MAR GREGORIOS COLLEGE OF ARTS & SCIENCE

Block No.8, College Road, Mogappair West, Chennai – 37

Affiliated to the University of Madras
Approved by the Government of Tamil Nadu
An ISO 9001:2015 Certified Institution

DEPARTMENT OF VISUAL COMMUNICATION

SUBJECT NAME: TELEVISION PRODUCTION

SEMESTER: V

PREPARED BY: PROF.REV.BRO.JOHN THOMAS.G

Introduction to TV Production

- TV System
- Four Stages of Production
- Staff and Crew
- Producing for Television

Television System

NTSC Standard

(National Television Standards Committee)

- **Standard for U.S., Japan, and Korea**
- **4 X 3 Aspect Ratio**
- **525 Lines**
- **30 Frames Per Second**
- **Scanned in "Fields"**

PAL System

(Phase Alternating Line)

- Another World Television Standard
- 4 X 3 Aspect Ratio
- 625 Lines
- 25 Frames Per Second
- Scanned in "Fields"
- There are Slight Variations: PAL-B, -G, -H, -N
- Used in Continental Europe and Parts of Africa, Middle East & So. America
- More Lines = Better Resolution
- Fewer Frames/Fields = More "Flicker"

SECAM System

(Sequential Color and Memory)

- Another World Television Standard
- 4 X 3 Aspect Ratio
- 625 Lines
- 25 Frames Per Second
- Scanned in "Fields“
- Used in France, Eastern Europe and Parts of the Middle East & Africa
- More Lines = Better Resolution
- Fewer Frames/Fields = More "Flicker"

HDTV System (High Definition Television)

- 16 X 9 Aspect Ratio
- A **Digital** System
- Permits Several Levels of Picture Resolution Similar to that of High-Quality Computer Monitors, With 720 or 1080 Lines (1280 x 720 pixels or 1920 x 1080 pixels)
- Ranges from 24 to 60 frames per second, progressive or interlaced scan
- Uses MPEG-2 Compression to squeeze a 19 megabit-per-second data flow so that it can be accommodated by a standard broadcast TV channel of 6 MHz bandwidth
- 5.1 Channels of Dolby AC-3 Digital Surround-Sound Audio

Four Stage of Television Production

(1) Preproduction

(2) Setup & Rehearsal

(3) Production

(4) Postproduction

Four Stage of Television Production

1. Preproduction

- A very essential stage for a successful show
- Research and concept development
- Script
- Initial meeting of key members

2. Setup and Rehearsal

- Setup for studio and control room
- Rehearsal
  - Out of studio and in-studio rehearsal
  - Monitoring and revision of script
  - Dress rehearsal

Four Stage of Television Production

3. Production

- **Live**
  - **The final phase of the production**
  - **News program, sports coverage**
- **Videotaping for Editing**
  - **Taping in segments for later editing**
  - **Drama, advertising & PSA**
- **Striking the Set**

  : The equipment and set is usually removed and the studio or location returned to its original condition

Four Stage of Television Production

4. Postproduction

- **Creative control**
  - **Selection of shots**
  - **Juxtaposition**
- **Special effects and graphics**
  - **Computer technology: Non-linear editing**
- **Audio**
  - **Enhancement and modification or addition**

The Television Team

- Production Staff
  - PD, DIR, AD, PA
- Production Crew
  - TD, AUD, FM, FA, CAM, CG, LD, SET, TAL
- Golden Rule

“Try to be a good crew person for your fellow classmates when they direct, just as you will most certainly want them to be a good crew for you when you direct.”

Producer

Pre-Production	▫ **Develop program concept & program budget** ▫ **Assign program's director** ▫ **Work with writer on script**
Setup & Rehearsal	▫ **Supervise overall production activities** ▫ **Keep production moving on time and within budget** ▫ **Approve last-minute changes as they arise**
Production	▫ **Help director as needed**
Post-Production	▫ **Approve final edited version** ▫ **Coordinate with station for promotion/publicity**

Director

Pre-Production	▫ **Work with producer and writer on script** ▫ **Cast performers** ▫ **Work out camera shots** ▫ **Consult with LD, SET, AUD, TD and approve all details**
Setup & Rehearsal	▫ **Rehearse performers** ▫ **Rehearse camera shots in studio** ▫ **Integrate all production elements into a coordinated show**
Production	▫ **Execute production**
Post-Production	▫ **Supervise editing**

Staff and Crew in Production

AD	▫ **Assist director by readying camera shots and other cues** ▫ **Keep track of program timing** ▫ **Roll in film or videotape segments**
TD	**Operate production switcher**
AUD	**Operate audio control console to mix program audio**
FM	**Relay all cues to talent**
CAM	**Operate cameras during the production**
CG	**Operate the character generator and electronic graphics**

Producing for Television

Producers

- Staff Producers

These are regular employees of a network, station, or production company who are responsible for developing and supervising program production. They are usually assigned to a specific division, or in the local level, working on a wide variety of shows.

- Independent Producers

Independent producers are entrepreneurs who sell programming to network and stations. They assemble a creative “package,” which consists of the program idea, the script, the director, the performers, and the production team.

They are responsible for almost all network and syndicated entertainment shows.

Producers - Creative Aspects

A producer must be a creative individual – someone with a broad and varied background who is conscious of the world around him or her, sensitive to events, and able to undertake different responsibilities and varied program assignments. The producer must create a vision of the show – how it should look, how it should sound, and how it should communicate its message. To do this, the producer must move through a series of program-development steps.

- **To develop a program idea.**
- **To begin background research.**
- **To analyze its audience.**

Producers - Organizational Aspects

Television is a complicated and technical medium that demands an efficient organizer to coordinate hundreds of different details.

- **The Program Proposal**

This is a brief outline of the proposed program that is used by program executives in deciding whether or not to authorize you to begin production.

  - a description of the basic show idea *(concept* or *premise)*
  - format
  - Hook :some information which will help to sell the idea as unique

The Production Book

The production book is a blueprint of the entire production process, and it offers in minute detail who, what, when, where, and how of a production.

- treatment
- shooting script
- staff and crew (including contracts)
- complete budget information
- schedules
- memos and meeting notes
- lighting plot and set design plan

Producers - Business Aspects

The producer organizes a creative idea within financial constraints. Among the business aspects of the producer's role are **(1) creating budgets**, **(2) selling the ideas**, and **(3) understanding contractual obligations**.

The producer's roles

- **Developing an idea and analyzing audience.**
- **Researching the idea and production feasibility.**
- **Determining the production mode.**
- **Developing the program outline.**
- **Preparing the program budget.**

Question to ask as a Producer

- Who is target audience?
- Why should audience watch?
- When should audience watch?
- How long should program be?
- How should program be produced?
- What are the production costs?
- Is the idea doable?
- Can you sell the idea?
- How will you know if you've succeeded?

Chapter 13

Art Direction and Production

Art Direction and Production

The Evolution from Words to Pictures

- Improved technology
- Advantages of visuals over text
- Brand images are build better with visuals
- Visuals can be protected legally
- Visuals are more portable than words across cultures
- Visuals allow placing the brand in a social context

Illustration

Definition:

- The actual drawing, painting, photography, or computer-generated art in the ad.

Purposes:

- Attract attention of the target audience
- Make the brand heroic
- Communicate product features or benefits
- Create a mood, feeling, or image
- Stimulate reading of the body copy
- Create the desired social context for the brand

Illustration Components

Size

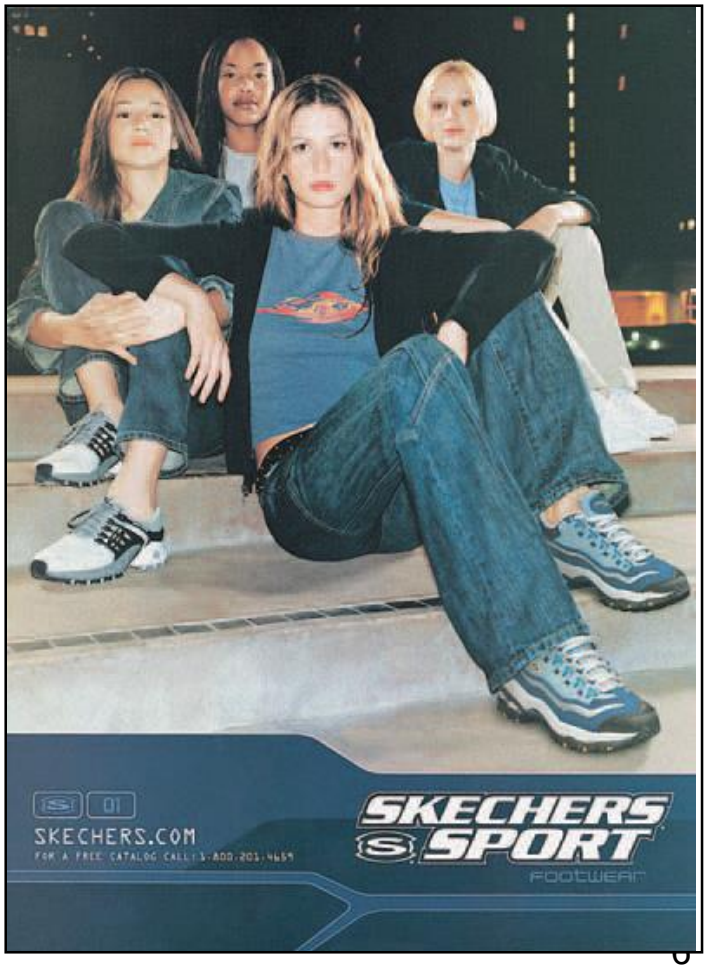
Color

Illustration Formats

- How the product or brand will appear as part of the illustration
- Formats include:
  - Emphasizing the social context or meaning of the product
  - More abstract formats
- Must be consistent with the copy strategy

Ad in Context Example

Illustrations can place the brand in a social context.



Strategic and Creative Impact of Illustration

- Attracts attention of target segment and stimulates information processing
- Communicates brand value relative to target's decision making criteria
- Visually presents the creative strategy
- Creates a mood for the brand
- Creates an image for the brand
- Makes concrete the values and benefits of the brand that may be intangible

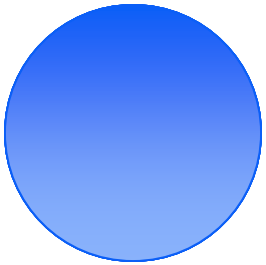
Design

- The structure (and plan behind the structure) for the aesthetic and stylistic aspects of a print advertisement.

Principles of Design

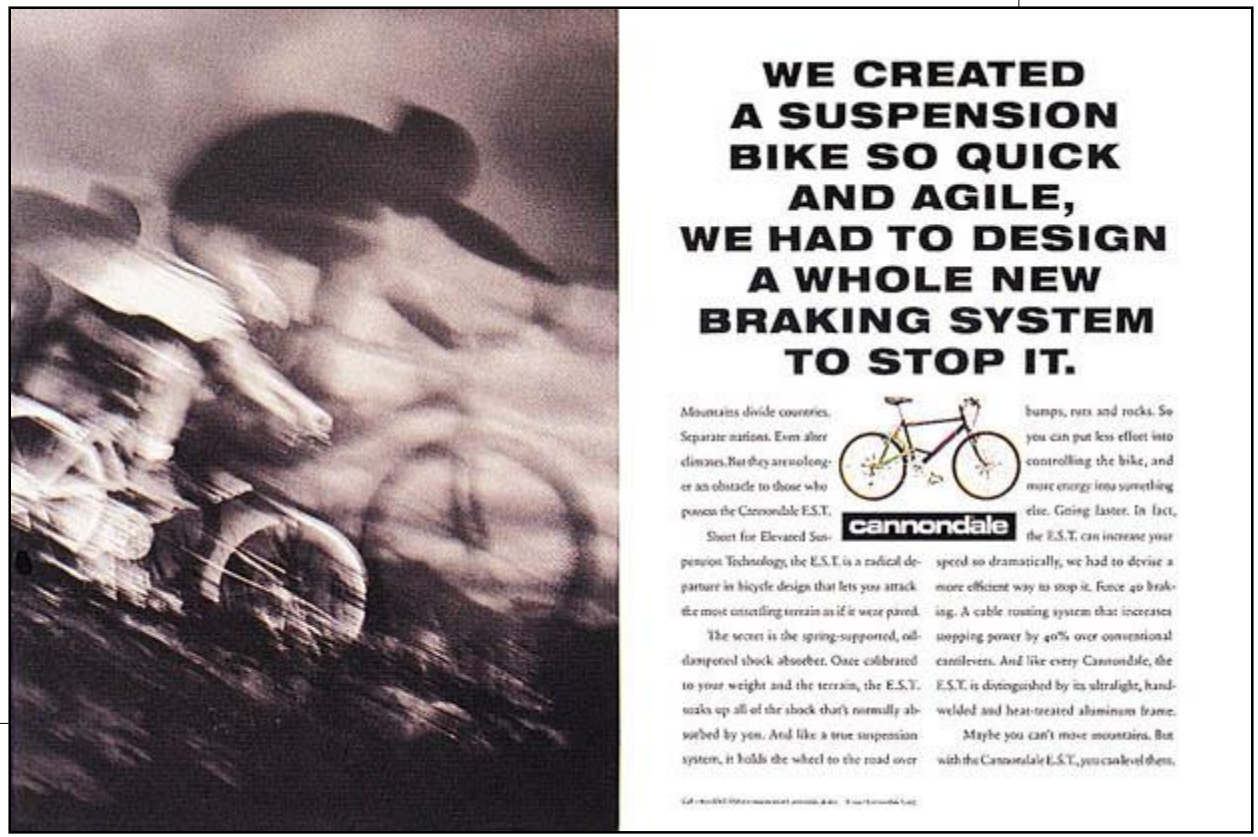
Balance

(Formal)



Ad in Context Example

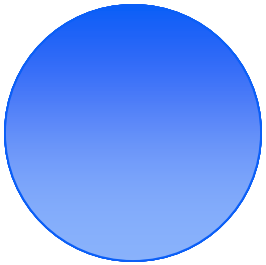
Formal balance can create a very orderly look and feel.



Principles of Design

Balance

(Informal)

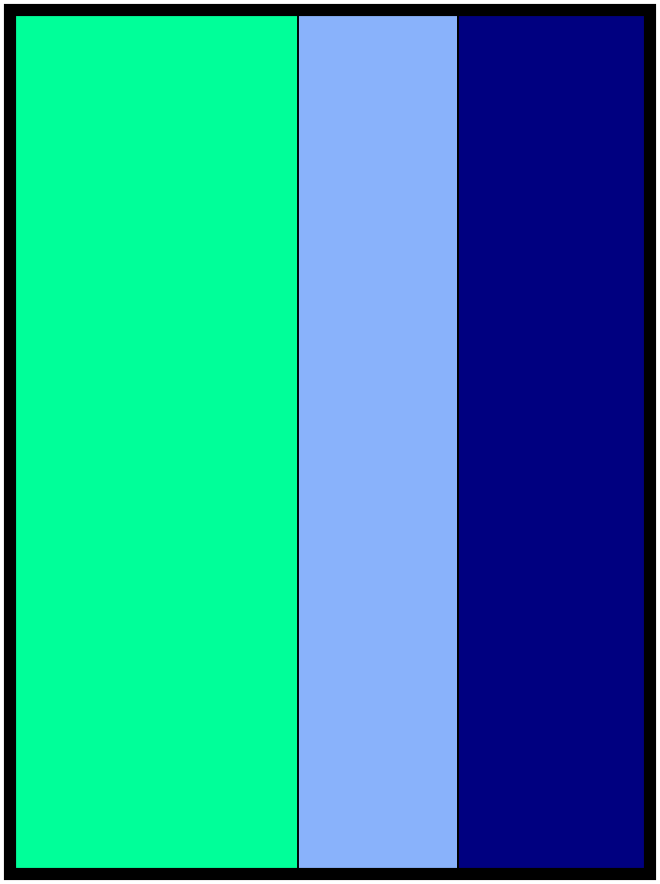


Ad in Context Example

Informal balance can create desired eye movement through an ad.

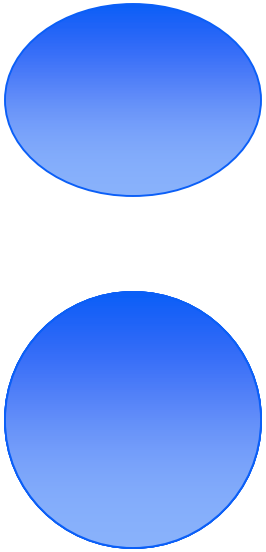
Principles of Design

Proportion



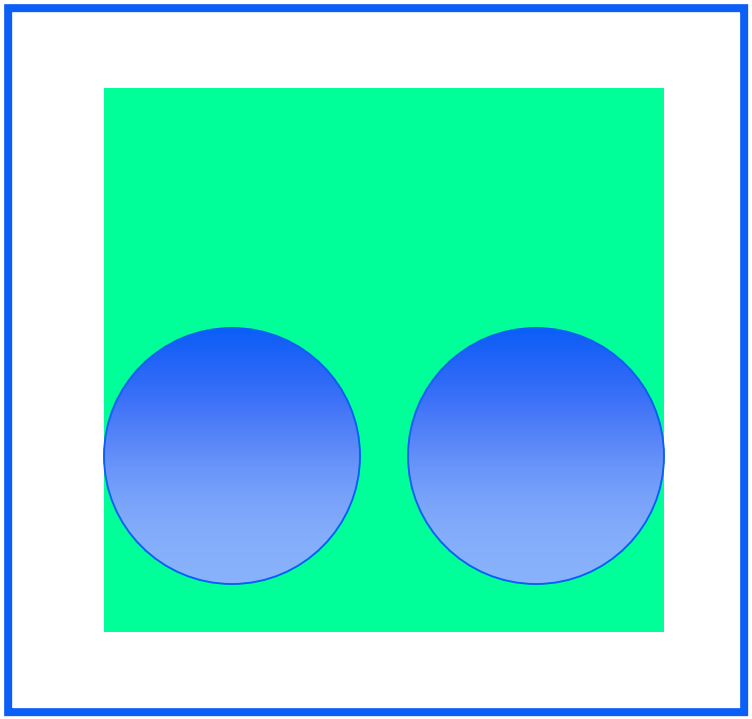
Principles of Design

Order



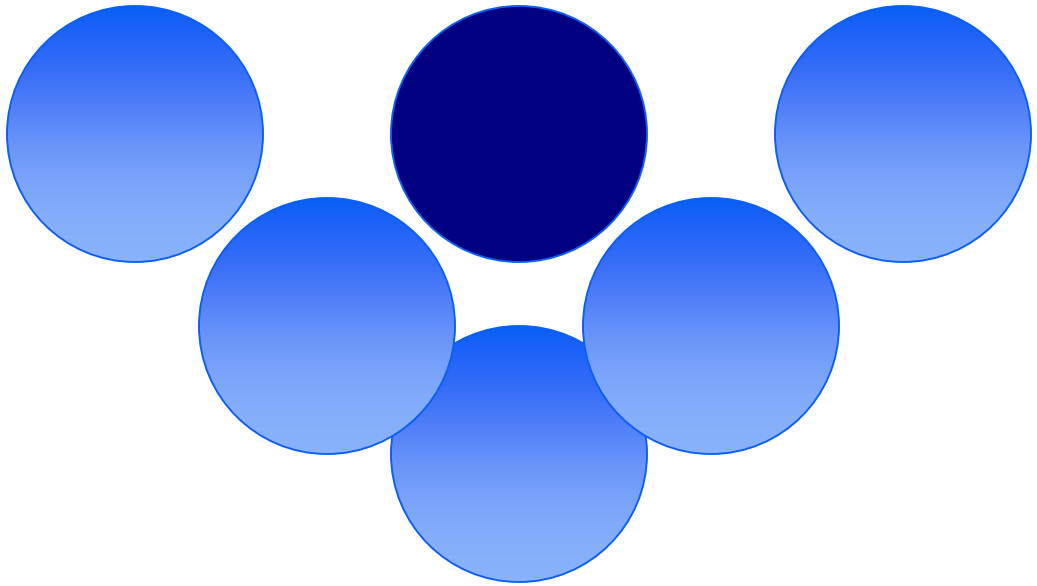
Principles of Design

Unity



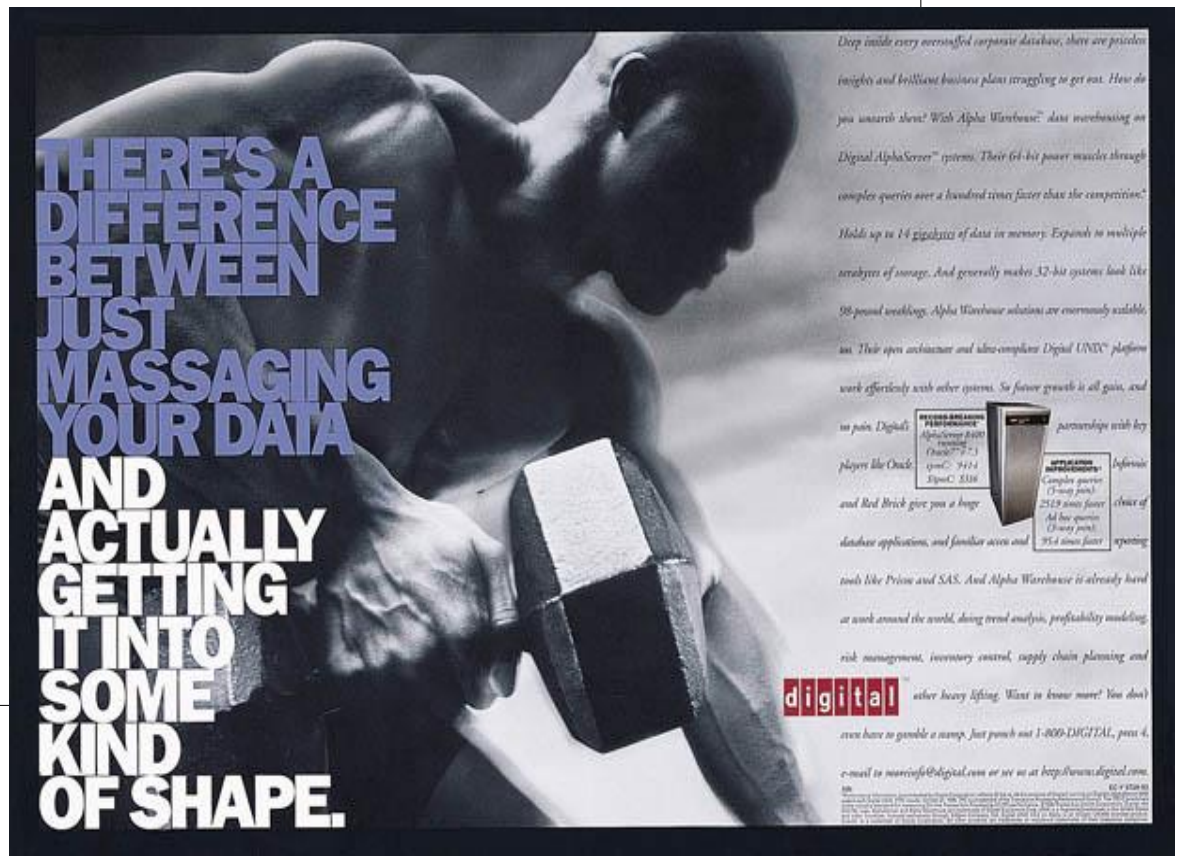
Principles of Design

Emphasis

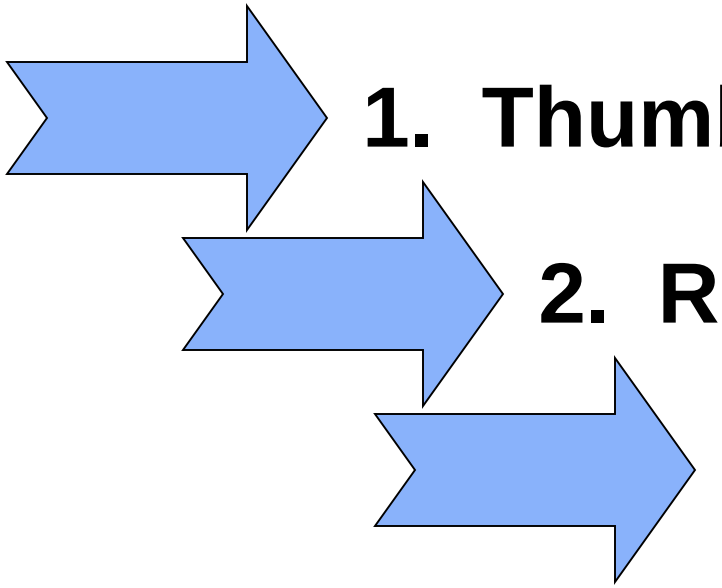


Ad in Context Example

Emphasis in an ad will lead the reader to focus on one layout element more than another.



Layout



1. Thumbnails
2. Rough layout
3. Comprehensive
4. Mechanicals

Print Production Processes

- Letterpress
- Offset lithography
- Gravure
- Flexography
- Electronic, laser, and inkjet
- Computer print production

Typography


Blackletter type
Script type
Sans serif type
Serif type
Roman type
Miscellaneous Type

Art Direction and Production in Cyberspace

- Cyberspace is its own medium
- The audience is not passive
- At present, it is closer to print than TV
  - Streaming and RSS are improvements
- Revision can be done instantaneously
- Persuasive content versus entertainment is a challenge
- Consumer generated content (CGC) is making its way into cyberspace (YouTube)

Art Direction in Television Advertising

- TV has changed the face of advertising
- TV is about moving visuals
- It can leave impressions, set moods, tell stories
- It can get consumers to notice the brand
- TV production is complex, with many people and requires tremendous organizational skills

The Creative Team in Television Advertising

Agency Participants:

- Creative Director (CD)
- Art Director (AD)
- Copywriter
- Account Executive (AE)
- Executive Producer
- Producer

Production Company Participants:

- Director
- Producer
- Production Manager
- Camera Department
- Art Department
- Editors

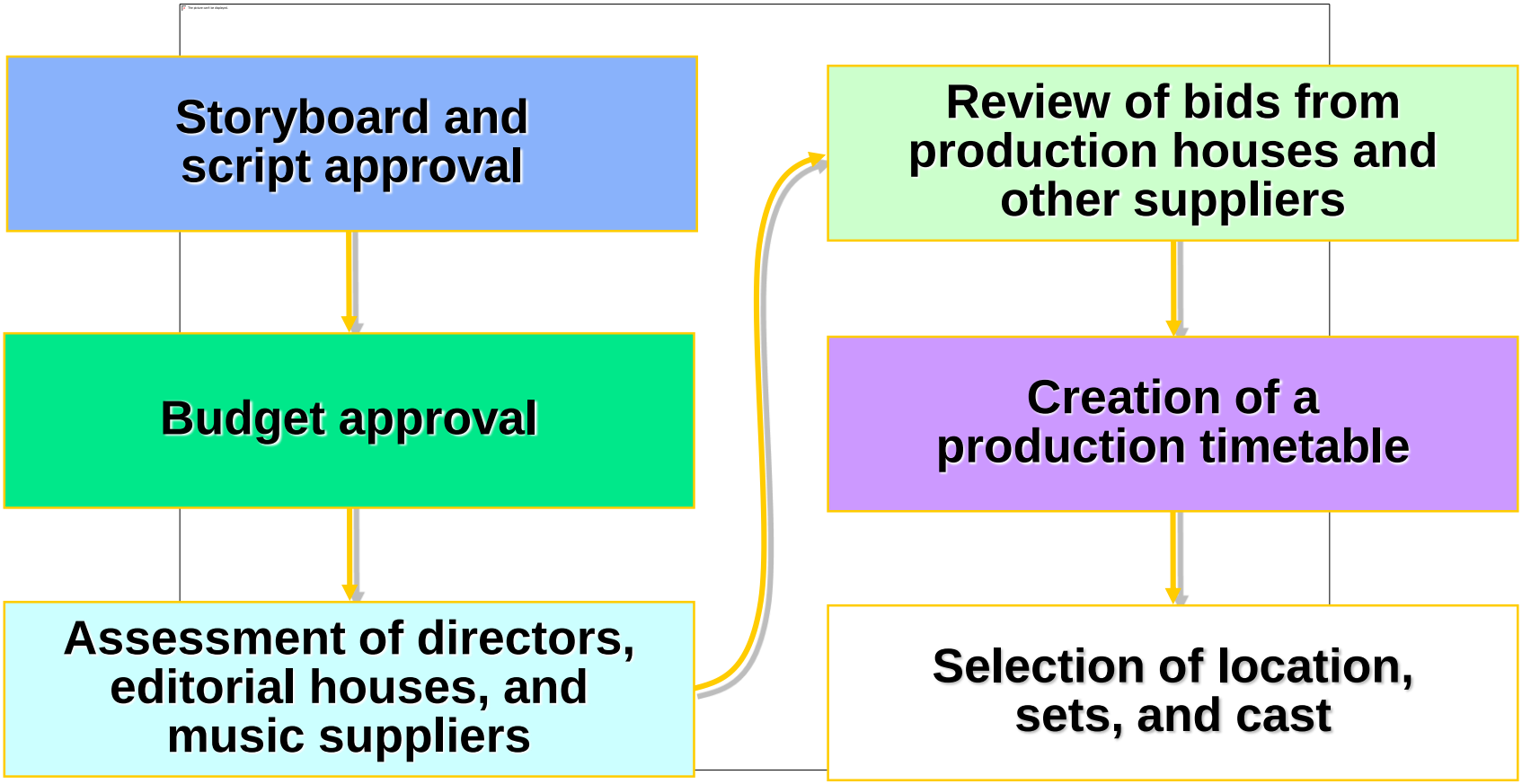
Creative Guidelines for TV Advertising

- Use an attention-getting opening
- Emphasize the visual
- Coordinate the audio with the visual
- Persuade as well as entertain
- Show the product

Production Process for TV Advertising

- Preproduction
  - Multiple activities that occur prior to filming the commercial
- Production (shoot)
  - Activities that occur during filming
- Postproduction
  - Activities that occur after filming to ready the commercial

