



Sponsored by LightShine Church and NPHS

PHOTOGRAPHY PHOLKS



lights**hine**
church

Some announcements

- \$25 due ASAP
- We owe \$20 a class for utilities costs, so I need at least 4 people to pay in cash or write checks payable to Eric Lindroth
- Snacks next week
- Assistant (be here by 6 to help set up, snack and potluck coordinator)
- November 11 and 18?

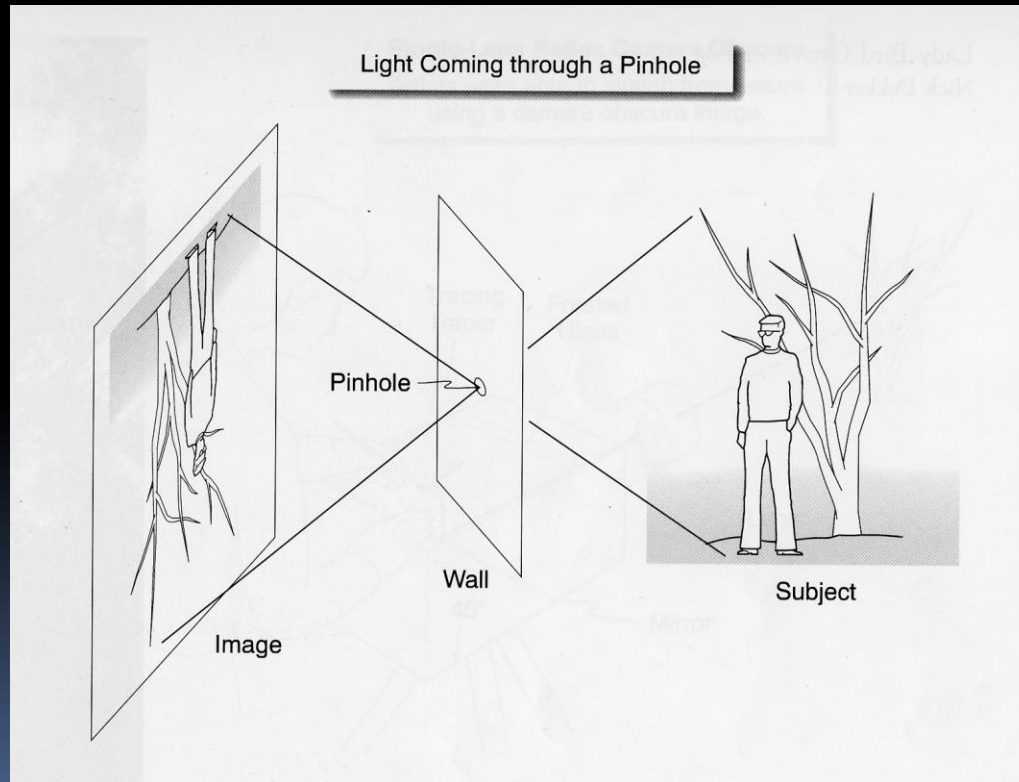


REVIEW



Camera Obscura

- Camera – “room”
- Obscura – “dark”
- Inverse square law

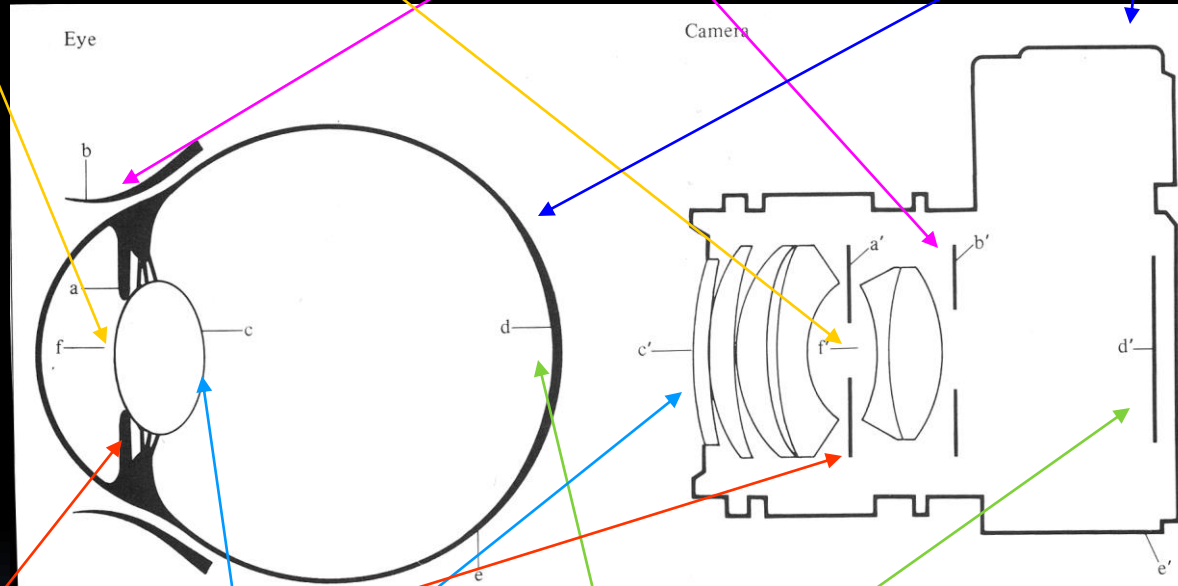


The Camera/Eye Comparison

Aperture =
Pupil

Shutter =
Eyelashes

Camera body =
Eyeball



Iris diaphragm =
Iris

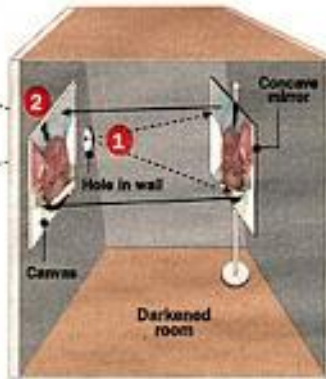
Lens

Film =
Light sensitive
retina

How the Camera Obscura Works



Subject



1. In one approach, the image of a subject passes through a small opening in the wall of a darkened room onto a mirror.

2. The image is reflected off the mirror onto a canvas or piece of paper hung on the opposite wall. The image is now traced. Then the canvas can be turned right side up and the work finished from real life.

Photo by Associated Press; Los Angeles Times graphic.



Camera Obscura Paintings

Johannes Vermeer





Early Landscape Photographers Influence in Creating and Preserving National Parks and Wilderness



