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-scene 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)

Shot, Take, Setup

- 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

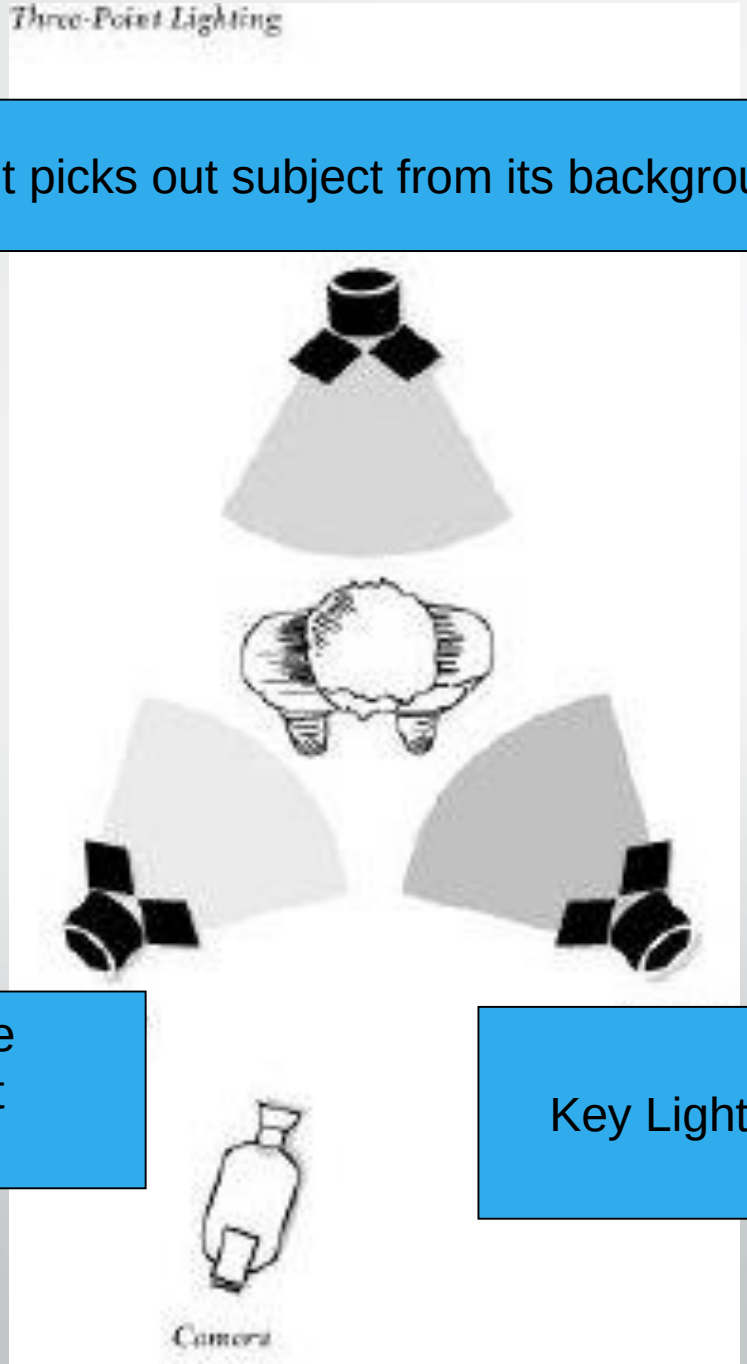
Production Process

- 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

