The Film Production Process

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**Introduction**

Film has come a long way as an expressive artistic medium since it emerged during the closing decade of the 19th century. But notwithstanding the extraordinary creativity and inventiveness of film makers during this period, the production process that leads to the final film, or motion picture, has remained relatively uniform since the 1930s. This process which will be described in detail in this article is conventionally divided into four parts: Development, the process that deals with conceiving, planning, and financing the film project; pre-production, the process that deals with assembling and preparing key resources such as cast, crew, and sets; principal photography which deals with the actual shooting of the film, and finally post-production, the process which sees the editing of the raw footage and the adding of soundtrack.

**Development of the Production Process in the United States**

To understand the modern system of film production in all its complexity it is necessary to trace the evolution of this system from its origins. The early film production process stands in marked contrast to the complex and lengthy process that prevails today. Early films were far shorter and less technically complex than today’s feature films. As a rule they did not require script, and utilized a small crew. Many were documentaries, and were therefore referred to as ‘actualities’. In most instances, these actualities simply involved setting the camera up in front of a street scene, or other such view, filming for a short while, developing and printing the film, and then screening it unedited. The celebrated Lumière’s ‘Cinématographe’ captured this served the purposes of this type of film making. It was a very versatile piece of machinery that functioned as a movie camera, printer and projector all rolled into one. A cameraman equipped with this device could be supplied to vaudeville theatres. He would film local scenes, print them, and project them, all on the same day.
By the 1890s, ‘trick films’ and filmed variety acts became popular. These films, as opposed to their documentary counterpart, required staging, rudimentary film sets, costumes and props. Trick films also demanded more innovative production techniques than the actualities. For example, *The Execution of Mary Queen of Scots* (1895) involved stopping the camera after the actor playing Queen Mary laid his head on the execution block, and then using a dummy for the head chopping sequence.

The advantage afforded by films such as *The Execution of Mary Queen of Scots* was that they could be shot in a studio. Indeed, ‘Execution’ was shot in the first film studio specifically built for this purpose: Thomas Edison’s ‘Black Maria’ which opened in New Jersey in 1892. Although basic by modern standards, it was carefully designed to deal with the various contingencies that film making faced at the time. It had an open roof to allow in the sun – essential for a period when all filming relied on natural light, and the whole structure rested on a pivot that revolved in order to maintain an alignment with sun. Other filmmakers followed suit, both in the US and abroad, including the Biograph Company which built a rooftop studio in New York in 1896, and George Méliès, who constructed a glass-encased studio near Paris in 1897.

Studio-made films demanded pre-planning. In the early days, however, this tended to be minimal, and was left mostly in the hands of the film’s director. As film companies came to appreciate the benefits of staggering the filmmaking process, of making more efficient use of resources, and of ensuring a regular flow of product - a more methodical production process was instituted. Increasingly, producers rather than directors assumed greater control over planning projects. Directors, for their part, were progressively relegated to the role of project managers, subject to strict schedule and budgetary controls, and required to shoot the film according to a script developed elsewhere in the system.

Two important management innovations did much to change the balance of power between producers and directors. First, the introduction of production schedules around 1907-9, and second continuity scripts which came into
regular use by the early 1910s. Production schedules helped to manage the flow of activity thereby ensuring maximum utilisation of studio capacity. These production schedules, in turn, depended on continuity scripts which ensured efficient utilisation of studio capacity by providing detailed outlines of each individual film project prior to principal photography. As longer narrative films became the dominant type of film production, continuity scripts also played the crucial role of indicating resources such actors, crew, set, and equipment that would be needed for principal photography, as well as ensuring that the plots were well planned in advance. Indeed, while these innovations came about partly in response to a growing reliance on narrative films, by making it easier to plan and produce narrative films they reinforced the eventual dominance of this type of films in the industry’s repertoire.

