and realism, the PD has to make sure that everything in the frame—from the city skyline to the tattered shoes to the trash on the ground—reflects that vision. Reporting to the PD is the *art director*, who oversees the conceptual artists to finalize the film's look. Once the main design elements are approved, a revised set of storyboards is created by the art department that will serve as a guide to setting up lighting, props, and camera angles once filming has started.

Meanwhile, the *property master*—working from an exhaustive list put together by the PD—has already begun the arduous process of finding or creating every object that appears in the movie. A *prop* is any inanimate object that an actor directly interacts with, such as a chair or a gun. A *set dressing* is any object that appears in a scene but that the actors do not touch. The property master searches through catalogs, prop houses, and thrift stores looking for these things. If they can't be found or don't exist, it is up to the art department to build them or modify them from real objects (such as turning an electric razor into a futuristic communicator).

Reel-Life Example: Jeannine Oppewall is a veteran PD with more than 30 films and four Oscar nominations to her credit, one of which was for 1998's *Pleasantville*. The film was especially difficult because it combines a period piece that strives for historical accu-

racy with a fantasy—Oppewall calls this a “hyper-reality.” The plot: two modern teenagers are magically transported back to a 1950s TV sitcom town where everything appears in black-and-white and everyone behaves innocently. As the two new teenagers introduce modern values and mores, Pleasantville gradually begins to show color.

On a typical project, Oppewall will spend up to nine months working 14-hour days, researching and drawing up plans. With a period piece, she says, the most important job is taking things out: “air-conditioners, reflectors that run down the middle of the street, cars of the wrong vintage, and satellite dishes.” Oppewall supervised the refurbishing of real neighborhood streets plus the creation of a replica of the town on a studio back lot.

Did it work? Yes. *Pleasantville* turned a tidy profit during its theatrical run, taking in nearly \$50 million. It also garnered great reviews, most of which acknowledged how convincing the make-believe world was. In her review for the *New York Times*, Janet Maslin wrote, “The film’s unsung heroine is Oppewall, who wittily turns the fantasy of Pleasantville into an actual place. Watch the sidewalks crack and the skirts grow less poufy as reality sets in.”

FINDING THE LOCATIONS

After reading the script and studying the storyboards, the *location scout* or *manager* travels around to find and photograph potential places to film—a difficult job, as numerous factors must be considered before the director and producers will even go and look at it.

- How much does it cost to film there? Are there permits available? Grand Central Station may be exactly what the film calls for, but will the cost of filming there put the movie over budget?
- How noisy is the location? Nearby construction equipment or an airport can grind a production to a halt. Location scouts must be able to see into the future to know what the conditions will be like when the filming is scheduled.
- How accessible is the location? Is there power available? Only movies with the biggest budgets can afford to send an armada of trucks and helicopters out to the middle of nowhere and power it all up with generators.

If no suitable location can be found, there are options: They can “re-dress” one place to make it look like another, send a film

There have been more than 200 deaths and 12,600 injuries...

crew to the location to get background shots and then digitally add in the actors during postproduction, or re-create the location on a soundstage or a studio back lot.

Reel-Life Example: In the 2000 comedy *Big Momma's House*, Martin Lawrence plays an FBI agent who disguises himself as a matriarchal woman in order to catch a criminal. Production designer Craig Steams knew that “the House” would need to be a character in and of itself, so he sent four location scouts on a search through the southern United States. When the perfect house was finally chosen, producers decided that filming would be much easier in a more controllable environment. So the crew ended up building an exact replica of the house on two stages at Universal Studios.

Did it work? Yes. Martin Lawrence's performance (along with that of the house) may not have won many accolades from critics, but audiences loved it. Made for \$33 million, *Big Momma's House* grossed \$173 million and spawned a successful sequel.

VISUAL EFFECTS

Because shooting schedules are so tight, the *visual effects coordinator* must read the script and then tell the director what can or can't be filmed on set—and then start figuring out how to do it. There are two kinds of visual effects: those that will be completed in postproduction, and *practical effects*, which will be done on set, such as explosions, gunfire, rain, and...baby cows.