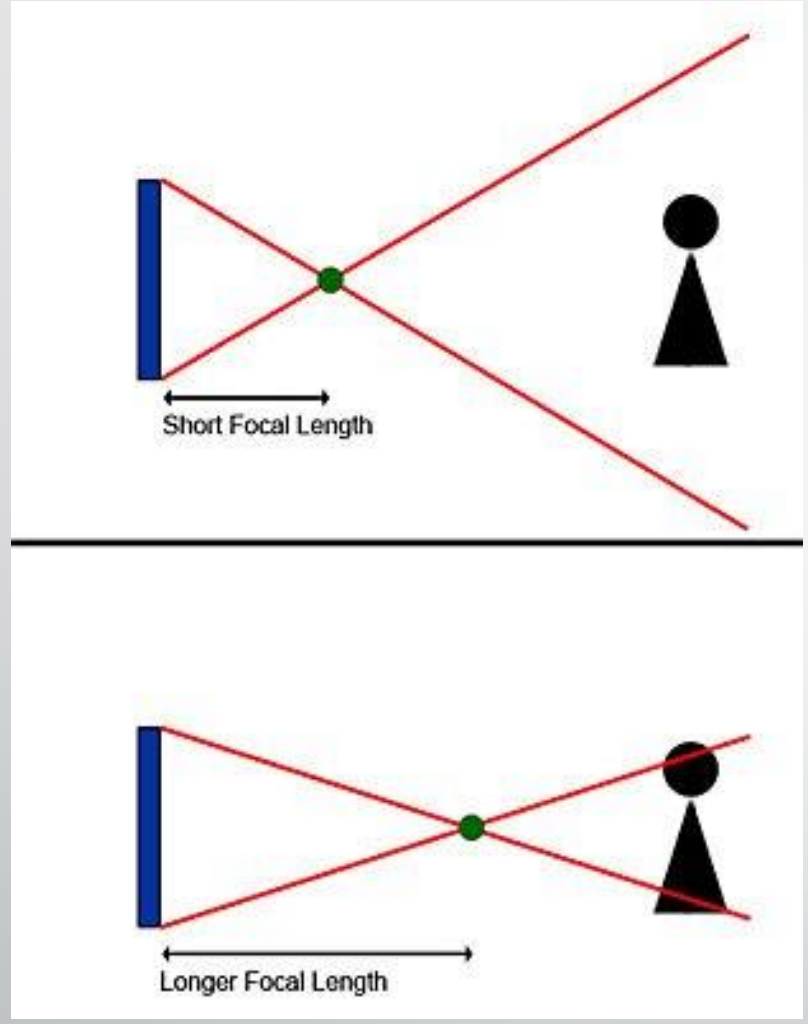


Fill Light from the opposite side ensures the key light only casts faint shadows

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)


Short Focal Length
Longer Focal Length

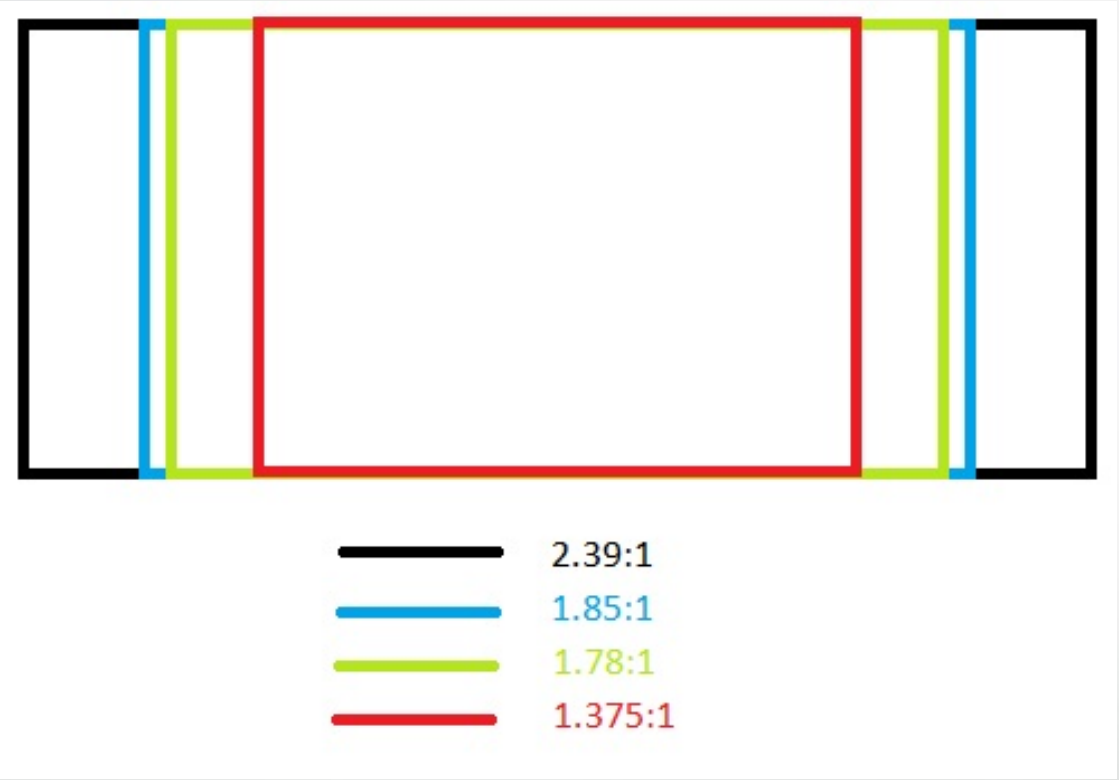
12mm
24mm
50mm
100mm
200mm

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)