This system started to develop around 1909, and was firmly entrenched by 1916, came to be known as the multiple director-unit system. Under this system, each company had several filmmaking units, with each unit headed by a director and supported by the crew assigned to film production. Other resources, such as actors, would be drawn from pooled resources which the production company made available to each unit as required. Later modifications to this scheme led to the so called ‘Central Producer System’ in which producers took responsibility for supervising a number of simultaneous productions and oversight responsibility for the directors that worked directly on them. This way of organising film production was the basis of the system used throughout the American studio era, and it quickly came to be seen as a model of best practice for other national industries.

Stages in the Production Process:
The production process established during the American studio system remains in use and dominates film making to this day. There are various reasons for the survival and dominance of this production model. To begin with, the basic technical requirements of film making have not changed significantly since the 1930s. Second, most of the skills that are needed for making films are now embedded in craft knowledge and professional practices that are protected by
unions and occupational communities. Finally, the economic and business advantages of dominant model are closely linked to the strategy of large distribution companies that continue to dominate the industry.

In what follows we examine the different stages of the production process in some detail. Although the process outlined is developed to meet the needs of live-action fiction feature film, many aspects of this system are used to produce other types of films such as documentaries and shorts.

1. Development and Planning

Feature film production demands substantial upfront commitment of financial and human resources before any images are committed to celluloid. Allocating and using these resources effectively requires planning. As the first industry to pursue large scale production of motion pictures, the American motion picture industry quickly came to see the importance of development and pre-production. Using the new methods of planning, the ‘studios’, the large integrated production-distribution-exhibition companies that dominated the American market, and later world markets, developed a strategy of producing and releasing a stream of movies into distribution and exhibition.

During the era in which the studios dominate the industry, or the so called ‘studio era’, development and planning was made by company executives, and was shaped by two factors. First, the estimates made by the head of distribution as to the number of films required to fill theatrical exhibition; and second, by the need to make optimal use of internally held resources such as specialised staff, sets, and customs. Top studio executives decided the overall budget for the year, and based on this budget, and the need to strike a balance between these two factors, allocated expenditures for individual motion picture projects.

Once the range of projects was decided, in terms of budget and genre, work commenced on planning the individual films. Projects normally originated with the script department, a unit that all the major producers had instituted by 1911.
Potential scripts were selected by readers from existing sources such as novels, plays, radio shows, or even existing movies. The studios rarely purchased completed original scripts from outside freelancers. It preferred to rely on writers under contract to the studio. For example, *Remember the Night* (1940) by Preston Sturges, began life as an original screenplay. The *Wizard of Oz* (1939), by contrast, went through all four forms by the time it was put into production.

Whilst some projects were selected on their individual merits, many, for example the successful Warner Bros. musical, *Gold Diggers of 1933* (1933), the low budget series Western, *Hopalong Rides Again* (1937), and Universal’s horror franchise entry, *Frankenstein Meets the Wolfman* (1943), were genre pieces or sequels that capitalised on proven success and available resources. Other projects, for example *The Road to Morocco* (1942), were commissioned and written as vehicles for contracted stars such as Bob Hope and Bing Crosby.

Once the script department had made its recommendations for potential productions, selected scripts were allocated to associate producers who oversaw the development and production process. This process normally began with a scenario describing the plot in prose form, it was followed by a treatment providing more detail about individual scenes, next a screenplay was prepared which included dialogue and, finally, a shooting script broken down into individual shots with specific instructions for staging and camera positioning.

Scripts conformed to a standardised format, with brief camera and set instructions in the left-hand column and dialogue to the right. Each step of the process was subjected to detailed critical evaluation and numerous revisions before allowed to progress to the next stage of writing. As the project evolved, other elements of the production, such as casting, were discussed and decided, and these decisions in turn often led to revision and further script development. The successive drafts were often the product of different writers. Some received on screen credit and others did not. Carried to an extreme this
process resulted in films such as *Forever and a Day* (1943) which credited the contributions of an astonishing twenty-one writers.