Reel-Life Example: In the 1991 film *City Slickers*, Mitch (Billy Crystal) must help deliver a newborn calf. Because an actual birthing would have been nearly impossible to set up and capture in one take, the visual effects department built an animatronic calf that Crystal “delivered” several times until director Ron Underwood was satisfied.

Did it work? Yes. *City Slickers* was a hit with both critics and audiences. If the birthing scene hadn't been convincing, the story would have suffered. Film critic Roger Ebert apparently didn't notice the ruse. “All of the subplots, like Crystal's love for a baby calf he helps deliver,” he wrote, “pay off at the end.”

COSTUME DESIGN

Working in conjunction with the art director, based on the PD's

vision, every single piece of clothing that the actors wear must either be found or created by the *costume designer*.

Reel-Life Example: In a character-driven film such as 2001's *Ocean's Eleven*, the costumes must help tell the story, and director Steven Soderbergh credits much of the movie's success to costume designer Jeffrey Kurland. But the head of an art department can't work in a vacuum; Kurland collaborated with production designer Phil Messina. "We share color schemes and ideas. When I told him that I was going to try to design Terry Benedict (Andy Garcia) with an Asian feeling, Phil designed Benedict's hotel with a distinctively Asian feel. We also talk about color and what he plans to use as upholstery so that the characters don't disappear into his furnishings." This is another job that begins in preproduction and stretches all the way through to the end of filming. "If I remember correctly, George (Clooney) has 26 costume changes, Brad (Pitt) has 24, Elliott (Gould) has 12 or 14. I was constantly making and designing clothes throughout the show." (In movie business lingo, a film project in production is called "the show.")

REHEARSE, REHEARSE, REHEARSE

It's important that the casting be completed as early as possible so the main actors can be brought in to rehearse and train for the various tasks their characters must perform—from stunt work to dancing to foreign accents. An actor may spend a month training for a scene that will take a week to shoot and only takes up a minute of screen time.

Reel-Life Example: When Keanu Reeves, Carrie-Anne Moss, Laurence Fishburne, and Hugo Weaving were cast as the four leads in 1999's futuristic action film, *The Matrix*, they figured training would only last a few weeks. Instead, it took closer to *four months*. Under the tutelage of kung fu choreographer Woo Ping Yuen, they had to learn not only martial arts but how to fight each other while suspended on wires.

Did it work? Yes. *The Matrix* set a new standard for action movies with both its never-before-seen visual effects and complex fight scenes. But it wasn't easy—the film spent four years in development and over a year in preproduction before the first scene was even filmed.

For Part IV, go to page 433.

MAKING A MOVIE, PT. IV: PHOTOGRAPHY

Our big-budget motion picture is finally ready to begin filming. Here are but a few of the hundreds of people who make it happen. (Part III is on page 330.)

THE VISUAL STORYTELLERS

THE VISUAL STORYTELLERS
Filming is actually the quickest aspect of movie-making, usually taking only one to three months of the entire process. Adhering to a strict schedule of “get the shot done and move on to the next,” the filmmakers assemble the many pieces that will be put together and cleaned up in postproduction. Yet many successful movies—ones that appeal to both viewers *and* critics—will report having had a close-knit crew. The actors say that this production was “different” and “special.” Everyone talks about how much fun it was to shoot. Well, for that to happen, it all starts with the single most important person on any movie set.

THE DIRECTOR

Responsible for the tone, pacing, and overall vision of the film, the director has the job of taking what’s in the script and translating it to the screen. While his or her primary duty is assisting the actors in their delivery of lines, the director is also usually the last person to sign off on every aspect of the production, from preproduction to the final sound mix. In many cases, especially within the studio system, the producer or the studio can usurp the director’s power in an attempt to make the finished product more marketable and more appealing to a mass audience, which is why many experienced directors prefer to take on the producing duties as well. Still, it is the director—not the producers—whom the actors and crew rely on to keep them all on the same page.

