Lighting Concepts
Create Mood with Light Direction
Ambient - Fill (diffused)
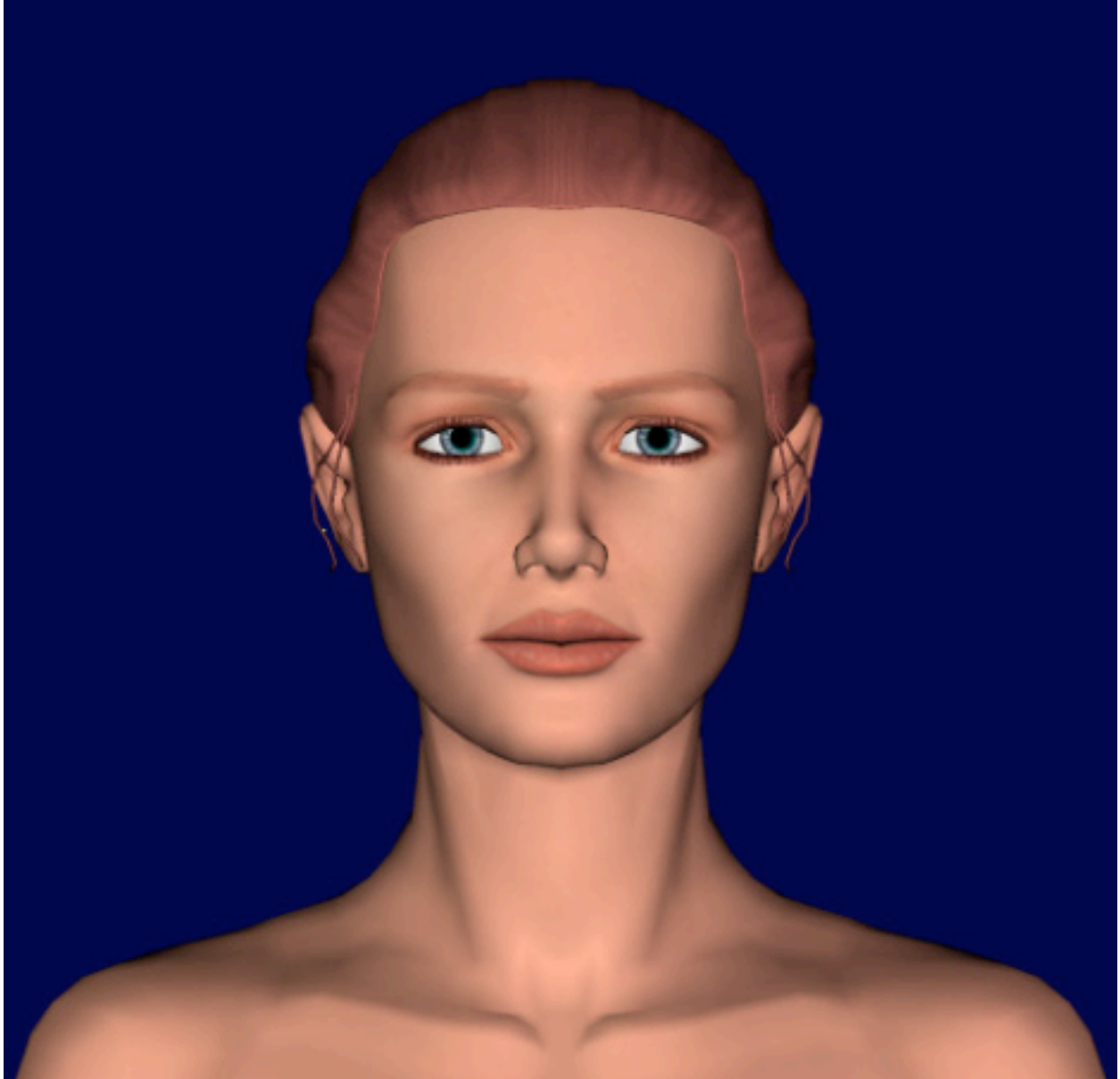

Ambient 0%

Lighting Concepts
Create Mood with Light Direction
Frontal - Fill (large & soft)

Fill 100%

Lighting Concepts
Create Mood with Light Direction
High - Key (sun)

Key 100%

Lighting Concepts
Create Mood with Light Direction
High back - Hair Kicker

Hair Kicker 100%

Lighting Concepts
Create Mood with Light Direction
Side – Rim Kicker

Rim (kicker) 100%

Lighting Concepts
Create Mood with Light Direction
Fill + Key

Fill 100%
Key 100%
Key is twice the intensity as fill = 3:1 Ratio

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Lighting Concepts
Create Mood with Light Direction
Fill + Key + Hair