The meticulous process of script development was intended to insure that not only would the story be entertaining and engaging, and hence popular with audiences, but that the resources needed to transform it into a film were available, and that the entire process could be performed within budget and on schedule. The continuity script acted as a blueprint for the tasks required during preproduction, such as casting and set building, and, once filming began, as a detailed template for the day to day activities involved in shooting the film. The tasks to be performed, such as the creation of different camera setups, were known in advance and thus could be scheduled for maximum efficiency. The continuity script also had the added virtue of making it far easier for the studio managers to monitor the progress of the shooting, and thus to intervene early when problems arose. This was often the case when scenes proved to be difficult and expensive to shoot, or when expenditures were higher than originally anticipated.

During the studio era, planning and resource allocation decisions were made within the context and in function of multiple projects. The logic of was one of portfolio investment in which decisions on individual projects were strongly related to what the studio intended to produce and release in a given year. The breakdown of the studio system in the early 1950s saw a return to the planning of films as individual units, a process known as the ‘package-unit system’. This approach rose to dominance through the 1950s and 60s when the studios began to cut back production. The cut back was partly a response to anti-trust decrees which forced the studios to dispose of their exhibition business, with consequent loss of control over release, and partly in response to falling demand as a result of the rise of television. The production cutbacks meant it was no longer viable for the studios to retain under contract costly personnel, nor was it worthwhile, once control over exhibition was lost, to maintain an infrastructure which depended on continuous flow of film production.
Personnel were therefore let go, physical assets were sold, and in-house departments such as makeup and props were shut down. Film making returned to the logic of individual production that prevailed during the early days of the industry. When planning a film, it became necessary to negotiate for the main elements – that is to say stars, director and script – separately. Once the main elements were secured, production finance was sought on a film by film basis. In the contemporary film industry most film projects will therefore originate with entrepreneurs, and as a rule will be financed largely on their individual merits rather than by virtue of their contribution to the production and distribution strategy of a large studio.

The change in the way the industry is organized has had important repercussions for the development stage of film production. Because key players are all independent contractors rather than attached to a studio, they are now free agents: able to engage in projects they like, but also able to exit projects when better ones come along. This freedom, however, is purchased at the cost of economic insecurity. As a rule, key personnel such as actors and directors become contractually committed to a film only when financing has been obtained and a date for principal photography has been set. In the post-studio era, however, financing has become an uncertain process. Financing is now negotiated piecemeal. It tends to come from a variety of companies or individuals, and may take so long to conclude that directors or actors who were originally enthusiastic about a project may be forced to move to other projects.

The impact of financing uncertainty on the commitment of key personnel paradoxically tends to increase the uncertainty of financing itself. Financial backers often make their participation contingent on stars or high profile directors. If key individuals exit the project financing may unravel. This may lead to postponements which in turn may lead to further exit by key personnel bringing to an end projects which originally were seen as highly promising.

The problems of obtaining and committing sufficient financing for production have increased exponentially since the breakdown of the studio system. Multiple sources for financing which prevail today increase the probability of
endless postponement and ultimately failure. If the financiers do not have confidence in the way that development is progressing, or if their financial situation changes, they may choose not to make the movie, putting the project into ‘turnaround’, a stage at which the producer may seek finance elsewhere. Monetary uncertainty, combined with constant changes in personnel, often means that the development process can be extremely protracted. Richard Attenborough’s pet project, Gandhi (1982), went through twelve screenplays and seventeen years of development before it reached the pre-production stage. Other films have suffered from too little time spent in development, since the independent producer may not receive payment until the film goes into pre-production, thus encouraging the fastest possible progression to this stage. Even large budget studio productions have sometimes suffered from hurried development processes, such as the $35 million Star Trek: The Motion Picture (1979), which began shooting without a completed script.

2. Pre-Production

Once basic agreement on the script is achieved, early preparations begin for the actual filming. Director, cast and film crew are assigned while script development continues. Suggestions made by the director are incorporated, and the script is tailored to fit the image of the selected stars. Each member of the crew is provided with a copy of the script to facilitate preparations for principal photography. Decisions are made about which parts of the film will be shot on studio sets, and which on location. In general, studio shooting is preferred as it allows a greater degree of control over both the artistic and practical elements of the production process, and avoids the expense of transporting and accommodating cast, crew and equipment. Location is preferred for greater realism. If location shooting is decided upon, locations are selected during pre-production and all the practical arrangements are made in preparation for the arrival of the cast and crew.