DIRECTOR OF PHOTOGRAPHY

Often the director’s closest collaborator, the DP is responsible for the film’s composition (how everything appears in the frame), its color palette, and how light or dark each scene is. Some directors are very specific about how they want the film to look, meaning

The 16th-century El Escorial palace of King Phillip II of Spain had 1,200 doors.

that the DP simply executes their orders, while other directors are more focused on the acting and give the DP creative license. Either way, DPs are in charge of making sure that the cameras, lenses, and film stock are available and in working order, and see to it that the film is processed after every scene so that the director can review the *dailies*. (Two terms that are often intertwined are the director of photography and the *cinematographer*. If both are listed in a movie's credits, it is usually the DP who oversees the camera crew and the cinematographer who is in charge of the composition and camera moves for each shot.)

Reel-Life Example: Wanting their 2000 comedy, *O Brother, Where Art Thou?*, to look like a “fable,” directors Joel and Ethan Coen charged DP Roger Deakins with the task of creating a sepia-toned look, complete with yellow trees and amber skies. One big problem: they were filming in Mississippi during the summer, when the trees were green and the skies blue. After trying various photo-chemical processes—including bleaching the film—Deakins realized that the look couldn't be achieved through conventional means. Result: *O Brother* marked the first time that an entire film was digitally colored. The process took two months to complete.

Did it work? Yes. Critics and audiences loved the quirky film; Deakins was nominated for an Oscar. More praise: Robert Allen of the International Cinematographers Guild wrote that “historians will look back on *O Brother, Where Art Thou?* as a milestone.”

MIDDLE MANAGEMENT

Movie sets are chaotic—hundreds of workers, each in charge of a specific task, work on different scenes simultaneously, often out of sequence, most not even aware of the storyline. Here are those whose job it is to keep the chaos in order.

- **Assistant Director.** If you were to visit a movie set, you might mistake the AD for the director—they're usually the loudest, barking orders and yelling “roll” and “cut” while the director sits quietly in a chair looking at a monitor. That's the AD's job—to let the director stay focused on the story being told. The AD must always stay one step ahead, so when the time comes for the cameras to roll, everyone and everything is ready to go. The AD sets the day's schedule and prepares *call sheets*, a list of which actors are needed for the scenes being shot. In addition, the AD relays instructions

Wide load: In 1970 Americans spent \$6 billion on fast food; in 2001 they spent over \$110 billion.

from the director to the other department heads, including the *1st AD* and *2nd AD*, who do the same thing for the AD that the AD does for the director. Their most important job is setting up and directing the extras.

- **Production Coordinator.** Responsible for maintaining the schedule and making sure the cast and crew are fed and have accommodations while on location.
- **Location Manager.** When a huge film crew takes over a location such as a small town, a city street, or a tourist attraction, the location manager obtains all required permits, heads up the security department, and keeps the locals happy. (On some productions, the location scout stays on as the location manager; on others a separate person is hired.)
- **Script Supervisor.** Responsible for *continuity*, the script supervisor views every single take of a scene—which can begin on location and continue weeks later on a soundstage—to ensure that the lighting, props, hair, makeup, and costumes don’t change drastically between takes. The script supervisor also notes when what’s been filmed differs from what’s in the script.
- **Costume Supervisor.** In charge of the *costumers*, who see to it that the actors’ clothes are always in the desired condition. This sometimes requires “aging” a new garment so it looks worn in. Along with the *hairstylist* and *makeup supervisor*, the costumers are in nearly constant contact with the actors—from seconds before the cameras roll to seconds after they cut. On special effects films that require prosthetics, this can be a very large department with many skilled craftspeople working around the clock.
- **Production Assistant.** Basically, they’re gofers, ready to do anything that needs to be done. They may run a broken doorknob back to the prop department, or make sure the producer gets his half-decaf double latté with two sugars and no foam. On big-budget movies, each of the principal cast and crew members gets their own PA.

THE TECHNICAL CREW

This group must work together as if they are a single person, because it only takes one little goof to cause the entire scene to be re-set (extras and all) and the shot done over.

- **Clapper-loader.** Loads the film stock into the camera and also

Some 50,000 Canadians fought in the American Civil War, including about 200 for the South.

claps the *slate* (or *clapboard*) before each take (on larger productions, separate people are hired for these jobs). The original use of the slate was to sync up the audio and visual for editing, but with digital technology this is no longer necessary. Still, the slate remains, mostly as tradition, but it does contain necessary information—the scene and take numbers and the date and time.

