Cinematography

Film Study 1 – Ms. Jones

From *Looking at Movies* by Barsam and Monahan
What is cinematography?

• Cinematography is the process of capturing moving images on film or a digital storage device.

• The word comes to us from three Greek roots—kinesis, meaning “movement”; photo, meaning “light”; and graphia, meaning “writing”—but the word was coined only after motion pictures themselves were invented.
The Director of Photography

• “...representing the mise-en-scène on film or video.”
• “the director of photography is the primary person responsible for transforming the other aspects of moviemaking into moving images.”
• Story/screenplay ➔ Director ➔ Cinematographer (DP)
The three key terms used in shooting a movie are shot, take, and setup.

- **Shot** – one uninterrupted run of the camera
- **Take** – refers to the number of times a particular shot is taken
- **Setup** – one camera position and everything associated with it
Production Process

• The cinematographer’s responsibilities for each shot and setup (as well as for each take) fall into four broad categories:
  • Cinemagraphic properties of the shot (film stock, lighting, lenses)
  • Framing the shot (proximity to the camera, depth, camera angle and height, scale, camera movement)
  • Speed and length of the shot
  • Special effects
Lighting (Review)

- Source
  - Natural and/or Artificial
- Quality
  - Hard or Soft
- Direction
  - Three-point Lighting (key, fill, back)
- Color
  - The human eye is different than a camera
Back Light picks out subject from its background

Fill Light from the opposite side ensures the key light only casts faint shadows

Key Light highlights the object
Lenses

• **Short-focal-length lens** (aka wide-angle lens, starting at 12.5mm)
  • Makes objects look further away than they actually are
  • Movement from background to foreground may appear faster
• **Long-focal-length lens** (aka telephoto lens, range from 85mm-500mm)
  • Makes objects look closer (or flatter) than they actually are
• **Middle-focal-length lens** (aka normal lens, range from 35mm-50mm)
• **Zoom Lens** (aka variable focal-length lens)
Lenses

• Depth of Field
  • Cinematography must decide what planes or areas of the image will be in focus
  • Short-focal-length lens permit many or all planes to be in focus

• Rack Focus (shift focus, select focus, pull focus)
  • Shifting focus from one plane to another
  • https://youtu.be/NRMUbjI3grY
Framing the Shot

- **Aspect Ratios**
  - 1.33:1 Academy (35mm flat)
  - 1.85 American Widescreen (35mm flat)
  - 2.2:1 Superpanovision (70mm flat)
  - 2.35:1 Panavision and CinemaScope (35mm anamorphic)
  - 2.75:1 Ultra Panavision (70mm anamorphic)
Framing the Shot

• Shot Types
  • Extreme long shot (XLS or ELS), long shot (LS), medium long shot (MLS), medium shot (MS), medium close-up (MCU), close-up (CU), extreme close-up (XCU or ECU)
  • Two-shot or three-shot
  • Draw an example of each shot on a separate sheet of paper
Rule of Thirds
180 Degree Rule

https://www.youtube.com/watch?v=Bba7raSvvRo
Camera Angle and Height

- Eye Level
- High-angle shot
- Low-angle shot
- Dutch-angle shot
- Aerial-view shot
  - bird’s-eye-view shot
Camera Movement

- Pan shot
- Tilt shot
- Dolly or Tracking shot
- Crane or Boom Shot
- Zoom
  - “vertigo shot”
- Handheld camera
- Steadicam
POV

- Omniscient
- Single Character
- Group
Speed

- Slow motion: [https://youtu.be/R6f8z9pBvfo](https://youtu.be/R6f8z9pBvfo)
Length of a Shot

- Long take  
  https://youtu.be/OJEEVtqXdK8
- Short take

An average shot is about 10 – 12 seconds. A long take is anywhere from 1 – 10 mins.
Special Effects (SPFX or FX)

• Until the 1960s:
  • In-camera effects
  • Mechanical effects
  • Laboratory effects

• Post 1960s:
  • All old effects plus...
  • Computer-Generated Imagery (CGI)
How much do you see??

• Movie Trailer