Under the studio system, the larger production companies not only employed a variety of sound stages, but also extensive grounds on which potentially flexible sets remained standing for repeated use. For instance, parts of the Jerusalem
set built for Cecil B. DeMille’s *The King of Kings* (1927) can also be seen in *King Kong* (1933), *The Garden of Allah* (1936) and *Gone with the Wind* (1939), amongst other films. The redressing of sets, with superficial alterations, disguised their repeated use was an important factor in the economy of the studio system. Standing sets would be readied for production and new sets built where necessary (although the latter expensive and time consuming activity tended to be avoided where possible). In addition to standing sets, the large studios also maintained vast collections of costumes, furniture, fake weapons and even live animals, all of which individual productions could book for use. During the studio era these activities were organized internally by heads of departments who worked to ensure that that all these resources were selected and made ready during pre-production. Following the dismantling of the studio system, it has become common for productions to rent studio space, costumes, props and other materials from independent business that provide specialised services to the film industry.

Many film makers have come to regard the conventional approach to pre-production planning which usually requires shooting out of sequence as artistically compromising. In some rare instances, directors insist on shooting films completely in sequence – a practice that allows actors to fully engage with their roles, but is costly in other respects. Ken Loach, the British director of *Raining Stones* (1993), *Ladybird, Ladybird* (1994) and *Sweet Sixteen* (2002), is one famous advocate of shooting in sequence, since strong performances are always the lynchpin of his films.

In big budget motion pictures, however, shooting out of sequence is to all intents unavoidable. The availability of stars often dictates the order in which scenes are filmed, as actors sometimes work on two pictures that are in production simultaneously. For instance, *Goldfinger* (1964) began shooting in Miami without its star Sean Connery, as he was still working on *Marnie* (1964)
at the time. The Fountainbleau Hotel set later had to be reconstructed at Pinewood Studios in England once Connery became available, and back projection was used to incorporate footage shot on location.

3. Principal Photography

By the first day of filming, every member of the crew is expected to be familiar with the shooting schedule, and all the necessary equipment for the day’s work should be available. Each member of the crew is provided with a call sheet, itemising when and why they are required on set. The sets will have been built and dressed, and lights positioned in accordance with the scheme agreed by the director and the director of photography. Cameras and microphones are positioned and camera movements and lighting adjustments are rehearsed with the help of stand-ins who walk through the actions. Marks are placed on the floor to ensure that actors make the same movements when the scene is shot. Whilst this is going on, the actors spend time in costume, hair and make-up. Once the technical aspects of shooting the scene have been firmly established and the actors are dressed, they are called to the set. At the discretion of the director, some time is normally spent rehearsing before the scene is filmed.

When the director is ready to shoot, an assistant calls for silence. If filming takes place in a studio, the doors are closed and a red light switched on above them to signal that entry to the set is forbidden. The director instructs the cameraman and sound recordist to begin recording. The scene and take numbers are read out and the hinged clapperboard snapped shut, which assists with marrying sound and image in post-production. The director then calls ‘action’ and the actors will begin their performance.

The first take will not always be successful. It may be spoiled by the actors poorly articulating their lines or giving otherwise inadequate performances, or else it may be marred by errors in camera movement or focus, or by lights or microphones making their way into the frame. Repeated takes are therefore often unavoidable. Some directors, such as W. S. Van Dyke, nicknamed ‘One-Take Woody’, have always endeavoured to keep these to a minimum, whilst
others, such as Fritz Lang and Stanley Kubrick, developed reputations for demanding extraordinarily large number of takes before their exacting standards are met. Few go to extremes as Charley Chaplin did when he went through 342 takes of a scene in *City Lights* (1931) where his little tramp buys a flower from the blind girl. In general, careful planning and rehearsal can help keep the number down and reduce unnecessary use of expensive film stock.