Timothy O'Sullivan



Carlton Watkins



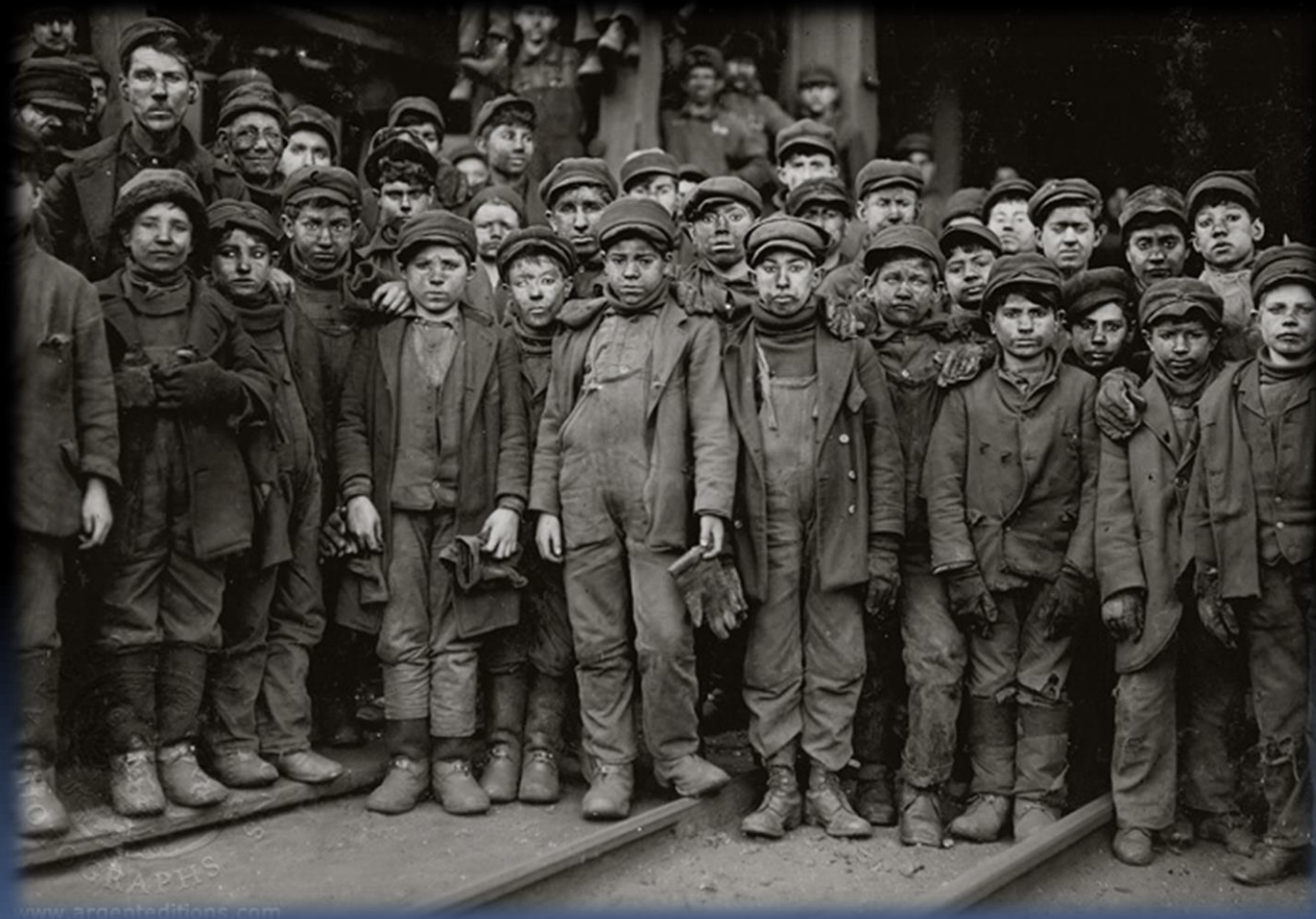
Ansel Adams

(and others...)

Mathew Brady



Lewis Hine





Photographic Composition Guidelines