- **Camera Operator.** Whether following the action on foot with a steady-cam or perched up in a crane zooming out for a wide shot, the camera operator must have not only extensive technical knowledge of the cameras and lenses but a creative eye as well. Larger productions have multiple camera operators.

- **Focus Puller.** Because a movie is designed to be projected on a very large screen, it is essential that the lenses are focused perfectly. The focus puller sits beside the camera and adjusts the focus, based on predetermined calculations. Along with the AD, they arrive on set early to rehearse the upcoming scene, or *block* it, with stand-ins to determine focus and camera movements.

- **Grips.** Led by the *key grip* and including the *dolly grips*, this crew of strong backs is in charge of setting up and breaking down all of the production equipment, including the cameras, cranes, and *dollies* (small train tracks for shots that require the camera to follow the action). Grips also set up the lighting system, which includes the lights, huge diffusers and reflectors, and heavy fabric used to *tent out* windows to keep out extraneous light.

- **Gaffers.** Working closely with the grips, the gaffers are the on-set electricians. They make sure that the lighting systems, cameras, dollies, cranes, fans, rain and wind machines, and video playback monitors are all wired correctly. Because of the enormous amount of power needed to run the equipment, gaffers must be experts, making sure that no fuses blow, which would delay production.

- **Best Boy.** This can be either gender and is divided into two categories: *best boy grip* and *best boy electric*, working as an assistant to the key grip and gaffer, respectively. Larger productions have multiple best boys. Their duties are often determined by what's needed at any given time, be it unloading equipment from a truck or finding a larger fan because the director wants even *more* wind.

- **Location Mixer.** Although very few sounds (footsteps, breaking glass, traffic, etc.) recorded on set in modern feature films ever make it to the final cut, most of the dialogue does: It must be recorded

clearly so that the editors, sound designers, and actors can reference them later in postproduction. The *boom operators* stand just outside of the shooting area holding long microphones over the top of the action while the location mixer monitors the scene with headphones.

- **Second Unit Director.** The *second* unit films any shot in which the principal actors are not needed, such as a close-up of an object, an explosion, crowds, or background scenery. On a larger production, third and even fourth units may be necessary.
- **Leadman.** In charge of the *swing gang*, the construction crew that builds and breaks down the sets. Next come the *set dressers* to add in objects such as furniture and wallpaper, as well as matte paintings (photorealistic murals used to convey distant locations) and green screens (monochrome curtains that will be replaced digitally in postproduction). The swing gang is already gone and working on the next set when the crew arrives to film.
- **Stunt Coordinator.** Not only choreographs the stunt performers for any shot deemed too dangerous for the actors, but must ensure the safety of the actors when they insist on doing their own stunts.
- **Wranglers.** In charge of any nonhuman performers.
- **Still Photographer.** Takes pictures for various purposes: framed photographs that will end up in the movie, promotional photos for advertising, as well as reference pics to aid in continuity.
- **Caterers.** Provide all of the meals for a legion of hungry people.
- **Transportation Coordinator.** In charge of getting the principal actors to and from the set each day as well as assembling a convoy of semitrucks—and sometimes airplanes—to transport the equipment to the location.

For Part V, go to page 531.

* * *

Reel-Life Wrangling Example: On the set of *The Shawshank Redemption* (1994), animal trainer Scott Hart set up a shot in which Brooks (James Whitmore) feeds a maggot to his pet crow. Per requirement, a Humane Society representative monitored the shoot to see that no animals were harmed—and deemed the scene “cruel” to the maggot. The only solution: They had to wait for the maggot to die of “natural causes” before the shot could be filmed.

“Talk is overrated as a means of settling disputes.” —Tom Cruise

MAKING A MOVIE, PT. V: POSTPRODUCTION

*Good news, Uncle John: Principal photography has been completed!
Bad news: Your movie is only half-done. (Part IV is on page 433.)*

SHIFTING GEARS

Once filming has wrapped, the number of people working on a movie shrinks from a few hundred to a few dozen. And the workplace shifts from huge soundstages and grand locations to small rooms with computers and video screens. While much of the postproduction work actually begins while the movie is still filming (such as visual effects), most of it isn't completed until a month or two before the movie's release. (That's why movie trailers often have different music, different visual effects, or even different scenes than the final film.)