The difficulty of deciding whether a take is satisfactory has been much reduced since video was introduced into the process. The practice was pioneered by the actor and director Jerry Lewis. When filming his feature debut, *The Bellboy* (1960), in which he also starred, Lewis sought a way to instantly review the recording of his acting performance. He decided to use a video camera linked to the main film camera and recording the same material, an invention that came to be known as the ‘video assist’. The recent advent of digital filmmaking has meant that not only is it now possible to view the master footage at any time, but it is economically realistic for the director to request a greater number of takes than with 35mm, or even 16mm, film stock, since digital video tapes are considerably less expensive.

A scene may be filmed with more than one camera at once, which allows a range of options when it comes to editing, and is an especially valuable technique where a scene can only be filmed once due to danger or expense. Thus *Gone with the Wind* (1939) used all of the seven Technicolor cameras in existence to shoot the sequence depicting the burning of Atlanta.

At the end of each day’s shooting, the film is developed and the takes the director has selected are printed and screened for the director and production company executives. This material is known as the ‘dailies’, or ‘rushes’, and are used to evaluate the film’s progress. These also reveal mistakes that had been overlooked during the day’s filming, takes ruined by substandard film stock, and direct attention to scenes that must be reshot while actors are still available and sets still standing.
While the director concentrates his attention on filming the main scenes – normally the ones in which the stars appear - the task of shooting other footage may be assigned to other units. A second unit is often used for filming in other locations, for shooting fights or other action in which the main actors are not engaged, or for filming street scenes, animals, landscapes, and other such material. Many well-know directors, such as Don Siegel, Robert Aldrich and Jonathan Demme, served as second unit directors early in their careers. The special effects department may also shoot some footage separately from the main unit, such as the model animation so central to *King Kong* (1933). During the studio era, some companies also had centralised resources for providing certain services. If, for instance, a film required a close-up of a newspaper headline, the task of filming this would fall to the insert department, rather than being performed by a crew member dedicated to the particular film.

Principal photography is probably the most difficult part of the production process in terms of investment and effort. Motion picture production is haunted by stories of shoots that have brought filming to the brink of collapse. A production that illustrates the difficulty of on location principal photography is *Apocalypse Now* (1979). The production’s problems ranged from difficulties with its stars – the drug-addled Dennis Hopper, the intractable Marlon Brando, and the heart attack stricken Martin Sheen – to having to deal with monsoons and logistical crises. Another example is *Fitzcarraldo* (1982) which experienced comparable difficulties with location, logistics, and climatic conditions. In the case of Fitzcarraldo matters were made worse by the loss of two main actors half way through the filming. This meant that principal photography needed to be restarted from scratch after more than half had been shot already. As difficult as production on these films proved to be, the directors could take comfort from the fact that at least they were completed and went on to receive considerable critical acclaim. Terry Gilliam’s abortive production of ‘*The Man who Killed Don Quixote*’ belongs to the rare instances where the difficulties of principal photography led to abandonment of production. Gillian, however, managed to salvage some of the loss with a documentary *Lost in La Mancha* (2002) which recounts in detail the saga behind the unfortunate production.
Although problems encountered during principal photography are often similar – difficult locations, poor logistics, and recalcitrant actors – the methods that filmmakers use to address them can be very different, as are their outcomes. *My Son John* (1952), *Solomon and Sheba* (1959), *Dark Blood* (1993) and *The Crow* (1994) all had to deal with the death of one of their lead actors during the shoot. *My Son John* was completed by incorporating outtakes of Robert Walker from his previous film, *Strangers on a Train* (1951). *Solomon and Sheba* recast the role of Solomon, replacing Tyrone Power with Yul Brynner, and re-shot all of Power’s scenes, whilst *The Crow* succeeded in resurrecting its star, Brandon Lee, through the use of computer animation. *Dark Blood*, however, was abandoned after the death of River Phoenix, as the insurance company considered this to be the cheapest option.

