# Lighting in Photography

# Why does lighting matter?

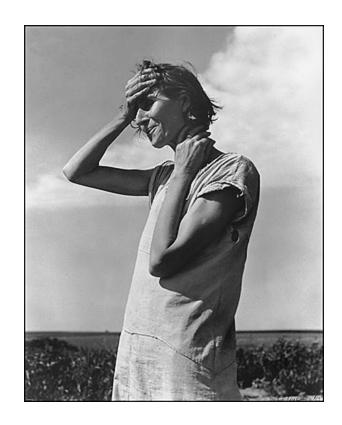
Light changes- indoors and outdoors

 Lighting can affect the feeling of a photograph or the look of the subject

 Understanding and controlling the lighting of your subject gives you more freedom to craft your images

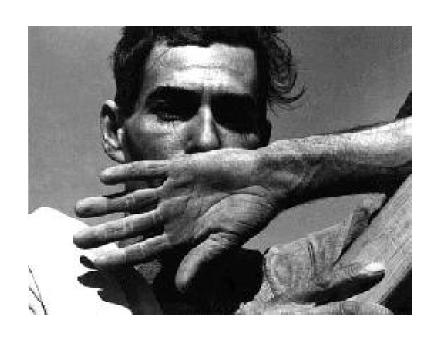
# **Direct light**

- Direct light is high contrast. It creates harsh shadows with sharp edges.
  - An example of direct light is the sunlight on a sunny day or a flash



Dorothea Lange. Woman of the High Plains. 1938.





More direct light images by Dorothea Lange.

# **Diffused light**

- Diffused light is low in contrast. The shadows are weak or even absent.
  - An example of diffused light is an overcast day or light bounced off of reflectors or umbrellas



Photo by Julia Margaret Cameron.



Photo by Annie Leibovitz



Georgia O'Keefe by Alfred Steiglitz

#### **Directional Diffused Light**

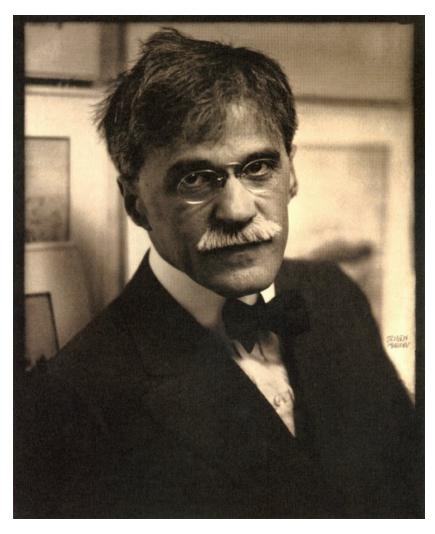
- Directional diffused light has moderate contrast and shadows.
  - An example is light from a window on a hazy day or light from a flash bouncing off a wall or reflector



Photo by Miguel Gandert.



Photo by Julia Margaret Cameron



Alfred Stieglitz, by Edward Steichen

# Setting Up Portrait Lighting

 There are numerous ways to set up portrait lighting to achieve different effects.

 In general, photographers are interested in using different types of light to minimize or maximize shadows to create interesting or flattering light for their subjects.

## **Types of Lights**

Main light or key light

• Fill light

Back light

Catch light

# The Main Light

 The main light is the main source of light or the brightest light.

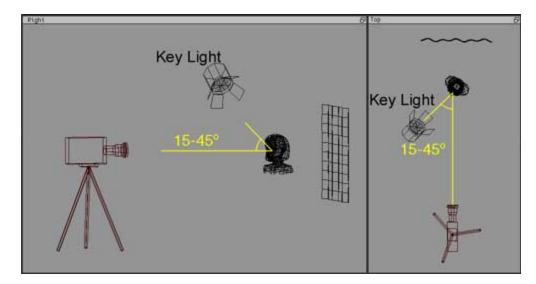
 The main light creates the main shadows on your subject and can be moved around to create different effects or softened by adding additional lights of the same intensity, a fill light, or using reflectors.

#### More on the Main Light...

 Highlights on the forehead, the upper cheeks, the chin, and along the bridge of the nose created by the main light give life, brilliance, and form to a portrait, and the quality of these highlights are controlled by the main light distance.

#### Where to Place the Main Light?

- To determine the main light distance, start with the light about 4 feet from the subject and about 2 feet above the subject's eye level.
- The light should be about a 45-degree angle to the lens axis.

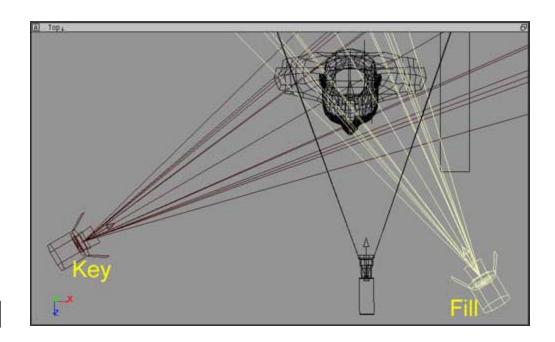


## Fill Light

- The fill light dims shadows created by the main light.
- Fill lights should not overpower main lights; they should raise the level of light in shadowed areas to allow for more detail.
- Fill lights can be used outdoors or indoors.
- Reflectors or bounce cards can also be used as fill lights

## Where to Place the Fill Light?

 The fill light is normally placed slightly above the subject's eyelevél and lówer than the main light on the opposite side of the camera from the main light and near the camera lens axis.

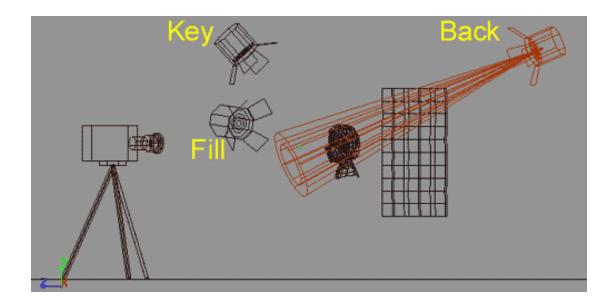


#### **Back Light**

 The back light creates a bright line around the edge of the object, to help visually separate the object from the background.



## **Three-Point Lighting**



**Three-point lighting** is a very common lighting setup used in photography and film. By using three separate light sources, the photographer can illuminate the shot's subject (such as a person) however desired, while also controlling (or eliminating entirely) the shading and shadows produced by direct lighting.

# **Catch Light**

- The term catch light is used to describe either the highlight in a subject's eye from a light source, or the light source itself.
- Adding a catch light can help draw attention to the subject's eyes, which may otherwise get lost among other elements in the scene.