In charge of the process is the *postproduction supervisor*, who maintains the schedule, hires vendors, brings the actors back if necessary, and keeps the distribution and marketing departments informed of the progress. That way, the director and producer can spend their time looking over the editor's shoulder.

EDITING

Without a highly skilled editor fitting all of the pieces together into a well-paced narrative, the movie wouldn't work. The editor's first task: create an *assembly cut* of the film—nearly every single take from every single scene, put into order according to the script. The director then spends a few days viewing it over and over, marking the best takes for the editor. With that information, the editor makes a *rough cut*. The director then watches *that*, looking for three main things: the order in which the scenes occur, how the shots are cut together within each scene, and which scenes didn't work as planned. With a new set of notes, the editor cuts the movie yet again. This fine-tuning keeps going until everyone is satisfied.

It's said that a good editor will "discover the film" in the cutting room, putting emphasis on an aspect of the movie that the director may not have seen as that important.

Reel-Life Example: The first rough cut of the original *Star Wars* presented to writer/director George Lucas in late 1976 was a mess. The pacing was slow; some shots lingered too long and others ended too quickly. With the film already behind schedule, Lucas fired his editor and brought in three new ones: Paul Hirsch, Richard Chew, and his own wife, Marcia Lucas. One such quick cut was when one of the sandpeople attacked Luke (Mark Hamill) with a staff. At the end of the original shot, the creature raised his staff above his head and then the shot ended abruptly. Hirsch extended the scene by running the film backwards for a brief second just as the creature's arms reached their highest point, then repeated that up-and-down move four times, adding emotional impact.

Did it work? Yes. Lucas has since credited the editing as one of the main reasons for the unparalleled success of *Star Wars*.

ADDITIONAL PHOTOGRAPHY

Why do so many movies have a “typical Hollywood ending?” After the rough cut of the film is finished, the studio will show it to test audiences and focus groups who then answer a series of questions: “Did you understand the plot?” “Did you like the ending?” If the majority of viewers answer “no,” the studio will mandate a new ending (often a happier one) and bring the principal actors back in for additional photography, sometimes called *pickups* or *re-shoots*. New sets often have to be built, because movie sets are designed to last only the few days they're needed and are then destroyed.

Another reason for additional photography: Sometimes the director or producer feels something is missing—perhaps a reaction shot that further explains a character's motivation. According to screenwriter John August (*Big Fish*), “In most cases, it's not that you're adding something great, but rather that you're replacing something sucky.”

Reel-Life Example: The 2007 horror thriller *The Invasion*, a remake of the classic sci-fi film, *Invasion of the Body Snatchers*, was German director Oliver Hirschbiegel's first English language film. Test audiences (and Warner Bros. execs) found the film too “claustrophobic” and “moody,” so producer Joel Silver took the extreme step of bringing in a new director to reshoot much of the film. In fact, he brought in *three* directors—Larry and Andy Wachowski, directors of *The Matrix* trilogy, and their longtime collaborator,

James McTeigue—to redo all the action scenes and the ending.

Did it work? No. After arriving in theaters a year and a half after its original announced release date, *The Invasion* was lambasted by critics and bombed at the Box Office.

AUTOMATIC DIALOGUE REPLACEMENT (ADR)

ADR, or lip-synching—also called *looping*—occurs months after filming has wrapped. Although the director would love it if every bit of dialogue recorded during filming was usable, much of it is not—either due to low audible levels, extraneous noises, or performances that didn't quite hit the mark. In addition, naughty words need to be changed so the film can be shown on broadcast television, or if the studio just wants a more family-friendly rating.

Reel-Life Example: In the 1999 comedy *Galaxy Quest*, when Gwen (Sigourney Weaver) sees the “Chompers” that she must run through, the audience hears her say, “Well, screw that!” but her lips are obviously saying...something else.

Did it work? Yes. After the original cut was deemed “too dark,” much of the violence and language was toned down in postproduction, making *Galaxy Quest* more accessible to a younger audience that helped it earn more than twice its \$45 million budget.

