CS 5964

Lighting:

Controlling Shadows, Shape, Mood and Tone





p.s. Machinima doesn't have to use these!



PHILOSOPHY

- Light affects everything
- Changes mood
 - Seasonal effective disorder
 - Film noir vs. Wizard of Oz
 - Fluorescent lights in Joe vs. Volcano
- Mix of art and science
- Use technique and aesthetics to support the theme



2 PHILOSOPHIES

1.) IMITATE LIFE

- Aims for realism
- Where is the existing light? Attribution? Motivation?

2.) INTENSIFY EXPERIENCE

- More expressionistic
- What's the emotional tone? Temperature? Mood?



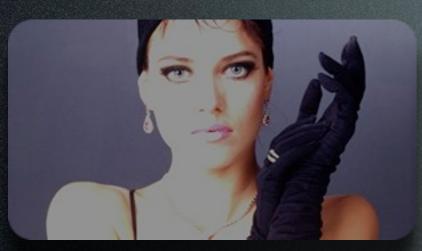


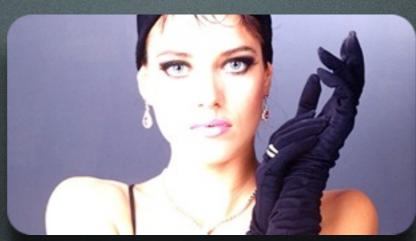
MOTIVATION

- Motivation is often what separates student films from professional films-how did that light get there?
- Practicals--light provided within the frame, such as a lamp
- The sun and its light derivatives are major motivators









1.) INTENSITY

- Measures the brightness of the shot
- Saturation measures brightness of a color

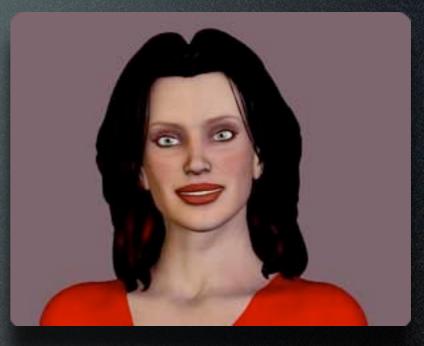






2.) QUALITY

- Is the lighting harsh, or soft
- Further from source, harsher the shadows (counterintuitive)
- Hard vs. soft, full sun vs. cloudy, direct vs. diffusion
- Size--smaller is harder (think sun), larger is softer (think clouds)



Softer light



Harder light

3.) CONTRAST

 Gauges the levels of brightness within the frame between the highlights and shadows



4.) DIRECTION

- Where is the light coming from? What angle?
- Motivation--realistic or expressionistic
- Reflective
- Bouncing/dampening
- Shaping



5.) COLOR

- Temperature--Is it a
 warmer or cooler color?
 (usually from more orange
 to more blue)
- Neon lights, stained glass, gels
- Psychology of color
 - Emotion of red, white, and blue
- Cultural--"Lady in Red"



Cooler tones

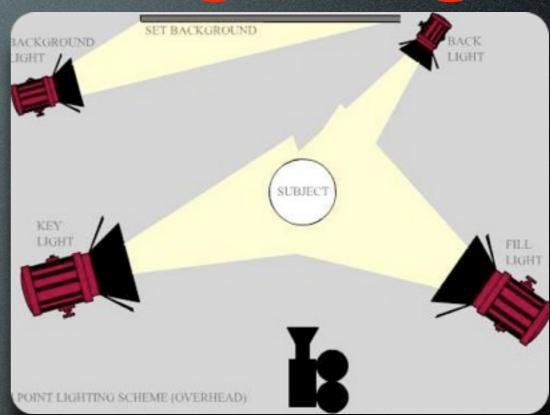


Warmer tones

3 (or 4) Point Lighting

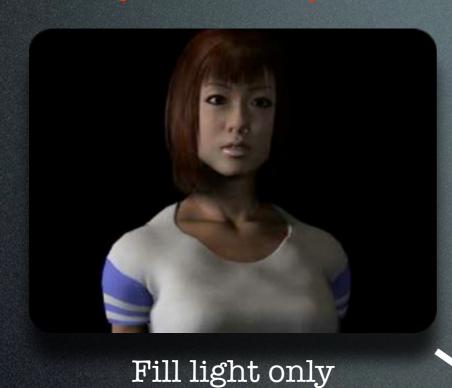
- 1.) Key--primary light source
- 2.) Fill--fills in the shadows
- 3.) Back--separates from background; 3D quality
- 4.) Background

Real world more complex





3 (or 4) Point Lighting









HIGH vs. LOW KEY

- High Key--No or few shadows; flat light; evenly lit can cause eye to wonder
 - Ex. TV shows--Jay Leno, Stephen Colbert-soaps; full shade and overcast
- Low Key--More shadows; more moody; light leads the eye
 - Ex. Film noir, Chiaroscuro, full sun