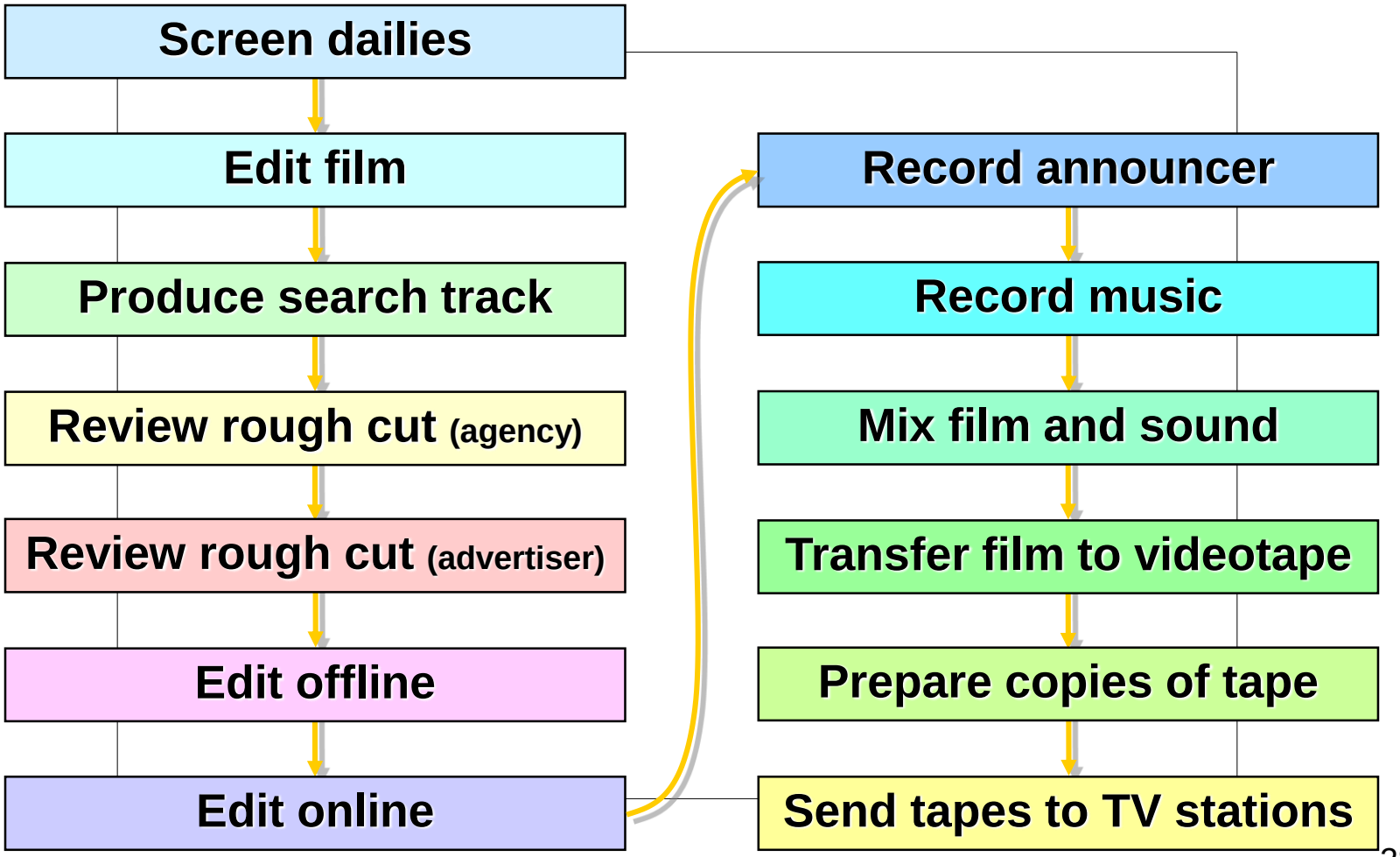
Preproduction Process for TV Advertising



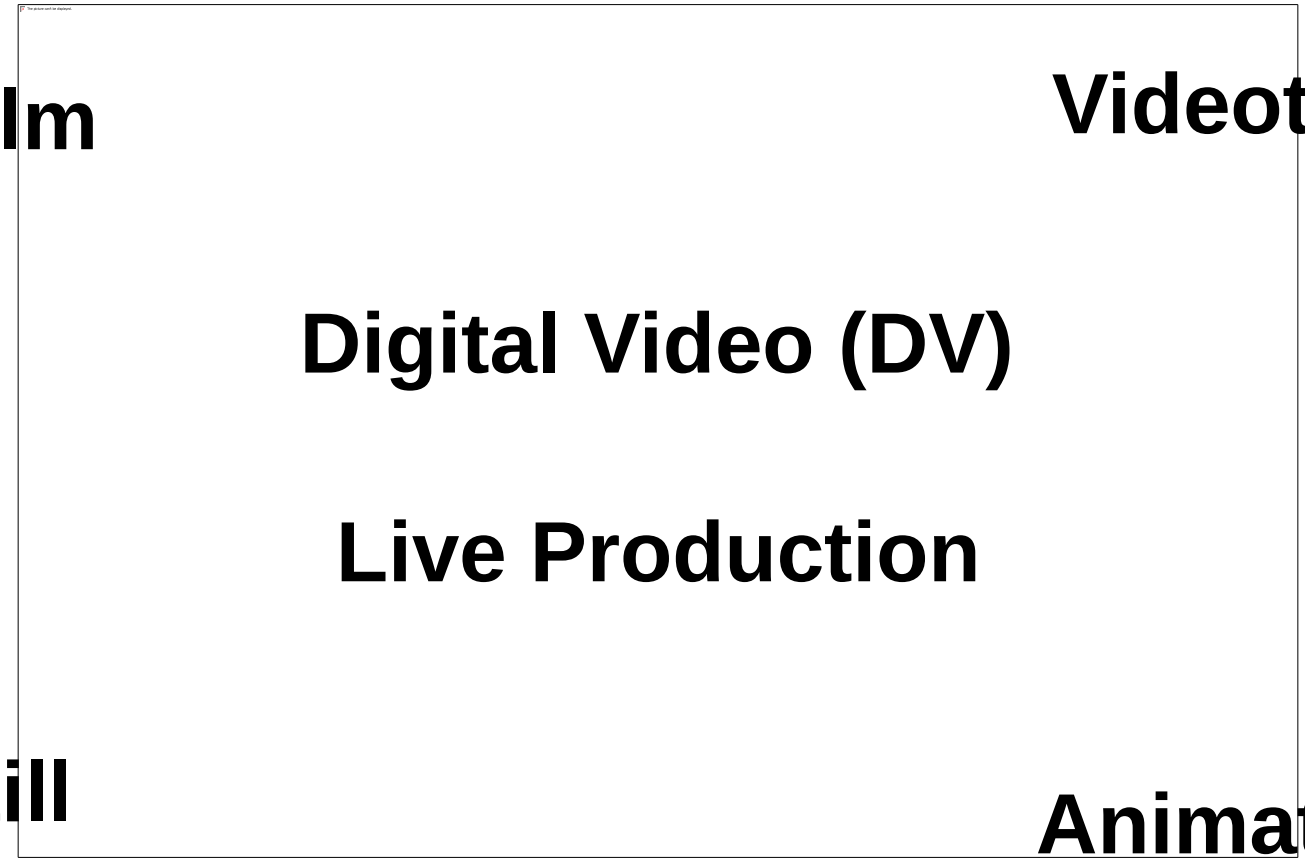
Production Process:

- Filming the commercial, or “the shoot”
- The shoot involves large numbers of diverse people:
  - Creative performers
  - Trained technicians
  - Skilled laborers
- Sets often feature tension and spontaneity
- Typical commercial costs $100,000 to $500,000

Postproduction Process



TV Production Options



Film

Videotape

Digital Video (DV)

Live Production

Still Production

Animation

FILM CREW

The Film Crew ... a typical crew engaged in a feature production.

PRE-PRODUCTION

During a feature production, a number of key people are brought into the project. The key roles and responsibilities include the following.

The creative stage of pre-production begins with the **Screenwriter.** A Screenwriter creates a screenplay (a written version of a movie before it is filmed) either based on previously written material, such as a book or a play, or as an original work. A Screenwriter may write a screenplay on speculation, then try to sell it, or the Screenwriter may be hired by a Producer or studio to write a screenplay to given specifications. Screenplays are often rewritten, and it's not uncommon for more than one Screenwriter to work on a script.

A **Producer** is given control over the entire production of a motion picture and is ultimately held responsible for the success or failure of the motion picture project; this person is involved with the project from start to finish. The Producer's task is to organize and guide the project into a successful motion picture. The Producer would be the person who accepts the Academy Award for best picture, should the movie win one. The Producer organizes the development of the film, and is thus quite active in the pre-production phase. Once production (filming) begins, generally the role of the Producer is to supervise and give suggestions—suggestions that must be taken seriously by those creating the film. However, some Producers play a key role throughout the entire production process.

The **Director** interprets the script and unifies the components of the film into something that bears his or her signature. This individual is like an orchestra conductor. The Director must be able to lead and control people, have them do what he or she wants them to do, yet remain on good terms. While in production, the Director not only oversees actors, but also advises the Director of Photography, instructs the major technical people, administrates the flow of people, consults on budgets, and deals with outside pressures. The Director is ultimately responsible for what happens on the set.

The **Director of Photography** (also **DP, DOP,** or **Cinematographer**) is responsible for the quality of the photography and the cinematic look of the film. The Director of Photography transforms the Screenwriter's and Director's concepts into visual images. Using his or her knowledge of lighting, lenses, cameras, and film emulsions, the Director of Photography creates the appropriate mood, atmosphere, and visual style of each shot to evoke the emotions that the Director desires. Working closely with the Director, the Director of Photography determines the camera angles, shot composition, and camera movement for every shot. The Director of Photography then decides upon the lighting equipment and the type and number of cameras that will be required for shooting. The Director of Photography orders the lights and cameras to be set up in such a way to attain the desired effect.

The creative side of pre-production includes "conceptualization." During this on-going process, a **Concept Artist** designs, plans, and sketches what the film will look like. The Concept Artist prepares the storyboard—a series of sketches that are used to visually illustrate the script. The sketches depict the key shots in the scripted scenes, including the framing, camera angle, blocking, character movement, as well as basic props and sets. During conceptualization, the Concept Artist also envisions and designs sets, characters, and costumes. Concept Artists often produce many thumbnail (small) sketches of different versions of objects or characters that are to appear in the intended film. The Concept Artist works closely with the Director, Producer, Director of Photography, and the entire art department.

The **Executive Producer** secures financing for a film. This person usually oversees business aspects but often has little actual involvement with the day-to-day operations of the filmmaking.

While the creative crew works on conceptualization, the **Production Finance Person** breaks down expenses and records expenses for every item for the production to keep the production within budget. (On smaller productions, the Producer or Associate Producer often performs this work.)

Costs are divided into above-the-line and below-the-line. For high-budget features, the general rule is above-the-line costs equal 75% of the budget. They are negotiated before production and are considered fixed costs. Above-the-line costs include salaries for the top creative talents and any rights to a book, play, or article. These are considered "fixed costs" because once they are negotiated, they won't change during production.

Below-the-line costs can equate to 25% of the budget. They cover everyday expenses to keep the production moving. Below-the-line costs are everything else, including crew, food costs during the shoot, housing, transportation, cameras, film stock and processing, editing, special effects, costumes, lighting, sets, props, and miscellaneous expenses.

The **Production Designer** works closely with the Director to make sure that the Director's creative vision can be put on film. The Production Designer, who heads the Art Department, is an artist responsible for creating the overall visual appearance of the film—the proper feel, the appropriate costumes, the right setting.

The **Art Director** reports to the Production Designer, and ensures that the actual location or set looks the way the Production Designer visualized it. The Art Director oversees the artists and craftspeople who build the sets, and is also responsible for costumes, make-up, and props.

A set is any scenery or environment built indoors or outdoors for use in a motion picture. The **Set Designer,** often a draftsman with architectural training, sketches plans and lists specifications for building sets based on the verbal descriptions or rough sketches provided by the Art Director. Because of the high cost of constructing sets, the set designer plans to build only what the camera can see.

The **Set Decorator,** who often has interior design experience, finds the appropriate objects to place within a set to make it look real, according to need, whether it's a businessperson's office or a hermit's shack.

Lead Man (or **Assistant Set Decorator**), who reports to the Set Decorator, takes the lead in tracking down various artifacts needed to decorate the set.

The **Swing Gang,** which reports to the Lead Man, is sent out to bring all the objects needed for the production back to the set.

The **Set Dresser** physically places the objects and furnishings—furniture, rugs, lamps, draperies, paintings, books, etc.—on the movie set, making it ready for shooting. The Set Dresser takes orders from the Set Decorator.

The **Construction Coordinator,** who reports to the Art Director, supervises the construction of a film's set to the Set Designer's specifications. The actual construction of a set can take many weeks or months, depending on the size and complexity of the required set. One decision that needs to be made is whether to shoot on location or on a set. This decision is made by the producer and/or director on a sequence-by-sequence basis.

The **Carpenter** takes orders from the Construction Coordinator and constructs the set to given specifications.

The **Carpenter's Assistant** reports to the Carpenter and helps build the set.

While the set is under construction, the **Costume Designer** conceives and draws designs for the costumes to be worn by the actors in the movie. The costume designs must be approved by the Art Director, Director, and Producer before going to the Seamstress, the person who actually makes the costumes.

The **Seamstress** makes the costumes based on the approved costume designs.

The **Casting Director** (or **Casting Associate**) suggests and evaluates potential actors appropriate for the film, sets up meetings with the actor and the Producer and/or Director, and often helps negotiate the terms of a proposed contract between the actor's agent or attorney and the Producer. When the actor is hired, the casting director helps negotiate the terms of a proposed contract between the actor's agent and the Producer.

A **Location Manager** scouts out locations for shooting and arranges for permission to shoot in specific places.

A **Technical Advisor** (or **Consultant**) may be hired by the Director for his or her expertise in a particular field to make sure that the movie portrays the particular events or situation accurately. A historian might be hired to make sure that a Civil War film is accurate. A lawyer may be consulted for courtroom scenes. A native of Laos may be asked to verify native customs or costumes. Or a biologist might be hired to check the accuracy of facts about the lives of dolphins.

If special effects, stunts, or animals are used, the film may also require specialized roles:

A **Special Effects Coordinator** (or **Special Effects Supervisor**) makes sure the special effects crew properly sets up effects according the Director's wishes.

A **Special Make-Up Effects** artist has expertise in combining make-up with special effects, such as squibs—small explosive devices that, when detonated, simulate the effect of a bullet, puncture wound, or small explosion.

A **Stunt Coordinator** is responsible for choreographing stunts and making sure the stunt is relatively safe, but still realistic.

Animals are sometimes used in movies. These animal performers often come with a **Trainer** or **Wrangler** who has either taught the animal to perform certain acts or entices the animal to perform by offering morsels of food. Several look-alike animals are often used for the same role. Clever editing makes an animal's random movements seem like they have a purpose.

The **Line Producer** runs the day-to-day operations. This person makes the deals for locations and transportation, secures extras for scenes, orders equipment, gets accommodations for the cast and crew when they're on location, and is on the set every day to ensure the production runs smoothly. The Line Producer is generally employed from pre-production through post-production and reports to the Producer.

Pre-production prepares everything needed for shoot:

- **Creative preparation** that includes scriptwriting to designing special props.
- **Financial preparation** that includes budgeting the film and finding the money to pay for it.
- **Administrative preparation** that includes arranging for people to be paid to ordering film and getting permits to shoot on location.
- **Physical preparation** that includes building sets, making costumes and arranging props.

After pre-production, the film goes into production.

PRODUCTION

During production, the actual film is shot. Many additional people and talents are involved:

The **Director of Photography** (also **DP, DOP,** or **Cinematographer**), who was involved in pre-production, has a major role in production. The prime responsibility during this stage is to light the set. Depending on the style of the Director, the Director of Photography may be left to decide the "look" of the film for him or herself or, after meetings with the Director and usually the Art Department, he/she may be left to light the set as he/she sees fit. Alternatively, the Director may have very firm ideas as to how the film should look, and if so, the Director of Photography must fulfill these wishes.

The Director of Photography has to set an example for the rest of the unit. Time keeping, crew behavior, dress, and manners all come, at least in part, from the Director of Photography and so set the standard for the professional approach of the crew.

The Director of Photography is responsible for all matters pertaining to the photography of the film: lighting, exposure, composition, cleanliness, etc. The Director of Photography will often "nominate" the crew; that is, he/she makes a list of first and second choice people to be offered the job. If crew members are "nominated" by the Director of Photography, then the Director of Photography is responsible for them and will have to fire them if

they are not up to the required standard. The up side of this is that Director of Photography usually gets the crew he/she wants.

The **Assistant Director** (also **A.D., First Assistant,** or **First A.D.**) controls the shooting schedule and is responsible for keeping the production on schedule. By assuming responsibility for the routine tasks, such as the call (summoning the actors, crew, and logistical support to the correct place at the right time), the Assistant Director allows the Director to focus on the creative aspects of the film. The Assistant Director maintains order on the set, which is hopefully achieved by yelling "Quiet on the set!" The Assistant Director even has assistants of his/her own.

The **Second Assistant** (also **Second Assistant Director** or **Second A.D.**), the assistant of the Assistant Director, oversees the movements of the cast and prepares the call sheets—a list of actors who will be required for each scene, and when these actors will be needed. The Second Assistant tends to be a liaison between the set and production office. There can also be a Third Assistant (also Third A.D. or Second Second Assistant), who also assists the Assistant Director.

The **Second-Unit Director** stages large-scale action sequences that often deal with complex special effects and the participation of many extras, stuntpersons, and animals.

What would a motion picture be without its Actors? **Actors** play the character roles in the film. Some are well-known stars; many are newcomers.

A **Stand-in** is an individual who is similar in body structure and looks to the star Actor in a film and who takes that Actor's place during a lengthy setup—the placing of cameras, lights, and microphones—so the Actor can get ready for the filming itself.

A **Stunt Person** (or **Stunt Performer**), a specialist actor, actually performs stunts, which are often risky pieces of physical action. Stunts range from fight scenes to a fall from a cliff to a head-on collision with an oncoming truck. Many stunts are actually less dangerous than they appear because of appropriate camera angles, lenses, and editing.

The **Make-up Supervisor** (or **Make-up Artist**) is an individual in charge of make-up applied directly on the skin of an Actor for cosmetic or artistic effect. The Actor is made up before filming, but sometimes the make-up wears off during filming and new make-up must be reapplied. The job of the Make-up Supervisor is to maintain the appearance of the Actor's make-up throughout the filming.

The **Hair Supervisor** (also **Hairstylist** or **Hairdresser**) is responsible for maintaining Actors' hairstyles during filming.

The **Camera Operator** (or **Cameraman**) rolls the camera and stops it on cue, as instructed by the Director of Photography. The Camera Operator's responsibility is to achieve smooth camera movement and produce satisfactory pictorial images. To do so, the Camera Operator not only has to make sure not to bump the camera into other equipment while shooting, but also must be aware of how far the camera can tilt when filming a shot and where the boom—the pole that holds the microphone above a scene—is located so that it doesn't get in the shot.

The **Assistant Cameraman** (also **Assistant Camera Operator, First Assistant Cameraman**) assists the Camera Operator. This person maintains and cares for the camera as well as prepares an accurate camera log (also called camera report or dope sheets)—a record sheet that gives details of the scenes that have been filmed. On many camera crews, the Assistant Cameraman may also perform the duties of a Focus Puller and/or a Clapper-Loader.

The **Clapper-Loader** (or **Second Assistant Cameraman**) loads the camera with a new roll of film as needed, and operates the clapper board (clapboard for short)—a small hand-held chalkboard filmed at the beginning of each take. The "clapper" part of the job is deceptively simple. It is vital that all the information is on the clapperboard and that it is easily read.

It is critical that the Clapper-Loader keeps the inside of the changing bag or, on a big picture, the darkroom should be immaculately clean to keep dust and hairs off the film. The inside of the changing bag or the darkroom should be cleaned several times a day.

Perhaps the most important responsibility of the Clapper-Loader is the paperwork. The lab report sheet must be both legible and accurate or it will be impossible to find the appropriate piece of negative when it's time for negative cutting.

On most motion pictures, the Production Office keeps a very close eye on the daily camera report sheets. This is because the shot footage must be logged to see if the production is on budget in this area and to see how much footage is being entered in the "waste" column. A reputation for good paperwork is the most common reason for a Production Office to approve the Director of Photography's nomination of a Clapper-Loader.

An **Additional Camera** (or **B Camera**) is an extra Camera Operator who is sometimes needed for filming complicated action sequences, stunts from a different angle, or additional scene coverage with a second camera.

The **Sound Designer** oversees all the audio elements of a motion picture; similar to what a Production Designer does for the visual elements.

The **Sound Recordist** operates the sound-recording equipment on a set. Until recently, a Nagra recorder with a 1/4-inch tape was standard equipment; today digital audiotape, or DAT, is used. DAT is easier to synchronize and edit, and requires no Dolby or other noise reduction.

The **Boom Operator** operates the boom—a long, adjustable bar used to position a microphone during filming. On the boom, the microphone can be positioned above the actor's head, picking up dialog while remaining out of the camera's field of view. The Boom Operator must correctly position the boom microphone to record all the actors, which means pointing the mike at the actor who is talking, anticipating when the next actor will speak, and swiveling the microphone over to him or her.

The **Third Man** (also **Cable Operator** or **Cable Person**) operates the second microphone, if one is needed in a scene where actors stand far apart. The Third Man also handles all the cables related to sound-recording equipment—laying the cables, taping them, and tending the cables to follow the camera. In addition, this individual is in charge of noise abatement—discovering the extraneous noises, such as a refrigerator motor, a creak in the floor, or rustling clothing, and eliminating or minimizing them.

The **Key Grip** reports to the Director of Photography, oversees work with all of the camera support equipment on the set. This person supervises the Grips, who can number from five to fifteen.

A **Grip** works on the set with all of the camera support equipment. Grips prepare camera mounts so a scene can be filmed from whatever vantage point the Director of Photography desires. This might require organizing and securing the equipment needed to film from a moving car. Or this might necessitate erecting scaffolding for a high point of view. Grips work closely with the Electricians and Lighting Crew who set up the lights.

The **Dolly Grip** works with the dolly—a small four-wheeled truck that rolls along carrying the camera, some of the camera crew, and occasionally even the Director. If necessary, Dolly Grips lay dolly tracks, railings that guide the dolly in tracking shots outdoors. During the actual shooting, Dolly Grips push the dolly into the proper position at the appropriate moments.

The **Focus Puller** adjusts the focus of the lens as the actor moves closer to or further from the camera, or when the camera moves during a dolly shot. Keeping the main action sharp is the prime responsibility of the Focus Puller.

Before shooting begins, the Focus Puller marks the actors' positions on the floor with tape, and measures the distance between the lens and significant points in a traveling shot in order to attain a smooth "follow focus" during the take—a continuous recorded performance of a scene. The Focus Puller is responsible for setting the "Stop" as directed by the Director of Photography.

In addition, the Focus Puller is concerned with the camera itself. It is the Focus Puller's task to build the camera each morning and to put it away after shooting is finished. The Focus Puller must keep the lenses scrupulously clean and carry out any front line maintenance on the camera and its associated kit.

The Focus Puller rarely leaves the camera. The Camera Operator must be free to go off with the Director and the Director of Photography to discuss the coming set-ups. The Clapper-Loader brings the Focus Puller the bits of kit needed to build the camera for the next shot. You could say that during the shooting day, the camera "belongs" to the Focus Puller.

At the end of every "printed" take, the Focus Puller is responsible for giving whoever is on continuity the details of the shot. This includes the focal length of the lens, the focus setting, and the stop.

On any professional film set, the camera crew must always arrive at least half an hour before the call on the call sheet. The camera must be built and ready on the tripod or dolly before the call time and should be positioned roughly where the first shot of the day is expected.

The **Script Supervisor** (or **Continuity Person**) writes down very specific notes of every scene during filming so that he/she can look back at the notes during a later scene to check that all of the details are correct. The Script Supervisor makes sure everything looks the same from one shot to the next. The Script Supervisor also keeps track of the number of pages and scenes covered in a day, the number of setups, the estimated screen time, and notes how the filmed scenes deviated from the script—for example, how the dialog spoken by the actor differed from the written one.

The **Still Photographer** takes the still photographs that are used in publicizing the movie. Stills and instant photos are also used to help maintain continuity.

The **Gaffer** (or **Chief Lighting Technician**) heads up the crew responsible for lighting and other electrical matters during filming. The Gaffer reports to the Director of Photography and makes sure that his or her orders are carried out.

The **Best Boy** is the assistant to the Gaffer. This person orders all necessary lighting equipment and oversees the lighting crews.

The **Lighting Crew** (also **Lighting Technicians** or **Electrician**) is a group of technicians who install, operate, and maintain lighting. They retrieve the particular light that the Gaffer asks for, put it in position, raise or lower it, and wait for orders from the Gaffer to turn it on or off. If necessary, they add diffusing material in front of the light or adjust the width of the light beam by opening or closing the light's barn doors—black metal shutters attached to the light unit.

The **Genny Operator** sets up and operates a generator—a machine by which mechanical energy is changed into electrical energy.

FULL CREWS AND LOW-BUDGET CREWS

The structure of the technical crew varies from film to film, depending on the budget and the requirements of the script. Below are the two most common combinations of crew members.

The Full-Feature Crew

Camera:	**Lighting:**	**Sound:**
Director of Photography	Gaffer	Sound Mixer
Camera Operator	Best Boy	Boom Operator
Focus Puller	Lighting Crew	
Clapper Loader	Key Grip	
Dolly Grip	Grip Crew	

The Low-Budget Crew

On the "Low Budget" crew, the Director of Photography manages lighting and operates the camera. This is quite often the case on low-budget features and TV drama.

Camera:	**Lighting:**	**Sound:**
Director of Photography	Gaffer	Sound Mixer
Focus Puller/Loader	Lighting Technician	Boom Operator
	Key Grip	
	Best Boy	

"That movie [Lost in Translation] was done with minimal equipment. When I met Lance [Acord] I had been accustomed to working on large-scale movies and being encumbered and enamored with all of the equipment, so much so that the humanity can get lost. I've since become very interested in working light. It's not because of the economics, but rather because it brings you closer to your subjects. So often the machinery of our industry distracts us, and we lose touch with what we are hired to do. I find it truly rewarding to be able to get the striking results we achieved on this spot with such a simple approach."

—Michael Williams, Director

The Writing Center
UNIVERSITY OF COLORADO
DENVER | ANSCHUTZ MEDICAL CAMPUS

Formal Elements of Film

Time & Space	Shot	What is recorded by a single operation of the camera; can be defined in terms of distance and area (see "Framing" below) or subject
	Scene	Unit of action taking place in the same location, comprised of one or many shots
	Sequence	Group of shots forming a self-contained segment of the film that is intelligible in itself
	Mise-en-scène	Staging or arrangement of the visual elements within a shot or sequence; includes the placement of characters in relation to each other, the set design, the lighting, etc.

Framing	Long	Main objects are seen in the distance and appear small on screen; used to establish setting (often called an establishing shot) and show characters in relation to objects; similar to the third-person, omniscient point-of-view in literature
	Med	Shows a character from the waist up; often a natural or neutral shot
	Close-up	Object or character takes up most of the frame; highlights emotion played out on a face or the detail of an object; encourages viewers to identify with characters or to focus their attention on a thematic element

Lighting	Low-Key	Small source of lighting used to create ample shadows and an atmosphere of mystery/danger; can suggest characters are evil, conflicted, or morally ambiguous
	High-Key	Even, sometimes flattering, light source with few shadows; can convey normalcy or a lack of threat; typical of most mainstream classical Hollywood films

	Low	Camera is positioned lower than the subject and tilted upward; makes the character appear "larger than life"
	Eye-Level	Camera is level with the eye-line of the characters; a neutral shot emulating the natural way we perceive the world

	High	Camera is positioned higher than the subject and tilted downward; makes the character appear smaller than normal
Movement	Pan	Camera *pivots* along a horizontal axis without moving its position; enlivens the shot, makes the frame dynamic, and emulates how people move their heads from side to side to view action (such as how a spectator watches cars zoom by on a race track)
	Tilt	Camera moves along a vertical axis without moving its position; can emphasize the grandeur of an object (like craning your head up to make look at a basketball player) or diminish it (like the huge class bully looking down at the class runt)
	Zoom	Camera's focal point is magnified/minimized to bring objects in the foreground or background into focus; emulates how our own focus shifts from person to person or object to object; can reconfigure the composition of the shot *without* any editing
	Track	Any shot taken when the camera is on some sort of moving vehicle or mechanism (such as a dolly, crane, or truck) or held by/strapped onto a person (Steadicam)

Editing	Fade	Image slowly fades to black; can signal the passage of time or a significant emotional ending to a sequence
	Dissolve	First shot slowly fades out while the second shot fades in, blending the two together; often used to create irony or visual juxtapositions
	Cross-cut	One shot placed immediately after another unmatched shot; creates visual dissonance and quickens the tempo and pace of the film
	Eyeline Match	Often used to depict conversations between characters; the camera first films the character looking in one direction, then follows with a shot of what being looked at

Further Reading

Corrigan, Timothy. *A Short Guide to Writing About Film*. New York: Longman, 2010. Print.

Dick, Bernard F. *Anatomy of Film*. Boston: Bedford/St. Martin, 2010. Print.

Golden, John. *Reading in the Reel World: Teaching Documentaries and Other Non-Fiction Texts*. Urbana: National Council of Teachers of English, 2006. Print.

Major Film Journal Databases

JSTOR
Academic Search Premier
Project Muse
Film and Television Literature Index

Auraria Research Librarian Specializing in Film

Nikki McCaslin—nikki.mccaslin@ucdenver.edu

SYLLABUS TELEVISION PRODUCTION

Maximum Marks: 100

Unit I

Introduction of visualization, Different approaches to visualization - TV, Films, and Ad films. Types of telecasting, Production standards NTSC, PAL, Secam etc. Television Crew, an overview of direction, art direction, floor management- indoor & outdoor, production management, budget preparation.

Unit II

Principles of script writing, creative writing, script formats. Planning of Story, story board, discussions, screen play, dialogue writing, selection of cast, costumes, locations, set & design ,Research. Locations: In-door, set, on-sights sets, - Outdoor on-sight sets, blue matte. Etc.,

Unit III

Camera techniques & operation, Types of camera, Video formats (VHS, SVHS, U-MATIC, BETA, DIGITAL), framing, shots & movements (wide, medium, close ups, shadow, zoom, pan , tilt, aerial etc.,), usage of various types of camera lenses (Normal, Tele, Zoom etc.,), usages of various filters (day , night, colour correcting filter, diffusion filter), objectives TV lighting, various types of Lights (baby, Junior, Senior, etc.,) colour temperature, lighting for different situations (interviews, indoor, out-door), types of lighting(Back, Front, full, semi, etc.,)

Video recording format - Audio on line or off line . Usage of various kinds of mics (Dynamic mic, condenser mic, ribbon mic, Uni-directional, Bi-directional, omnidirectional mics, Hand mic, Head set mic, quadraphonic mic and wireless mic, lapel etc.,) Knowledge about audio recording (mono, stereo, surround sound, eco etc.,).

Unit IV

Editing procedure, assembling shots, symbolic editing and editing errors. The language of editing and shooting-sound in editing-categories of sound, post-synchronization, voice-over or narration, music and dubbing, Video Editing - linear, non-linear, types of editing modes. (assemble mode, insert mode, on line mode) computer editing - time cede roll editing, etc., Television graphics & titling and specials effects, Audio - Dubbing, Back ground Music, synchronizing of video and audio, voice Over (narration)etc. Presentation skills, recording live programmes.

TELEVISION PRODUCTION

Pre visualization (also known as **pre-rendering**, **preview** or **wireframe windows**) is a function to visualize complex scenes in a movie before filming. Pre visualization is applied to techniques such as storyboarding, either in the form of charcoal drawn sketches or in digital technology in the planning and conceptualization of movie scenery make up.

The advantage of pre visualization is that it allows directors to experiment with different staging and art direction options—such as lighting, camera placement and movement, stage direction and editing—without having to incur the costs of actual production. On larger budget project, the directors work with actors in visual effects department or dedicated rooms. Pre visualizations can add music, sound effects and dialogue to closely emulate the look of fully produced and edited sequences, and are most encountered in scenes that involves stunts and special effects (such as chroma key). Digital video, photography, hand-drawn art, clip art and 3D animation combine in use.