VISUAL EFFECTS

Working against tight deadlines, digital effects artists pore over every layer of every frame, striving to combine digital and traditional shots, often “painting” out green screens and adding in background plates (such as a fake sky)...hoping that the director will approve of their completed shot.

Reel-Life Example: One of the most effects-heavy movies ever made was 2003's *The Return of the King*, the conclusion to the *Lord of the Rings* trilogy. One particularly complex shot featured two giant, elephantlike creatures (called *mûmaks*) crashing into each other, and then tumbling to the ground. After working on the shot for six months, the digital artists were disheartened when director Peter Jackson informed them that it lacked the size, force, and impact that he was looking for. But time was running out—they only had *two days* to redo it. Working nonstop, the effects team was able to match up with Jackson's vision.

Did it work? Yes. Jackson's insistence on perfection in every

aspect of the filmmaking process was rewarded with massive commercial *and* critical success, culminating with eleven Academy Awards, including the Oscar for Best Visual Effects.

SOUND DESIGN

Every scene of a big-budget movie contains dozens of separate and distinct sounds: squeaky floor boards, slamming doors, barking dogs, cars, thunder, coughs, sneezes, crashes, explosions, and so on. Each must either be found or created in post-production. The *sound designer* will first search through vast sound effects libraries (which explains why you've heard the exact same hawk screech in so many movies). What can't be found must be created by *Foley artists*—named after influential Hollywood sound effects man Jack Foley. Working in either a soundproof room or outdoors if required, these technicians pull from a giant bag of tricks.

Reel-Life Example: For the 2008 animated comedy *WALL-E*, in which a discarded robot must save humanity, producer Jim Morris brought in veteran sound designer Ben Burtt, who first made his mark on the *Star Wars* films. Since *WALL-E* must communicate without words, Burtt used the same technique he used 32 years earlier for *R2-D2*: he recorded his own voice making kid sounds and then ran those through a synthesizer.

Did it work? Yes. Because the speechless robot was given a human foundation for his vocal utterances, audiences were able to identify with his plight, helping *WALL-E* to become a huge summer hit.

MUSIC

Music is divided into three categories: The *soundtrack* consists of songs played over the top of the scene that help convey mood. These are found by the *music supervisor*, working from a director's wish list. This process is usually started before postproduction begins, as negotiating payments and securing rights can be a lengthy process. The second category is *source music*, sometimes called *incidental music*. This may be the background music played at a restaurant or a carnival ride at a fair. Rights have to be secured for incidental music as well, unless it's in the public domain. The third category is the *score*, original music that a composer creates specifically for the film.

In most cases, the composer isn't brought in until well into

postproduction. Once on board, he or she will watch the most recent edit of the film—often accompanied by a *temp track* of pre-existing music to help convey what the director is looking for. Then it's up to the composer to write the music, and for the music supervisor to hire an orchestra and book studio time to record it. This is also an area where creative differences often occur.

Reel-Life Example: In 1989 Hans Zimmer was hired to score Ridley Scott's action movie, *Black Rain*, starring Michael Douglas as an American cop caught up in the Japanese underworld. Zimmer tried to bring something new to the typical action score by blending in traditional Japanese music. He recalls that producer Stanley Jaffe "hated the score so much that I actually got shouted at after a screening, and I fainted. By the time we got to the dub stage, I was just living in fear. And it's odd because after the Oscars, I went to a private party. Michael Douglas was there, and he said, 'You really saved my a** in *Black Rain*.'"

Did it work? It appears Douglas was right; the movie earned \$134 million in worldwide ticket sales. And Zimmer boasts that his ethnically flavored music has had a lasting influence. "*Black Rain* had somehow set up a new way action movies could be scored. Soon everybody was doing the *Black Rain* thing."

TITLE SEQUENCES

Some filmmakers still open their movies with elaborate title sequences. A great deal of work is put into these stand-alone "short films" that, according to Saul Bass, the man who pioneered them in the 1960s, "should create a climate for the story that's about to unfold." The process: The script or the most current cut of the film is sent to a title design company along with the list of credits, a music temp track if one is available, and any instructions concerning the style (animation, computer graphics, and so on). After the designers watch the film, they draw up *style frames* of what the sequence will look like. Once the director approves those, they complete a rough draft of the entire sequence. And it goes back and forth until the director is happy; then the music is mixed in, and the title is ready to go.