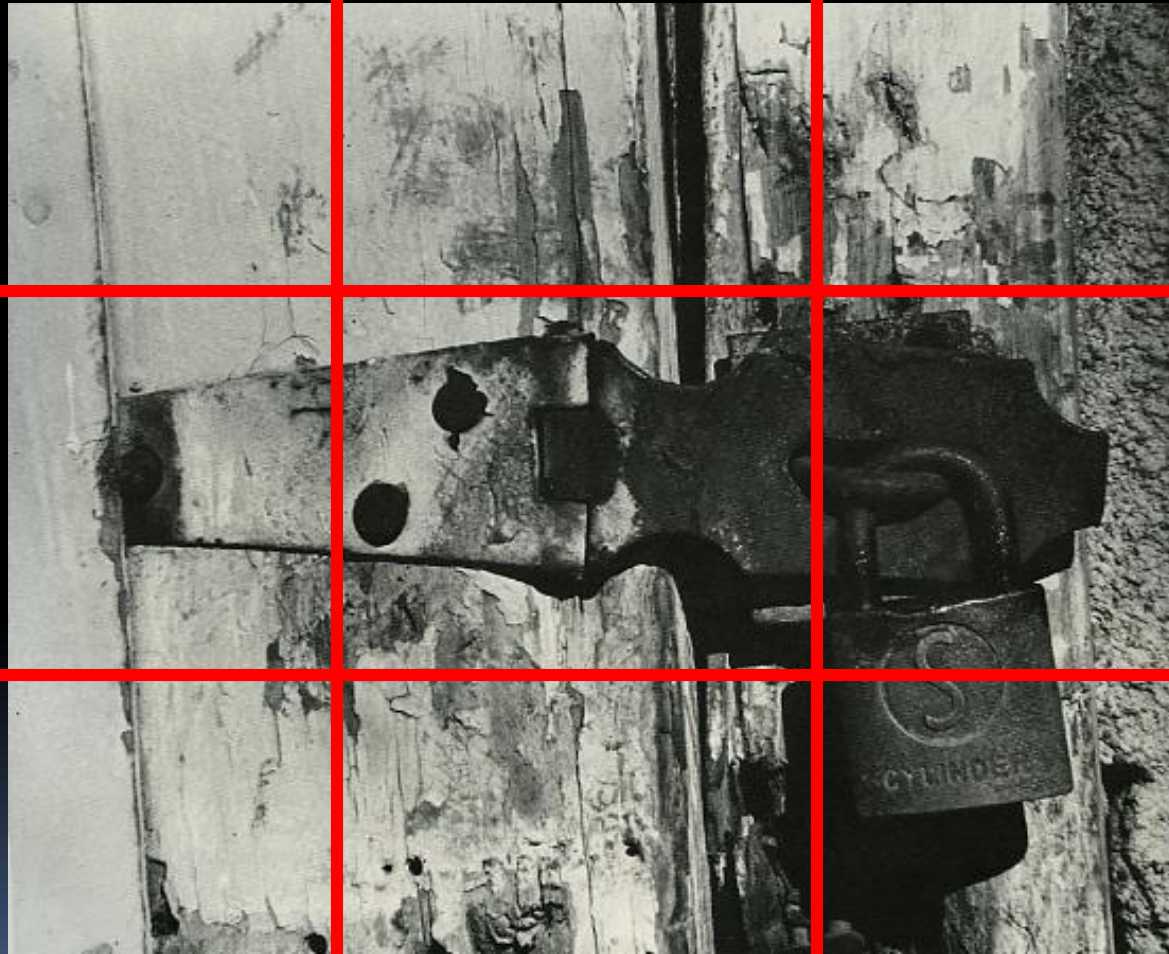
- **Simplicity**
 - **Rule of Thirds**
 - **Lines**
 - **Balance**
 - **Framing**
 - **Avoid Mergers**
- 