Types of Broadcasting or telecasting

Terrestrial television is a type of television broadcasting which does not involve either satellite transmission or cables. Instead, transmission is done with radio waves, and antennas or television antenna aerials are used for reception. sometimes **over-the-air television** and requires a tuner to view content.

The BBC began broadcasting television to the public in 1929, and had a regular schedule of television programmes in 1930.

Terrestrial television in India started with the experimental telecast starting in Delhi on 15 September 1959 with a small transmitter and a makeshift studio. Television services were separated from radio in 1976.

National telecasts were introduced in 1982. In the same year, color TV was introduced in the Indian market. At that time there was only one national channel Doordarshan, which was government owned. The *Ramayana* and *Mahabharata* (both being Hindu mythological stories based on religious scriptures of the same names) were the first major television series produced.

Cable television is a system of distributing television programs to subscribers via radio frequency (RF) signals transmitted through coaxial cables or light pulses through fiber-optic cables. This contrasts with traditional broadcast television (terrestrial television) in which the television signal is transmitted over the air by radio waves and received by a television antenna attached to the television.

FM radio programming, high-speed Internet, telephone service, and similar non-television services may also be provided through these cables.

in areas where over-the-air reception was limited by distance from transmitters or mountainous terrain, large "community antennas" were constructed, and cable was run from them to individual homes.

In order to receive cable television at a given location, cable distribution lines must be available on the local utility poles or underground utility lines.

There are two standards for cable television; older analog cable, and newer digital cable which is capable of carrying high definition signals used by newer digital HDTV televisions.

Satellite television is television programming delivered by the means of communications satellite and received by an outdoor antenna, usually a parabolic reflector generally referred to as a satellite dish, and as far as household usage is concerned, a satellite receiver either in the form of an external set-top box or a satellite tuner module built into a TV set.

Satellite TV tuners are also available as a card or a USB peripheral to be attached to a personal computer. In many areas of the world satellite television provides a wide range of channels and services, often to areas that are not serviced by terrestrial or cable providers. Direct-broadcast satellite television comes to the general public in two distinct flavors—analog and digital. This necessitates either having an analog satellite receiver or a digital satellite receiver. Analog satellite television is being replaced by digital satellite television and the latter is becoming available in a better quality known as high-definition television.

Production Standards:

National Television System Committee is the analog television system that is used in most of North America, parts of South America (except Brazil, Argentina, Uruguay, and French Guiana), Myanmar, South Korea, Taiwan, Japan, the Philippines, and some Pacific island nations and territories

Most countries using the NTSC standard, as well as those using other analog television standards, are switching to newer digital television standards. North America, parts of Central America, and South Korea are adopting the ATSC standards, while other countries are adopting or have adopted other standards.

The first NTSC standard was developed in 1941 and had no provision for color television. In 1953 a second modified version of the NTSC standard was adopted, which allowed color television broadcasting compatible with the existing stock of black-and-white receivers.

There is a large difference in frame rate between film, which runs at 24.0 frames per second, and the NTSC standard, which runs at approximately 29.976 frames per second.

In regions that use 25-fps television and video standards, this difference can be overcome by speed-up.

Phase Alternating Line, is a color encoding system for analogue television used in broadcast television systems in most countries broadcasting at 576i. 625-line / 50 field (25 frame) per second television standard,

NTSC receivers have a tint control to perform color correction manually. If this is not adjusted correctly, the colors may be faulty. The PAL standard automatically cancels hue errors by phase reversal, PAL has 576 visible lines compared with 480 lines with NTSC, meaning that PAL has a 20% higher resolution. Both PAL and NTSC have a higher frame rate than film, 24 frames per second, offering flicker free motion. NTSC is used with a fps of 60i or30p whereas PAL generally uses 50i or 25p; both use a high enough frame rate to give the illusion of fluid motion.

SECAM, *Séquentiel couleur à mémoire*, French for "Sequential Color with Memory"), is an analog color television system first used in France.

It is, historically, the first European color television standard.

SECAM is a standard which permits existing monochrome television to continue to be operated as monochrome televisions. Additionally, for compatibility, it is required to use no more bandwidth than the monochrome signal alone;

The color signal has to be somehow inserted into the monochrome signal, without disturbing it. This insertion is possible because the spectrum of the monochrome TV signal is not continuous hence empty space exists which can be utilized. SECAM uses frequency modulation to encode chrominance information on the sub carrier.

Initially, a version of SECAM for the French 819-line television standard was devised and tested, but not introduced. Following a pan-European agreement to introduce color TV only in 625 lines, France had to start the conversion by switching over to a 625-line television standard, which happened at the beginning of the 1960s with the introduction of a second network.

Television Crew members

Casting director

The casting director casts actors, and so is usually one of the first crew members on the project. In fact, during initial casting for a television pilot, the executive producer and casting director are often the only crew members.

Costume designer

The costume designer makes all the clothing and costumes worn by all the Actors on screen, as well as designing, planning, and organizing the construction of the garments down to the fabric, colors, and sizes. They greatly contribute to the appearance of the production, and set a particular mood, time, feeling, or genre.

Director

A television director is usually responsible for directing the actors and other filmed aspects of a television production. The role differs from that of a film director because the major creative control usually belongs to the

Associate Director (AD)

An associate director (AD) in television production is usually responsible for floor directing in the studio and ensuring that the sets, props and technical equipment are safe, ready to use and positioned correctly before filming. Associate directors are also responsible for communications with the audience and any guests,

Location manager

The location manager finds and manages film locations. Most pictures are shot in the controllable environment of a studio sound stage but occasionally, outdoor sequences call for filming on location.

Make-up artist

A professional make-up artist is usually a cosmetology beautician, and applies makeup to anyone who appears on screen. They concentrate on the area above the chest, the face, the top of the head, the fingers, hands, arms, and elbows. Their role is to manipulate the actor's on-screen appearance to make them look younger, older, larger, etc.

Production designer

The production designer is responsible for the production's visual appearance. They design, plan, organize, and arrange set design, equipment availability, and control a production's on-screen appearance. The production designer is often called the *set designer*, or *scenic designer*.

Researcher

Researchers research the project ahead of shooting time to increase truth, factual content, creative content, original ideas, background information, and sometimes performs minor searches such as flight details,

Set designer

Scenic designers create scale models of the scenery, artistic renderings, paint elevations, and scale construction drawings to communicate with other production staff.

Television producer

In the entertainment industry, a television producer is generally in charge of, or helps coordinate, the financial, legal, administrative, technological, and artistic aspects of a production.

Executive producer

The executive producer supervises one or more producers in all aspects of their work—and sometimes initiated the production. They are usually the ultimate authority on creative and business aspects of the production

Line producer

A line producer supervises physical aspects of the production (not the creative aspects), including personnel, technology, budget, and scheduling. The line producer oversees the budget

Writer

The Writer creates and moulds an original story, or adapts other written, told, or acted stories for production of a television show

Boom operator

The boom operator is part of the sound crew, and an assistant to the sound engineer or production sound mixer. The boom operator's main responsibility is microphone placement, with a microphone attached to the end—and sometimes using a "boom" boom is a piece of equipment that the operator stands on that lets him precisely control the microphone at a greater distance from the actors.

Camera operator/cinematographer

As the head member of the camera crew, the camera operator uses the camera as instructed by the Director. They ensure the required action is correctly filmed in the frame, and must react instinctively as the proceedings take place. If the camera operator is also a cinematographer, they also help establish the theme and appearance of the show.

Floor manager

The floor manager represents the director on the studio floor, and gives instructions and direction to crew, cast, and guests.

Gaffer

The gaffer is the head electrician at the production set, and is in charge of lighting the stage

Grip

Grips have two main functions. The first is to work closely with the camera department to provide camera support, especially if the camera is mounted to a dolly, crane, or in an unusual position, such as the top of a ladder.

Production manager

The Production Manager reports their expenses and needs to the Line Producer.

Stunt coordinator

Where the programme requires a stunt, and involves the use of stunt performers, the stunt coordinator arranges casting and performance for the stunt, working closely with the television director.

Video control operator/vision engineering

A video control operator controls the video console to regulate transmission of content

Composer

A composer writes the music for a production. They may also conduct an orchestra, or part of an orchestra, that plays the music.

Editor

The editor works in tandem with the director to edit raw footage into a finished work. The director has ultimate accountability for editing choices, but often the editor has substantial contribution in the creative decisions

Foley artist

The Foley artist on a film crew creates and records many of the sound effects. Foley artists

An Overview of Direction

Film directors create an overall vision through which a film eventually becomes realized. Realizing this vision includes overseeing the artistic and technical elements of film production, as well as directing the shooting timetable and meeting deadlines.

This entails organizing the film crew in such a way as to achieve his or her vision of the film. This requires skills of group leadership, as well as the ability to maintain a singular focus even in the stressful, fast-paced environment of a film set.

Moreover it is necessary to have an artistic eye to frame shots and to give precise feedback to cast and crew, thus, excellent communication skills are a must.

Since the film director depends on the successful cooperation of many different creative individuals with possibly strongly contradicting artistic ideals and visions, he or she also needs to possess conflict resolution skills in order to mediate whenever necessary.

Thus the director ensures that all individuals involved in the film production are working towards an identical vision for the completed film. The set of varying challenges he or she has to tackle has been described as "a multi-dimensional jigsaw puzzle with egos and weather thrown in for good measure".

It adds to the pressure that the success of a film can influence when and how they will work again. Omnipresent are the boundaries of the films budget. Additionally, the director may also have to ensure an intended age rating Theoretically the sole superior of a director is the studio that is financing the film, however a poor working relationship between a film director and an actor could possibly result in the director being replaced if the actor is a Major

Even so, it is arguable that the director spends more time on a project than anyone else, considering that the director is one of the few positions that requires intimate involvement during every stage of film production. Thus, the position of film director is widely considered to be a highly stressful and demanding one. It has been said that "20-hour days are not unusual".

Floor Management

Before the show:

- Assisting with production planning and consulting on logistics.
- Ensuring all staging, furniture and props are ready before the show starts.
- Ensuring all equipment is in place and technical checks have been done.

- Briefing presenters and talent.
- Managing the audience.
- Coordinating rehearsals.

During the show:

- Relaying information between the control room, floor staff and talent.
- Providing cues, timing and other information to presenters and talent.
- Informing the director of any relevant off-camera action.
- Preparing for upcoming parts of the show.
- Maintaining control of the audience and ensuring they are looked after.
- Overseeing safety issues on the floor.

Budgeting in film making

- **Film budgeting** refers to the process by which a line producer, unit production manager or filmmaker prepares a budget for a film production.
- This document, which could be over 150 pages long, is used to secure financing for the film and lead to pre-production and production of the film.
- Multiple drafts of the budget may be required to whittle down costs.
- A budget is typically divided into four sections: *above the line* (creative talent), *below the line* (direct production costs), *post-production* (editing, visual effects, etc.), and *other*(insurance, completion bond, etc.).
- Film financing can be acquired from a private investor, sponsor, a film studio or entertainment company, or out of pocket funds.

Elements of Budget

- **Story rights**: The right to produce a film based on a play, novel cost anything from a couple of thousand to over millions
- **Screenplay**: An A-list screenwriter can be paid 100,000 to 2 million to write a script,
- **Producers**: Film producers and executive producers are often well-paid, with a top producer earning a seven-figure salary upfront as well as bonuses and a share of the profits.
- **Director**: The payment minimum is about $16,800 a week,
-
- **Cast**: While the bulk of the cast usually gets paid by the Actors Guild standard rate, famous and bankable film stars can demand more fees, plus perks (trailer, entourage, etc.)

- **Production costs**: The cost of producing the film includes crew wages, production design, live set and studio costs, costumes, catering, accommodation and transportation.
-
- **Director of photography** is usually the highest paid member of the crew
- **Visual effects**: The cost of Computer-generated imagery effects and other visual effect work in post-production depends largely on the amount of work
- **Music**: The top film composers can ask for a seven-figure salary to compose an hour or so of original film score.

Above the line and below the line in budget

1. Above-the-line refers to Actors, Producers, Writers and Directors. For the most part, these are fixed costs meaning, if you cut a scene from the script, you don't pay the writer a little less. The same is true of producers and directors.

2. Below-the-line crew refers to everybody else including

- Assistant Director
- Art Director
- Line Producer
- Location manager
- Best Boy Electric
- Best Boy Grip
- Boom Operator
- Character generator (CG) operator (television)
- Costume Designer
- Director of Photography
- Camera operator
- Composer
- Dolly grip
- Gaffer
- Graphic Artist
- Hair Stylist
- Key Grip
- Make-up Artist
- Production Assistant
- Script Supervisor (continuity)
- Sound Engineer
- Stage Manager (television)
- Stage Carpenter
- Technical Director (TD) (television)
- Video control Broadcast engineering (television)
- Film Editor
- Visual Effects Editor

Tactics for Cutting cost

- **Eliminate night scenes.** Shooting at night requires powerful/expensive lighting and the payment of nighttime rates to the crew.
- **Avoid location filming in famous or commercial areas.** Some locations are more willing to allow filming than others - commercial enterprises such as hotels and

nightclubs. Some producers of low-budget features avoid paying location fees and seek to capture shots by subterfuge.

- **Film action scenes early on Sunday morning.** Stopping traffic for a car chase scene is easier in the early hours of Sunday morning, when traffic is at its lightest.
- **Use unknown cast members rather than stars.**
- **Ask above-the-line talent to defer their salaries.**
- **Use a non-union crew.**
- **Film in another region.** For example, many Hollywood movies set in U.S. cities are shot in Canada to take advantage of lower labor costs,

Screenplay

A **screenplay** or **script** is a written work by screenwriters for a film, or television program. These screenplays can be original works or adaptations from existing pieces of writing. In them, the movement, actions, expression, and dialogues of the characters are also narrated. A play for television is also known as a teleplay.

Spec screenplay

A 'spec' or speculative screenplay is a script written to be sold on the open market with no upfront payment, or promise of payment. The content is usually invented solely by the screenwriter, though spec screenplays can also be based on established works, or real people and events.

Commissioned screenplay

A commissioned screenplay is written by a hired writer. The concept is usually developed long before the screenwriter is brought on, and often has multiple writers work on it before the script is given a green-light.

Film Genres

Action films usually include high energy, big-budget physical stunts and chases, possibly with rescues, battles, fights, escapes, destructive crises (floods, explosions, natural disasters, fires, etc.), non-stop motion, spectacular rhythm and pacing, and adventurous, often two-dimensional 'good-guy' heroes (or recently, heroines) battling 'bad guys' - all designed for pure audience escapism.

Adventure films are usually exciting stories, with new experiences or exotic locales, searches or expeditions for lost continents, "jungle" and "desert" epics, treasure hunts.

Comedies are light-hearted plots consistently and deliberately designed to amuse and provoke laughter (with one-liners, jokes, etc.) by exaggerating the situation

Crime (gangster) films are developed around the sinister actions of criminals or mobsters, particularly bank robbers, underworld figures, or ruthless hoodlums who operate outside the law

Dramas are serious, plot-driven presentations, portraying realistic characters, settings, life situations, and stories involving intense character development and interaction.

Epics include costume dramas, historical *dramas*, *war* films, medieval romps, or 'period pictures' that often cover a large expanse of time set against a vast, panoramic backdrop.

Horror films are designed to frighten and to invoke our hidden worst fears, often in a terrifying, shocking finale.

Musical/dance films are cinematic forms that emphasize full-scale scores or song and dance routines in a significant way

Sci-fi films are often quasi-scientific, visionary and imaginative.

War (and anti-war) films acknowledge the horror and heartbreak of war

Six principles of Writing a good Script

1. Never write a script without knowing who your characters are in depth and caring about them all
2. Never write sloppily about any of these characters
3. Always have your characters be affected by one another’s deeds and words
4. Always have more than one truth operating between people at any one time
5. Always remember that people rarely get what they want but often get what they’ve earned
6. Always tell the truth about your characters

Two Types of Scripts

Two column or Shooting script

A shooting script contains a very elaborate description of all shots, locations, character, action, sound and technical details of the film. The shooting script is a breakdown of all all camera placements and movements.

- The shooting script includes the exact dialogue and sound you will hear at each precise moment of production.

VIDEO	**AUDIO**
CU Mother pleading with father	"I can't this any (sobs)
MS Father's reaction	Sternly have no options

Set Design

Set Design is the process by which a construction manager undertakes to build full scale scenery suitable for viewing by camera, as specified by a Production Designer or Art Director working in collaboration with the director of a production to create a set for a theatrical, film or television production.
The set designer produces a scale model, scale drawings, paint elevations (a scale painting supplied to the scenic painter of each element that requires painting), and research about props, textures, and so on.
Scale drawings typically include a ground plan, elevation, and section of the complete set, as well as more detailed drawings of individual scenic elements which, in theatrical productions, may be static, flown, or built onto scenery wagons.
Models and paint elevations are frequently hand-produced, though in recent years, many Production Designers and most commercial theatres have begun producing scale drawings with

Camera Shots

An **extreme long shot** contains a large amount of landscape. It is often used at the beginning of a scene or a film to establish general **location**(setting). This is also known as an establishing shot.

A **long shot** contains landscape but gives the viewer a more specific idea of setting. A long shot may show the viewers the building where the action will take place.

A **full shot** contains a complete view of the **characters**. From this shot, viewers can take in the costumes of characters and may also help to demonstrate the relationships between characters. For more information on costumes and acting refer to Chapter 4.

A **mid shot** contains the characters or a **character from the waist up**. From this shot, viewers can see the characters' faces more clearly as well as their interaction with other characters. This is also known as a social shot

A **close-up** (*animation on right*) contains just **one character's face**. This enables viewers to understand the actor's emotions and also allows them to feel empathy for the character. An **extreme close-up** contains one **part of a character's face** or other object. This technique is quite common in horror films.

Camera angles

It is important that you do not confuse camera angles and camera shots. Camera shots are used to demonstrate different aspects of setting, themes and characters. Camera angles are used to position the viewer so that they can understand the relationships between the characters. These are very important for shaping meaning in film as well as in other visual texts.

A **bird's eye angle** is an angle that looks **directly down upon a scene**. This angle is often used as an establishing angle, along with an extreme long shot, to establish setting.

A **high angle** is a camera angle that looks **down upon a subject**. A character shot with a high angle will look vulnerable or small. These angles are often used to demonstrate to the audience a perspective of a particular character. The example above demonstrates to us the perspective or point of view of a vampire. As a viewer we can understand that the vampire feels powerful.

An **eye-level angle** puts the audience on **an equal footing with the character/s**. This is the most commonly used angle in most films as it allows the viewers to feel comfortable with the characters.

A **low angle** is a camera angle that **looks up at a character**. This is the opposite of a high angle and makes a character look more powerful.

A **Dutch angle** is used to demonstrate the confusion of a character.

Camera movement

Composers of films also use camera movement to shape meaning

A **crane shot** is often used by composers of films to signify the end of a film or scene. The effect is achieved by the camera being put on a crane that can move upwards

A **tracking shot** and a **dolly shot** have the same effect. A tracking shot moves on tracks and a dolly shot is mounted on a trolley to achieve the effect in the example above. This camera movement is used in a number of ways but is most commonly used to explore a room such as a restaurant.

Panning) is used to give the viewer a panoramic view of a set or setting. This can be used to establish a scene

TYPES OF CAMERA LENSES

"Close-up" or macro

A macro lens used in macro or "close-up" is any lens that produces an image on the focal plane that is the same size or larger than the subject being imaged. They can be special lens corrected optically for close up work or they can be any lens modified (with adapters or spacers) to bring the focal plane "forward" for very close photography. The depth-of-field is very narrow, limiting their usefulness. Lenses are usually stopped down to give a greater depth-of-field.

Zoom

Some lenses, called **zoom lenses**, have a focal length that varies as internal elements are moved, typically by rotating the barrel or pressing a button which activates an electric motor. Commonly, the lens may zoom from moderate wide-angle, through normal, to moderate telephoto; or from normal to extreme telephoto.

The zoom range is limited by manufacturing constraints; the ideal of a lens of large maximum aperture which will zoom from extreme wide angle to extreme telephoto is not attainable Bulk and price limit their use for larger film sizes.

Special-purpose

- Enlarger lenses are made to be used with photographic enlargers r
- Lenses for aerial photography.

- Fisheye lenses: extreme wide-angle lenses with an angle of view of up to 180 degrees or more, with very noticeable (and intended) distortion.
- Stereoscopic lenses, to produce pairs of photographs which give a 3-dimensional effect when viewed with an appropriate viewer.
- Soft-focus lenses which give a soft, but not out-of-focus, image and have an imperfection-removing effect popular among portrait and fashion photographers.
- Infrared lenses
- Ultraviolet lenses
- Swivel lenses rotate while attached to a camera body to give unique perspectives and camera angles.

LIGHTING & TYPES OF LIGHTS

1. Backlighting
2. Side lighting
3. Full frontal lighting
4. All round lighting

OPEN-FACED TUNGSTEN

Tungsten lights are simply larger versions of the everyday lighting found in your home, using a filament of tungsten wire. There are two types: studio, a full size lamp and a smaller “baby” light; in reality these can both be pretty much any size, but the baby version is always the smaller of two lights of the same type, making them handier for location work as they’re more portable.

Redheads are your typical workhorse lights, particularly on a low budget. Cheap versions of branded heads are common, but make sure they're earthed!

Tungsten lights usually come in wattages of up to 20K, with most running at 220 volts and being useable with a dimmer. The colour balance of tungsten lights is quite orange/yellow, making them ideal for indoor locations where ordinary household lights can be seen, and with a blue colour correction gel a tungsten light can also be used to simulate daylight. Perhaps the most common form of tungsten light is the "redhead", a rough term for lights averaging around 800w; lamps of this size and upwards generally have a large spread of light.

The downside of dimming these lights, however, is that the reduction in power causes tungsten lamps to give off a much more orange glow; what this means in practice is that a change in brightness leads to a need to change any gels used to correct the colour temperature, which takes up a great deal of valuable time out of your day.LEDS

LED's are a cheap, extremely efficient type of lighting which has taken off in recent years.

LED lighting consists of series of small diodes which are extremely energy efficient and produce a lot more lumens (brightness) of light at a given wattage. Another side to this efficiency is that they remain cool to the touch throughout their use, making them a safer and more easy-to-handle (not to mention comfortable, if you've ever been trapped in a tiny room with a redhead on the go) than many other types of lights.

Their colour temperature tends to have a very white daylight balance of around 5600K; while they are available in other colour variations, this tends to be the most popular following on from the widespread use of fluorescent lighting.

They're also cheap to manufacture, which makes them one of the most affordable light sources available to filmmakers. A word of warning though: not all LEDs are necessarily useable for film. Because LEDs flicker they must be calibrated to fit in with the shutter

speed of digital cameras in order to avoid strobing in the image, which means that besides professional lights designed for film, there's no certainty that other LED fixtures will be free of this problem.

FRESNELS

Fresnels allow you to focus a light as required, either spot for a narrow beam or flood for a wider spread.

A fresnel is a type of lens placed in front of lamps such as tungsten sources in order to focus the light given off into a controllable beam. This is very useful in creating a spotlight effect, as well as being able to cover a relatively small portion of a scene. A fresnel light, therefore, is simply a light falling into any category which utilises such a fresnel lens in front of the bulb, traditionally a tungsten light such as an 800w redhead, although more recently we've seen a growing trend in LED versions and bigger-budget lighting solutions such as HMIs also sometimes utilise fresnels.

HMIS

While producing three to four times the amount of a light of a tungsten halogen, the more pricy HMI lamp consumes up to 75% less energy for the same output. Because of this energy efficiency, like LEDs HMIs also generate considerably less heat than tungsten lights.

If you've ever lit a scene using tungsten before, you can appreciate the extent of these advantages; improved fire safety, a cooler and more pleasant working environment, more light output for the power you have available, to name a few. In terms of colour temperature, HMIs are closer to daylight than tungsten at a colour temperature of about 5600K. 

HMI lighting is a high-end, daylight-balanced lighting solution.

The disadvantage of HMIs is that they require a ballast due to the high voltage required to fire them up, which reflects in the price of each unit as a whole. For the low-to-no budget filmmaker, HMIs are likely to be out of the question.

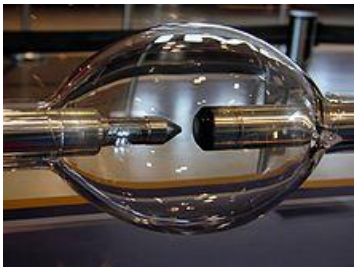
FLUORESCENTS

Colour-corrected fluorescent tubes are an extremely popular lighting method because of their portability and compact nature. Originally created by the Kino Flo company in 1987, this brand remains the most common for these lights. Using ballasts which are extremely quiet, the lights also do not flicker due to their high frequency, and are completely colour corrected to match either daylight or tungsten. In a pinch an uncorrected fluorescent (pretty much any not designed for use in film) will provide the same quality of light as a corrected one, but will cast a green tinge over a scene which results in undesirable skin tones

Kino Flos are often taped to walls and other convenient spaces.

The units generate less heat than HMIs or Tungsten lights, and are useful for locations with little room to bounce or diffuse larger lights as they produce a soft light and are easy to hide from the camera.

XENONS



Xenon Arcs are a rarer, extremely powerful type of lighting.

Ridley Scott’s Blade Runner was known for its use of xenon arcs.

Similar to HMIs in the way they work, xenon arc lamps feature a polished parabolic reflector that gives them amazing range and focus the light they give out almost like a laser beam. They can potentially project a beam of light for several blocks without it spreading too much. They are arguably the most efficient light, coming in five sizes from 1K to 10K. So powerful are they that they can crack windows and mirrors, leading manufacturers to produce special mirrors for their use. Unsurprisingly, xenons are also particularly expensive compared to tungsten lights. Blade Runner is a good example of a film that uses xenons for a very specific and powerful effect.

PRACTICALS

Practical lighting refers to any source that forms part of the scene itself and does not need to be hidden from the camera. Lights such as household lamps with shades are practical they fit in with the natural look of a location, and don’t break the illusion of reality for the audience of a film. Bulbs are often replaced with more powerful ones in order to throw more light into a scene without the audience being able to notice, and are usually used along with larger light sources to provide motivation for why, say, the side of a character’s face is lit up.

An example of practical lighting, in this case a couple of lamps and a wood stove. This would probably be boosted with additional lighting from outside the shot.

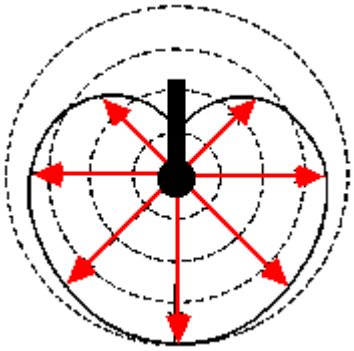
SUNGUNS

Sun guns are handy for adding tiny and specific pools of light to a scene.

These handheld, battery operated lights come in two basic varieties: tungsten and HMI. Tungsten sun guns are normally 12 or 30 volt, powered by a battery belt; running time for these is about 20 minutes. HMI sun guns have a daylight balance and are more efficient.

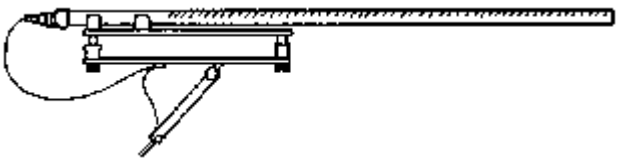
TYPES OF MICROPHONES

Cardioid



A **cardioids** mic has a somewhat directional pickup pattern, so it is less sensitive to sounds from behind, than it is to the sides and front. It is often used from above, on a fish pole.

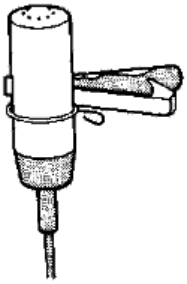
Shotgun



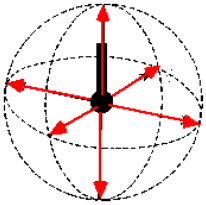
A **shotgun mic** is a more directional **super-cardioids**. This allows you to record sound with minimal background noise, from a greater distance. There may be some sacrifice of sound quality compared to a simpler cardioid mic.

It is most useful **outdoors** where sound is not **reverberating** off walls.

Lavalier



The **lavalier** mic is small enough to be hidden on a person's clothes, to provide **close Perspective** sound of their voice. It will also pick up other voices or sounds from nearby. Unless equipped with a wireless transmitter, it is best suited to static scenes.



Note: a lavalier has an **omni-directional** pickup pattern, so the direction it is pointing is not significant.

Lapel Microphones

These are tiny little mics, also referred to as lavalier microphones, that clip to someone's shirt or tie and are usually used in a sit-down interview situation. These are great for capturing consistent audio levels as the microphone does not move around like a handheld mic. (Helpful Hint: always tuck away wires and cables for a more professional look.)

Dynamic Microphones

Dynamic mic's are best known as the music, vocal microphones. These microphones are ideal in any worship situation because they are reliable, durable and resistant to feedback from monitors. Dynamic microphones are great for their price and generally have a long shelf life.

Condenser Microphones

Condenser Microphones are the least common in church sanctuaries, probably because of their price and their need to be well looked after. However, the one place that you will probably find one being used, will be by the speaker/pastor and maybe the drums. Condenser microphones can also be used for choirs, pianos and overhead for drums. In order for their unique pick-up.

Types Of Camera Filters:

Polarizing Filter: A polarizing filter cuts reflections from water or glass which gives a subtle look and objects do not appear very shiny. It also enhances colors and reduces haze. Polarizing filters are very useful when taking photographs indoors. You may have experienced that when you take a picture of a person wearing glasses their eyes don't show since the reflection from their glasses obscures them, a polarizing filter will cut out the reflection and the persons' eyes won't be obscured any more.

• **Neutral Density Filters:** These filters reduce the amount of light entering the camera which gives you the benefit of taking a longer exposure; it is good if you want to take a picture of flowing water like waterfalls, or streams, the resulting image will make the water very smooth. These filters come in 0.3, 0.6, and 0.9, which lowers the f-stop by 1, 2, and 3 respectively.

• **Warming & Cooling Filters:** These filters were more useful when using film, with digital cameras however, the use of these filters become somewhat redundant since you can set the white balance according to your needs and that takes care of the warmth or the cool.

• **Enhancements Filters:** These come in Red, Blue, Green, and enhances that particular color. There is a sepia filter as well, which makes photos have an old look, however, this filter has become redundant as well since you can add the sepia from an image enhancement software and even from your digital camera. However many photographers prefer the authentic look of using a filter over softwware.

• **Graduated Color Filters:** These filters can make landscape photographs look even more beautiful, you can make the skies bluer, or you can add a really nice golden to a sunset or a sunrise. These filters come in a variety of colors.

Cross screen - A **cross screen filter**, also known as a **star filter**, creates a star pattern, in which lines radiate outward from bright objects.