4. *Post-Production*

After principal photography is concluded, the production process moves to post-production. Post-production transforms the thousands of feet of raw film into a finished film. The process combines editing, selecting shots to be used, and assembling these shots in an appropriate order. Attention then turns to the soundtrack. While the majority of American films record dialogue on set, some parts may be rerecorded due to poor sound quality. Music and sound effects must be recorded and the different tracks combined into a final mix. Opening and/or end credits must also be added, and other optical and visual effects work may be required.

Editing, like script development, goes through several stages. Traditionally, the editing process has involved working with a physical copy of the film, cutting and splicing pieces of footage manually. It is now more common to load the images onto a computer, using a system such as ‘Final Cut’ or ‘Avid’, which allow easy experimentation with different ways of arranging the shots.

Whichever method is used, the basic processes remain the same. First the dailies are assembled in the order specified in the shooting script. In the next stage of editing, excerpts are taken from individual shots and arranged in such a way as to tell the story as economically as possible, whilst at the same time
persevering a coherent sense of time and place. This is traditionally referred to as the 'rough cut', and though it normally does not have a soundtrack, it is generally a reliable guide to what the finished film will look like.

The editing that produces the rough cut often uncovers deficiencies that had not been detected before. Takes may fail to edit together well, or the film shot may be too short to explain the action. This happened to director Don Siegel in *Duel at Silver Creek* (1952). Siegel shot the script with an excessively tight economy. The resulting rough cut had only 54 minutes, far too short for the feature film. The obvious remedy in such situations is to shoot additional footage. It is a remedy that most producers strive to avoid because of the difficult logistics and potentially great expense of reassembling actors and sets.

Whilst the editing is taking place, work is carried out on the soundtrack, with different crew members working on the music, sound effects and dialogue. In rare cases, most of the musical score is written before filming began. Sergio Leone and composer Ennio Morricone's score *The Good, the Bad and the Ugly* (1966), and *Once Upon a Time in the West* (1968), and John Williams' music for *Close Encounters of the Third Kind* (1977), are well known examples of such practice. In most cases, however, the composer will usually not begin work until he has seen the rough cut. Even then, however, the full sound track, in particular sound effects, has to wait until editing approaches completion.

Certain sound effects, for example footsteps, are normally taken from a library of already available sound effects. Other sound effects, however, may require new recordings, a process which is undertaken in a recording studio by a ‘foley artist’. Post-synchronised dialogue is recorded as required. This normally entails placing the actors in front of a film projection so they can ensure their lip movements match the image. Some films post-synch all the dialogue to avoid the difficulties associated with recording sound on the film set. This practice is common in some national industries, such as Italy, but relatively rare in America, where it is most likely to be used when location shooting has caused dialogue to be drowned out by high levels of ambient sound. On occasion this technique has also been used for studio shooting. For instance, when filming
The Love Parade (1929), director Ernst Lubitsch employed this technique as a way of avoiding the restrictions on camera movement imposed by the cumbersome soundproofing which encased cameras at the time.

The different pieces of sound are recorded on separate tracks. They are combined in ‘premixes’, which are the equivalent of the visual rough cuts. As the editing of the image track progresses, the sound needs to be remixed in accordance with the lengthening, shortening, rearranging or deleting of scenes. This process has been greatly facilitated by the development of computerised sound editing software.

When the editing of the image track has been completed to the filmmakers’ satisfaction, a copy of the original negative is cut to match the edited print. A new positive print, known as an ‘answer print’ is struck from the edited negative. This print is then graded, a procedure which ensures that colour and light levels are consistent throughout the film. The process may be repeated several times before unwanted variations are eliminated. At the end of this process, a print called an ‘interpos’ is created, from which another negative, called an ‘interneg’ is struck.

Work on the final version of the soundtrack is also completed at this stage. The final sound mix is made to synchronise perfectly with the finished image track, and the sound is recorded onto film in order to create an optical soundtrack. A negative is created from this and combined with the interneg. Any titles and optical effects are also added at this stage. The combined optical print that results will be the source of the ‘interdupe’ negative from which the final release prints will be struck.