Simplicity



Danielle Adler

Rule of Thirds



Lines



Melissa Abel

Balance



Framing



Whitney Bulmer

Avoid Mergers





Technical Lesson

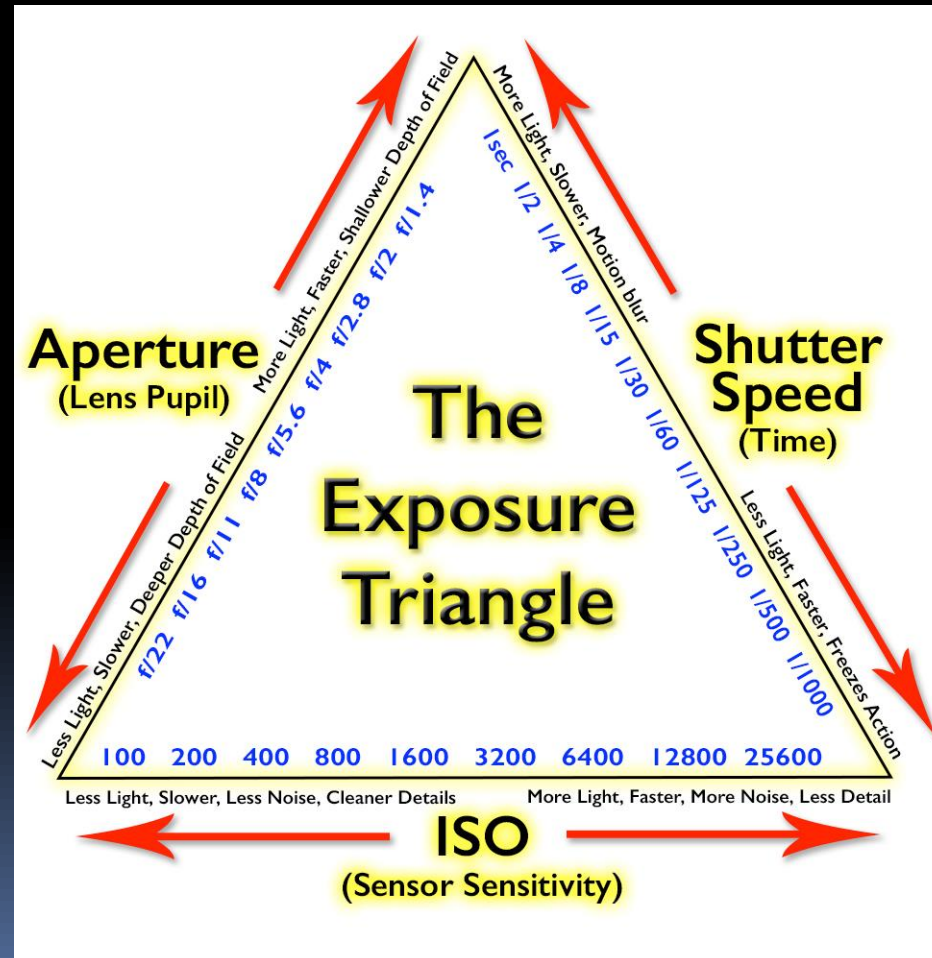


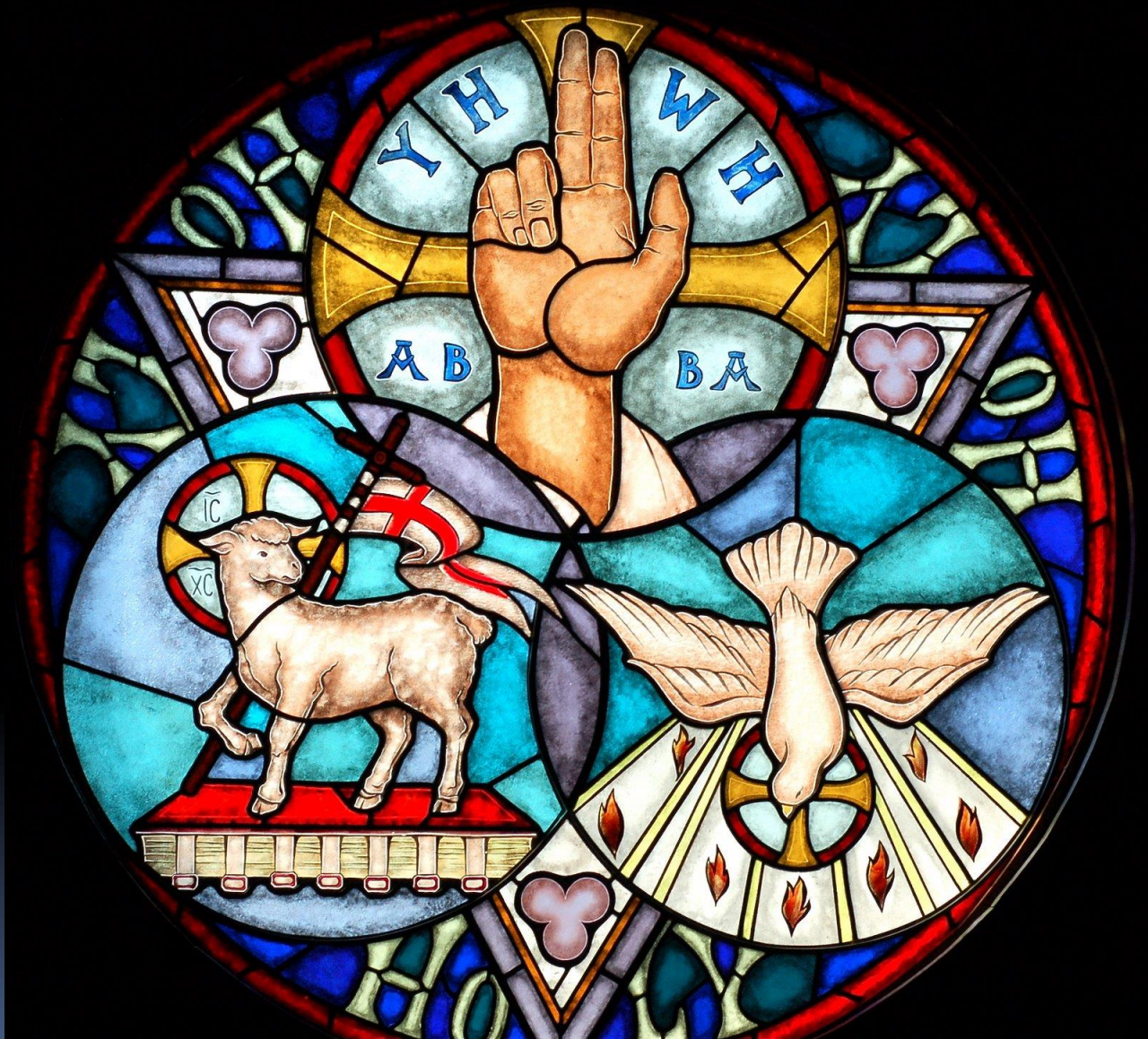