A diffusion filter (also called a **softening filter**) softens subjects and generates a dreamy haze. This is most often used for portraits. It also has the effect of reducing contrast

Colour Temperature :

Color temperatures over 5,000K are called cool colors (bluish white), while lower color temperatures (2,700–3,000 K) are called warm colors

Temperature

Degrees Kelvin	Type of Light Source	Indoor (3200k) Color Balance	Outdoor (5500k) Color Balance
1700-1800K	Match Flame		
1850-1930K	Candle Flame		
2000-3000K	Sun: At Sunrise or Sunset		
2500-2900K	Household Tungsten Bulbs		
3000K	Tungsten lamp 500W-1k		
3200-3500K	Quartz Lights		
3200-7500K	Fluorescent Lights		
3275K	Tungsten Lamp 2k		
3380K	Tungsten Lamp 5k, 10k		
5000-5400K	Sun: Direct at Noon		
5500-6500K	Daylight (Sun + Sky)		
5500-6500K	Sun: through clouds/haze		
6000-7500K	Sky: Overcast		
6500K	RGB Monitor (White Pt.)		
7000-8000K	Outdoor Shade Areas		
8000-10000K	Sky: Partly Cloudy		

Based on information from the book [digital] Lighting & Rendering
Chart and colors (c)2003 Jeremy Birn for www.3dRender.com

Working of a motion picture camera:

The shutter is a circular disk which rotates with each frame. The duration of the exposure is dependent on both the frame rate (number of frames each second) and the shutter angle. When the shutter is open, the film in the gate is exposed. When the shutter is closed, the film is advanced to the next frame so that it will be in position when the shutter opens.

If the shutter angle is set for the standard 180o , then the shutter will be open for half the frame rate.

In other words, at 24fps and a shutter angle of 180o , each frame will be exposed for 1/48th of a second.

The gate is the opening where each frame of film stops so that it can be exposed to light when the shutter opens. It is directly behind the shutter.

The pull down claw actually pulls each frame of film into place and then retracts in time to grab the next frame and pull it into place

viewing system. Most modern motion picture cameras use reflex viewing systems. Reflex cameras have a mirror attached to the front of the shutter so that when the shutter is closed and the film is advancing, the camera operator can see the image through the same lens that projects its image onto the film.

Video Time Code:

When looking at a length of exposed motion picture film, it's easy to see each individual frame and along the edge of the motion picture film is a series of sprocket holes. In 16mm film, there is a perforation between each frame. In 35mm film there are various formats: 2 perforation techno vision, a 3 perf format and the standard 4 perf format.

1. The images will be recorded on a video tape rather than on film.
2. 2. Rather than the rotating mechanical shutter, video cameras have an electronic shutter that regulates the duration of the exposure.
3. When one changes the shutter speed with a film camera, it also necessarily alters the frame
   rate, which affects the perception of speed of movement - slow frame rates accelerate
   apparent motion and faster frame rates record slow motion effects. When one changes the
   shutter speed in video, it does not alter the apparent motion of the subject.

4) A film camera allows light to be focused onto a photosensitive emulsion, which is then

chemically processed to reveal an image. Negative emulsions produce a negative image

and reversal stocks produce a positive image.

5) Whereas film in the US is recorded at 24 fps., NTSC Video is recorded at 29.97 fps

EDITING PROCEDURE:

1. The Content Cut

Content cuts are those which deal with moving the narrative forwards or adding new information for the audience. These tend to be relatively simple, with nothing changing except for the content of the shot. An example of where this is used is during a conversation, in which one might cut from a wide master shot, to an over-the-shoulder, to a close-up as the dialogue progresses.

2) The Action cut

Also known as a movement or continuity cut, the action cut is used where action starts off in one shot and ends in another. When a character reaches for something, e.g. a glass on a table, an action cut is frequently used to move from a shot of the character reaching out, to a close-up of the glass being picked up, back to the character with glass in hand.

3) Match Cut

A match cut normally serves to link together two separate scenes. This works by placing together two shots that contain a subject of similar appearance, shape or quality.

4) The Conceptual Cut

Conceptual cuts deal with metaphor. Cutting from a shot in which a feeling is expressed to a shot illustrating the point is primarily what this type of cut deals with.

5) The Zero Cut

The zero cut differs from the others in this list in that it's the only one not generally used as a creative choice. By stitching two shots together that share the same angle, lens and framing size, the cut is intended to be hidden from the audience. This is often used in creating visual trickery such as special effects, or selling the authenticity of a stunt such as a character rolling to avoid an oncoming car.

EDITORS CUT & DIRECTORS CUT

Editor's Cut:

There are several editing stages and the editor's cut is the first. An editor's cut referred to as the "**Assembly edit**" or "**Rough cut**" is normally the first pass of what the final film will be when it reaches audience

Screening dailies gives the editor a ballpark idea of the director's intentions. Because it is the first pass, the editor's cut might be longer than the final film.

Director's cut

When shooting is finished, the director can then turn his full attention to collaborating with the editor and further refining the cut of the film.

During director's cut", the director and the editor go over the entire movie with a fine-tooth comb; scenes and shots are re-ordered, removed, shortened and otherwise tweaked. Often it is discovered that there are plot holes, missing shots or even missing segments which might require that new scenes be filmed.

Final cut

Often after the director has had his chance to oversee a cut, the subsequent cuts are supervised by one or more producers, who represent the production company and/or movie studio. There have been several conflicts in the past between the director and the studio.

cut
A visual transition created in editing in which one shot is instantaneously replaced on screen by another.

continuity editing
Editing that creates action that flows smoothly across shots and scenes without jarring visual inconsistencies. Establishes a sense of story for the viewer.

cross cutting
Cutting back and forth quickly between two or more lines of action, indicating they are happening simultaneously.

dissolve
A gradual scene transition. The editor overlaps the end of one shot with the beginning of the next one.

editing
The work of selecting and joining together shots to create a finished film.

errors of continuity
Disruptions in the flow of a scene, such as a failure to match action or the placement of props across shots.

establishing shot
A shot, normally taken from a great distance or from a "bird's eye view," that establishes where the action is about to occur.

eyeline match
The matching of eyelines between two or more characters. For example, if Sam looks to the right in shot A, Jean will look to the left in shot B. This establishes a relationship of proximity and continuity.

fade
A visual transition between shots or scenes that appears on screen as a brief interval with no picture. The editor fades one shot to black and then fades in the next. Often used to indicate a change in time and place.

final cut
The finished edit of a film, approved by the director and the producer. This is what the audience sees.

iris
Visible on screen as a circle closing down over or opening up on a shot. Seldom used in contemporary film, but common during the silent era of Hollywood films.

jump cut
A cut that creates a lack of continuity by leaving out parts of the action.

matched cut
A cut joining two shots whose compositional elements match, helping to establish strong continuity of action.

montage
Scenes whose emotional impact and visual design are achieved through the editing together of many brief shots. The shower scene from **Psycho** is an example of montage editing.

rough cut
The editor's first pass at assembling the shots into a film, before tightening and polishing occurs.

sequence shot
A long take that extends for an entire scene or sequence. It is composed of only one shot with no editing.

shot reverse shot cutting
Usually used for conversation scenes, this technique alternates between over-the-shoulder shots showing each character speaking.

wipe
Visible on screen as a bar travelling across the frame pushing one shot off and pulling the next shot into place. Rarely used in contemporary film, but common in films from the 1930s and 1940s.

Non Linear and Linear Editing

Non-linear editing is the most natural approach when all assets are available as files on video servers or hard disks, rather than recordings on reels or tapes—while linear editing is tied to the need to sequentially view film or hear tape. with the use of non-linear editing systems, the destructive act of cutting of film negatives is eliminated.

Non-linear editing enables direct access to any video frame in a digital video clip, without needing to play or scrub/shuttle through adjacent footage to reach it.

Linear video editing is a video editing post-production process of selecting, arranging and modifying images and sound in a predetermined, ordered sequence. Regardless of whether it was captured by a video camera, tapeless camcorder, or recorded in a television studio on a video tape recorder (VTR) the content must be accessed sequentially.

EDITING MODES (ASSEMBLY MODE, INSERT MODE, ONLINE MODE)

Assembly mode

In assembly mode, each new shot (picture and sound)is connected to the end of the previous one, much as train carriages are coupled together, one after another. Each shot will follow on from the last one. This is the simplest form of editing, and so should be the one you start off with. Put your original tape in the play machine, your edit master tape in the record machine, and edit. However, your picture and both soundtracks are locked together.

Insert mode

In insert editing, we are able to do two additional things. We can insert a picture into the middle of an already recorded shot, and we can edit the soundtracks separate to the picture. We will now see how this works in practice.

Say you have a wide-angle shot of the old soldier on his sunny verandah, and it lasts for 25 seconds. You want to use the start and the end of the shot, but the middle is out of focus. You also have a shot of his medals hanging on the wall. With insert editing, you can put your medals picture into the middle 10 seconds of the wide shot, and keep the soundtrack (his voice) continuous throughout. Thus your scene will be:

Online Editing In some situations multiple cameras and other video sources are routed through a central mixing console and edited in real time. Live television coverage is an example of live editing.

Glossaries

¾" tape (U-matic)

—U-matic tape is a three-quarter inch format. It is fairly heavy-duty. A U-matic recorder can record video, time code, and two tracks of FM-radio quality audio. U-matic offers 350-400 lines resolution, but the quality tends to degrade quickly since it does not support separated recording. Time code can be on a separate track or VITC.

16:9 —The aspect ratio of wide-screen-format television.

2D (Two-dimensional)

—All television is by its nature 2-dimensional (the viewers' screens are flat), but the use of lighting, blocking and effects help to achieve a three dimensional look.

3 CCD

—This is a term used to describe a camera with three (as opposed to one) Charged Coupled Devices.

3D (three-dimensional)

—The world around up has 3 dimensions width, height, and depth. On a flat screen lighting, blocking and effects (e.g. spinning 3D animations).

4:3 —Aspect ratio of the NTSC television standard.

8mm —A compact videocassette format that uses magnetic tape and is eight millimeters wide. 8mm is a world-wide standard and offers high-quality recording and playback of video and audio.

A/B-roll linear editing —Recording edits from two video sources, such as two VCRs to a third, to achieve transition effects. See also, B-roll

Action axis —The action axis is an imaginary line drawn between two subjects or along a line of motion as an aid in maintaining continuity of screen direction. It is sometimes referred to as the "180-degree rule."

Active tense —Broadcasters usually write in active tense, rather than passive. Active tense sentences are shorter and use words more efficiently, and their meaning is more apparent. **After**

Analog —Information stored or transmitted as a continuously variable signal (as opposed to digital, in which the analogue signal is represented as a series of discreet values). Analogue is often technically the more accurate representation of the original signal, but

digital systems have numerous advantages which have tended to make them more popular.

Anchor —The anchor is typically the lead news personality. Some formats use two anchors holding equal status.

Aperture —Aperture literally means "opening". The camera iris; the opening which lets light through the lens.

A-roll —Unwanted visual distortions that appear in a video image, such as cross-color artifacts, cross-luminance artifacts, jitter, blocking, ghosts, etc.

Aspect ratio —The ratio of width to height of an image. Can be expressed as a number, or a relationship between two numbers. For example, the standard television screen ratio is 4:3 (4 units wide by 3 units high) or 1.33 (the width is 1.33 times the height). The new "wide screen" television ratio is 16:9 (1.78), and many new video cameras have the option to record using this format. Theatrical film aspect ratios vary, but the most common is 18.5:10 (1.85).

Assistant Director (AKA, AD) —The AD is the first Assistant Director, 1st Assistant Director. An assistant director's duties include tracking the progress of filming versus the production schedule.

Assistant Producer (AKA, AP) —The AP shares responsibility for stories and business of the production.

A-to-D converter —An electronic device that converts analog signals to digital. An A-to-D converter is an integral part of digital-video-related technology.

ATSC —Advanced Television Systems. Committee formed to establish technical standards HDTV and other U.S. digital television systems.

Audio Engineer —An audio engineer who performs the sound mix.

Auto-focus —Camera feature that uses an infrared (IR) beam or sonar to set its focus.

AV —Short for audio/video.

AVI —"Audio Video Interleaved". A common digital video format, in which the audio is interleaved as "packets", into the video frames.

Avid — Manufacturer of a popular non-linear editing system. Often used to refer to the system itself, as "AVID editor".

Back focus —The focus between the lens and the camera. Adjusted by a ring at the rear of the lens (the closest ring to the camera body). If the camera appears focused when zoomed in, but becomes out of focus when zoomed wide, the back focus needs adjusting.

Back light —A light which is positioned behind the subject. It's primary purpose is to make the subject stand out from the background by highlighting the subject's outline.

Bandwidth —A bandwidth is a range of frequencies. AM, FM, UHF, VHF, and 2.4GHz are all frequencies. Bandwidth is also a term used to describe available space on a network. The amount of data that can be passed through the wires that connect us to the Internet.

Balanced composition —Compositional balance is achieved when objects in the frame hold an appropriate amount of space.

Barn Doors —Metal projections attached to the front of a light, which can be positioned in various ways to control the dispersal of the light.

Betacam —A tape format and transportable combination camera and recording (camcorder) system developed by Sony and introduced in 1982. Betacam uses a variation of the Y, R-Y, B-Y analog component format.

Bit — **B**inary dig**it**. One piece of binary (digital) information. A description of one of two possible states (e.g. 0 or 1; off or on).

Black (blackburst) —Blacking a tape records an image with no luminance (or black) or sound, but containing the timecode. Blacking tapes prepares them for later use in editing.

Black balance —A camera function which gives a reference to true black. When auto-black balance is activated (by a switch, positioned with the white balance switch), the iris is automatically shut, and the camera adjusts itself to absolute black.

Blanking level —Blanking Level is also known as the pedestal, it is the voltage level produced at the end of each horizontal picture line which separates the portion of the video signal containing the picture information from the portion containing the synchronizing information. This voltage makes the electron beam "invisible" as it moves to draw the next visible line.

Bleeding —Video image imperfection characterized by blurring of color borders; colors spill over defined boundaries, "run" into neighboring areas.

Block —Programming is divided into blocks or areas between the breaks. A typical half-hour program would have 4 blocks.

Blue screen —A bright blue background used for chroma-keying. Weathermen everywhere do a nightly weathercast in front of a blue screen (green screens are also used).

Broadcast quality —A quality standard for composite video signals set by the NTSC and conforming to FCC rules. If you plan to record video signal or videotape for broadcast, it is important to note that devices providing NTSC signals do not necessarily meet FCC broadcast standards.

Bump —A piece of animation that is used either before or after a commercial break. It's called a bump-out leaving the show, and a bump-back upon returning.

Camcorder —A video camera with an attached recording device (deck).

Cameo lighting —The type of lighting that will only accentuate a specific performer and a few objects in the immediate background. For the most part, all other portions of the set are blackened.

Camera Operator (AKA: Cameraman) —The person who operates the camera to the specifications dictated by the production. A director or a director of photography sometimes may assume the role of camera direction in a production.

Capturing —Refers to capturing source video for use on a computer. If analog, the captured video is converted to digital.

Cardioid —Cardioid is the term used to describe a microphone that picks up sounds in a heart shaped pattern.

CCD —The image sensing device of video and television cameras -- the component which converts light from the lens into an electrical signal. Made up of pixels—the more pixels, the higher the resolution.

Chromakey —An electronic/computerized technique that allows for specific color elements (chroma) to be replaced with different picture elements. See also bluescreen and greenscreen.

Chrominance —Chroma, or color. In composite video signals, the chrominance component is separated from the luminance component, and is carried on a sub-carrier wave.

Close up (CU) —A shot in which the subject is larger than the frame, revealing much detail. The abbreviation is often used in a slug line.

Coaxial cable —Coaxial cables contain an insulated wire conductor wrapped in another conductor made of metal foil or mesh. Both conductors share the same axis; thus the name. They are used for cable TV transmission.

CODEC —Contraction of compression/decompression algorithm; used to encode and decode, or compress and decompress data, such as sound and video files.

Color bars —The pattern comprising eight equal-width color bars generated by an NTSC generator. The color bars are used for calibration and as a reference to check transmission paths, signal phase, recording and playback quality, and monitor alignment.

Color correction —The electronic altering of the coloring of a video image.

Composite video —A signal in which the luminance, chrominance, and sync information are combined into one signal using one of the coding standards (e.g., NTSC, PAL, or SECAM). The signal must take the form of composite video before it can be broadcast or recorded by standard means. Until recently, most monitors and projectors accepted only composite video signals, though many presently accept RGB signals. Contrast with component video.

Compositing —Compositing is the combining of two or more images into a single frame or display.

Composition —Composition is the thoughtful arrangement of elements in a frame. Many elements of composition come into play, simplicity, balance, rule of thirds, dynamic/active lines, etc.

Compression — The translation of audio or video data into a format that requires less storage space than the original data. See also, codec.

Condenser microphone —A microphone that generates an electrical signal when sound waves vary the spacing between two charged surfaces: the diaphragm and the back plate.

Contrast —The range of difference between the lightest and darkest values of a picture, or maximum and minimum brightness values.

Control room —The control room is the center of broadcast operations from which programming originates; air studio.

Cover shot —An establishing wide-angle or long shot of a set used both to establish the relationships between subject matter in a scene and to momentarily cover problems with lip sync or mismatched action.

Crawl —The movement of credits or other graphic material across the screen.

Crew —A team made up to create a media production.

Cue (stand-by, cue, wrap, speed up, stretch, 30 seconds, minutes) —A cue is a signal by the floor director given to someone on set.

Cut —An instantaneous transition from one shot to the next.

Depth of field —The zone between the nearest and furthest points at which the camera can obtain acceptable focus.

Director —The principle creative and motivating force in any production. The director communicates to the actors, guests, cameras, etc. how things should be done. Ultimately all products are team generated, but these teams are led by directors.

Dissolve —A transition in which one shot dissolves into the next.

Dolly —Any apparatus upon which a camera can be mounted, which can be moved around smoothly. Also used by the director to tell the camera operator to move the camera right or left (as opposed to panning, which is just turning the camera).

Dropped frames (drop out) —The area of a magnetic tape where information is missing. This will show up as glitches on playback. Drop-out may occur due to dust, lack of oxide, or other causes.

Dub —Copy of a recording; duplicate.

DV —DV is a quarter-inch tape format. There are actually three formats: MiniDV, the consumer format; DVCAM, the Sony format, and DVCPRO, the Panasonic format.

F-stop —Measurement of aperture. The higher the f-stop number, the smaller the aperture.

Face time —Face time is the amount of time someone is seen on camera.

Fade —A transition to or from "nothing". In audio, to or from silence. In video, usually to or from a color such as black.

Fall off —The gradual reduction in luminance from the screen center to the edges and corners.

Fill light —Supplementary illumination, usually from a floodlight positioned midway between camera and subject and about 45 degrees off center, which lightens or eliminates shadows created by key light (see three-point lighting).

Final Cut Pro —Prosumer grade digital video editing software built by and for Apple Computer.

Floor Director —The floor director makes sure talent is cued, and helps with equipment and props during taping/filming.

Floor plan — The two-dimensional ground plan which helps to define the stage or scene positions.

Frame rate —The number of video or film frames displayed each second (frames per second; fps). PAL frame rate is 25 fps, NTSC is 30 fps, film frame rate is 24 fps.

Fresnel —A spotlight with step-like concentric rings commonly used as a key light. The fresnel Named after the inventor of its lens.

Gels —Semi-transparent heat-resistant material which is placed in front of a light source in order to modify its color temperature or other characteristics.

Generation loss —Generation loss is used to describe the loss of quality in a recording when it is necessary to re-record the original for editing purposes.

Grip —Person who is responsible for constructing and dismantling film sets, as well as laying down dolly tracks.

Guest —A guest is someone brought into a production area to be interviewed.

Head room —The amount of space between the top of the subject's head and the

top of the picture frame.

HI8 —Hi8 is an eight millimeter tape format. Hi8, like SVHS, uses separated recording to achieve resolutions from 400-500 lines. However, the thin tape is fragile and can produce dropouts easily.

High key lighting —Lighting characterized by minimal shadows and a low key-to-fill ratio.

Iris —The circular opening (aperture) which controls the amount of light passing through to the camera's sensing element or film.

Kelvin —A unit of temperature measurement. Color is measured in degrees Kelvin.

Key —The replacing of part of one television image with video from another image.

Lavaliere microphone — A type of miniature microphone that is usually worn fastened to clothing somewhere near the user's mouth. Also referred to as a clip-on., lav, or lapel microphone. Can also be used in live sound to pick up the sound of various acoustic instruments.

Lens Flare —An anomaly caused by bright light entering the lens directly. Lens flare looks like light concentric circles in the shape of the aperture (iris).

Levels —The strength or amplitude of an audio or video signal.

Linear editing —As opposed to non-linear editing (random access), an editing approach that requires edits to be entered and done in the sequence required for the final edited version. Each segment has to be found, cued and then recorded in sequence, which necessitates the stopping of both tapes as each segment is located and cued.

Log —An operational document for broadcast operations, generally issued daily, which includes information such as program source or origin, scheduled program time, program title and other program-related information.

Low key lighting —Lighting characterized by a high key-to-fill ratio which results in predominant shadow areas. Typically used for night scenes in dramatic productions.

Luminance —Measure of brightness. The black-and-white aspect of a television signal. Also called the Y-signal.

Macro —Macro is a term applied to lenses (and lens settings) that allow focusing at points very near the lens.

Mini-DV —Mini-DV is a video format using very small video cameras and tapes.

Non-linear —Any method of video editing which doesn't require all shots to be assembled in a linear fashion. Avid, Premier, and Final Cut Pro are non-linear editing systems.

Nose room —Nose room refers to leaving space in front of a person in a shot.

Omni directional —Omni directional is a term applied to microphones meaning working in all directions.

Pan —Horizontal camera movement.

Pedestal —1. A movable mount for studio cameras. 2. The black level of a video signal.

Persistence of vision —Tendency of human vision to retain images for a fraction of a second. Discrete images presented at a rate of about 16 or more per second--even when

change takes place between them--blend together, creating the illusion of motion in TV and film.

POV (Point Of View) shot —A point of view shot tries to put the viewer in the drivers seat. Looking out at the action as an immediate participant.

Preview monitor (PVW) —The preview monitor shows the control room what is prepared to be on air next.

Progressive scanning —Progressive scanning is sequential scanning, or non-interlaced video scanning. A television scanning system in which each scanning line follows its predecessor in a progressive fashion, rather than skipping intermediate lines to be filled in by the next field.

Prompter —1. An electrical device for displaying a script that can be read by talent during a production. 2. Someone who operates a prompter device.

Props (property) —Something that is handled or used within a set by talent during a production.

Rack focus —Shifting camera focus from one part of a scene to another in a single shot, thereby forcing a shift in audience attention.

Reaction shot —A cut to performer's face that registers a response. Generally a close-up of someone reacting to the central dialogue or action.

Rear projection (RP) —Screen used for video effects onto which images are projected from the rear. When actors are photographed form the front, it appears as if they are part of the projected scene.

Reflectors —Reflectors are silver or bright white surface used to reflect light onto a subject. Generally used outside to soften and fill in the light from the sun.

Resolution (horizontal resolution) —The amount of detail in an image or signal.

RGB—Red, Green, and Blue are the primary colors of light used to form the image on television and computer screens.

Rule of thirds —Composition theory based on dividing the screen into thirds vertically and horizontally and placing the main subject along the resulting intersecting lines.

Saturation —The level of color in a vision signal. A highly-saturated signal has very strong colors.

Scrims —A spun-glass material placed over the front of a light to reduce intensity.

Set —The set is an environment used for filming/taping.

Silhouette —A silhouette is the effect in which the subject is rendered as a black shape without detail against a bright background.

Slug —The title/name of a story in a rundown.

Snoot —Open-ended cylindrical funnel mounted on a light source to project a narrow, concentrated circle of illumination.

Split screen —TV or computer screen electronically divided to show two or more images at once.

Spotlight —Lighting instrument that focuses its beam of light.

Teleprompter —Device which scrolls text on a screen, to provide cues for a television/video presenter.

Time code —A method of marking each individual frame on a tape. There are many different methods of time code. SMPTE/EBU time code uses a series of eight numbers identifying the hours, minutes, seconds and frames related to a specific video frame on a tape.

Traveling shot —A traveling shot is a moving camera shot.

Trim —To adjust the in and out points marginally to achieve tighter edits.

Tripod —A three-legged stand for mounting equipment such as a camera, etc.

Truck —A left or right movement of the camera along with its mount.

Turn —An on camera movement from one camera to a second. This movement is much easier to capture with two cameras, but some careful planning can allow a turn using a single camera.

Two shot —A picture showing two individuals.

UHF —UHF is Ultra High Frequency radio waves.

VCR —Video Cassette Recorder.

VHF —VHF stands for Very High Frequency. This is a popular television broadcast band. It is lower than

White balance —White balance is a camera function which gives a reference to "true white", in order for the camera to interpret all colors correctly.

Wide angle lens —A lens or a scene that represents an angle of view significantly wider than normal angle of view (about 47 degrees field of view). A wide-angle lens or shot is either a prime lens with a focal length significantly less (at least 25 percent less) than a normal lens, or a zoom lens used at a focal length significantly less than normal.

TELEVISION PRODUCTION – REV.BRO.JOHN THOMAS.G		
Pre Production	CINEMA	Creativity
Production		Technology
Post Production		Business

Film Language		
1	Direction	
		Story
		Screenplay
		Dialogue
2	Cinematography	Camera
		Lights
		Lenses
3	Editing	Transitions
4	Music	
		Songs
		Background Music – BGM
		Dubbing
		Mixing
5	Art Direction	
6	Choreography	
7	Stunt Direction	
8	Make Up	
9	Costumes	
10	Computer Graphics	

2. CAMERA TECHNIQUES – CINEMATOGRAPHY

1	SHOTS
2	ANGLES
3	MOVEMENTS
4	LENSES
5	LIGHTING

1. SHOTS

1	**Close Up Shot**	**CS**
2	Extreme Close Up	ECS
3	Tight Close Up	TCS
4	**Mid Shot**	**MS**
5	Mid Close Shot	MCS
6	Mid Long Shot or Knee Shot	MLS
7	**Long Shot**	**LS**
8	Full Shot	FS
9	Extreme Long Shot	ELS
10	Establishment Shot	ES
11	Suggestion Shot or Over the Shoulder Shot	SS or OSS
12	Right Profile Shot	
13	Left Profile Shot	
17	Point of View Shot	
18	Stop Block Shot	
19	Two Shot / Combined Shot	
20	Three Shot	
21	Reverse Shot	

2. ANGLES

1	Eye Level Angle	
2	Low Angle	
3	Worms Eye View	
4	High Angle	
5	Top Angle	
6	Birds Eye View	
7	Dutch Angle	

3. MOVEMENTS		
	MOVEMENT OF CAMERA	
	MOVEMENT OF SUBJECT	
	MOVEMENT OF SUBJECT AND CAMERA	
1	Right Pan	
2	Left Pan	
3	Tilt Up	
4	Tilt Down	
5	Zoom In	
6	Zoom Out	
7	Trolley Forward – Trolley in	
8	Trolley Backward – Trolley Out	
9	Round Trolley	
10	Dolly Shot	
11	Crane Shots	
12	Crane With Arm – Computer Control Shots	
13	Handheld Camera Shots	
14	Steady Cam	
15	Fast Forward	
16	Rewind	
17	Ramping	
18	Follow Backward	
19	Follow Forward	
20	Subject and Camera going Opposite	
21	Under the Subject	
22	Subject going Left to the Camera	
23	Subject going Right to the Camera	
24	Subject going out of the Camera	
25	Subject Crossing Right to Left	
26	Subject Crossing Left to Right	
27	Swish Pan	

4. LENSES		
1	Extreme Wide Angle Lens	21 mm
2	Wide Angle Lens	21-35 mm
3	Normal Lens	35-70 mm
4	Medium Telephoto Lens	70-135 mm
5	Telephoto Lens	135-300mm
6	Zoom Lens	
7	Fish Eye Lens	
8	Shift of Focus	

5. LIGHTING		
1	Key Light	
2	Fill Light	
3	Back Light	
4	Background Light	
5	High Key Lighting	
6	Flood Lighting	
7	Cameo Lighting	
8	Mood Lighting	
9	Rembrandt Light	
10	Low Key Lighting	
11	Stage Lighting	
12	Soft Lighting	

3. EDITING TECHNIQUES		
1	*Cross Cutting*	
2	*Cut Away*	
3	*Fast Cutting*	
4	*Insert*	
5	*Jump Cut*	
6	*Match Cut*	
7	*Dissolve*	
8	*Fade*	
9	*Wipe*	
10	*Spilt Screen*	
11	*Montage*	
12	*Flash Back*	
13	*Reverse Shot*	
14		
15		

FILM LANGUAGE

Rev.Bro.John Thomas.G

Pre Production CINEMA Creativity
Production Technology
Post Production Business

Film Language

1 Direction
- Story
- Screenplay
- Dialogue

2 Cinematography
- Camera
- Lights
- Lenses

3 Editing
- Cuts
- Transitions

4 Music
- Songs
- Background Music – BGM
- Dubbing
- Mixing

5 Art Direction

6 Choreography

7 Stunt Direction

8 Make Up

9 Costumes

10 Computer Graphics

2. CAMERA TECHNIQUES – CINEMATOGRAPHY

1 SHOTS
2 ANGLES
3 MOVEMENTS
4 LENSES
5 LIGHTING

1. SHOTS

1	Close Up Shot	CS
2	Extreme Close Up	ECS
3	Tight Close Up	TCS
4	Mid Shot	MS
5	Mid Close Shot	MCS
6	Mid Long Shot or Knee Shot	MLS
7	Long Shot	LS
8	Full Shot	FS
9	Extreme Long Shot	ELS
10	Establishment Shot	ES
11	Suggestion Shot or Over the Shoulder Shot	SS or OSS
12	Right Profile Shot	
13	Left Profile Shot	
17	Point of View Shot	
18	Stop Block Shot	
19	Two Shot / Combined Shot	
20	Three Shot	
21	Reverse Shot	

2. ANGLES

1 Eye Level Angle
2 Low Angle
3 Worms Eye View
4 High Angle
5 Top Angle
6 Birds Eye View
7 Dutch Angle

3. MOVEMENTS

MOVEMENT OF CAMERA
MOVEMENT OF SUBJECT
MOVEMENT OF SUBJECT AND CAMERA

1 Right Pan
2 Left Pan
3 Tilt Up
4 Tilt Down
5 Zoom In
6 Zoom Out
7 Trolley Forward – Trolley in
8 Trolley Backward – Trolley Out
9 Round Trolley
10 Dolly Shot
11 Crane Shots
12 Crane with Arm – Computer Control Shots
13 Handheld Camera Shots
14 Steady Cam
15 Fast Forward
16 Rewind
17 Ramping
18 Follow Backward
19 Follow Forward
20 Subject and Camera going Opposite
21 Under the Subject
22 Subject going Left to the Camera
23 Subject going Right to the Camera
24 Subject going out of the Camera
25 Subject Crossing Right to Left
26 Subject Crossing Left to Right
27 Swish Pan

4. LENSES

1 Extreme Wide Angle Lens 21 mm
2 Wide Angle Lens 21-35 mm
3 Normal Lens 35-70 mm
4 Medium Telephoto Lens 70-135 mm
5 Telephoto Lens 135-300mm
6 Zoom Lens
7 Fish Eye Lens

8 Shift of Focus

5. LIGHTING

1 Key Light
2 Fill Light
3 Back Light
4 Background Light
5 High Key Lighting
6 Flood Lighting
7 Cameo Lighting
8 Mood Lighting
9 Rembrandt Light
10 Low Key Lighting
11 Stage Lighting
12 Soft Lighting

3. EDITING TECHNIQUES

1 Cross Cutting
2 Cut Away
3 Fast Cutting
4 Insert
5 Jump Cut
6 Match Cut
7 Dissolve
8 Fade
9 Wipe
10 Spilt Screen
11 Montage
12 Flash Back
13 Reverse Shot

https://www.google.co.in/books/edition/Television_Production/NsajCwAAQBAJ?hl=en&gbpv=1&dq=television%20production%20handbook%20pdf%20free%20download&pg=PP18&printsec=frontcover

Introduction to TV Production

- TV System
- Four Stages of Production
- Staff and Crew
- Producing for Television

Television System

NTSC Standard

(National Television Standards Committee)

- **Standard for U.S., Japan, and Korea**
- **4 X 3 Aspect Ratio**
- **525 Lines**
- **30 Frames Per Second**
- **Scanned in "Fields"**

PAL System

(Phase Alternating Line)

- Another World Television Standard
- 4 X 3 Aspect Ratio
- 625 Lines
- 25 Frames Per Second
- Scanned in "Fields"
- There are Slight Variations: PAL-B, -G, -H, -N
- Used in Continental Europe and Parts of Africa, Middle East & So. America
- More Lines = Better Resolution
- Fewer Frames/Fields = More "Flicker"

SECAM System

(Sequential Color and Memory)

- Another World Television Standard
- 4 X 3 Aspect Ratio
- 625 Lines
- 25 Frames Per Second
- Scanned in "Fields“
- Used in France, Eastern Europe and Parts of the Middle East & Africa
- More Lines = Better Resolution
- Fewer Frames/Fields = More "Flicker"

HDTV System (High Definition Television)

- 16 X 9 Aspect Ratio
- A **Digital** System
- Permits Several Levels of Picture Resolution Similar to that of High-Quality Computer Monitors, With 720 or 1080 Lines (1280 x 720 pixels or 1920 x 1080 pixels)
- Ranges from 24 to 60 frames per second, progressive or interlaced scan
- Uses MPEG-2 Compression to squeeze a 19 megabit-per-second data flow so that it can be accommodated by a standard broadcast TV channel of 6 MHz bandwidth
- 5.1 Channels of Dolby AC-3 Digital Surround-Sound Audio

Four Stage of Television Production

(1) Preproduction

(2) Setup & Rehearsal

(3) Production

(4) Postproduction

Four Stage of Television Production

1. Preproduction

- A very essential stage for a successful show
- Research and concept development
- Script
- Initial meeting of key members

2. Setup and Rehearsal

- Setup for studio and control room
- Rehearsal
  - Out of studio and in-studio rehearsal
  - Monitoring and revision of script
  - Dress rehearsal

Four Stage of Television Production

3. Production

- **Live**
  - **The final phase of the production**
  - **News program, sports coverage**
- **Videotaping for Editing**
  - **Taping in segments for later editing**
  - **Drama, advertising & PSA**
- **Striking the Set**

  : The equipment and set is usually removed and the studio or location returned to its original condition

Four Stage of Television Production

4. Postproduction

- **Creative control**
  - **Selection of shots**
  - **Juxtaposition**
- **Special effects and graphics**
  - **Computer technology: Non-linear editing**
- **Audio**
  - **Enhancement and modification or addition**

The Television Team

- Production Staff
  - PD, DIR, AD, PA
- Production Crew
  - TD, AUD, FM, FA, CAM, CG, LD, SET, TAL
- Golden Rule

“Try to be a good crew person for your fellow classmates when they direct, just as you will most certainly want them to be a good crew for you when you direct.”

