

CS 5964

Lighting: Controlling Shadows, Shape, Mood and Tone



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

“GTA Coca-cola ad”

Color shift?

PHILOSOPHY

- Light affects everything
- Changes mood
 - Seasonal affective 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?

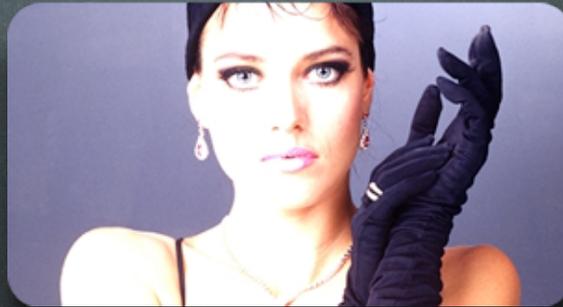
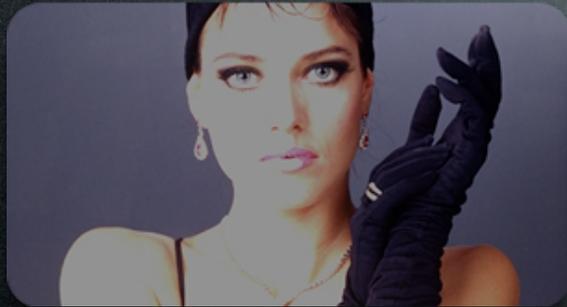


MOTIVATION

- 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



CHARACTERISTICS



1.) INTENSITY

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

CHARACTERISTICS

2.) QUALITY

- Is the lighting **harsh**, or **soft**
- 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

CHARACTERISTICS

3.) CONTRAST

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



CHARACTERISTICS

4.) **DIRECTION**

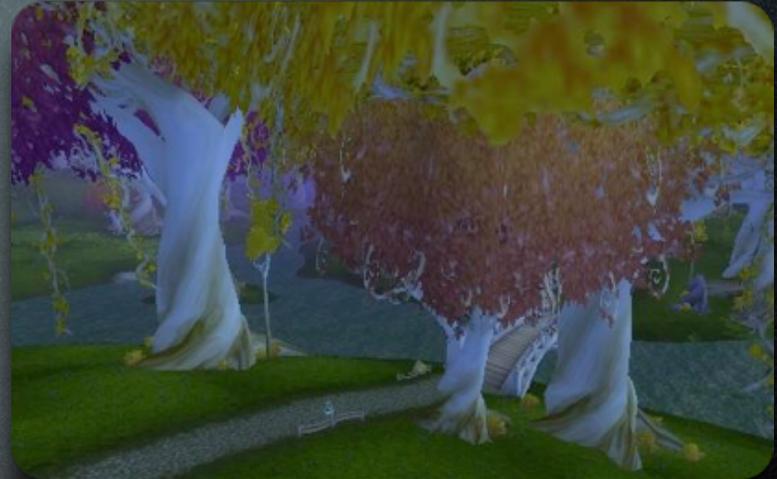
- Where is the light coming from? What angle?
- **Motivation**--realistic or expressionistic
- Reflective
- Bouncing/dampening
- Shaping



CHARACTERISTICS

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"



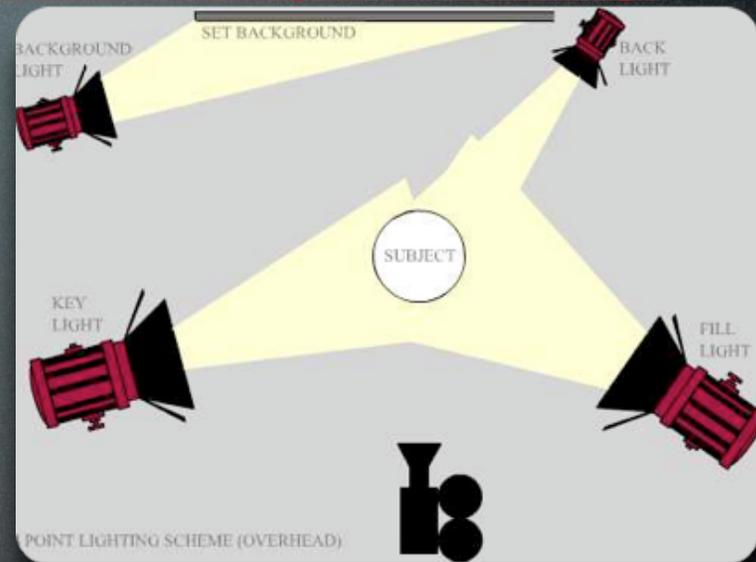
Cooler tones



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



Fill light only



Key light only



Back light only



Complete 3-point light setup

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



STYLES



Black & White



Realism



Real-Expressionistic



Expressionistic



Experimental

STYLES



Chiaroscuro

“Jill’s Song”



STYLES



Dramatic

“Maintenance Man”



STYLES



Realism Saturated



"Ignis Solus"

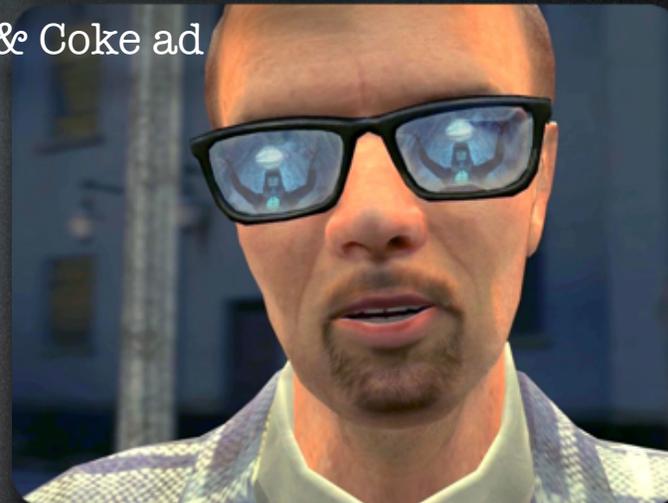


STYLES



Realism Desaturated

“Melon 3” & Coke ad



STYLES



Sepia Toned
"Flying Fenix"



Lighting Effects



Color key



Silhouette



Fog and natural elements



Spectral flare

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