EXPOSURE TRIANGLE, ISO, LIGHT METER

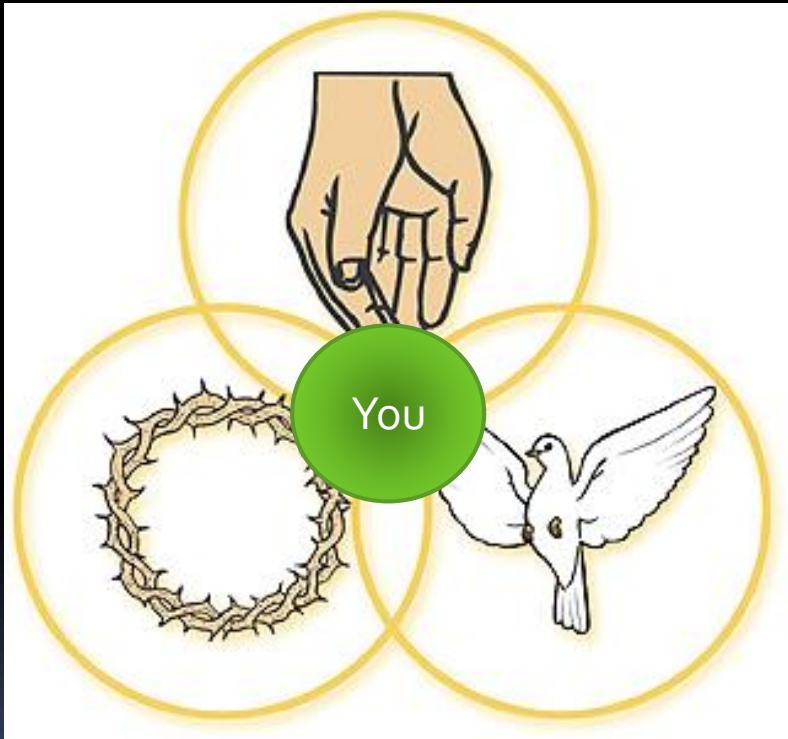
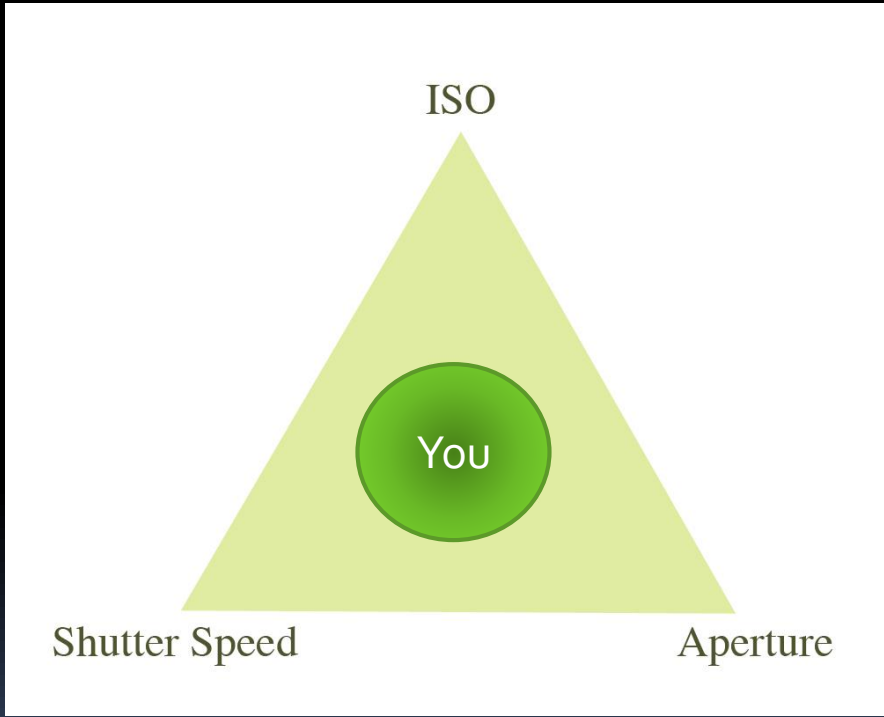