Fill 100%
Key 100%
Hair 100%
Ratio 3:1

Lighting Concepts
Create Mood with Light Direction
Fill + Key + Hair + Rim

Fill 100%
Key 100%
Hair 100%
Rim 100%
Ratio 3:1

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Lighting Concepts
Create Mood with Light Direction
Low Key - Unnatural

Low Key 100% (unnatural)

Lighting Concepts
Create Mood with Light Direction
Low Key + Hair + Rim

Fill 0%
Low Key 100%
Hair 100%
Rim 100%

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Lighting Concepts
Create Mood with Light Direction
Fill + Key + Key (butterfly)

Fill 100%
Key1 100%
Key2 100%
Key is same intensity as fill = 2:1 ratio

Lighting Concepts
Create Drama with Lighting Ratio
Key to Fill Ratios
                1:1 - flat
                2:1 - modeling
                3:1 - modeling dramatic

Once you understand lighting ratios, it is much easier to control your lighting to create mood, add a sense of depth or shape, and control the way textured surfaces look. A 2:1 ratio would mean that the highlights are twice as bright as the shadows, or that the key light is the same brightness as the fill. Remember that light is additive. 1 Fill + 1 Key = 2. In shadows where the key light does not reach, its only 1. Therefore, key = 2 in the highlights and fill = 1 in the shadows.
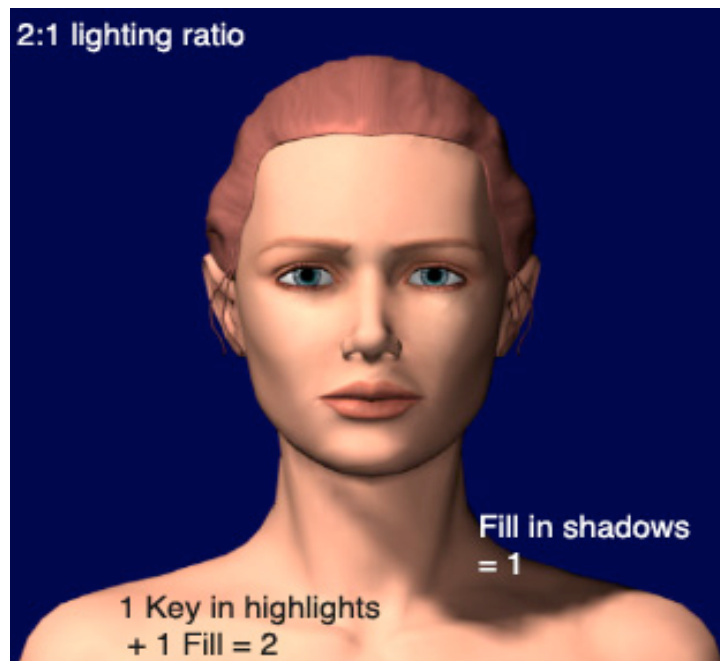
1:1 - flat lighting (one light)
2:1 - Highlights get twice as much light as the shadows. Key is same f-stop as the fill
3:1 - Highlights get three times as much light as the shadows. Key is one f-stop
      greater than the fill.
4:1 - Highlights get four times as much light as the shadows. Key is two f-stops greater
      than the fill.
8:1 - Highlights get eight times as much light as the fill. Key is three f-stops greater
      than the fill. (very low-key dramatic effect) Video has contrast range limitations,
      for ratios such as this the dark areas will probably just be rendered as black,
      without discernible detail.

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Lighting Concepts

Using Multiple Lights

ambient (available)

one point (just fill or on camera flash)

flat (one light)