Reel-Life Example: Four of the five 2007 Best Picture nominees used a "cold" opening (no title sequence at the beginning). The only one that used a traditional opening title sequence was Jason

Reitman's *Juno*, a comedy starring Ellen Page as a teenager dealing with pregnancy. Reitman hired a small company called Shadowplay to do the sequence, and the process was a bit different than most feature films. Before animating the entire sequence, Gareth Smith, co-founder of Shadowplay, sent style frames—inspired by vintage 1970s punk-rock posters—to Reitman for approval. After that, hundreds of photographs were taken of Page walking on a treadmill carrying a bottle of orange juice. Those were then cut out and hand-animated to create the retro feel. Adding to the whimsy of the sequence was the song, “All I Want Is You,” by Barry Louis Polisar, which Reitman had chosen himself. “Title sequences tend to be an afterthought for most films,” says Smith. “We prefer to develop ideas early in the filmmaking process, which we think enhances the storytelling of the film.”

Did it work? Yes. *Juno* cost \$7.5 million and grossed over \$228 million worldwide, making it one of the most profitable films of all time...and making Shadowplay a not-so-small company anymore.

PUTTING IT ALL TOGETHER

As the release date looms ever closer, the work intensifies.

- **The final sound mix.** This is the last step in the creative process. Any given shot in a film may contain dozens of sounds. For instance, a bar fight will contain the actors' voices, source music, score music, sound effects of punches landing, windows being broken, and what's known in the industry as *walla* (background murmur noise). Every single one of these sounds needs to be carefully balanced by the sound editor.
- **Locking the picture.** Most of the postproduction tasks have been going on simultaneously, with the director running from one office to another, looking and listening, and signing off on things. But at some point, the work must stop, and that's not often when the filmmakers would prefer. As director Peter Jackson once said, “You never really finish a film; you just keep working on it until they tell you to turn it in.” (Just like making a *Bathroom Reader*.)
- **Making prints.** The finished film must be copied up to 2,500 times for distribution to theaters all over the world. This is a highly technical process that takes place in specialized labs. Because making thousands of copies would wear down the master, a series of intermediate prints must be made to copy from: first is the *interposi-*

High tide? Coral can be found around the tops of some Alaskan mountains.

tive, a low-contrast copy on very fine-grained film stock. From this new master, a set of *internegatives* are made. These contain the separate audio tracks; some will also be given subtitle tracks for foreign markets. The final step is to create the individual copies, which are divided into reels, each holding 2,000 feet of film (on what is technically called a *double reel*). A typical film will comprise five separate reels. Now they're all ready to be sent to theaters—bigger movies will be given fake labels in an effort to curb piracy. Often the final reel won't be sent until the day before the film opens.

MARKETING AND DISTRIBUTION

A separate company, hired by the studio, has been working for months on ways to get the movie shown in as many theaters and to get as much buzz among filmgoers as possible. They negotiate with distributors, film festival organizers, as well as marketing companies that will help promote the film. They send the finished film to *exhibitors*—theater owners who pay for the right to show it and then share in its profits. The latest trend is *viral marketing*, mainly done on the Internet. This consists of getting online users involved in the process while the film is being made, relying on word of mouth to increase the buzz. The more faith a studio has in a film, the more money it's willing to spend to advertise it.

LETTING IT GO

The release date finally arrives. Commercials have been airing; press kits and posters are displayed in theaters; and the stars have promoted the movie on talk shows. Now, the film is completely out of the filmmakers' hands—it is up to the movie-going public to decide whether or not they've succeeded.

But the odds are not in the filmmakers' favor: Out of the roughly 600 movies that get released into U.S. theaters each year (about 2/3 of those are independently made)—only a select few will turn a profit. And less than one percent will become classics. For that to happen, the concept needs to be fresh, the story needs to be well written, the film needs to be well shot, well acted, and well edited; and the timing in the marketplace needs to be right. A misfire in any of these areas results in yet another one of the thousands of movies that you see sitting there see on the video shelf...but never seem to be able to bring yourself to rent.

The only *Brady Bunch* kid to appear in every episode: Bobby.