Producer

Pre-Production	▫ **Develop program concept & program budget** ▫ **Assign program's director** ▫ **Work with writer on script**
Setup & Rehearsal	▫ **Supervise overall production activities** ▫ **Keep production moving on time and within budget** ▫ **Approve last-minute changes as they arise**
Production	▫ **Help director as needed**
Post-Production	▫ **Approve final edited version** ▫ **Coordinate with station for promotion/publicity**

Director

Pre-Production	▫ **Work with producer and writer on script** ▫ **Cast performers** ▫ **Work out camera shots** ▫ **Consult with LD, SET, AUD, TD and approve all details**
Setup & Rehearsal	▫ **Rehearse performers** ▫ **Rehearse camera shots in studio** ▫ **Integrate all production elements into a coordinated show**
Production	▫ **Execute production**
Post-Production	▫ **Supervise editing**

Staff and Crew in Production

AD	▫ **Assist director by readying camera shots and other cues** ▫ **Keep track of program timing** ▫ **Roll in film or videotape segments**
TD	**Operate production switcher**
AUD	**Operate audio control console to mix program audio**
FM	**Relay all cues to talent**
CAM	**Operate cameras during the production**
CG	**Operate the character generator and electronic graphics**

Producing for Television

Producers

- Staff Producers

These are regular employees of a network, station, or production company who are responsible for developing and supervising program production. They are usually assigned to a specific division, or in the local level, working on a wide variety of shows.

- Independent Producers

Independent producers are entrepreneurs who sell programming to network and stations. They assemble a creative “package,” which consists of the program idea, the script, the director, the performers, and the production team.

They are responsible for almost all network and syndicated entertainment shows.

Producers - Creative Aspects

A producer must be a creative individual – someone with a broad and varied background who is conscious of the world around him or her, sensitive to events, and able to undertake different responsibilities and varied program assignments. The producer must create a vision of the show – how it should look, how it should sound, and how it should communicate its message. To do this, the producer must move through a series of program-development steps.

- **To develop a program idea.**
- **To begin background research.**
- **To analyze its audience.**

Producers - Organizational Aspects

Television is a complicated and technical medium that demands an efficient organizer to coordinate hundreds of different details.

- **The Program Proposal**

This is a brief outline of the proposed program that is used by program executives in deciding whether or not to authorize you to begin production.

  - a description of the basic show idea *(concept* or *premise)*
  - format
  - Hook :some information which will help to sell the idea as unique

The Production Book

The production book is a blueprint of the entire production process, and it offers in minute detail who, what, when, where, and how of a production.

- treatment
- shooting script
- staff and crew (including contracts)
- complete budget information
- schedules
- memos and meeting notes
- lighting plot and set design plan

Producers - Business Aspects

The producer organizes a creative idea within financial constraints. Among the business aspects of the producer's role are **(1) creating budgets**, **(2) selling the ideas**, and **(3) understanding contractual obligations**.

The producer's roles

- **Developing an idea and analyzing audience.**
- **Researching the idea and production feasibility.**
- **Determining the production mode.**
- **Developing the program outline.**
- **Preparing the program budget.**

Question to ask as a Producer

- Who is target audience?
- Why should audience watch?
- When should audience watch?
- How long should program be?
- How should program be produced?
- What are the production costs?
- Is the idea doable?
- Can you sell the idea?
- How will you know if you've succeeded?

Chapter 13

Art Direction and Production

Art Direction and Production

The Evolution from Words to Pictures

- Improved technology
- Advantages of visuals over text
- Brand images are build better with visuals
- Visuals can be protected legally
- Visuals are more portable than words across cultures
- Visuals allow placing the brand in a social context

Illustration

Definition:

- The actual drawing, painting, photography, or computer-generated art in the ad.

Purposes:

- Attract attention of the target audience
- Make the brand heroic
- Communicate product features or benefits
- Create a mood, feeling, or image
- Stimulate reading of the body copy
- Create the desired social context for the brand

Illustration Components

Size

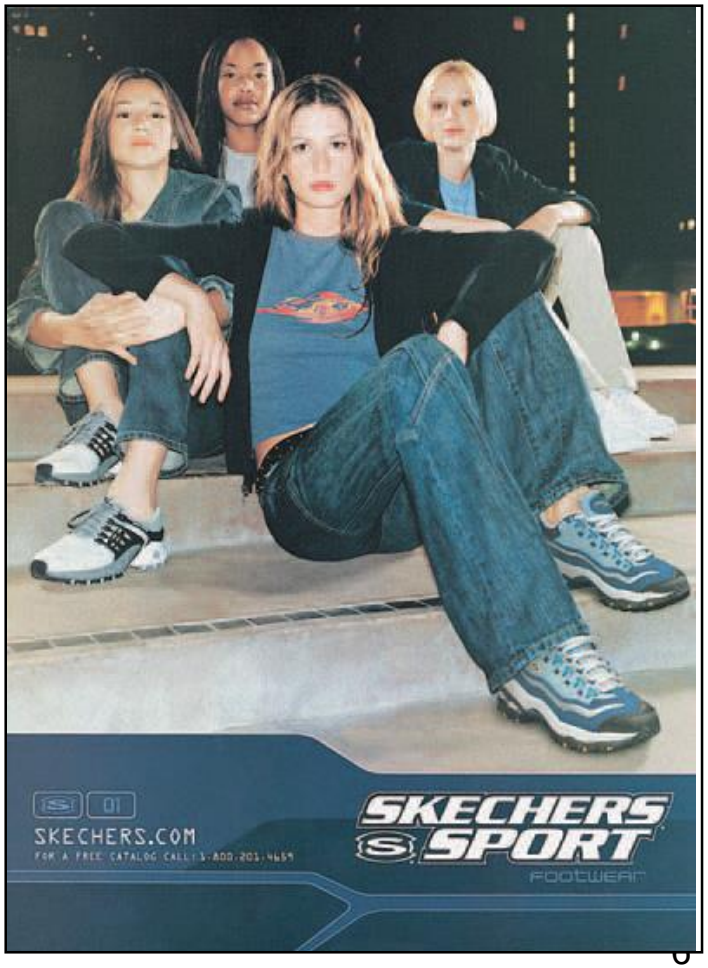
Color

Illustration Formats

- How the product or brand will appear as part of the illustration
- Formats include:
  - Emphasizing the social context or meaning of the product
  - More abstract formats
- Must be consistent with the copy strategy

Ad in Context Example

Illustrations can place the brand in a social context.



Strategic and Creative Impact of Illustration

- Attracts attention of target segment and stimulates information processing
- Communicates brand value relative to target's decision making criteria
- Visually presents the creative strategy
- Creates a mood for the brand
- Creates an image for the brand
- Makes concrete the values and benefits of the brand that may be intangible

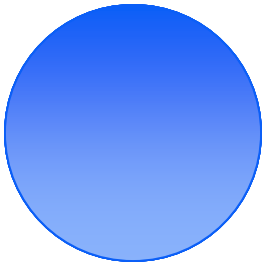
Design

- The structure (and plan behind the structure) for the aesthetic and stylistic aspects of a print advertisement.

Principles of Design

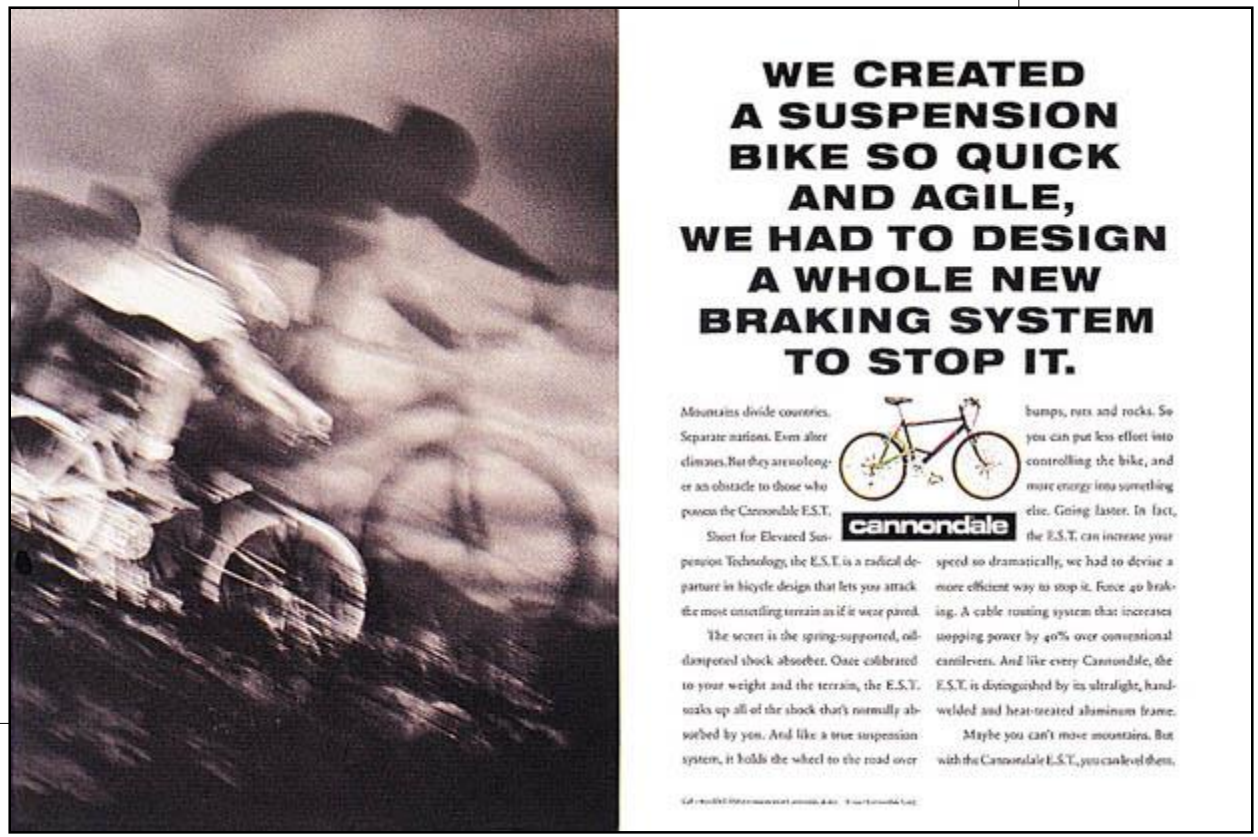
Balance

(Formal)



Ad in Context Example

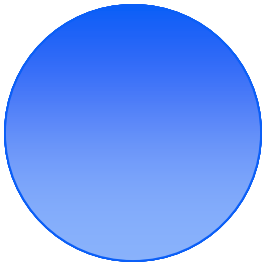
Formal balance can create a very orderly look and feel.



Principles of Design

Balance

(Informal)

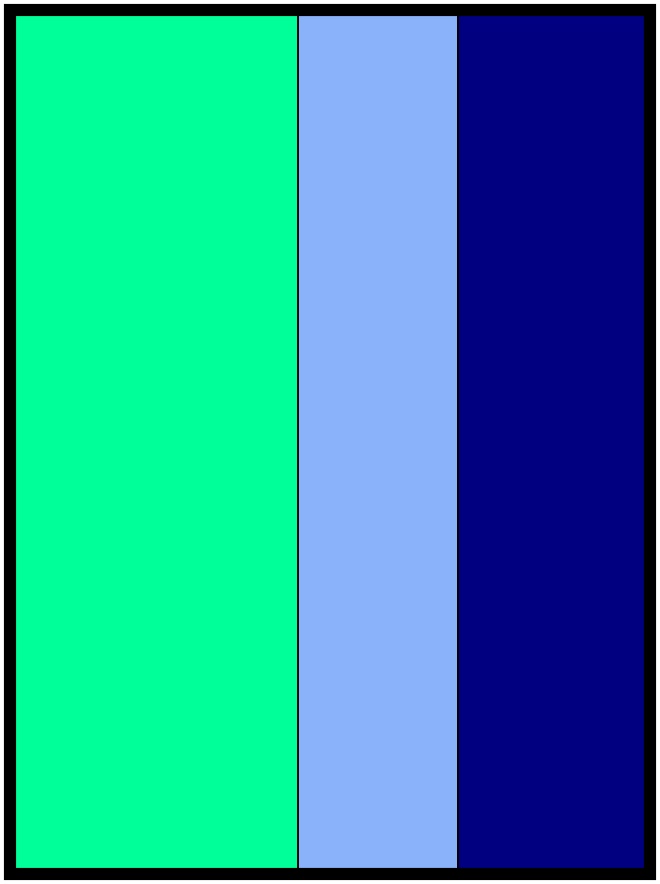


Ad in Context Example

Informal balance can create desired eye movement through an ad.

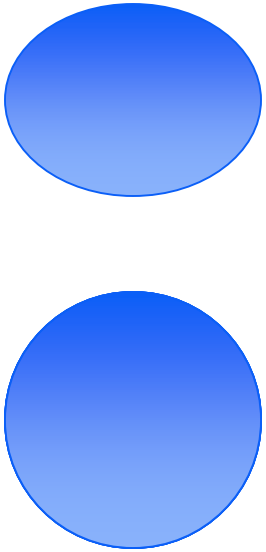
Principles of Design

Proportion



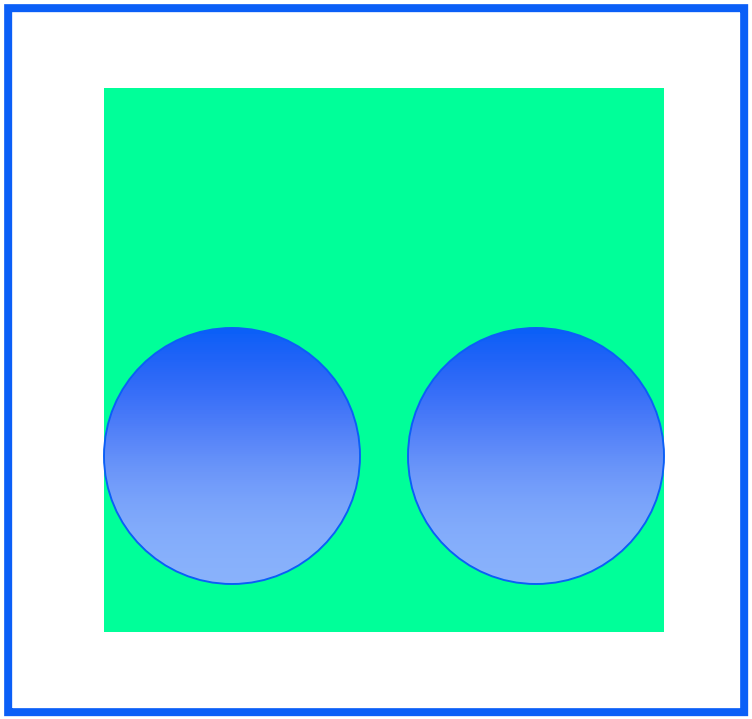
Principles of Design

Order



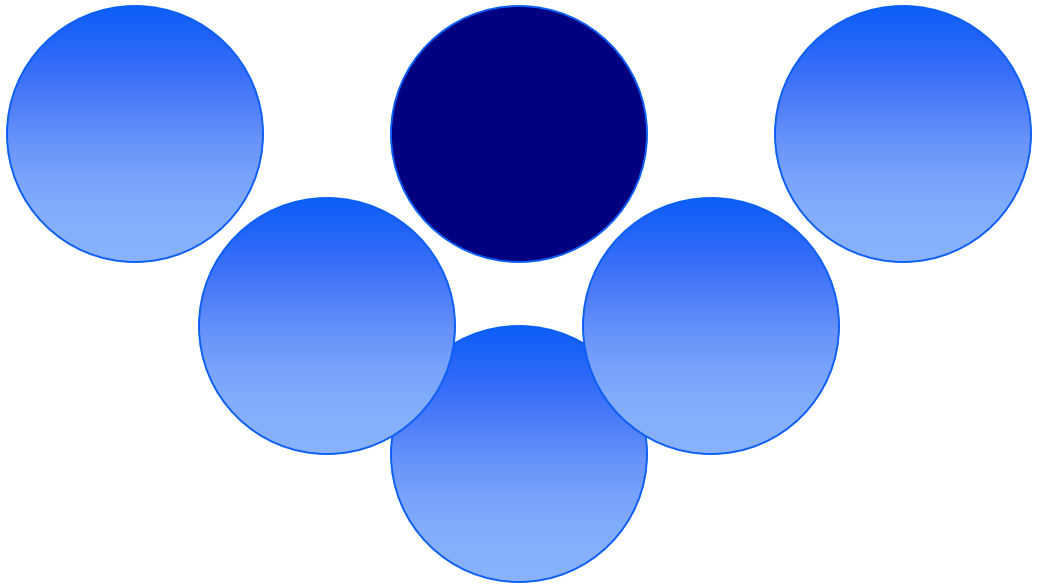
Principles of Design

Unity



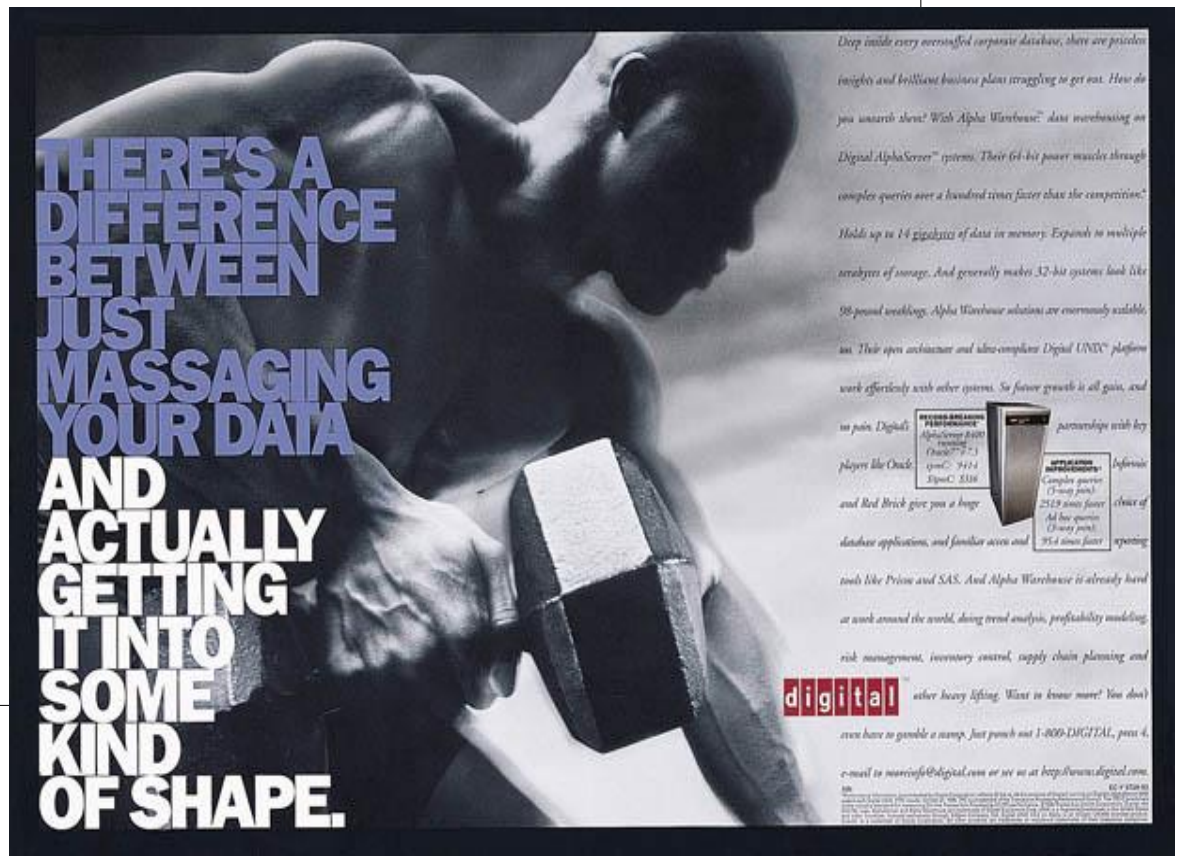
Principles of Design

Emphasis

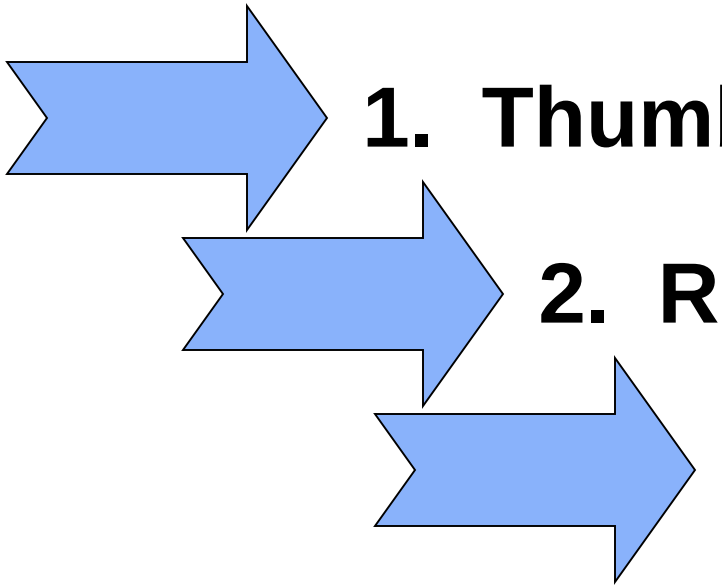


Ad in Context Example

Emphasis in an ad will lead the reader to focus on one layout element more than another.



Layout



1. Thumbnails
2. Rough layout
3. Comprehensive
4. Mechanicals

Print Production Processes

- Letterpress
- Offset lithography
- Gravure
- Flexography
- Electronic, laser, and inkjet
- Computer print production

Typography


Blackletter type
Script type
Sans serif type
Serif type
Roman type
Miscellaneous Type

Art Direction and Production in Cyberspace

- Cyberspace is its own medium
- The audience is not passive
- At present, it is closer to print than TV
  - Streaming and RSS are improvements
- Revision can be done instantaneously
- Persuasive content versus entertainment is a challenge
- Consumer generated content (CGC) is making its way into cyberspace (YouTube)

Art Direction in Television Advertising

- TV has changed the face of advertising
- TV is about moving visuals
- It can leave impressions, set moods, tell stories
- It can get consumers to notice the brand
- TV production is complex, with many people and requires tremendous organizational skills

The Creative Team in Television Advertising

Agency Participants:

- Creative Director (CD)
- Art Director (AD)
- Copywriter
- Account Executive (AE)
- Executive Producer
- Producer

Production Company Participants:

- Director
- Producer
- Production Manager
- Camera Department
- Art Department
- Editors

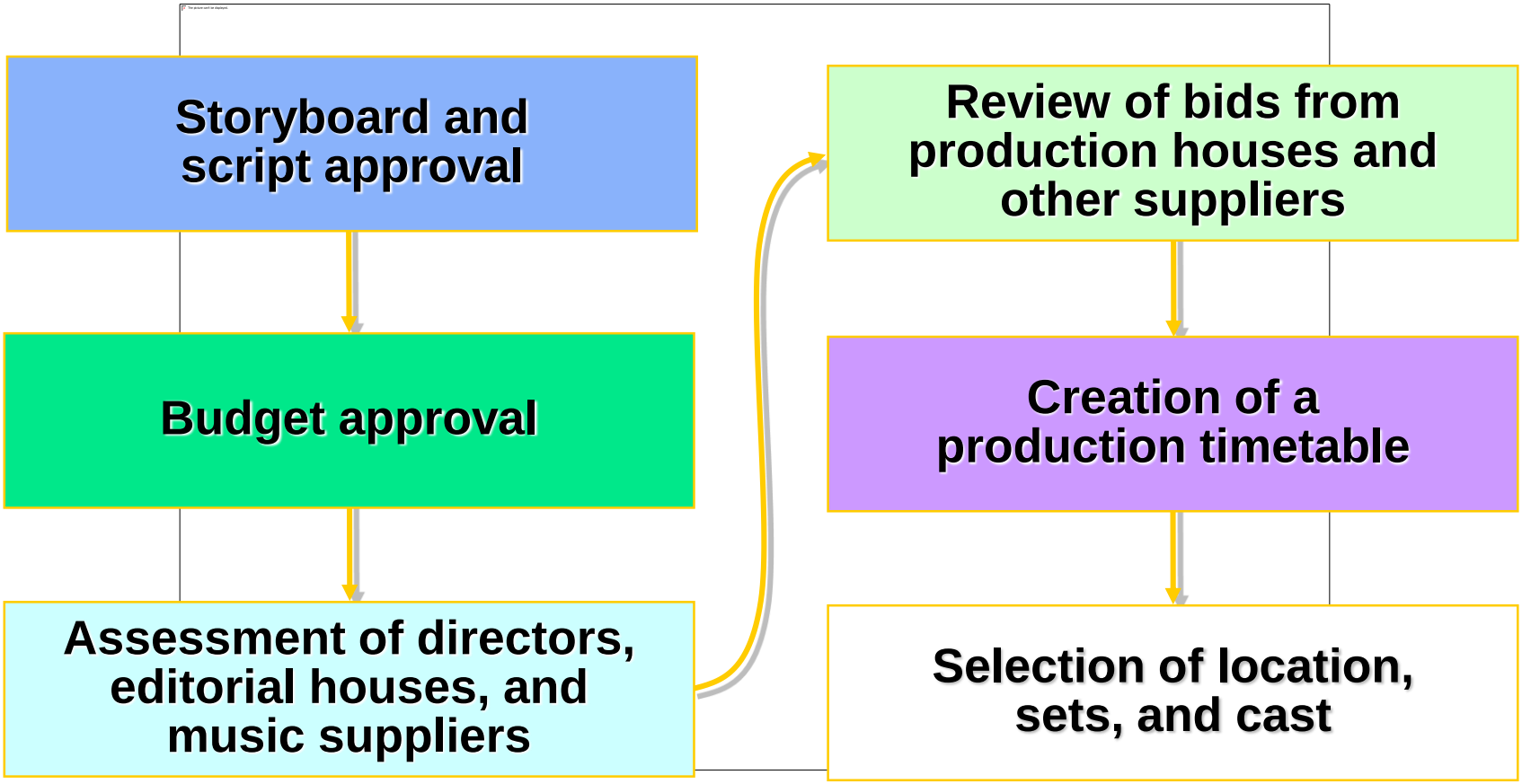
Creative Guidelines for TV Advertising

- Use an attention-getting opening
- Emphasize the visual
- Coordinate the audio with the visual
- Persuade as well as entertain
- Show the product

Production Process for TV Advertising

- Preproduction
  - Multiple activities that occur prior to filming the commercial
- Production (shoot)
  - Activities that occur during filming
- Postproduction
  - Activities that occur after filming to ready the commercial