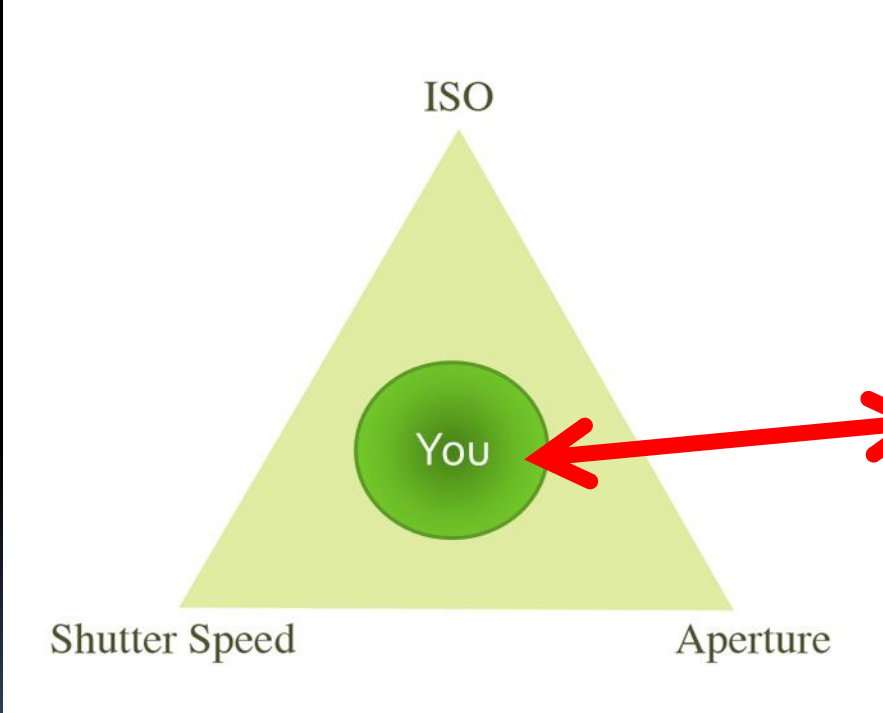
EXPOSURE TRIANGLE

Holy Trinity of Photography