Realism

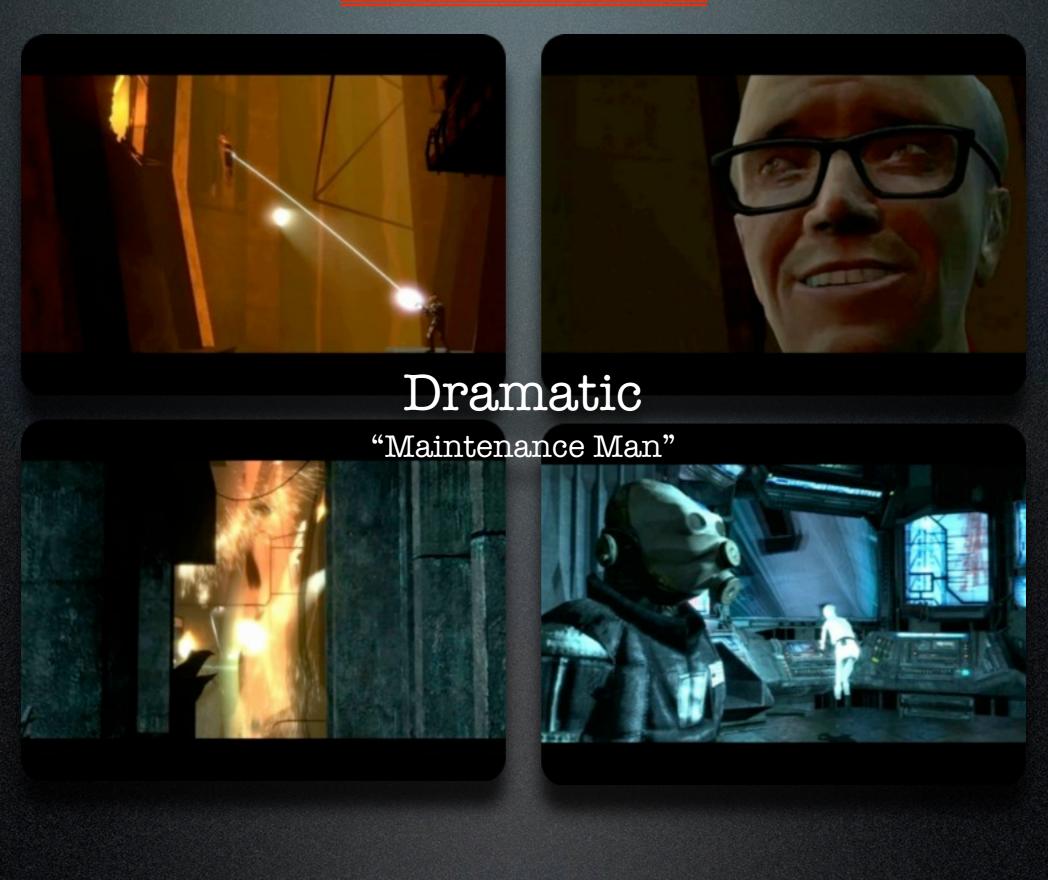


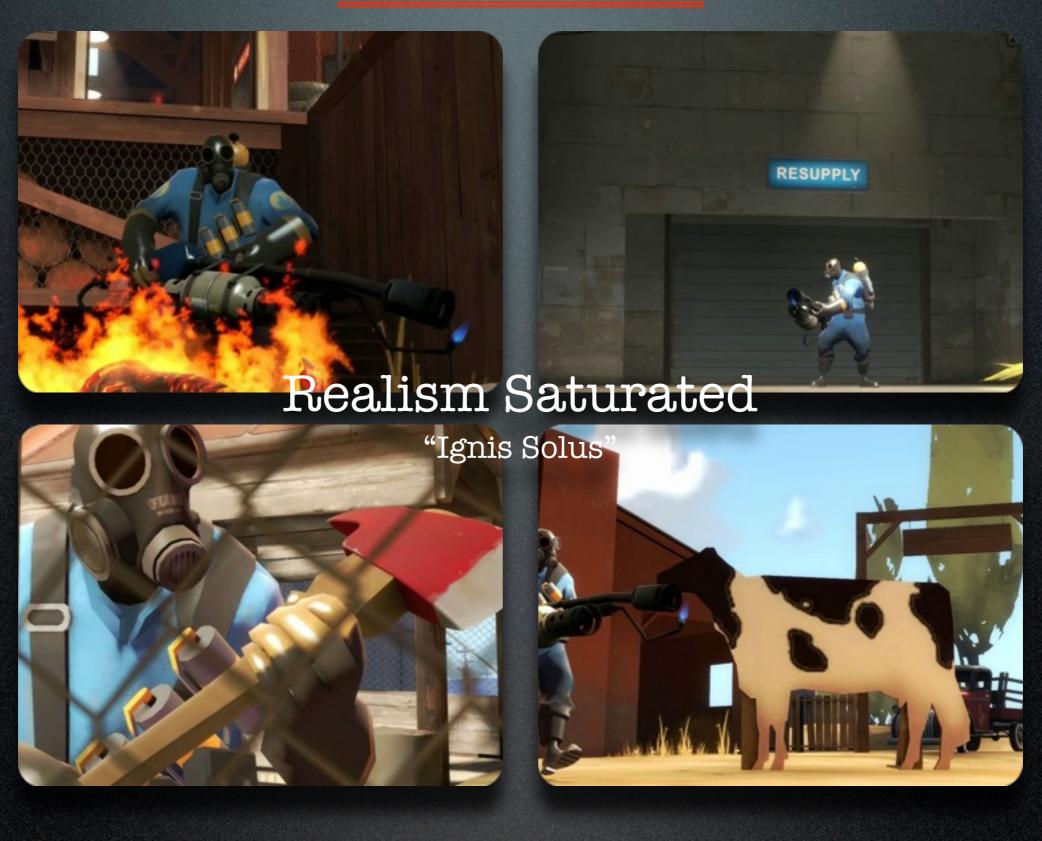
"Slightly Later Man"

"Male Restroom Etiquette"

"Legend of a Cowgirl, 2:00 mins. in"













Sepia Toned





Lighting Effects









Fog and natural elements

"The Right - in production" Thursday, February 12, 2009

CLOSING WORDS

- Light as simply as possible
- Make pictures one picture at a time
- Managing light is also managing shadows (don't just eliminate them)
- Let necessity drive your decisions
- If all else fails... turn all the lights off and turn them back on one-by-one
- Draw a lighting diagram