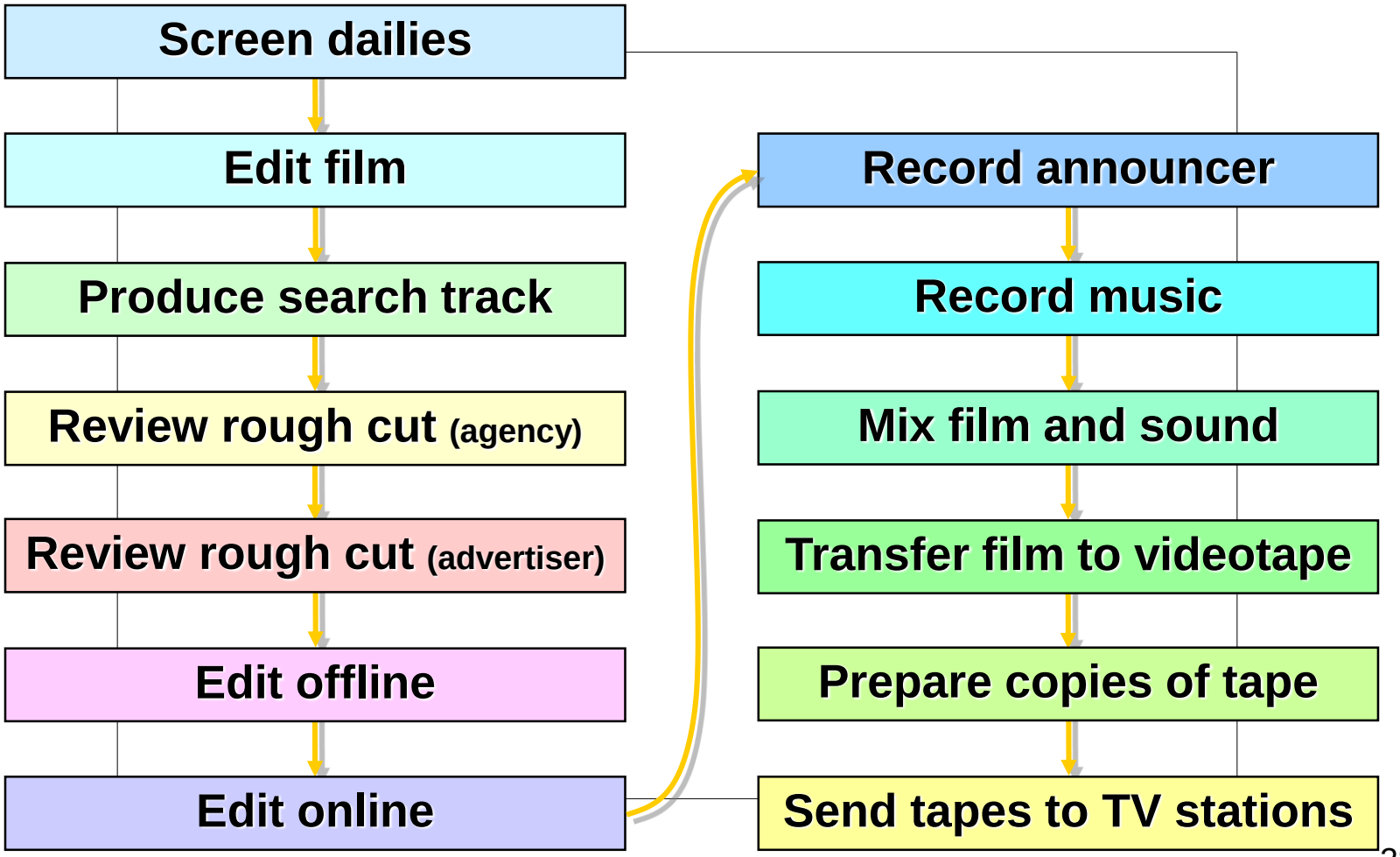
Preproduction Process for TV Advertising



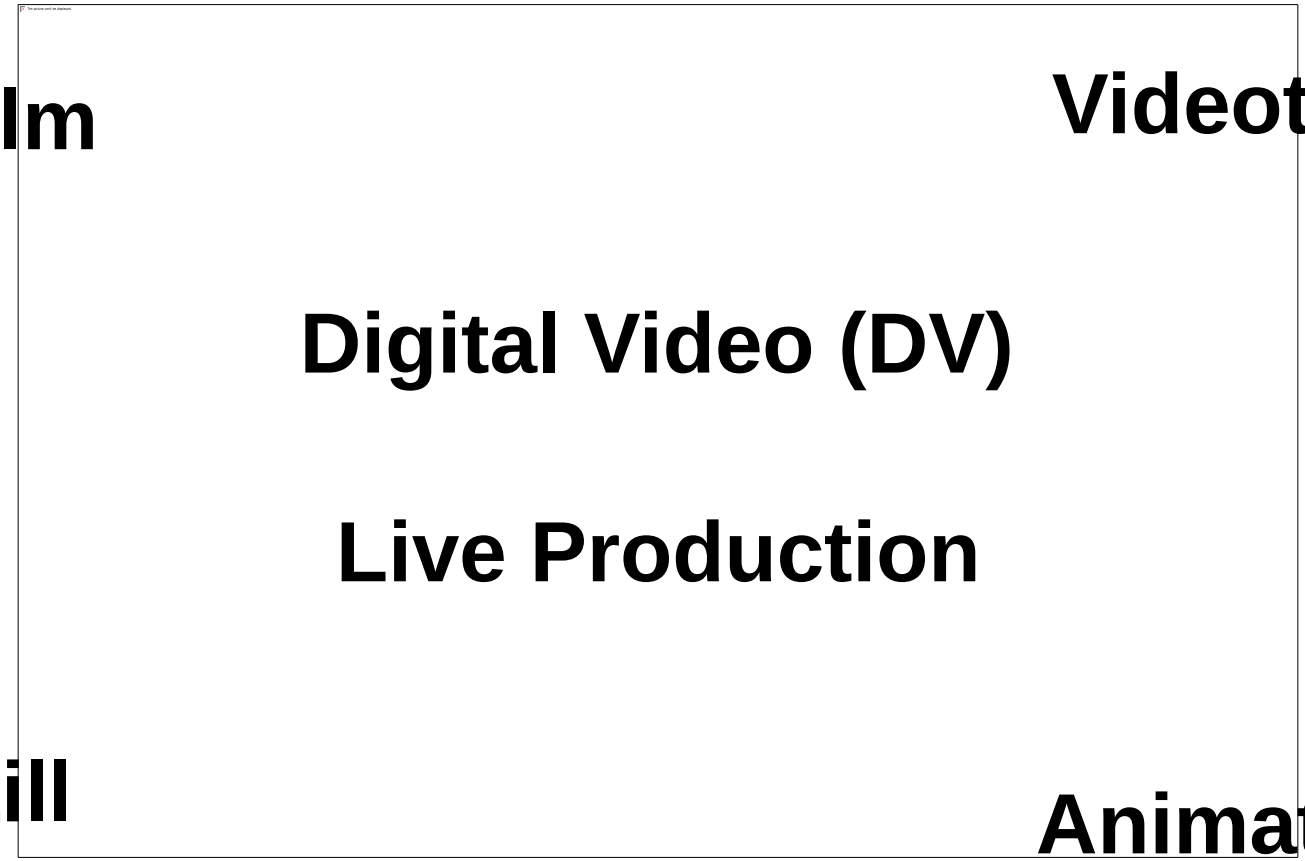
Production Process:

- Filming the commercial, or “the shoot”
- The shoot involves large numbers of diverse people:
  - Creative performers
  - Trained technicians
  - Skilled laborers
- Sets often feature tension and spontaneity
- Typical commercial costs $100,000 to $500,000

Postproduction Process



TV Production Options



Film

Videotape

Digital Video (DV)

Live Production

Still Production

Animation

TELEVISION PRODUCTION – REV.BRO.JOHN THOMAS.G		
Pre Production	CINEMA	Creativity
Production		Technology
Post Production		Business

Film Language		
1	Direction	
		Story
		Screenplay
		Dialogue
2	Cinematography	Camera
		Lights
		Lenses
3	Editing	Transitions
4	Music	
		Songs
		Background Music – BGM
		Dubbing
		Mixing
5	Art Direction	
6	Choreography	
7	Stunt Direction	
8	Make Up	
9	Costumes	
10	Computer Graphics	

2. CAMERA TECHNIQUES – CINEMATOGRAPHY

1	SHOTS
2	ANGLES
3	MOVEMENTS
4	LENSES
5	LIGHTING

1. SHOTS

1	**Close Up Shot**	**CS**
2	Extreme Close Up	ECS
3	Tight Close Up	TCS
4	**Mid Shot**	**MS**
5	Mid Close Shot	MCS
6	Mid Long Shot or Knee Shot	MLS
7	**Long Shot**	**LS**
8	Full Shot	FS
9	Extreme Long Shot	ELS
10	Establishment Shot	ES
11	Suggestion Shot or Over the Shoulder Shot	SS or OSS
12	Right Profile Shot	
13	Left Profile Shot	
17	Point of View Shot	
18	Stop Block Shot	
19	Two Shot / Combined Shot	
20	Three Shot	
21	Reverse Shot	

2. ANGLES

1	Eye Level Angle	
2	Low Angle	
3	Worms Eye View	
4	High Angle	
5	Top Angle	
6	Birds Eye View	
7	Dutch Angle	

3. MOVEMENTS		
	MOVEMENT OF CAMERA	
	MOVEMENT OF SUBJECT	
	MOVEMENT OF SUBJECT AND CAMERA	
1	Right Pan	
2	Left Pan	
3	Tilt Up	
4	Tilt Down	
5	Zoom In	
6	Zoom Out	
7	Trolley Forward – Trolley in	
8	Trolley Backward – Trolley Out	
9	Round Trolley	
10	Dolly Shot	
11	Crane Shots	
12	Crane With Arm – Computer Control Shots	
13	Handheld Camera Shots	
14	Steady Cam	
15	Fast Forward	
16	Rewind	
17	Ramping	
18	Follow Backward	
19	Follow Forward	
20	Subject and Camera going Opposite	
21	Under the Subject	
22	Subject going Left to the Camera	
23	Subject going Right to the Camera	
24	Subject going out of the Camera	
25	Subject Crossing Right to Left	
26	Subject Crossing Left to Right	
27	Swish Pan	

4. LENSES		
1	Extreme Wide Angle Lens	21 mm
2	Wide Angle Lens	21-35 mm
3	Normal Lens	35-70 mm
4	Medium Telephoto Lens	70-135 mm
5	Telephoto Lens	135-300mm
6	Zoom Lens	
7	Fish Eye Lens	
8	Shift of Focus	

5. LIGHTING		
1	Key Light	
2	Fill Light	
3	Back Light	
4	Background Light	
5	High Key Lighting	
6	Flood Lighting	
7	Cameo Lighting	
8	Mood Lighting	
9	Rembrandt Light	
10	Low Key Lighting	
11	Stage Lighting	
12	Soft Lighting	

3. EDITING TECHNIQUES		
1	*Cross Cutting*	
2	*Cut Away*	
3	*Fast Cutting*	
4	*Insert*	
5	*Jump Cut*	
6	*Match Cut*	
7	*Dissolve*	
8	*Fade*	
9	*Wipe*	
10	*Spilt Screen*	
11	*Montage*	
12	*Flash Back*	
13	*Reverse Shot*	
14		
15		

FILM LANGUAGE

Rev.Bro.John Thomas.G

Pre Production CINEMA Creativity
Production Technology
Post Production Business

Film Language

1 Direction
- Story
- Screenplay
- Dialogue

2 Cinematography
- Camera
- Lights
- Lenses

3 Editing
- Cuts
- Transitions

4 Music
- Songs
- Background Music – BGM
- Dubbing
- Mixing

5 Art Direction

6 Choreography

7 Stunt Direction

8 Make Up

9 Costumes

10 Computer Graphics

2. CAMERA TECHNIQUES – CINEMATOGRAPHY

1 SHOTS
2 ANGLES
3 MOVEMENTS
4 LENSES
5 LIGHTING

1. SHOTS

1	Close Up Shot	CS
2	Extreme Close Up	ECS
3	Tight Close Up	TCS
4	Mid Shot	MS
5	Mid Close Shot	MCS
6	Mid Long Shot or Knee Shot	MLS
7	Long Shot	LS
8	Full Shot	FS
9	Extreme Long Shot	ELS
10	Establishment Shot	ES
11	Suggestion Shot or Over the Shoulder Shot	SS or OSS
12	Right Profile Shot	
13	Left Profile Shot	
17	Point of View Shot	
18	Stop Block Shot	
19	Two Shot / Combined Shot	
20	Three Shot	
21	Reverse Shot	

2. ANGLES

1 Eye Level Angle
2 Low Angle
3 Worms Eye View
4 High Angle
5 Top Angle
6 Birds Eye View
7 Dutch Angle

3. MOVEMENTS

MOVEMENT OF CAMERA
MOVEMENT OF SUBJECT
MOVEMENT OF SUBJECT AND CAMERA

1 Right Pan
2 Left Pan
3 Tilt Up
4 Tilt Down
5 Zoom In
6 Zoom Out
7 Trolley Forward – Trolley in
8 Trolley Backward – Trolley Out
9 Round Trolley
10 Dolly Shot
11 Crane Shots
12 Crane with Arm – Computer Control Shots
13 Handheld Camera Shots
14 Steady Cam
15 Fast Forward
16 Rewind
17 Ramping
18 Follow Backward
19 Follow Forward
20 Subject and Camera going Opposite
21 Under the Subject
22 Subject going Left to the Camera
23 Subject going Right to the Camera
24 Subject going out of the Camera
25 Subject Crossing Right to Left
26 Subject Crossing Left to Right
27 Swish Pan

4. LENSES

1 Extreme Wide Angle Lens 21 mm
2 Wide Angle Lens 21-35 mm
3 Normal Lens 35-70 mm
4 Medium Telephoto Lens 70-135 mm
5 Telephoto Lens 135-300mm
6 Zoom Lens
7 Fish Eye Lens

8 Shift of Focus

5. LIGHTING

1 Key Light
2 Fill Light
3 Back Light
4 Background Light
5 High Key Lighting
6 Flood Lighting
7 Cameo Lighting
8 Mood Lighting
9 Rembrandt Light
10 Low Key Lighting
11 Stage Lighting
12 Soft Lighting

3. EDITING TECHNIQUES

1 Cross Cutting
2 Cut Away
3 Fast Cutting
4 Insert
5 Jump Cut
6 Match Cut
7 Dissolve
8 Fade
9 Wipe
10 Spilt Screen
11 Montage
12 Flash Back
13 Reverse Shot

https://www.google.co.in/books/edition/Television_Production/NsajCwAAQBAJ?hl=en&gbpv=1&dq=television%20production%20handbook%20pdf%20free%20download&pg=PP18&printsec=frontcover

FILM CREW

The Film Crew ... a typical crew engaged in a feature production.

PRE-PRODUCTION

During a feature production, a number of key people are brought into the project. The key roles and responsibilities include the following.

The creative stage of pre-production begins with the **Screenwriter.** A Screenwriter creates a screenplay (a written version of a movie before it is filmed) either based on previously written material, such as a book or a play, or as an original work. A Screenwriter may write a screenplay on speculation, then try to sell it, or the Screenwriter may be hired by a Producer or studio to write a screenplay to given specifications. Screenplays are often rewritten, and it's not uncommon for more than one Screenwriter to work on a script.

A **Producer** is given control over the entire production of a motion picture and is ultimately held responsible for the success or failure of the motion picture project; this person is involved with the project from start to finish. The Producer's task is to organize and guide the project into a successful motion picture. The Producer would be the person who accepts the Academy Award for best picture, should the movie win one. The Producer organizes the development of the film, and is thus quite active in the pre-production phase. Once production (filming) begins, generally the role of the Producer is to supervise and give suggestions—suggestions that must be taken seriously by those creating the film. However, some Producers play a key role throughout the entire production process.

The **Director** interprets the script and unifies the components of the film into something that bears his or her signature. This individual is like an orchestra conductor. The Director must be able to lead and control people, have them do what he or she wants them to do, yet remain on good terms. While in production, the Director not only oversees actors, but also advises the Director of Photography, instructs the major technical people, administrates the flow of people, consults on budgets, and deals with outside pressures. The Director is ultimately responsible for what happens on the set.

The **Director of Photography** (also **DP, DOP,** or **Cinematographer**) is responsible for the quality of the photography and the cinematic look of the film. The Director of Photography transforms the Screenwriter's and Director's concepts into visual images. Using his or her knowledge of lighting, lenses, cameras, and film emulsions, the Director of Photography creates the appropriate mood, atmosphere, and visual style of each shot to evoke the emotions that the Director desires. Working closely with the Director, the Director of Photography determines the camera angles, shot composition, and camera movement for every shot. The Director of Photography then decides upon the lighting equipment and the type and number of cameras that will be required for shooting. The Director of Photography orders the lights and cameras to be set up in such a way to attain the desired effect.

The creative side of pre-production includes "conceptualization." During this on-going process, a **Concept Artist** designs, plans, and sketches what the film will look like. The Concept Artist prepares the storyboard—a series of sketches that are used to visually illustrate the script. The sketches depict the key shots in the scripted scenes, including the framing, camera angle, blocking, character movement, as well as basic props and sets. During conceptualization, the Concept Artist also envisions and designs sets, characters, and costumes. Concept Artists often produce many thumbnail (small) sketches of different versions of objects or characters that are to appear in the intended film. The Concept Artist works closely with the Director, Producer, Director of Photography, and the entire art department.

The **Executive Producer** secures financing for a film. This person usually oversees business aspects but often has little actual involvement with the day-to-day operations of the filmmaking.

While the creative crew works on conceptualization, the **Production Finance Person** breaks down expenses and records expenses for every item for the production to keep the production within budget. (On smaller productions, the Producer or Associate Producer often performs this work.)

Costs are divided into above-the-line and below-the-line. For high-budget features, the general rule is above-the-line costs equal 75% of the budget. They are negotiated before production and are considered fixed costs. Above-the-line costs include salaries for the top creative talents and any rights to a book, play, or article. These are considered "fixed costs" because once they are negotiated, they won't change during production.

Below-the-line costs can equate to 25% of the budget. They cover everyday expenses to keep the production moving. Below-the-line costs are everything else, including crew, food costs during the shoot, housing, transportation, cameras, film stock and processing, editing, special effects, costumes, lighting, sets, props, and miscellaneous expenses.

The **Production Designer** works closely with the Director to make sure that the Director's creative vision can be put on film. The Production Designer, who heads the Art Department, is an artist responsible for creating the overall visual appearance of the film—the proper feel, the appropriate costumes, the right setting.

The **Art Director** reports to the Production Designer, and ensures that the actual location or set looks the way the Production Designer visualized it. The Art Director oversees the artists and craftspeople who build the sets, and is also responsible for costumes, make-up, and props.

A set is any scenery or environment built indoors or outdoors for use in a motion picture. The **Set Designer,** often a draftsman with architectural training, sketches plans and lists specifications for building sets based on the verbal descriptions or rough sketches provided by the Art Director. Because of the high cost of constructing sets, the set designer plans to build only what the camera can see.

The **Set Decorator,** who often has interior design experience, finds the appropriate objects to place within a set to make it look real, according to need, whether it's a businessperson's office or a hermit's shack.

Lead Man (or **Assistant Set Decorator**), who reports to the Set Decorator, takes the lead in tracking down various artifacts needed to decorate the set.

The **Swing Gang,** which reports to the Lead Man, is sent out to bring all the objects needed for the production back to the set.

The **Set Dresser** physically places the objects and furnishings—furniture, rugs, lamps, draperies, paintings, books, etc.—on the movie set, making it ready for shooting. The Set Dresser takes orders from the Set Decorator.

The **Construction Coordinator,** who reports to the Art Director, supervises the construction of a film's set to the Set Designer's specifications. The actual construction of a set can take many weeks or months, depending on the size and complexity of the required set. One decision that needs to be made is whether to shoot on location or on a set. This decision is made by the producer and/or director on a sequence-by-sequence basis.

The **Carpenter** takes orders from the Construction Coordinator and constructs the set to given specifications.

The **Carpenter's Assistant** reports to the Carpenter and helps build the set.

While the set is under construction, the **Costume Designer** conceives and draws designs for the costumes to be worn by the actors in the movie. The costume designs must be approved by the Art Director, Director, and Producer before going to the Seamstress, the person who actually makes the costumes.

The **Seamstress** makes the costumes based on the approved costume designs.

The **Casting Director** (or **Casting Associate**) suggests and evaluates potential actors appropriate for the film, sets up meetings with the actor and the Producer and/or Director, and often helps negotiate the terms of a proposed contract between the actor's agent or attorney and the Producer. When the actor is hired, the casting director helps negotiate the terms of a proposed contract between the actor's agent and the Producer.

A **Location Manager** scouts out locations for shooting and arranges for permission to shoot in specific places.

A **Technical Advisor** (or **Consultant**) may be hired by the Director for his or her expertise in a particular field to make sure that the movie portrays the particular events or situation accurately. A historian might be hired to make sure that a Civil War film is accurate. A lawyer may be consulted for courtroom scenes. A native of Laos may be asked to verify native customs or costumes. Or a biologist might be hired to check the accuracy of facts about the lives of dolphins.

If special effects, stunts, or animals are used, the film may also require specialized roles:

A **Special Effects Coordinator** (or **Special Effects Supervisor**) makes sure the special effects crew properly sets up effects according the Director's wishes.

A **Special Make-Up Effects** artist has expertise in combining make-up with special effects, such as squibs—small explosive devices that, when detonated, simulate the effect of a bullet, puncture wound, or small explosion.

A **Stunt Coordinator** is responsible for choreographing stunts and making sure the stunt is relatively safe, but still realistic.

Animals are sometimes used in movies. These animal performers often come with a **Trainer** or **Wrangler** who has either taught the animal to perform certain acts or entices the animal to perform by offering morsels of food. Several look-alike animals are often used for the same role. Clever editing makes an animal's random movements seem like they have a purpose.

The **Line Producer** runs the day-to-day operations. This person makes the deals for locations and transportation, secures extras for scenes, orders equipment, gets accommodations for the cast and crew when they're on location, and is on the set every day to ensure the production runs smoothly. The Line Producer is generally employed from pre-production through post-production and reports to the Producer.

Pre-production prepares everything needed for shoot:

- **Creative preparation** that includes scriptwriting to designing special props.
- **Financial preparation** that includes budgeting the film and finding the money to pay for it.
- **Administrative preparation** that includes arranging for people to be paid to ordering film and getting permits to shoot on location.
- **Physical preparation** that includes building sets, making costumes and arranging props.

After pre-production, the film goes into production.

PRODUCTION

During production, the actual film is shot. Many additional people and talents are involved:

The **Director of Photography** (also **DP, DOP,** or **Cinematographer**), who was involved in pre-production, has a major role in production. The prime responsibility during this stage is to light the set. Depending on the style of the Director, the Director of Photography may be left to decide the "look" of the film for him or herself or, after meetings with the Director and usually the Art Department, he/she may be left to light the set as he/she sees fit. Alternatively, the Director may have very firm ideas as to how the film should look, and if so, the Director of Photography must fulfill these wishes.

The Director of Photography has to set an example for the rest of the unit. Time keeping, crew behavior, dress, and manners all come, at least in part, from the Director of Photography and so set the standard for the professional approach of the crew.

The Director of Photography is responsible for all matters pertaining to the photography of the film: lighting, exposure, composition, cleanliness, etc. The Director of Photography will often "nominate" the crew; that is, he/she makes a list of first and second choice people to be offered the job. If crew members are "nominated" by the Director of Photography, then the Director of Photography is responsible for them and will have to fire them if

they are not up to the required standard. The up side of this is that Director of Photography usually gets the crew he/she wants.

The **Assistant Director** (also **A.D., First Assistant,** or **First A.D.**) controls the shooting schedule and is responsible for keeping the production on schedule. By assuming responsibility for the routine tasks, such as the call (summoning the actors, crew, and logistical support to the correct place at the right time), the Assistant Director allows the Director to focus on the creative aspects of the film. The Assistant Director maintains order on the set, which is hopefully achieved by yelling "Quiet on the set!" The Assistant Director even has assistants of his/her own.

The **Second Assistant** (also **Second Assistant Director** or **Second A.D.**), the assistant of the Assistant Director, oversees the movements of the cast and prepares the call sheets—a list of actors who will be required for each scene, and when these actors will be needed. The Second Assistant tends to be a liaison between the set and production office. There can also be a Third Assistant (also Third A.D. or Second Second Assistant), who also assists the Assistant Director.

The **Second-Unit Director** stages large-scale action sequences that often deal with complex special effects and the participation of many extras, stuntpersons, and animals.

What would a motion picture be without its Actors? **Actors** play the character roles in the film. Some are well-known stars; many are newcomers.

A **Stand-in** is an individual who is similar in body structure and looks to the star Actor in a film and who takes that Actor's place during a lengthy setup—the placing of cameras, lights, and microphones—so the Actor can get ready for the filming itself.

A **Stunt Person** (or **Stunt Performer**), a specialist actor, actually performs stunts, which are often risky pieces of physical action. Stunts range from fight scenes to a fall from a cliff to a head-on collision with an oncoming truck. Many stunts are actually less dangerous than they appear because of appropriate camera angles, lenses, and editing.

The **Make-up Supervisor** (or **Make-up Artist**) is an individual in charge of make-up applied directly on the skin of an Actor for cosmetic or artistic effect. The Actor is made up before filming, but sometimes the make-up wears off during filming and new make-up must be reapplied. The job of the Make-up Supervisor is to maintain the appearance of the Actor's make-up throughout the filming.

The **Hair Supervisor** (also **Hairstylist** or **Hairdresser**) is responsible for maintaining Actors' hairstyles during filming.

The **Camera Operator** (or **Cameraman**) rolls the camera and stops it on cue, as instructed by the Director of Photography. The Camera Operator's responsibility is to achieve smooth camera movement and produce satisfactory pictorial images. To do so, the Camera Operator not only has to make sure not to bump the camera into other equipment while shooting, but also must be aware of how far the camera can tilt when filming a shot and where the boom—the pole that holds the microphone above a scene—is located so that it doesn't get in the shot.

The **Assistant Cameraman** (also **Assistant Camera Operator, First Assistant Cameraman**) assists the Camera Operator. This person maintains and cares for the camera as well as prepares an accurate camera log (also called camera report or dope sheets)—a record sheet that gives details of the scenes that have been filmed. On many camera crews, the Assistant Cameraman may also perform the duties of a Focus Puller and/or a Clapper-Loader.

The **Clapper-Loader** (or **Second Assistant Cameraman**) loads the camera with a new roll of film as needed, and operates the clapper board (clapboard for short)—a small hand-held chalkboard filmed at the beginning of each take. The "clapper" part of the job is deceptively simple. It is vital that all the information is on the clapperboard and that it is easily read.

It is critical that the Clapper-Loader keeps the inside of the changing bag or, on a big picture, the darkroom should be immaculately clean to keep dust and hairs off the film. The inside of the changing bag or the darkroom should be cleaned several times a day.

Perhaps the most important responsibility of the Clapper-Loader is the paperwork. The lab report sheet must be both legible and accurate or it will be impossible to find the appropriate piece of negative when it's time for negative cutting.

On most motion pictures, the Production Office keeps a very close eye on the daily camera report sheets. This is because the shot footage must be logged to see if the production is on budget in this area and to see how much footage is being entered in the "waste" column. A reputation for good paperwork is the most common reason for a Production Office to approve the Director of Photography's nomination of a Clapper-Loader.

An **Additional Camera** (or **B Camera**) is an extra Camera Operator who is sometimes needed for filming complicated action sequences, stunts from a different angle, or additional scene coverage with a second camera.

The **Sound Designer** oversees all the audio elements of a motion picture; similar to what a Production Designer does for the visual elements.

The **Sound Recordist** operates the sound-recording equipment on a set. Until recently, a Nagra recorder with a 1/4-inch tape was standard equipment; today digital audiotape, or DAT, is used. DAT is easier to synchronize and edit, and requires no Dolby or other noise reduction.

The **Boom Operator** operates the boom—a long, adjustable bar used to position a microphone during filming. On the boom, the microphone can be positioned above the actor's head, picking up dialog while remaining out of the camera's field of view. The Boom Operator must correctly position the boom microphone to record all the actors, which means pointing the mike at the actor who is talking, anticipating when the next actor will speak, and swiveling the microphone over to him or her.

The **Third Man** (also **Cable Operator** or **Cable Person**) operates the second microphone, if one is needed in a scene where actors stand far apart. The Third Man also handles all the cables related to sound-recording equipment—laying the cables, taping them, and tending the cables to follow the camera. In addition, this individual is in charge of noise abatement—discovering the extraneous noises, such as a refrigerator motor, a creak in the floor, or rustling clothing, and eliminating or minimizing them.

The **Key Grip** reports to the Director of Photography, oversees work with all of the camera support equipment on the set. This person supervises the Grips, who can number from five to fifteen.

A **Grip** works on the set with all of the camera support equipment. Grips prepare camera mounts so a scene can be filmed from whatever vantage point the Director of Photography desires. This might require organizing and securing the equipment needed to film from a moving car. Or this might necessitate erecting scaffolding for a high point of view. Grips work closely with the Electricians and Lighting Crew who set up the lights.

The **Dolly Grip** works with the dolly—a small four-wheeled truck that rolls along carrying the camera, some of the camera crew, and occasionally even the Director. If necessary, Dolly Grips lay dolly tracks, railings that guide the dolly in tracking shots outdoors. During the actual shooting, Dolly Grips push the dolly into the proper position at the appropriate moments.

The **Focus Puller** adjusts the focus of the lens as the actor moves closer to or further from the camera, or when the camera moves during a dolly shot. Keeping the main action sharp is the prime responsibility of the Focus Puller.

Before shooting begins, the Focus Puller marks the actors' positions on the floor with tape, and measures the distance between the lens and significant points in a traveling shot in order to attain a smooth "follow focus" during the take—a continuous recorded performance of a scene. The Focus Puller is responsible for setting the "Stop" as directed by the Director of Photography.

In addition, the Focus Puller is concerned with the camera itself. It is the Focus Puller's task to build the camera each morning and to put it away after shooting is finished. The Focus Puller must keep the lenses scrupulously clean and carry out any front line maintenance on the camera and its associated kit.

The Focus Puller rarely leaves the camera. The Camera Operator must be free to go off with the Director and the Director of Photography to discuss the coming set-ups. The Clapper-Loader brings the Focus Puller the bits of kit needed to build the camera for the next shot. You could say that during the shooting day, the camera "belongs" to the Focus Puller.

At the end of every "printed" take, the Focus Puller is responsible for giving whoever is on continuity the details of the shot. This includes the focal length of the lens, the focus setting, and the stop.

On any professional film set, the camera crew must always arrive at least half an hour before the call on the call sheet. The camera must be built and ready on the tripod or dolly before the call time and should be positioned roughly where the first shot of the day is expected.

The **Script Supervisor** (or **Continuity Person**) writes down very specific notes of every scene during filming so that he/she can look back at the notes during a later scene to check that all of the details are correct. The Script Supervisor makes sure everything looks the same from one shot to the next. The Script Supervisor also keeps track of the number of pages and scenes covered in a day, the number of setups, the estimated screen time, and notes how the filmed scenes deviated from the script—for example, how the dialog spoken by the actor differed from the written one.

The **Still Photographer** takes the still photographs that are used in publicizing the movie. Stills and instant photos are also used to help maintain continuity.

The **Gaffer** (or **Chief Lighting Technician**) heads up the crew responsible for lighting and other electrical matters during filming. The Gaffer reports to the Director of Photography and makes sure that his or her orders are carried out.

The **Best Boy** is the assistant to the Gaffer. This person orders all necessary lighting equipment and oversees the lighting crews.

The **Lighting Crew** (also **Lighting Technicians** or **Electrician**) is a group of technicians who install, operate, and maintain lighting. They retrieve the particular light that the Gaffer asks for, put it in position, raise or lower it, and wait for orders from the Gaffer to turn it on or off. If necessary, they add diffusing material in front of the light or adjust the width of the light beam by opening or closing the light's barn doors—black metal shutters attached to the light unit.

The **Genny Operator** sets up and operates a generator—a machine by which mechanical energy is changed into electrical energy.

FULL CREWS AND LOW-BUDGET CREWS

The structure of the technical crew varies from film to film, depending on the budget and the requirements of the script. Below are the two most common combinations of crew members.

The Full-Feature Crew

Camera:	**Lighting:**	**Sound:**
Director of Photography	Gaffer	Sound Mixer
Camera Operator	Best Boy	Boom Operator
Focus Puller	Lighting Crew	
Clapper Loader	Key Grip	
Dolly Grip	Grip Crew	

The Low-Budget Crew

On the "Low Budget" crew, the Director of Photography manages lighting and operates the camera. This is quite often the case on low-budget features and TV drama.