Lighting Concepts

Using Multiple Lights
ambient (available)
one point
two point

Two lights:
Fill frontal
Key at 45 degrees

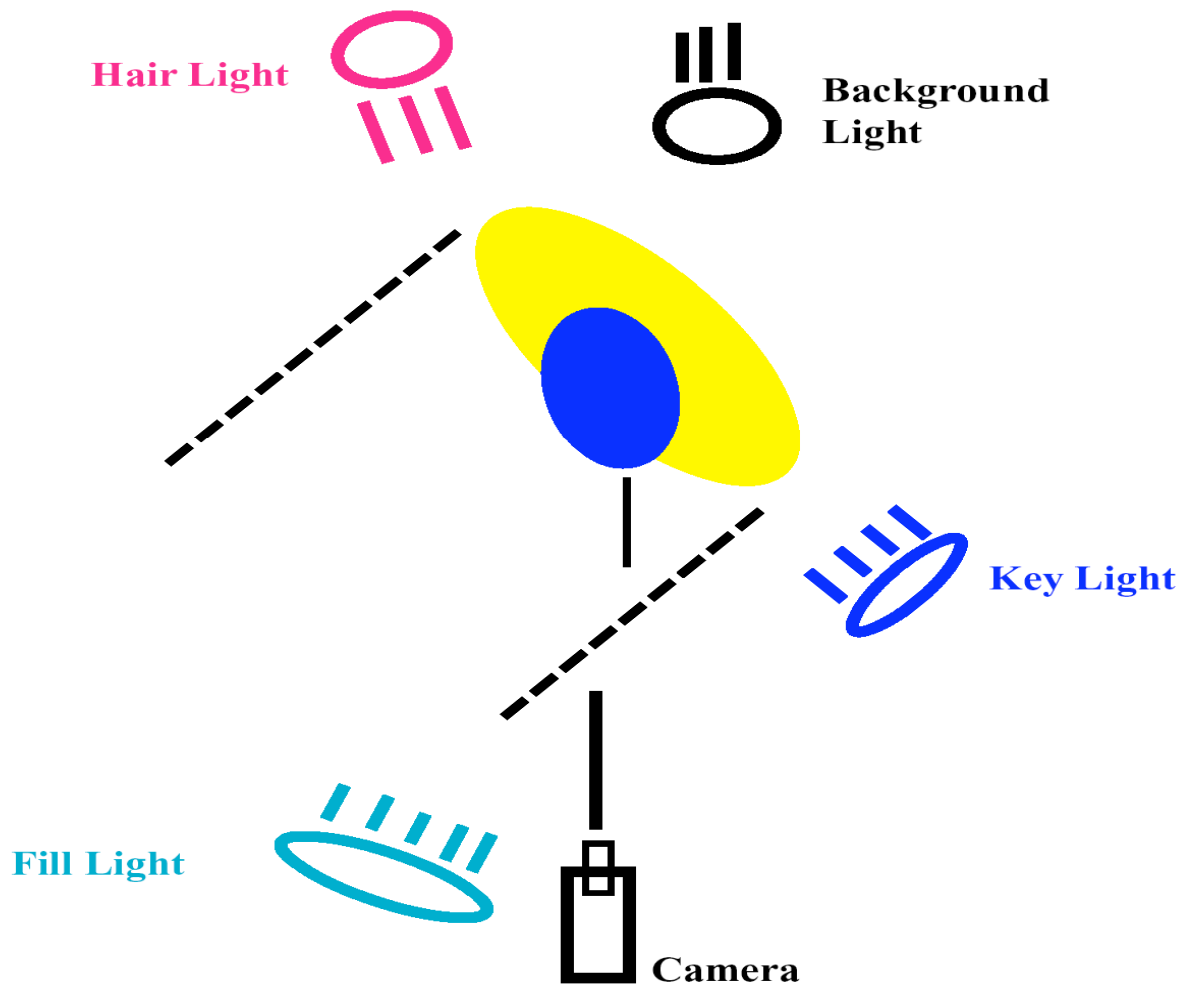Basic Lighting for Film & Video
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Lighting Concepts
Using Multiple Lights
ambient (available)
one point
two point
three point (Rembrandt)
four point or more

45 degree key, 3 or four lights

Background

Hair Light

Background Light

Key Light

Fill Light

Camera

Lighting Concepts
Using Multiple Lights
Portrait Lighting
Broad Lighting
Butterfly
Short
Rembrandt
Split

Broad Lighting
The main light illuminates the side of the face turned toward the camera -- the broad view. It tends to flatten the illusion of depth and de-emphasize facial features. Nevertheless, it is useful for widening an overly narrow, thin face.

Butterfly Lighting
Moving the light further camera-left, we hit the face right between the eyes producing a symmetrical butterfly effect. With some softening, we could call this your basic glamour lighting. A well- proportioned, oval face benefits most from this light.

Short Lighting
Still further left, we get the popular short or narrow lighting. It narrows round faces and brings out the contours much better than broad lighting.

Rembrandt Lighting
Still further left until a triangular patch of light remains on the leading cheek, is reminiscent of many of Rembrandt's portrait paintings. As in butterfly lighting, the light needs to be fairly high -- like Rembrandt's studio skylight.

Split Lighting
Finally, at 90 degrees left so that only half of the face is illuminated is aptly called split lighting. In addition to creating dramatic effects, this lighting can hide defects on the shadow side or narrow a broad nose.

This document is available in color pdf format at http://stocom.com/basic_lighting