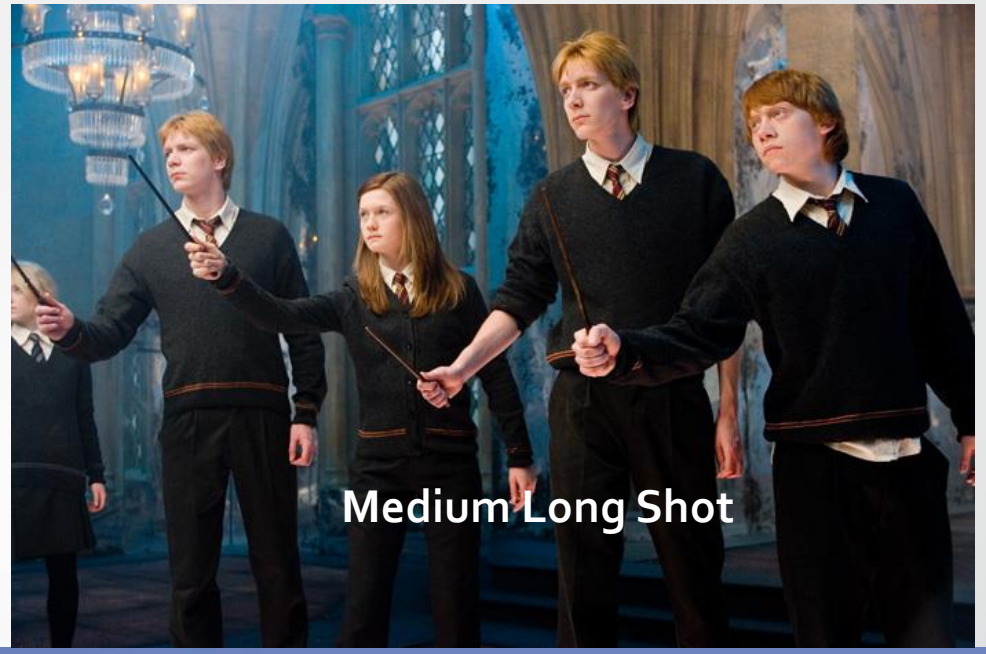


https://www.youtube.com/watch?v=3CgrMsjGk7k

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

Long Shot


Medium Long Shot

Medium Shot

Extreme Long Shot

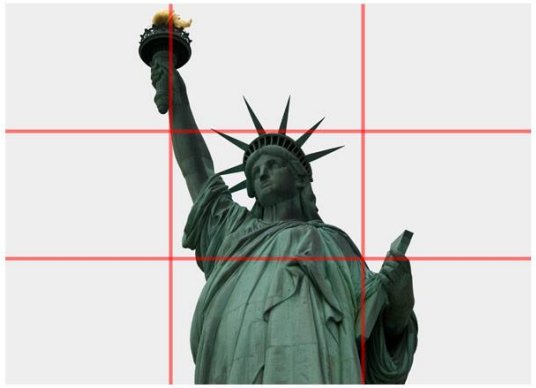
Medium Close-Up

Close-Up

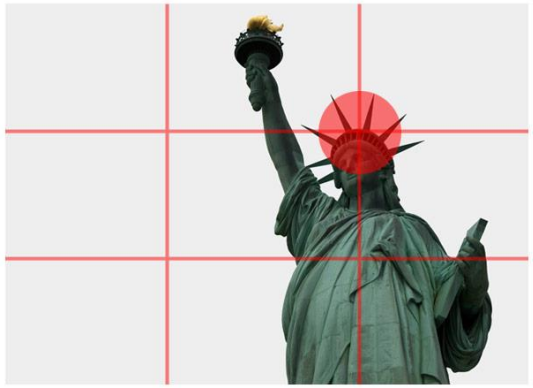
Extreme Close-Up
Zodiac
Sea Wolf
Automatic