Camera:	**Lighting:**	**Sound:**
Director of Photography	Gaffer	Sound Mixer
Focus Puller/Loader	Lighting Technician	Boom Operator
	Key Grip	
	Best Boy	

"That movie [Lost in Translation] was done with minimal equipment. When I met Lance [Acord] I had been accustomed to working on large-scale movies and being encumbered and enamored with all of the equipment, so much so that the humanity can get lost. I've since become very interested in working light. It's not because of the economics, but rather because it brings you closer to your subjects. So often the machinery of our industry distracts us, and we lose touch with what we are hired to do. I find it truly rewarding to be able to get the striking results we achieved on this spot with such a simple approach."

—Michael Williams, Director

SYLLABUS TELEVISION PRODUCTION

Maximum Marks: 100

Unit I

Introduction of visualization, Different approaches to visualization - TV, Films, and Ad films. Types of telecasting, Production standards NTSC, PAL, Secam etc. Television Crew, an overview of direction, art direction, floor management- indoor & outdoor, production management, budget preparation.

Unit II

Principles of script writing, creative writing, script formats. Planning of Story, story board, discussions, screen play, dialogue writing, selection of cast, costumes, locations, set & design ,Research. Locations: In-door, set, on-sights sets, - Outdoor on-sight sets, blue matte. Etc.,

Unit III

Camera techniques & operation, Types of camera, Video formats (VHS, SVHS, U-MATIC, BETA, DIGITAL), framing, shots & movements (wide, medium, close ups, shadow, zoom, pan , tilt, aerial etc.,), usage of various types of camera lenses (Normal, Tele, Zoom etc.,), usages of various filters (day , night, colour correcting filter, diffusion filter), objectives TV lighting, various types of Lights (baby, Junior, Senior, etc.,) colour temperature, lighting for different situations (interviews, indoor, out-door), types of lighting(Back, Front, full, semi, etc.,)

Video recording format - Audio on line or off line . Usage of various kinds of mics (Dynamic mic, condenser mic, ribbon mic, Uni-directional, Bi-directional, omnidirectional mics, Hand mic, Head set mic, quadraphonic mic and wireless mic, lapel etc.,) Knowledge about audio recording (mono, stereo, surround sound, eco etc.,).

Unit IV

Editing procedure, assembling shots, symbolic editing and editing errors. The language of editing and shooting-sound in editing-categories of sound, post-synchronization, voice-over or narration, music and dubbing, Video Editing - linear, non-linear, types of editing modes. (assemble mode, insert mode, on line mode) computer editing - time cede roll editing, etc., Television graphics & titling and specials effects, Audio - Dubbing, Back ground Music, synchronizing of video and audio, voice Over (narration)etc. Presentation skills, recording live programmes.

TELEVISION PRODUCTION

Pre visualization (also known as **pre-rendering**, **preview** or **wireframe windows**) is a function to visualize complex scenes in a movie before filming. Pre visualization is applied to techniques such as storyboarding, either in the form of charcoal drawn sketches or in digital technology in the planning and conceptualization of movie scenery make up.

The advantage of pre visualization is that it allows directors to experiment with different staging and art direction options—such as lighting, camera placement and movement, stage direction and editing—without having to incur the costs of actual production. On larger budget project, the directors work with actors in visual effects department or dedicated rooms. Pre visualizations can add music, sound effects and dialogue to closely emulate the look of fully produced and edited sequences, and are most encountered in scenes that involves stunts and special effects (such as chroma key). Digital video, photography, hand-drawn art, clip art and 3D animation combine in use.

Types of Broadcasting or telecasting

Terrestrial television is a type of television broadcasting which does not involve either satellite transmission or cables. Instead, transmission is done with radio waves, and antennas or television antenna aerials are used for reception. sometimes **over-the-air television** and requires a tuner to view content.

The BBC began broadcasting television to the public in 1929, and had a regular schedule of television programmes in 1930.

Terrestrial television in India started with the experimental telecast starting in Delhi on 15 September 1959 with a small transmitter and a makeshift studio. Television services were separated from radio in 1976.

National telecasts were introduced in 1982. In the same year, color TV was introduced in the Indian market. At that time there was only one national channel Doordarshan, which was government owned. The *Ramayana* and *Mahabharata* (both being Hindu mythological stories based on religious scriptures of the same names) were the first major television series produced.

Cable television is a system of distributing television programs to subscribers via radio frequency (RF) signals transmitted through coaxial cables or light pulses through fiber-optic cables. This contrasts with traditional broadcast television (terrestrial television) in which the television signal is transmitted over the air by radio waves and received by a television antenna attached to the television.

FM radio programming, high-speed Internet, telephone service, and similar non-television services may also be provided through these cables.

in areas where over-the-air reception was limited by distance from transmitters or mountainous terrain, large "community antennas" were constructed, and cable was run from them to individual homes.

In order to receive cable television at a given location, cable distribution lines must be available on the local utility poles or underground utility lines.

There are two standards for cable television; older analog cable, and newer digital cable which is capable of carrying high definition signals used by newer digital HDTV televisions.

Satellite television is television programming delivered by the means of communications satellite and received by an outdoor antenna, usually a parabolic reflector generally referred to as a satellite dish, and as far as household usage is concerned, a satellite receiver either in the form of an external set-top box or a satellite tuner module built into a TV set.

Satellite TV tuners are also available as a card or a USB peripheral to be attached to a personal computer. In many areas of the world satellite television provides a wide range of channels and services, often to areas that are not serviced by terrestrial or cable providers. Direct-broadcast satellite television comes to the general public in two distinct flavors—analog and digital. This necessitates either having an analog satellite receiver or a digital satellite receiver. Analog satellite television is being replaced by digital satellite television and the latter is becoming available in a better quality known as high-definition television.

Production Standards:

National Television System Committee is the analog television system that is used in most of North America, parts of South America (except Brazil, Argentina, Uruguay, and French Guiana), Myanmar, South Korea, Taiwan, Japan, the Philippines, and some Pacific island nations and territories

Most countries using the NTSC standard, as well as those using other analog television standards, are switching to newer digital television standards. North America, parts of Central America, and South Korea are adopting the ATSC standards, while other countries are adopting or have adopted other standards.

The first NTSC standard was developed in 1941 and had no provision for color television. In 1953 a second modified version of the NTSC standard was adopted, which allowed color television broadcasting compatible with the existing stock of black-and-white receivers.

There is a large difference in frame rate between film, which runs at 24.0 frames per second, and the NTSC standard, which runs at approximately 29.976 frames per second.

In regions that use 25-fps television and video standards, this difference can be overcome by speed-up.

Phase Alternating Line, is a color encoding system for analogue television used in broadcast television systems in most countries broadcasting at 576i. 625-line / 50 field (25 frame) per second television standard,

NTSC receivers have a tint control to perform color correction manually. If this is not adjusted correctly, the colors may be faulty. The PAL standard automatically cancels hue errors by phase reversal, PAL has 576 visible lines compared with 480 lines with NTSC, meaning that PAL has a 20% higher resolution. Both PAL and NTSC have a higher frame rate than film, 24 frames per second, offering flicker free motion. NTSC is used with a fps of 60i or30p whereas PAL generally uses 50i or 25p; both use a high enough frame rate to give the illusion of fluid motion.

SECAM, *Séquentiel couleur à mémoire*, French for "Sequential Color with Memory"), is an analog color television system first used in France.

It is, historically, the first European color television standard.

SECAM is a standard which permits existing monochrome television to continue to be operated as monochrome televisions. Additionally, for compatibility, it is required to use no more bandwidth than the monochrome signal alone;

The color signal has to be somehow inserted into the monochrome signal, without disturbing it. This insertion is possible because the spectrum of the monochrome TV signal is not continuous hence empty space exists which can be utilized. SECAM uses frequency modulation to encode chrominance information on the sub carrier.

Initially, a version of SECAM for the French 819-line television standard was devised and tested, but not introduced. Following a pan-European agreement to introduce color TV only in 625 lines, France had to start the conversion by switching over to a 625-line television standard, which happened at the beginning of the 1960s with the introduction of a second network.

Television Crew members

Casting director

The casting director casts actors, and so is usually one of the first crew members on the project. In fact, during initial casting for a television pilot, the executive producer and casting director are often the only crew members.

Costume designer

The costume designer makes all the clothing and costumes worn by all the Actors on screen, as well as designing, planning, and organizing the construction of the garments down to the fabric, colors, and sizes. They greatly contribute to the appearance of the production, and set a particular mood, time, feeling, or genre.

Director

A television director is usually responsible for directing the actors and other filmed aspects of a television production. The role differs from that of a film director because the major creative control usually belongs to the

Associate Director (AD)

An associate director (AD) in television production is usually responsible for floor directing in the studio and ensuring that the sets, props and technical equipment are safe, ready to use and positioned correctly before filming. Associate directors are also responsible for communications with the audience and any guests,

Location manager

The location manager finds and manages film locations. Most pictures are shot in the controllable environment of a studio sound stage but occasionally, outdoor sequences call for filming on location.

Make-up artist

A professional make-up artist is usually a cosmetology beautician, and applies makeup to anyone who appears on screen. They concentrate on the area above the chest, the face, the top of the head, the fingers, hands, arms, and elbows. Their role is to manipulate the actor's on-screen appearance to make them look younger, older, larger, etc.

Production designer

The production designer is responsible for the production's visual appearance. They design, plan, organize, and arrange set design, equipment availability, and control a production's on-screen appearance. The production designer is often called the *set designer*, or *scenic designer*.

Researcher

Researchers research the project ahead of shooting time to increase truth, factual content, creative content, original ideas, background information, and sometimes performs minor searches such as flight details,

Set designer

Scenic designers create scale models of the scenery, artistic renderings, paint elevations, and scale construction drawings to communicate with other production staff.

Television producer

In the entertainment industry, a television producer is generally in charge of, or helps coordinate, the financial, legal, administrative, technological, and artistic aspects of a production.

Executive producer

The executive producer supervises one or more producers in all aspects of their work—and sometimes initiated the production. They are usually the ultimate authority on creative and business aspects of the production

Line producer

A line producer supervises physical aspects of the production (not the creative aspects), including personnel, technology, budget, and scheduling. The line producer oversees the budget

Writer

The Writer creates and moulds an original story, or adapts other written, told, or acted stories for production of a television show

Boom operator

The boom operator is part of the sound crew, and an assistant to the sound engineer or production sound mixer. The boom operator's main responsibility is microphone placement, with a microphone attached to the end—and sometimes using a "boom" boom is a piece of equipment that the operator stands on that lets him precisely control the microphone at a greater distance from the actors.

Camera operator/cinematographer

As the head member of the camera crew, the camera operator uses the camera as instructed by the Director. They ensure the required action is correctly filmed in the frame, and must react instinctively as the proceedings take place. If the camera operator is also a cinematographer, they also help establish the theme and appearance of the show.

Floor manager

The floor manager represents the director on the studio floor, and gives instructions and direction to crew, cast, and guests.

Gaffer

The gaffer is the head electrician at the production set, and is in charge of lighting the stage

Grip

Grips have two main functions. The first is to work closely with the camera department to provide camera support, especially if the camera is mounted to a dolly, crane, or in an unusual position, such as the top of a ladder.

Production manager

The Production Manager reports their expenses and needs to the Line Producer.

Stunt coordinator

Where the programme requires a stunt, and involves the use of stunt performers, the stunt coordinator arranges casting and performance for the stunt, working closely with the television director.

Video control operator/vision engineering

A video control operator controls the video console to regulate transmission of content

Composer

A composer writes the music for a production. They may also conduct an orchestra, or part of an orchestra, that plays the music.

Editor

The editor works in tandem with the director to edit raw footage into a finished work. The director has ultimate accountability for editing choices, but often the editor has substantial contribution in the creative decisions

Foley artist

The Foley artist on a film crew creates and records many of the sound effects. Foley artists

An Overview of Direction

Film directors create an overall vision through which a film eventually becomes realized. Realizing this vision includes overseeing the artistic and technical elements of film production, as well as directing the shooting timetable and meeting deadlines.

This entails organizing the film crew in such a way as to achieve his or her vision of the film. This requires skills of group leadership, as well as the ability to maintain a singular focus even in the stressful, fast-paced environment of a film set.

Moreover it is necessary to have an artistic eye to frame shots and to give precise feedback to cast and crew, thus, excellent communication skills are a must.

Since the film director depends on the successful cooperation of many different creative individuals with possibly strongly contradicting artistic ideals and visions, he or she also needs to possess conflict resolution skills in order to mediate whenever necessary.

Thus the director ensures that all individuals involved in the film production are working towards an identical vision for the completed film. The set of varying challenges he or she has to tackle has been described as "a multi-dimensional jigsaw puzzle with egos and weather thrown in for good measure".

It adds to the pressure that the success of a film can influence when and how they will work again. Omnipresent are the boundaries of the films budget. Additionally, the director may also have to ensure an intended age rating Theoretically the sole superior of a director is the studio that is financing the film, however a poor working relationship between a film director and an actor could possibly result in the director being replaced if the actor is a Major

Even so, it is arguable that the director spends more time on a project than anyone else, considering that the director is one of the few positions that requires intimate involvement during every stage of film production. Thus, the position of film director is widely considered to be a highly stressful and demanding one. It has been said that "20-hour days are not unusual".

Floor Management

Before the show:

- Assisting with production planning and consulting on logistics.
- Ensuring all staging, furniture and props are ready before the show starts.
- Ensuring all equipment is in place and technical checks have been done.

- Briefing presenters and talent.
- Managing the audience.
- Coordinating rehearsals.

During the show:

- Relaying information between the control room, floor staff and talent.
- Providing cues, timing and other information to presenters and talent.
- Informing the director of any relevant off-camera action.
- Preparing for upcoming parts of the show.
- Maintaining control of the audience and ensuring they are looked after.
- Overseeing safety issues on the floor.

Budgeting in film making

- **Film budgeting** refers to the process by which a line producer, unit production manager or filmmaker prepares a budget for a film production.
- This document, which could be over 150 pages long, is used to secure financing for the film and lead to pre-production and production of the film.
- Multiple drafts of the budget may be required to whittle down costs.
- A budget is typically divided into four sections: *above the line* (creative talent), *below the line* (direct production costs), *post-production* (editing, visual effects, etc.), and *other*(insurance, completion bond, etc.).
- Film financing can be acquired from a private investor, sponsor, a film studio or entertainment company, or out of pocket funds.

Elements of Budget

- **Story rights**: The right to produce a film based on a play, novel cost anything from a couple of thousand to over millions
- **Screenplay**: An A-list screenwriter can be paid 100,000 to 2 million to write a script,
- **Producers**: Film producers and executive producers are often well-paid, with a top producer earning a seven-figure salary upfront as well as bonuses and a share of the profits.
- **Director**: The payment minimum is about $16,800 a week,
-
- **Cast**: While the bulk of the cast usually gets paid by the Actors Guild standard rate, famous and bankable film stars can demand more fees, plus perks (trailer, entourage, etc.)

- **Production costs**: The cost of producing the film includes crew wages, production design, live set and studio costs, costumes, catering, accommodation and transportation.
-
- **Director of photography** is usually the highest paid member of the crew
- **Visual effects**: The cost of Computer-generated imagery effects and other visual effect work in post-production depends largely on the amount of work
- **Music**: The top film composers can ask for a seven-figure salary to compose an hour or so of original film score.

Above the line and below the line in budget

1. Above-the-line refers to Actors, Producers, Writers and Directors. For the most part, these are fixed costs meaning, if you cut a scene from the script, you don't pay the writer a little less. The same is true of producers and directors.

2. Below-the-line crew refers to everybody else including

- Assistant Director
- Art Director
- Line Producer
- Location manager
- Best Boy Electric
- Best Boy Grip
- Boom Operator
- Character generator (CG) operator (television)
- Costume Designer
- Director of Photography
- Camera operator
- Composer
- Dolly grip
- Gaffer
- Graphic Artist
- Hair Stylist
- Key Grip
- Make-up Artist
- Production Assistant
- Script Supervisor (continuity)
- Sound Engineer
- Stage Manager (television)
- Stage Carpenter
- Technical Director (TD) (television)
- Video control Broadcast engineering (television)
- Film Editor
- Visual Effects Editor

Tactics for Cutting cost

- **Eliminate night scenes.** Shooting at night requires powerful/expensive lighting and the payment of nighttime rates to the crew.
- **Avoid location filming in famous or commercial areas.** Some locations are more willing to allow filming than others - commercial enterprises such as hotels and

nightclubs. Some producers of low-budget features avoid paying location fees and seek to capture shots by subterfuge.

- **Film action scenes early on Sunday morning.** Stopping traffic for a car chase scene is easier in the early hours of Sunday morning, when traffic is at its lightest.
- **Use unknown cast members rather than stars.**
- **Ask above-the-line talent to defer their salaries.**
- **Use a non-union crew.**
- **Film in another region.** For example, many Hollywood movies set in U.S. cities are shot in Canada to take advantage of lower labor costs,

Screenplay

A **screenplay** or **script** is a written work by screenwriters for a film, or television program. These screenplays can be original works or adaptations from existing pieces of writing. In them, the movement, actions, expression, and dialogues of the characters are also narrated. A play for television is also known as a teleplay.

Spec screenplay

A 'spec' or speculative screenplay is a script written to be sold on the open market with no upfront payment, or promise of payment. The content is usually invented solely by the screenwriter, though spec screenplays can also be based on established works, or real people and events.

Commissioned screenplay

A commissioned screenplay is written by a hired writer. The concept is usually developed long before the screenwriter is brought on, and often has multiple writers work on it before the script is given a green-light.

Film Genres

Action films usually include high energy, big-budget physical stunts and chases, possibly with rescues, battles, fights, escapes, destructive crises (floods, explosions, natural disasters, fires, etc.), non-stop motion, spectacular rhythm and pacing, and adventurous, often two-dimensional 'good-guy' heroes (or recently, heroines) battling 'bad guys' - all designed for pure audience escapism.

Adventure films are usually exciting stories, with new experiences or exotic locales, searches or expeditions for lost continents, "jungle" and "desert" epics, treasure hunts.

Comedies are light-hearted plots consistently and deliberately designed to amuse and provoke laughter (with one-liners, jokes, etc.) by exaggerating the situation

Crime (gangster) films are developed around the sinister actions of criminals or mobsters, particularly bank robbers, underworld figures, or ruthless hoodlums who operate outside the law

Dramas are serious, plot-driven presentations, portraying realistic characters, settings, life situations, and stories involving intense character development and interaction.

Epics include costume dramas, historical *dramas*, *war* films, medieval romps, or 'period pictures' that often cover a large expanse of time set against a vast, panoramic backdrop.

Horror films are designed to frighten and to invoke our hidden worst fears, often in a terrifying, shocking finale.

Musical/dance films are cinematic forms that emphasize full-scale scores or song and dance routines in a significant way

Sci-fi films are often quasi-scientific, visionary and imaginative.

War (and anti-war) films acknowledge the horror and heartbreak of war

Six principles of Writing a good Script

1. Never write a script without knowing who your characters are in depth and caring about them all
2. Never write sloppily about any of these characters
3. Always have your characters be affected by one another’s deeds and words
4. Always have more than one truth operating between people at any one time
5. Always remember that people rarely get what they want but often get what they’ve earned
6. Always tell the truth about your characters

Two Types of Scripts

Two column or Shooting script

A shooting script contains a very elaborate description of all shots, locations, character, action, sound and technical details of the film. The shooting script is a breakdown of all all camera placements and movements.

- The shooting script includes the exact dialogue and sound you will hear at each precise moment of production.

VIDEO	**AUDIO**
CU Mother pleading with father	"I can't this any (sobs)
MS Father's reaction	Sternly have no options

Set Design

Set Design is the process by which a construction manager undertakes to build full scale scenery suitable for viewing by camera, as specified by a Production Designer or Art Director working in collaboration with the director of a production to create a set for a theatrical, film or television production.
The set designer produces a scale model, scale drawings, paint elevations (a scale painting supplied to the scenic painter of each element that requires painting), and research about props, textures, and so on.
Scale drawings typically include a ground plan, elevation, and section of the complete set, as well as more detailed drawings of individual scenic elements which, in theatrical productions, may be static, flown, or built onto scenery wagons.
Models and paint elevations are frequently hand-produced, though in recent years, many Production Designers and most commercial theatres have begun producing scale drawings with

Camera Shots

An **extreme long shot** contains a large amount of landscape. It is often used at the beginning of a scene or a film to establish general **location**(setting). This is also known as an establishing shot.

A **long shot** contains landscape but gives the viewer a more specific idea of setting. A long shot may show the viewers the building where the action will take place.

A **full shot** contains a complete view of the **characters**. From this shot, viewers can take in the costumes of characters and may also help to demonstrate the relationships between characters. For more information on costumes and acting refer to Chapter 4.

A **mid shot** contains the characters or a **character from the waist up**. From this shot, viewers can see the characters' faces more clearly as well as their interaction with other characters. This is also known as a social shot

A **close-up** (*animation on right*) contains just **one character's face**. This enables viewers to understand the actor's emotions and also allows them to feel empathy for the character. An **extreme close-up** contains one **part of a character's face** or other object. This technique is quite common in horror films.

Camera angles

It is important that you do not confuse camera angles and camera shots. Camera shots are used to demonstrate different aspects of setting, themes and characters. Camera angles are used to position the viewer so that they can understand the relationships between the characters. These are very important for shaping meaning in film as well as in other visual texts.

A **bird's eye angle** is an angle that looks **directly down upon a scene**. This angle is often used as an establishing angle, along with an extreme long shot, to establish setting.

A **high angle** is a camera angle that looks **down upon a subject**. A character shot with a high angle will look vulnerable or small. These angles are often used to demonstrate to the audience a perspective of a particular character. The example above demonstrates to us the perspective or point of view of a vampire. As a viewer we can understand that the vampire feels powerful.

An **eye-level angle** puts the audience on **an equal footing with the character/s**. This is the most commonly used angle in most films as it allows the viewers to feel comfortable with the characters.

A **low angle** is a camera angle that **looks up at a character**. This is the opposite of a high angle and makes a character look more powerful.

A **Dutch angle** is used to demonstrate the confusion of a character.

Camera movement

Composers of films also use camera movement to shape meaning

A **crane shot** is often used by composers of films to signify the end of a film or scene. The effect is achieved by the camera being put on a crane that can move upwards

A **tracking shot** and a **dolly shot** have the same effect. A tracking shot moves on tracks and a dolly shot is mounted on a trolley to achieve the effect in the example above. This camera movement is used in a number of ways but is most commonly used to explore a room such as a restaurant.

Panning) is used to give the viewer a panoramic view of a set or setting. This can be used to establish a scene

TYPES OF CAMERA LENSES

"Close-up" or macro

A macro lens used in macro or "close-up" is any lens that produces an image on the focal plane that is the same size or larger than the subject being imaged. They can be special lens corrected optically for close up work or they can be any lens modified (with adapters or spacers) to bring the focal plane "forward" for very close photography. The depth-of-field is very narrow, limiting their usefulness. Lenses are usually stopped down to give a greater depth-of-field.

Zoom

Some lenses, called **zoom lenses**, have a focal length that varies as internal elements are moved, typically by rotating the barrel or pressing a button which activates an electric motor. Commonly, the lens may zoom from moderate wide-angle, through normal, to moderate telephoto; or from normal to extreme telephoto.

The zoom range is limited by manufacturing constraints; the ideal of a lens of large maximum aperture which will zoom from extreme wide angle to extreme telephoto is not attainable Bulk and price limit their use for larger film sizes.

Special-purpose

- Enlarger lenses are made to be used with photographic enlargers r
- Lenses for aerial photography.

- Fisheye lenses: extreme wide-angle lenses with an angle of view of up to 180 degrees or more, with very noticeable (and intended) distortion.
- Stereoscopic lenses, to produce pairs of photographs which give a 3-dimensional effect when viewed with an appropriate viewer.
- Soft-focus lenses which give a soft, but not out-of-focus, image and have an imperfection-removing effect popular among portrait and fashion photographers.
- Infrared lenses
- Ultraviolet lenses
- Swivel lenses rotate while attached to a camera body to give unique perspectives and camera angles.

LIGHTING & TYPES OF LIGHTS

1. Backlighting
2. Side lighting
3. Full frontal lighting
4. All round lighting

OPEN-FACED TUNGSTEN

Tungsten lights are simply larger versions of the everyday lighting found in your home, using a filament of tungsten wire. There are two types: studio, a full size lamp and a smaller “baby” light; in reality these can both be pretty much any size, but the baby version is always the smaller of two lights of the same type, making them handier for location work as they’re more portable.

Redheads are your typical workhorse lights, particularly on a low budget. Cheap versions of branded heads are common, but make sure they're earthed!

Tungsten lights usually come in wattages of up to 20K, with most running at 220 volts and being useable with a dimmer. The colour balance of tungsten lights is quite orange/yellow, making them ideal for indoor locations where ordinary household lights can be seen, and with a blue colour correction gel a tungsten light can also be used to simulate daylight. Perhaps the most common form of tungsten light is the "redhead", a rough term for lights averaging around 800w; lamps of this size and upwards generally have a large spread of light.

The downside of dimming these lights, however, is that the reduction in power causes tungsten lamps to give off a much more orange glow; what this means in practice is that a change in brightness leads to a need to change any gels used to correct the colour temperature, which takes up a great deal of valuable time out of your day.LEDS

LED's are a cheap, extremely efficient type of lighting which has taken off in recent years.

LED lighting consists of series of small diodes which are extremely energy efficient and produce a lot more lumens (brightness) of light at a given wattage. Another side to this efficiency is that they remain cool to the touch throughout their use, making them a safer and more easy-to-handle (not to mention comfortable, if you've ever been trapped in a tiny room with a redhead on the go) than many other types of lights.

Their colour temperature tends to have a very white daylight balance of around 5600K; while they are available in other colour variations, this tends to be the most popular following on from the widespread use of fluorescent lighting.

They're also cheap to manufacture, which makes them one of the most affordable light sources available to filmmakers. A word of warning though: not all LEDs are necessarily useable for film. Because LEDs flicker they must be calibrated to fit in with the shutter

speed of digital cameras in order to avoid strobing in the image, which means that besides professional lights designed for film, there's no certainty that other LED fixtures will be free of this problem.

FRESNELS

Fresnels allow you to focus a light as required, either spot for a narrow beam or flood for a wider spread.

A fresnel is a type of lens placed in front of lamps such as tungsten sources in order to focus the light given off into a controllable beam. This is very useful in creating a spotlight effect, as well as being able to cover a relatively small portion of a scene. A fresnel light, therefore, is simply a light falling into any category which utilises such a fresnel lens in front of the bulb, traditionally a tungsten light such as an 800w redhead, although more recently we've seen a growing trend in LED versions and bigger-budget lighting solutions such as HMIs also sometimes utilise fresnels.

HMIS

While producing three to four times the amount of a light of a tungsten halogen, the more pricy HMI lamp consumes up to 75% less energy for the same output. Because of this energy efficiency, like LEDs HMIs also generate considerably less heat than tungsten lights.

If you've ever lit a scene using tungsten before, you can appreciate the extent of these advantages; improved fire safety, a cooler and more pleasant working environment, more light output for the power you have available, to name a few. In terms of colour temperature, HMIs are closer to daylight than tungsten at a colour temperature of about 5600K. 

HMI lighting is a high-end, daylight-balanced lighting solution.

The disadvantage of HMIs is that they require a ballast due to the high voltage required to fire them up, which reflects in the price of each unit as a whole. For the low-to-no budget filmmaker, HMIs are likely to be out of the question.

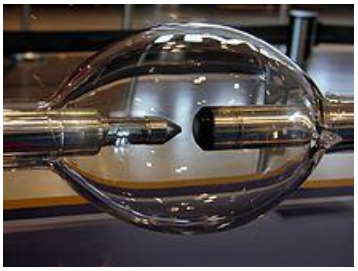
FLUORESCENTS

Colour-corrected fluorescent tubes are an extremely popular lighting method because of their portability and compact nature. Originally created by the Kino Flo company in 1987, this brand remains the most common for these lights. Using ballasts which are extremely quiet, the lights also do not flicker due to their high frequency, and are completely colour corrected to match either daylight or tungsten. In a pinch an uncorrected fluorescent (pretty much any not designed for use in film) will provide the same quality of light as a corrected one, but will cast a green tinge over a scene which results in undesirable skin tones

Kino Flos are often taped to walls and other convenient spaces.

The units generate less heat than HMIs or Tungsten lights, and are useful for locations with little room to bounce or diffuse larger lights as they produce a soft light and are easy to hide from the camera.

XENONS



Xenon Arcs are a rarer, extremely powerful type of lighting.

Ridley Scott’s Blade Runner was known for its use of xenon arcs.

Similar to HMIs in the way they work, xenon arc lamps feature a polished parabolic reflector that gives them amazing range and focus the light they give out almost like a laser beam. They can potentially project a beam of light for several blocks without it spreading too much. They are arguably the most efficient light, coming in five sizes from 1K to 10K. So powerful are they that they can crack windows and mirrors, leading manufacturers to produce special mirrors for their use. Unsurprisingly, xenons are also particularly expensive compared to tungsten lights. Blade Runner is a good example of a film that uses xenons for a very specific and powerful effect.

PRACTICALS

Practical lighting refers to any source that forms part of the scene itself and does not need to be hidden from the camera. Lights such as household lamps with shades are practical they fit in with the natural look of a location, and don’t break the illusion of reality for the audience of a film. Bulbs are often replaced with more powerful ones in order to throw more light into a scene without the audience being able to notice, and are usually used along with larger light sources to provide motivation for why, say, the side of a character’s face is lit up.

An example of practical lighting, in this case a couple of lamps and a wood stove. This would probably be boosted with additional lighting from outside the shot.

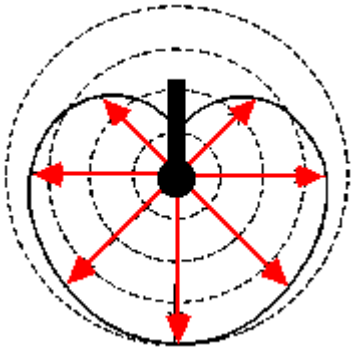
SUNGUNS

Sun guns are handy for adding tiny and specific pools of light to a scene.

These handheld, battery operated lights come in two basic varieties: tungsten and HMI. Tungsten sun guns are normally 12 or 30 volt, powered by a battery belt; running time for these is about 20 minutes. HMI sun guns have a daylight balance and are more efficient.

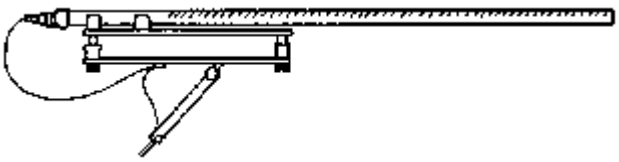
TYPES OF MICROPHONES

Cardioid



A **cardioids** mic has a somewhat directional pickup pattern, so it is less sensitive to sounds from behind, than it is to the sides and front. It is often used from above, on a fish pole.

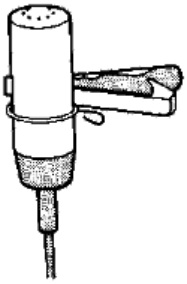
Shotgun



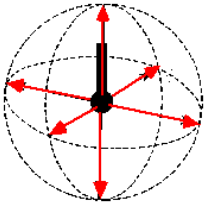
A **shotgun mic** is a more directional **super-cardioids**. This allows you to record sound with minimal background noise, from a greater distance. There may be some sacrifice of sound quality compared to a simpler cardioid mic.