Throughout post-production, executives of the producing or distributing company carefully monitor the progress of the film. If dissatisfied with the results, they may insist on changes, sometimes even replacing the original editor and/or director. This may happen at any stage from the rough cut onwards. The insistence of studio executives on their right to determine the final cut has often resulted in bitter conflict with directors who often regard
themselves as the ‘authors’ of the finished film. A particularly famous example of such confrontation took place during the studio era between MGM and its star director, Erich von Stroheim. Producers at MGM were alarmed by von Stroheim’s 42-reel (approximately nine or ten hour) rough cut version of *Greed* (1924). Aware that a film of this length could never be screened commercially, von Stroheim decided to cut almost half the footage himself, and then handed the reduced version to a trusted associate for further editing. The results failed to impress MGM executives who demanded further cuts. When von Stroheim failed to comply they appointed their own editor, and cut the film down to the more marketable length of ten reels.

If the studio is uncertain about the audience appeal of a film, it will often undertake test screenings in order to gauge response and obtain information on potential changes. Test screenings may be repeated several times until audience scorecards indicate the film has attained the desirable response. Re-editing, or even re-shooting, may be required if audience reactions fall short of expectations. Recent films that were substantially altered following test screenings include *Troy* (2004), which replaced Gabriel Yared’s score with completely new music by James Horner, and *King Arthur* (2004), for which a new ending was shot and the violence toned down. With each batch of changes, however, the post-production cycle must be repeated, as new versions of sound and image track need to be married together and new negatives and prints created.

It is also common to prepare multiple versions of films for release in different countries. Perhaps the most obvious feature that needs to be localised is the language. Often the dialogue is dubbed into local languages, which means that the newly recorded voice tracks need to be remixed with the music and sound effects. Title sequences may be replaced completely – sometimes with entirely different visual designs – or subtitles may be added to the existing credit titles. If the film has not been dubbed, dialogue subtitles will be needed throughout the film.
Language is not the only feature that varies between countries however. Different censorship regulations mean that sequences allowed in one country may have to be removed in another. This has obvious knock-on effect in terms of spatial and/or narrative coherence. Sometimes major changes are made to a film in order to give it greater appeal outside its home territory. Francis Ford Coppola’s first directorial assignment (under the pseudonym of Thomas Colchart) was to take a Japanese disaster film, *Nebo Zovyot* (1960) and completely reedit it for American audiences, transforming the plot and adding not only new dialogue but also new footage. The film was released in America as *Battle beyond the Sun* (1962).

*Variations in the Production Process*

The main filmmaking stages – development, pre-production, principal photography, and post production, are relatively the same for most filmmaking. There are two notable exceptions to this dominant model: documentaries and animation.

**Documentary Filmmaking**

The method of making documentary films necessarily differs from fictional features because the events can rarely be planned in advance. This is especially true for so called ‘Cinema Verité’ films, such as *Primary* (1960), which followed presidential candidates John F. Kennedy and Hubert Humphrey, *Don’t Look Back* (1967), D. A. Pennebaker’s account of Bob Dylan’s British tour, and Michael Wadleigh’s *Woodstock* (1970), a documentary of the famous film festival with the same name. Each of these films was shot on location using lightweight cameras, long takes, and whatever light was available. While the aim of these films was to document events as they occurred, other types of documentary present accounts of events that have already happened. These allow some level of scripting prior to production, with more detailed planning of the material to be shot. Examples of this approach include *The Thin Blue Line* (1988), Errol Morris’s powerful argument against the death penalty, and *Touching the Void* (2003), which tells the remarkable tale of a climbing expedition that goes catastrophically wrong. Each of these films mixed
interviews with reconstructions of events. Their production processes thus emulates fictional films more closely than the strict verité style documentaries.

No matter what its style and subject though, a documentary always has greater potential to deviate from its original intent than do their fiction films counterpart. For example, Capturing the Friedmans (2003) was conceived as a documentary about clowns, but when it emerged that the father and brother of one of the subjects were both convicted paedophiles, the director Andrew Jarecki saw an opportunity to make a far more interesting film.