Medium Close-Up

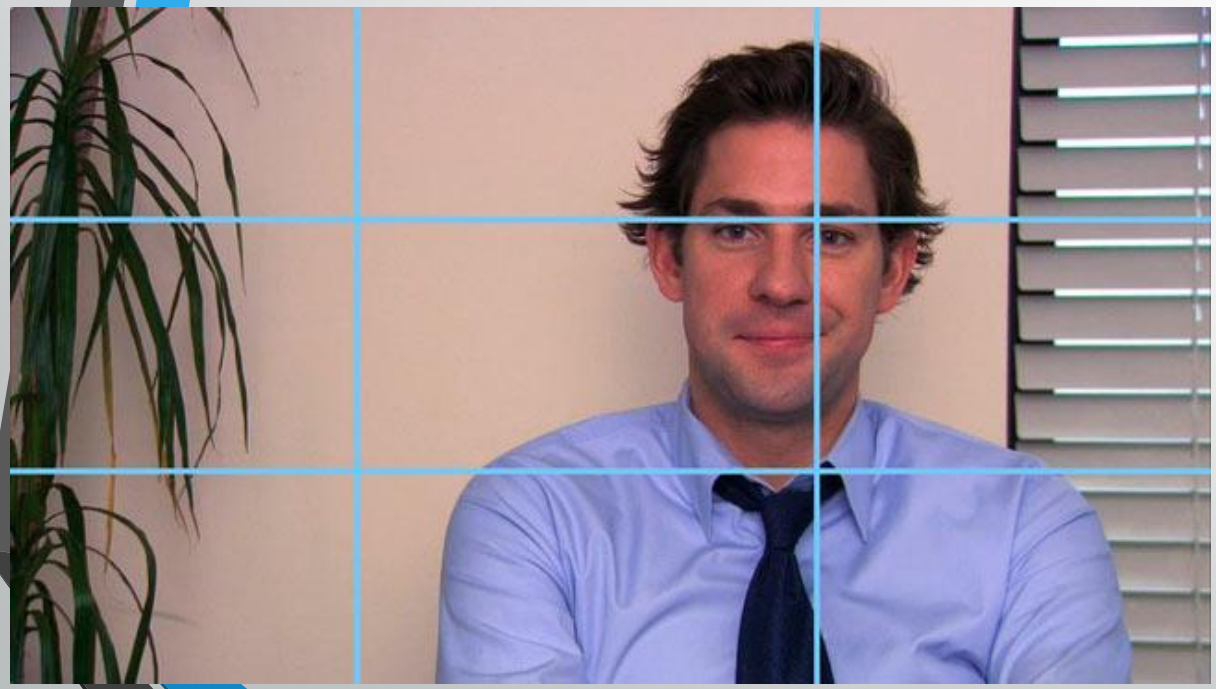
Rule of Thirds

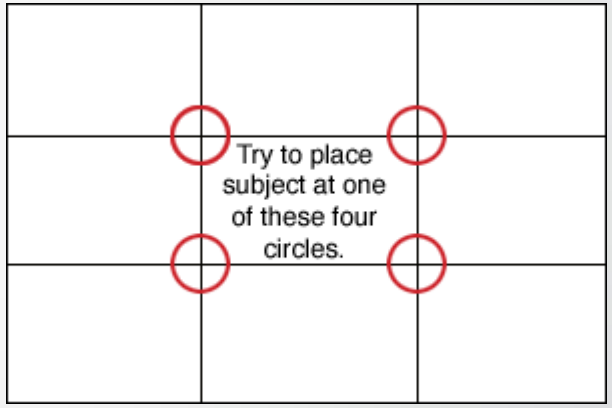


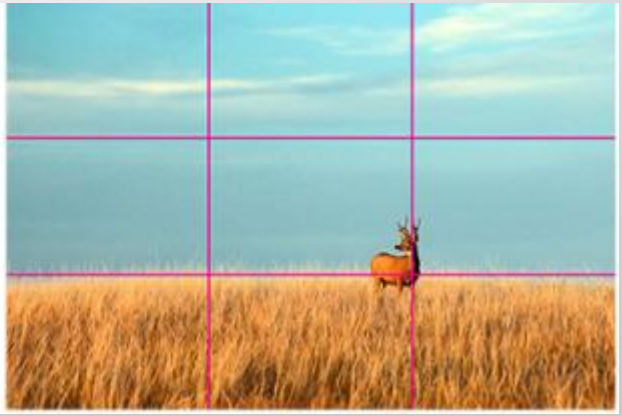
Central Focal Point



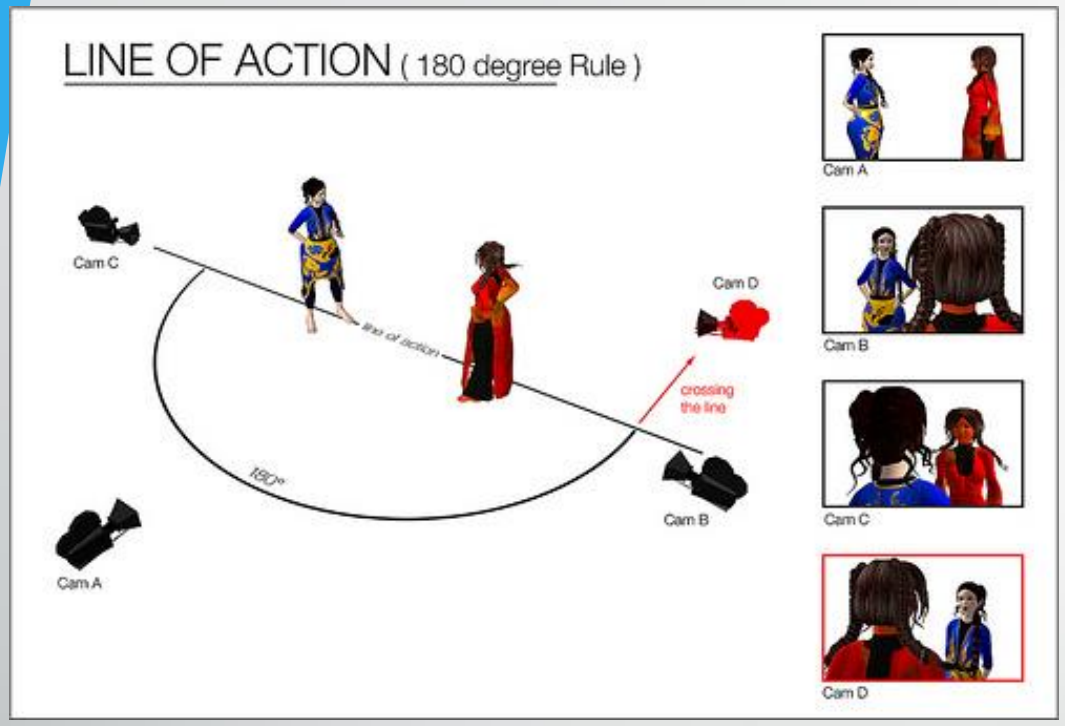
Focal Point Using