It is most useful **outdoors** where sound is not **reverberating** off walls.

Lavalier



The **lavalier** mic is small enough to be hidden on a person's clothes, to provide **close Perspective** sound of their voice. It will also pick up other voices or sounds from nearby. Unless equipped with a wireless transmitter, it is best suited to static scenes.



Note: a lavalier has an **omni-directional** pickup pattern, so the direction it is pointing is not significant.

Lapel Microphones

These are tiny little mics, also referred to as lavalier microphones, that clip to someone's shirt or tie and are usually used in a sit-down interview situation. These are great for capturing consistent audio levels as the microphone does not move around like a handheld mic. (Helpful Hint: always tuck away wires and cables for a more professional look.)

Dynamic Microphones

Dynamic mic's are best known as the music, vocal microphones. These microphones are ideal in any worship situation because they are reliable, durable and resistant to feedback from monitors. Dynamic microphones are great for their price and generally have a long shelf life.

Condenser Microphones

Condenser Microphones are the least common in church sanctuaries, probably because of their price and their need to be well looked after. However, the one place that you will probably find one being used, will be by the speaker/pastor and maybe the drums. Condenser microphones can also be used for choirs, pianos and overhead for drums. In order for their unique pick-up.

Types Of Camera Filters:

Polarizing Filter: A polarizing filter cuts reflections from water or glass which gives a subtle look and objects do not appear very shiny. It also enhances colors and reduces haze. Polarizing filters are very useful when taking photographs indoors. You may have experienced that when you take a picture of a person wearing glasses their eyes don't show since the reflection from their glasses obscures them, a polarizing filter will cut out the reflection and the persons' eyes won't be obscured any more.

• **Neutral Density Filters:** These filters reduce the amount of light entering the camera which gives you the benefit of taking a longer exposure; it is good if you want to take a picture of flowing water like waterfalls, or streams, the resulting image will make the water very smooth. These filters come in 0.3, 0.6, and 0.9, which lowers the f-stop by 1, 2, and 3 respectively.

• **Warming & Cooling Filters:** These filters were more useful when using film, with digital cameras however, the use of these filters become somewhat redundant since you can set the white balance according to your needs and that takes care of the warmth or the cool.

• **Enhancements Filters:** These come in Red, Blue, Green, and enhances that particular color. There is a sepia filter as well, which makes photos have an old look, however, this filter has become redundant as well since you can add the sepia from an image enhancement software and even from your digital camera. However many photographers prefer the authentic look of using a filter over softwware.

• **Graduated Color Filters:** These filters can make landscape photographs look even more beautiful, you can make the skies bluer, or you can add a really nice golden to a sunset or a sunrise. These filters come in a variety of colors.

Cross screen - A **cross screen filter**, also known as a **star filter**, creates a star pattern, in which lines radiate outward from bright objects.

A diffusion filter (also called a **softening filter**) softens subjects and generates a dreamy haze. This is most often used for portraits. It also has the effect of reducing contrast

Colour Temperature :

Color temperatures over 5,000K are called cool colors (bluish white), while lower color temperatures (2,700–3,000 K) are called warm colors

Temperature

Degrees Kelvin	Type of Light Source	Indoor (3200k) Color Balance	Outdoor (5500k) Color Balance
1700-1800K	Match Flame		
1850-1930K	Candle Flame		
2000-3000K	Sun: At Sunrise or Sunset		
2500-2900K	Household Tungsten Bulbs		
3000K	Tungsten lamp 500W-1k		
3200-3500K	Quartz Lights		
3200-7500K	Fluorescent Lights		
3275K	Tungsten Lamp 2k		
3380K	Tungsten Lamp 5k, 10k		
5000-5400K	Sun: Direct at Noon		
5500-6500K	Daylight (Sun + Sky)		
5500-6500K	Sun: through clouds/haze		
6000-7500K	Sky: Overcast		
6500K	RGB Monitor (White Pt.)		
7000-8000K	Outdoor Shade Areas		
8000-10000K	Sky: Partly Cloudy		

Based on information from the book [digital] Lighting & Rendering
Chart and colors (c)2003 Jeremy Birn for www.3dRender.com

Working of a motion picture camera:

The shutter is a circular disk which rotates with each frame. The duration of the exposure is dependent on both the frame rate (number of frames each second) and the shutter angle. When the shutter is open, the film in the gate is exposed. When the shutter is closed, the film is advanced to the next frame so that it will be in position when the shutter opens.

If the shutter angle is set for the standard 180o , then the shutter will be open for half the frame rate.

In other words, at 24fps and a shutter angle of 180o , each frame will be exposed for 1/48th of a second.

The gate is the opening where each frame of film stops so that it can be exposed to light when the shutter opens. It is directly behind the shutter.

The pull down claw actually pulls each frame of film into place and then retracts in time to grab the next frame and pull it into place

viewing system. Most modern motion picture cameras use reflex viewing systems. Reflex cameras have a mirror attached to the front of the shutter so that when the shutter is closed and the film is advancing, the camera operator can see the image through the same lens that projects its image onto the film.

Video Time Code:

When looking at a length of exposed motion picture film, it's easy to see each individual frame and along the edge of the motion picture film is a series of sprocket holes. In 16mm film, there is a perforation between each frame. In 35mm film there are various formats: 2 perforation techno vision, a 3 perf format and the standard 4 perf format.

1. The images will be recorded on a video tape rather than on film.
2. 2. Rather than the rotating mechanical shutter, video cameras have an electronic shutter that regulates the duration of the exposure.
3. When one changes the shutter speed with a film camera, it also necessarily alters the frame
   rate, which affects the perception of speed of movement - slow frame rates accelerate
   apparent motion and faster frame rates record slow motion effects. When one changes the
   shutter speed in video, it does not alter the apparent motion of the subject.

4) A film camera allows light to be focused onto a photosensitive emulsion, which is then

chemically processed to reveal an image. Negative emulsions produce a negative image

and reversal stocks produce a positive image.

5) Whereas film in the US is recorded at 24 fps., NTSC Video is recorded at 29.97 fps

EDITING PROCEDURE:

1. The Content Cut

Content cuts are those which deal with moving the narrative forwards or adding new information for the audience. These tend to be relatively simple, with nothing changing except for the content of the shot. An example of where this is used is during a conversation, in which one might cut from a wide master shot, to an over-the-shoulder, to a close-up as the dialogue progresses.

2) The Action cut

Also known as a movement or continuity cut, the action cut is used where action starts off in one shot and ends in another. When a character reaches for something, e.g. a glass on a table, an action cut is frequently used to move from a shot of the character reaching out, to a close-up of the glass being picked up, back to the character with glass in hand.

3) Match Cut

A match cut normally serves to link together two separate scenes. This works by placing together two shots that contain a subject of similar appearance, shape or quality.

4) The Conceptual Cut

Conceptual cuts deal with metaphor. Cutting from a shot in which a feeling is expressed to a shot illustrating the point is primarily what this type of cut deals with.

5) The Zero Cut

The zero cut differs from the others in this list in that it's the only one not generally used as a creative choice. By stitching two shots together that share the same angle, lens and framing size, the cut is intended to be hidden from the audience. This is often used in creating visual trickery such as special effects, or selling the authenticity of a stunt such as a character rolling to avoid an oncoming car.

EDITORS CUT & DIRECTORS CUT

Editor's Cut:

There are several editing stages and the editor's cut is the first. An editor's cut referred to as the "**Assembly edit**" or "**Rough cut**" is normally the first pass of what the final film will be when it reaches audience

Screening dailies gives the editor a ballpark idea of the director's intentions. Because it is the first pass, the editor's cut might be longer than the final film.

Director's cut

When shooting is finished, the director can then turn his full attention to collaborating with the editor and further refining the cut of the film.

During director's cut", the director and the editor go over the entire movie with a fine-tooth comb; scenes and shots are re-ordered, removed, shortened and otherwise tweaked. Often it is discovered that there are plot holes, missing shots or even missing segments which might require that new scenes be filmed.

Final cut

Often after the director has had his chance to oversee a cut, the subsequent cuts are supervised by one or more producers, who represent the production company and/or movie studio. There have been several conflicts in the past between the director and the studio.

cut
A visual transition created in editing in which one shot is instantaneously replaced on screen by another.

continuity editing
Editing that creates action that flows smoothly across shots and scenes without jarring visual inconsistencies. Establishes a sense of story for the viewer.

cross cutting
Cutting back and forth quickly between two or more lines of action, indicating they are happening simultaneously.

dissolve
A gradual scene transition. The editor overlaps the end of one shot with the beginning of the next one.

editing
The work of selecting and joining together shots to create a finished film.

errors of continuity
Disruptions in the flow of a scene, such as a failure to match action or the placement of props across shots.

establishing shot
A shot, normally taken from a great distance or from a "bird's eye view," that establishes where the action is about to occur.

eyeline match
The matching of eyelines between two or more characters. For example, if Sam looks to the right in shot A, Jean will look to the left in shot B. This establishes a relationship of proximity and continuity.

fade
A visual transition between shots or scenes that appears on screen as a brief interval with no picture. The editor fades one shot to black and then fades in the next. Often used to indicate a change in time and place.

final cut
The finished edit of a film, approved by the director and the producer. This is what the audience sees.

iris
Visible on screen as a circle closing down over or opening up on a shot. Seldom used in contemporary film, but common during the silent era of Hollywood films.

jump cut
A cut that creates a lack of continuity by leaving out parts of the action.

matched cut
A cut joining two shots whose compositional elements match, helping to establish strong continuity of action.

montage
Scenes whose emotional impact and visual design are achieved through the editing together of many brief shots. The shower scene from **Psycho** is an example of montage editing.

rough cut
The editor's first pass at assembling the shots into a film, before tightening and polishing occurs.

sequence shot
A long take that extends for an entire scene or sequence. It is composed of only one shot with no editing.

shot reverse shot cutting
Usually used for conversation scenes, this technique alternates between over-the-shoulder shots showing each character speaking.

wipe
Visible on screen as a bar travelling across the frame pushing one shot off and pulling the next shot into place. Rarely used in contemporary film, but common in films from the 1930s and 1940s.

Non Linear and Linear Editing

Non-linear editing is the most natural approach when all assets are available as files on video servers or hard disks, rather than recordings on reels or tapes—while linear editing is tied to the need to sequentially view film or hear tape. with the use of non-linear editing systems, the destructive act of cutting of film negatives is eliminated.

Non-linear editing enables direct access to any video frame in a digital video clip, without needing to play or scrub/shuttle through adjacent footage to reach it.

Linear video editing is a video editing post-production process of selecting, arranging and modifying images and sound in a predetermined, ordered sequence. Regardless of whether it was captured by a video camera, tapeless camcorder, or recorded in a television studio on a video tape recorder (VTR) the content must be accessed sequentially.

EDITING MODES (ASSEMBLY MODE, INSERT MODE, ONLINE MODE)

Assembly mode

In assembly mode, each new shot (picture and sound)is connected to the end of the previous one, much as train carriages are coupled together, one after another. Each shot will follow on from the last one. This is the simplest form of editing, and so should be the one you start off with. Put your original tape in the play machine, your edit master tape in the record machine, and edit. However, your picture and both soundtracks are locked together.

Insert mode

In insert editing, we are able to do two additional things. We can insert a picture into the middle of an already recorded shot, and we can edit the soundtracks separate to the picture. We will now see how this works in practice.

Say you have a wide-angle shot of the old soldier on his sunny verandah, and it lasts for 25 seconds. You want to use the start and the end of the shot, but the middle is out of focus. You also have a shot of his medals hanging on the wall. With insert editing, you can put your medals picture into the middle 10 seconds of the wide shot, and keep the soundtrack (his voice) continuous throughout. Thus your scene will be:

Online Editing In some situations multiple cameras and other video sources are routed through a central mixing console and edited in real time. Live television coverage is an example of live editing.

Glossaries

¾" tape (U-matic)

—U-matic tape is a three-quarter inch format. It is fairly heavy-duty. A U-matic recorder can record video, time code, and two tracks of FM-radio quality audio. U-matic offers 350-400 lines resolution, but the quality tends to degrade quickly since it does not support separated recording. Time code can be on a separate track or VITC.

16:9 —The aspect ratio of wide-screen-format television.

2D (Two-dimensional)

—All television is by its nature 2-dimensional (the viewers' screens are flat), but the use of lighting, blocking and effects help to achieve a three dimensional look.

3 CCD

—This is a term used to describe a camera with three (as opposed to one) Charged Coupled Devices.

3D (three-dimensional)

—The world around up has 3 dimensions width, height, and depth. On a flat screen lighting, blocking and effects (e.g. spinning 3D animations).

4:3 —Aspect ratio of the NTSC television standard.

8mm —A compact videocassette format that uses magnetic tape and is eight millimeters wide. 8mm is a world-wide standard and offers high-quality recording and playback of video and audio.

A/B-roll linear editing —Recording edits from two video sources, such as two VCRs to a third, to achieve transition effects. See also, B-roll

Action axis —The action axis is an imaginary line drawn between two subjects or along a line of motion as an aid in maintaining continuity of screen direction. It is sometimes referred to as the "180-degree rule."

Active tense —Broadcasters usually write in active tense, rather than passive. Active tense sentences are shorter and use words more efficiently, and their meaning is more apparent. **After**

Analog —Information stored or transmitted as a continuously variable signal (as opposed to digital, in which the analogue signal is represented as a series of discreet values). Analogue is often technically the more accurate representation of the original signal, but

digital systems have numerous advantages which have tended to make them more popular.

Anchor —The anchor is typically the lead news personality. Some formats use two anchors holding equal status.

Aperture —Aperture literally means "opening". The camera iris; the opening which lets light through the lens.

A-roll —Unwanted visual distortions that appear in a video image, such as cross-color artifacts, cross-luminance artifacts, jitter, blocking, ghosts, etc.

Aspect ratio —The ratio of width to height of an image. Can be expressed as a number, or a relationship between two numbers. For example, the standard television screen ratio is 4:3 (4 units wide by 3 units high) or 1.33 (the width is 1.33 times the height). The new "wide screen" television ratio is 16:9 (1.78), and many new video cameras have the option to record using this format. Theatrical film aspect ratios vary, but the most common is 18.5:10 (1.85).

Assistant Director (AKA, AD) —The AD is the first Assistant Director, 1st Assistant Director. An assistant director's duties include tracking the progress of filming versus the production schedule.

Assistant Producer (AKA, AP) —The AP shares responsibility for stories and business of the production.

A-to-D converter —An electronic device that converts analog signals to digital. An A-to-D converter is an integral part of digital-video-related technology.

ATSC —Advanced Television Systems. Committee formed to establish technical standards HDTV and other U.S. digital television systems.

Audio Engineer —An audio engineer who performs the sound mix.

Auto-focus —Camera feature that uses an infrared (IR) beam or sonar to set its focus.

AV —Short for audio/video.

AVI —"Audio Video Interleaved". A common digital video format, in which the audio is interleaved as "packets", into the video frames.

Avid — Manufacturer of a popular non-linear editing system. Often used to refer to the system itself, as "AVID editor".

Back focus —The focus between the lens and the camera. Adjusted by a ring at the rear of the lens (the closest ring to the camera body). If the camera appears focused when zoomed in, but becomes out of focus when zoomed wide, the back focus needs adjusting.

Back light —A light which is positioned behind the subject. It's primary purpose is to make the subject stand out from the background by highlighting the subject's outline.

Bandwidth —A bandwidth is a range of frequencies. AM, FM, UHF, VHF, and 2.4GHz are all frequencies. Bandwidth is also a term used to describe available space on a network. The amount of data that can be passed through the wires that connect us to the Internet.

Balanced composition —Compositional balance is achieved when objects in the frame hold an appropriate amount of space.

Barn Doors —Metal projections attached to the front of a light, which can be positioned in various ways to control the dispersal of the light.

Betacam —A tape format and transportable combination camera and recording (camcorder) system developed by Sony and introduced in 1982. Betacam uses a variation of the Y, R-Y, B-Y analog component format.

Bit — **B**inary dig**it**. One piece of binary (digital) information. A description of one of two possible states (e.g. 0 or 1; off or on).

Black (blackburst) —Blacking a tape records an image with no luminance (or black) or sound, but containing the timecode. Blacking tapes prepares them for later use in editing.

Black balance —A camera function which gives a reference to true black. When auto-black balance is activated (by a switch, positioned with the white balance switch), the iris is automatically shut, and the camera adjusts itself to absolute black.

Blanking level —Blanking Level is also known as the pedestal, it is the voltage level produced at the end of each horizontal picture line which separates the portion of the video signal containing the picture information from the portion containing the synchronizing information. This voltage makes the electron beam "invisible" as it moves to draw the next visible line.

Bleeding —Video image imperfection characterized by blurring of color borders; colors spill over defined boundaries, "run" into neighboring areas.

Block —Programming is divided into blocks or areas between the breaks. A typical half-hour program would have 4 blocks.

Blue screen —A bright blue background used for chroma-keying. Weathermen everywhere do a nightly weathercast in front of a blue screen (green screens are also used).

Broadcast quality —A quality standard for composite video signals set by the NTSC and conforming to FCC rules. If you plan to record video signal or videotape for broadcast, it is important to note that devices providing NTSC signals do not necessarily meet FCC broadcast standards.

Bump —A piece of animation that is used either before or after a commercial break. It's called a bump-out leaving the show, and a bump-back upon returning.

Camcorder —A video camera with an attached recording device (deck).

Cameo lighting —The type of lighting that will only accentuate a specific performer and a few objects in the immediate background. For the most part, all other portions of the set are blackened.

Camera Operator (AKA: Cameraman) —The person who operates the camera to the specifications dictated by the production. A director or a director of photography sometimes may assume the role of camera direction in a production.

Capturing —Refers to capturing source video for use on a computer. If analog, the captured video is converted to digital.

Cardioid —Cardioid is the term used to describe a microphone that picks up sounds in a heart shaped pattern.

CCD —The image sensing device of video and television cameras -- the component which converts light from the lens into an electrical signal. Made up of pixels—the more pixels, the higher the resolution.

Chromakey —An electronic/computerized technique that allows for specific color elements (chroma) to be replaced with different picture elements. See also bluescreen and greenscreen.

Chrominance —Chroma, or color. In composite video signals, the chrominance component is separated from the luminance component, and is carried on a sub-carrier wave.

Close up (CU) —A shot in which the subject is larger than the frame, revealing much detail. The abbreviation is often used in a slug line.

Coaxial cable —Coaxial cables contain an insulated wire conductor wrapped in another conductor made of metal foil or mesh. Both conductors share the same axis; thus the name. They are used for cable TV transmission.

CODEC —Contraction of compression/decompression algorithm; used to encode and decode, or compress and decompress data, such as sound and video files.

Color bars —The pattern comprising eight equal-width color bars generated by an NTSC generator. The color bars are used for calibration and as a reference to check transmission paths, signal phase, recording and playback quality, and monitor alignment.

Color correction —The electronic altering of the coloring of a video image.

Composite video —A signal in which the luminance, chrominance, and sync information are combined into one signal using one of the coding standards (e.g., NTSC, PAL, or SECAM). The signal must take the form of composite video before it can be broadcast or recorded by standard means. Until recently, most monitors and projectors accepted only composite video signals, though many presently accept RGB signals. Contrast with component video.

Compositing —Compositing is the combining of two or more images into a single frame or display.

Composition —Composition is the thoughtful arrangement of elements in a frame. Many elements of composition come into play, simplicity, balance, rule of thirds, dynamic/active lines, etc.

Compression — The translation of audio or video data into a format that requires less storage space than the original data. See also, codec.

Condenser microphone —A microphone that generates an electrical signal when sound waves vary the spacing between two charged surfaces: the diaphragm and the back plate.

Contrast —The range of difference between the lightest and darkest values of a picture, or maximum and minimum brightness values.

Control room —The control room is the center of broadcast operations from which programming originates; air studio.

Cover shot —An establishing wide-angle or long shot of a set used both to establish the relationships between subject matter in a scene and to momentarily cover problems with lip sync or mismatched action.

Crawl —The movement of credits or other graphic material across the screen.

Crew —A team made up to create a media production.

Cue (stand-by, cue, wrap, speed up, stretch, 30 seconds, minutes) —A cue is a signal by the floor director given to someone on set.

Cut —An instantaneous transition from one shot to the next.

Depth of field —The zone between the nearest and furthest points at which the camera can obtain acceptable focus.

Director —The principle creative and motivating force in any production. The director communicates to the actors, guests, cameras, etc. how things should be done. Ultimately all products are team generated, but these teams are led by directors.

Dissolve —A transition in which one shot dissolves into the next.

Dolly —Any apparatus upon which a camera can be mounted, which can be moved around smoothly. Also used by the director to tell the camera operator to move the camera right or left (as opposed to panning, which is just turning the camera).

Dropped frames (drop out) —The area of a magnetic tape where information is missing. This will show up as glitches on playback. Drop-out may occur due to dust, lack of oxide, or other causes.

Dub —Copy of a recording; duplicate.

DV —DV is a quarter-inch tape format. There are actually three formats: MiniDV, the consumer format; DVCAM, the Sony format, and DVCPRO, the Panasonic format.

F-stop —Measurement of aperture. The higher the f-stop number, the smaller the aperture.

Face time —Face time is the amount of time someone is seen on camera.

Fade —A transition to or from "nothing". In audio, to or from silence. In video, usually to or from a color such as black.

Fall off —The gradual reduction in luminance from the screen center to the edges and corners.

Fill light —Supplementary illumination, usually from a floodlight positioned midway between camera and subject and about 45 degrees off center, which lightens or eliminates shadows created by key light (see three-point lighting).

Final Cut Pro —Prosumer grade digital video editing software built by and for Apple Computer.

Floor Director —The floor director makes sure talent is cued, and helps with equipment and props during taping/filming.

Floor plan — The two-dimensional ground plan which helps to define the stage or scene positions.

Frame rate —The number of video or film frames displayed each second (frames per second; fps). PAL frame rate is 25 fps, NTSC is 30 fps, film frame rate is 24 fps.

Fresnel —A spotlight with step-like concentric rings commonly used as a key light. The fresnel Named after the inventor of its lens.

Gels —Semi-transparent heat-resistant material which is placed in front of a light source in order to modify its color temperature or other characteristics.

Generation loss —Generation loss is used to describe the loss of quality in a recording when it is necessary to re-record the original for editing purposes.

Grip —Person who is responsible for constructing and dismantling film sets, as well as laying down dolly tracks.

Guest —A guest is someone brought into a production area to be interviewed.

Head room —The amount of space between the top of the subject's head and the

top of the picture frame.

HI8 —Hi8 is an eight millimeter tape format. Hi8, like SVHS, uses separated recording to achieve resolutions from 400-500 lines. However, the thin tape is fragile and can produce dropouts easily.

High key lighting —Lighting characterized by minimal shadows and a low key-to-fill ratio.

Iris —The circular opening (aperture) which controls the amount of light passing through to the camera's sensing element or film.

Kelvin —A unit of temperature measurement. Color is measured in degrees Kelvin.

Key —The replacing of part of one television image with video from another image.

Lavaliere microphone — A type of miniature microphone that is usually worn fastened to clothing somewhere near the user's mouth. Also referred to as a clip-on., lav, or lapel microphone. Can also be used in live sound to pick up the sound of various acoustic instruments.

Lens Flare —An anomaly caused by bright light entering the lens directly. Lens flare looks like light concentric circles in the shape of the aperture (iris).

Levels —The strength or amplitude of an audio or video signal.

Linear editing —As opposed to non-linear editing (random access), an editing approach that requires edits to be entered and done in the sequence required for the final edited version. Each segment has to be found, cued and then recorded in sequence, which necessitates the stopping of both tapes as each segment is located and cued.

Log —An operational document for broadcast operations, generally issued daily, which includes information such as program source or origin, scheduled program time, program title and other program-related information.

Low key lighting —Lighting characterized by a high key-to-fill ratio which results in predominant shadow areas. Typically used for night scenes in dramatic productions.

Luminance —Measure of brightness. The black-and-white aspect of a television signal. Also called the Y-signal.

Macro —Macro is a term applied to lenses (and lens settings) that allow focusing at points very near the lens.

Mini-DV —Mini-DV is a video format using very small video cameras and tapes.

Non-linear —Any method of video editing which doesn't require all shots to be assembled in a linear fashion. Avid, Premier, and Final Cut Pro are non-linear editing systems.

Nose room —Nose room refers to leaving space in front of a person in a shot.

Omni directional —Omni directional is a term applied to microphones meaning working in all directions.

Pan —Horizontal camera movement.

Pedestal —1. A movable mount for studio cameras. 2. The black level of a video signal.

Persistence of vision —Tendency of human vision to retain images for a fraction of a second. Discrete images presented at a rate of about 16 or more per second--even when

change takes place between them--blend together, creating the illusion of motion in TV and film.

POV (Point Of View) shot —A point of view shot tries to put the viewer in the drivers seat. Looking out at the action as an immediate participant.

Preview monitor (PVW) —The preview monitor shows the control room what is prepared to be on air next.

Progressive scanning —Progressive scanning is sequential scanning, or non-interlaced video scanning. A television scanning system in which each scanning line follows its predecessor in a progressive fashion, rather than skipping intermediate lines to be filled in by the next field.

Prompter —1. An electrical device for displaying a script that can be read by talent during a production. 2. Someone who operates a prompter device.

Props (property) —Something that is handled or used within a set by talent during a production.

Rack focus —Shifting camera focus from one part of a scene to another in a single shot, thereby forcing a shift in audience attention.

Reaction shot —A cut to performer's face that registers a response. Generally a close-up of someone reacting to the central dialogue or action.

Rear projection (RP) —Screen used for video effects onto which images are projected from the rear. When actors are photographed form the front, it appears as if they are part of the projected scene.

Reflectors —Reflectors are silver or bright white surface used to reflect light onto a subject. Generally used outside to soften and fill in the light from the sun.

Resolution (horizontal resolution) —The amount of detail in an image or signal.

RGB—Red, Green, and Blue are the primary colors of light used to form the image on television and computer screens.

Rule of thirds —Composition theory based on dividing the screen into thirds vertically and horizontally and placing the main subject along the resulting intersecting lines.

Saturation —The level of color in a vision signal. A highly-saturated signal has very strong colors.

Scrims —A spun-glass material placed over the front of a light to reduce intensity.

Set —The set is an environment used for filming/taping.

Silhouette —A silhouette is the effect in which the subject is rendered as a black shape without detail against a bright background.

Slug —The title/name of a story in a rundown.

Snoot —Open-ended cylindrical funnel mounted on a light source to project a narrow, concentrated circle of illumination.

Split screen —TV or computer screen electronically divided to show two or more images at once.

Spotlight —Lighting instrument that focuses its beam of light.

Teleprompter —Device which scrolls text on a screen, to provide cues for a television/video presenter.

Time code —A method of marking each individual frame on a tape. There are many different methods of time code. SMPTE/EBU time code uses a series of eight numbers identifying the hours, minutes, seconds and frames related to a specific video frame on a tape.

Traveling shot —A traveling shot is a moving camera shot.

Trim —To adjust the in and out points marginally to achieve tighter edits.

Tripod —A three-legged stand for mounting equipment such as a camera, etc.

Truck —A left or right movement of the camera along with its mount.

Turn —An on camera movement from one camera to a second. This movement is much easier to capture with two cameras, but some careful planning can allow a turn using a single camera.

Two shot —A picture showing two individuals.

UHF —UHF is Ultra High Frequency radio waves.

VCR —Video Cassette Recorder.

VHF —VHF stands for Very High Frequency. This is a popular television broadcast band. It is lower than

White balance —White balance is a camera function which gives a reference to "true white", in order for the camera to interpret all colors correctly.

Wide angle lens —A lens or a scene that represents an angle of view significantly wider than normal angle of view (about 47 degrees field of view). A wide-angle lens or shot is either a prime lens with a focal length significantly less (at least 25 percent less) than a normal lens, or a zoom lens used at a focal length significantly less than normal.

The Writing Center
UNIVERSITY OF COLORADO
DENVER | ANSCHUTZ MEDICAL CAMPUS

Formal Elements of Film

Time & Space	Shot	What is recorded by a single operation of the camera; can be defined in terms of distance and area (see "Framing" below) or subject
	Scene	Unit of action taking place in the same location, comprised of one or many shots
	Sequence	Group of shots forming a self-contained segment of the film that is intelligible in itself
	Mise-en-scène	Staging or arrangement of the visual elements within a shot or sequence; includes the placement of characters in relation to each other, the set design, the lighting, etc.

Framing	Long	Main objects are seen in the distance and appear small on screen; used to establish setting (often called an establishing shot) and show characters in relation to objects; similar to the third-person, omniscient point-of-view in literature
	Med	Shows a character from the waist up; often a natural or neutral shot
	Close-up	Object or character takes up most of the frame; highlights emotion played out on a face or the detail of an object; encourages viewers to identify with characters or to focus their attention on a thematic element

Lighting	Low-Key	Small source of lighting used to create ample shadows and an atmosphere of mystery/danger; can suggest characters are evil, conflicted, or morally ambiguous
	High-Key	Even, sometimes flattering, light source with few shadows; can convey normalcy or a lack of threat; typical of most mainstream classical Hollywood films

	Low	Camera is positioned lower than the subject and tilted upward; makes the character appear "larger than life"
	Eye-Level	Camera is level with the eye-line of the characters; a neutral shot emulating the natural way we perceive the world

	High	Camera is positioned higher than the subject and tilted downward; makes the character appear smaller than normal
Movement	Pan	Camera *pivots* along a horizontal axis without moving its position; enlivens the shot, makes the frame dynamic, and emulates how people move their heads from side to side to view action (such as how a spectator watches cars zoom by on a race track)
	Tilt	Camera moves along a vertical axis without moving its position; can emphasize the grandeur of an object (like craning your head up to make look at a basketball player) or diminish it (like the huge class bully looking down at the class runt)
	Zoom	Camera's focal point is magnified/minimized to bring objects in the foreground or background into focus; emulates how our own focus shifts from person to person or object to object; can reconfigure the composition of the shot *without* any editing
	Track	Any shot taken when the camera is on some sort of moving vehicle or mechanism (such as a dolly, crane, or truck) or held by/strapped onto a person (Steadicam)

Editing	Fade	Image slowly fades to black; can signal the passage of time or a significant emotional ending to a sequence
	Dissolve	First shot slowly fades out while the second shot fades in, blending the two together; often used to create irony or visual juxtapositions
	Cross-cut	One shot placed immediately after another unmatched shot; creates visual dissonance and quickens the tempo and pace of the film
	Eyeline Match	Often used to depict conversations between characters; the camera first films the character looking in one direction, then follows with a shot of what being looked at

Further Reading

Corrigan, Timothy. *A Short Guide to Writing About Film*. New York: Longman, 2010. Print.

Dick, Bernard F. *Anatomy of Film*. Boston: Bedford/St. Martin, 2010. Print.

Golden, John. *Reading in the Reel World: Teaching Documentaries and Other Non-Fiction Texts*. Urbana: National Council of Teachers of English, 2006. Print.

Major Film Journal Databases

JSTOR
Academic Search Premier
Project Muse
Film and Television Literature Index

Auraria Research Librarian Specializing in Film

Nikki McCaslin—nikki.mccaslin@ucdenver.edu