Animation
Animated films are another type of filmmaking whose processes differ from the norm that is associated with live-action fiction features. Animators rely on a variety of techniques which are normally used in the more traditional feature film. Among the most widely used (for example in Bambi (1942) and The Lion King (1994)) is ‘cel animation’. In this technique images are painted onto sheets of celluloid which overlie painted backgrounds. These are filmed by a camera that looks down upon the pictures as they lie flat on the animation table. Some animation may use three dimensional models instead of pictures. Examples range from puppet animation, such as The Muppets Take Manhattan (1984), to claymation, such as Chicken Run (2000). Digital animation is becoming increasingly popular, this runs the gamut from experimental works, such as Waking Life (2001), to such mainstream features as Toy Story (1995) and Shrek (2001). Other techniques used have included the animation of cut-out silhouettes, most famously employed by Lotte Reiniger in films such as The Adventures of Prince Achmed (1926), and images, normally abstract, painted directly on film, seen in Len Lye’s Color Cry (1952) and Norman McLaren’s Short and Suite (1959).

Innovative Challenges to the Current Production Process
Although most live-action fiction features adhere closely to the conventional production process as originally developed during the Hollywood studio era, there are many that have broken with convention and in the process have generated a great deal of different strategies and different experiences. A
number of critically and/or commercially successful films have been made with virtually none of the planning and development that projects normally require. Among the best examples are films made by the American entrepreneur Roger Corman, who achieved particular renown in the field of low budget films, many of which targeted the drive-in market in the 1950s and 1960s. *The Little Shop of Horrors* (1960) and *The Terror* (1963) were both inspired by standing sets and filmed quickly to take advantage of the sets before they were torn down. The script for *The Little Shop of Horrors* was conceived and written in the space of a couple of weeks and was filmed in slightly over two days with a largely improvised crew. *The Terror* used the sets and stars assembled for Corman’s production of *The Raven* (1963). It was shot with just a handful of hurriedly written scenes without a clear idea of narrative. But far from replicating the efficiency of *The Little Shop of Horrors* it required a further nine months of shooting scenes piecemeal to accumulate enough footage to transform it into a feature film. The filming of this jumble of sequences was completed by another five uncredited directors, including Francis Ford Coppola, Jack Nicholson, Monte Hellman, Dennis Jacob and Jack Hill, and became one of the most protracted production processes of Corman’s career. Corman has not been the only filmmaker to capitalise on standing sets. At the end of shooting *Smoke* (1995), director Wayne Wang succeeded in making *Blue in the Face* (1995) in six days, based on ideas noted down by writer Paul Auster during the shooting of the first movie. It was assembled from largely improvised scenes using many of the same actors plus a host of quickly marshalled celebrity cameos.

Some films deliberately set out to challenge the dominant modes of film practice by employing production processes that result in radically different aesthetics from those of mainstream films. *Timecode* (2000) was shot in real time on digital video, using four handheld cameras shooting simultaneous action in different locations. The frame of the finished film was split into four sections, each showing the footage from one of the cameras. Shooting involved a very elaborate choreography of action. Actors and cameras were extremely mobile, even making car journeys at times, but careful timetabling meant that the actors and cameras from each of the four strands would meet up with one another at important dramatic moments. To make this possible, instead of creating a
conventional script, writer and director Mike Figgis used music paper to coordinate with precision the events that each camera is required to shoot. The film was shot fifteen times before a satisfactory version was achieved. An even more radical example of this approach is *Blue* (1993), a feature film with a blank blue screen as the only visual image. Its creator, artist and filmmaker Derek Jarman, had lost his eyesight by the time the film was made, and decided that the main production effort should go into transforming the film into a richly woven soundtrack.

Sometimes challenges to mainstream production processes and aesthetics arise from new interpretations of the nature of film making itself. For example, in spring 1995 a collective of filmmakers working under the name ‘Dogme 95’ issued a manifesto that included a ten point ‘Vow of Chastity’, setting down the rules under which their future films would be made. Amongst them were commitments to location shooting, hand-held camera and use of only sounds that were recorded simultaneously with the images. The best known of the Dogme 95 films are *Festen* (1998), and *The Idiots* (1998).

**References**