The Rule Of Thirds

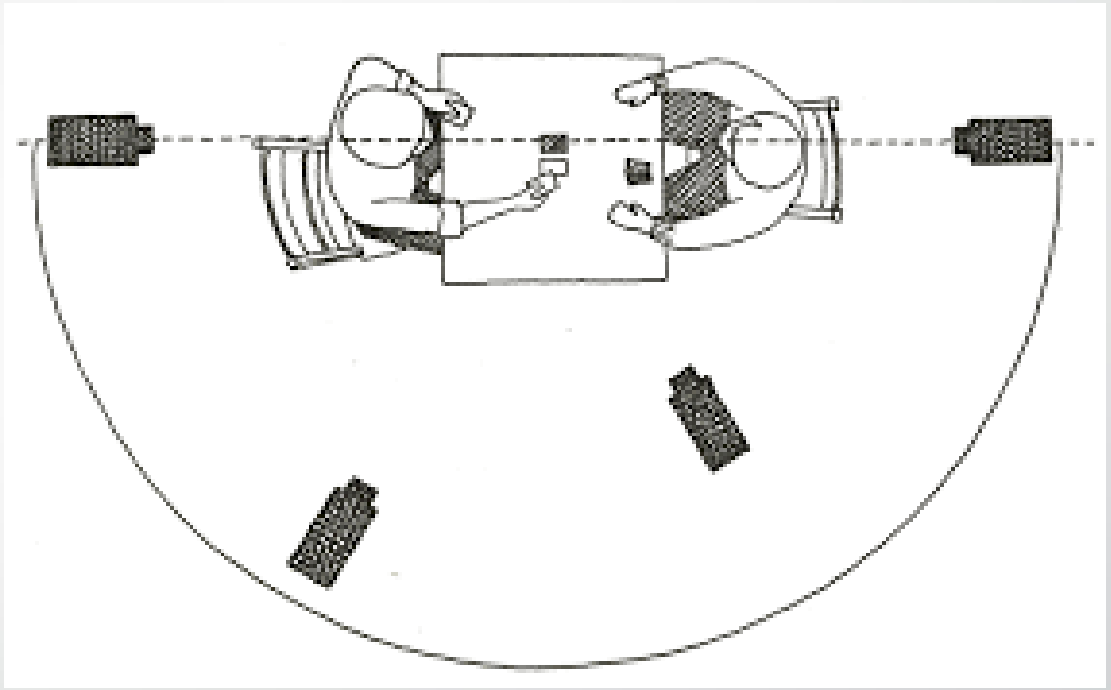






180 Degree Rule





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
- Fast motion https://youtu.be/XPxmlKjKLSQ

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