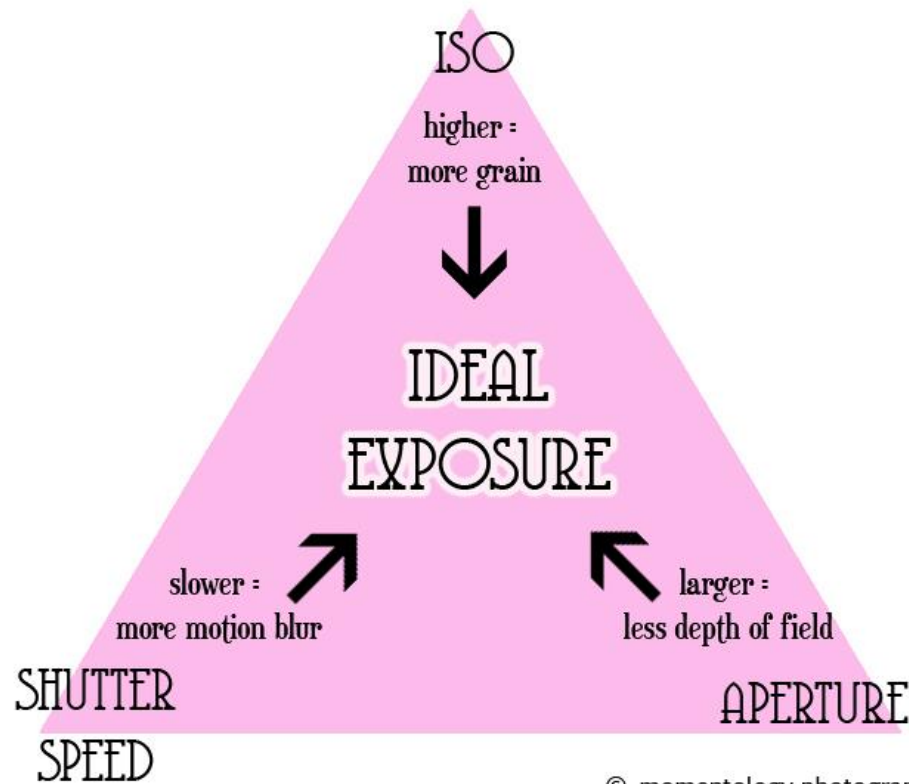


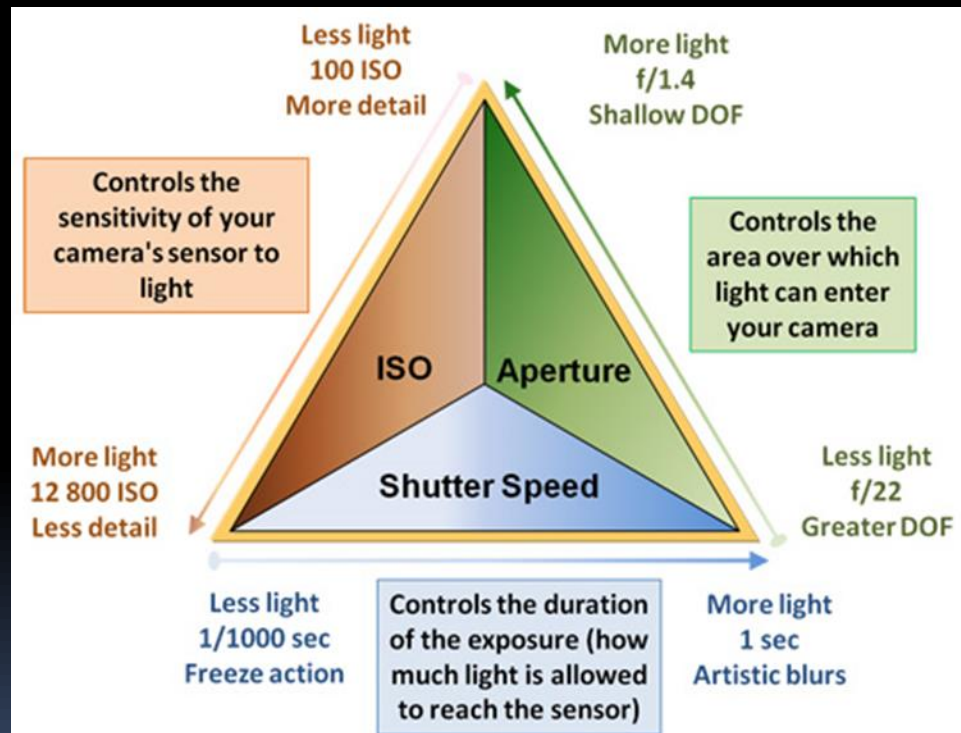


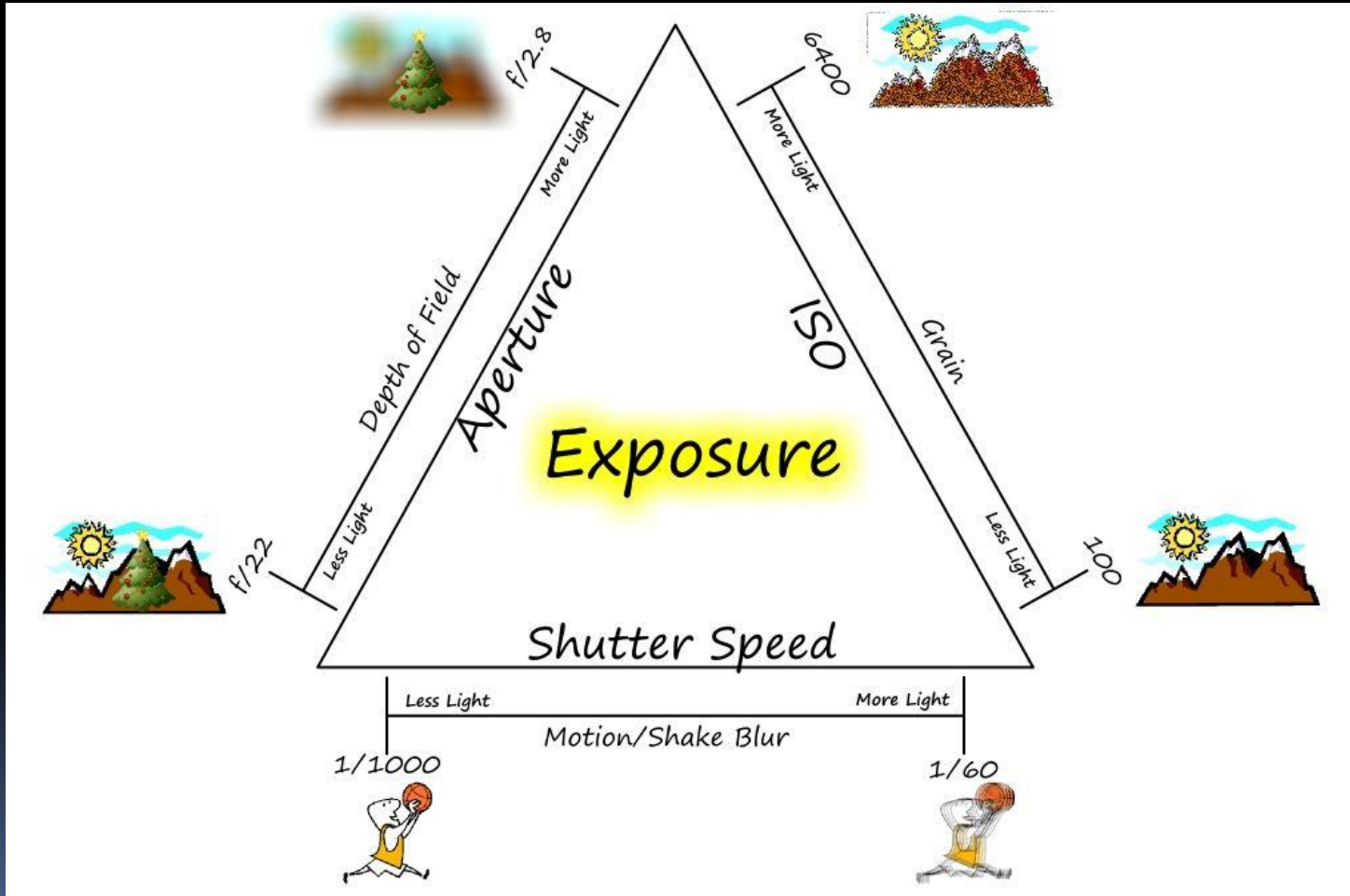


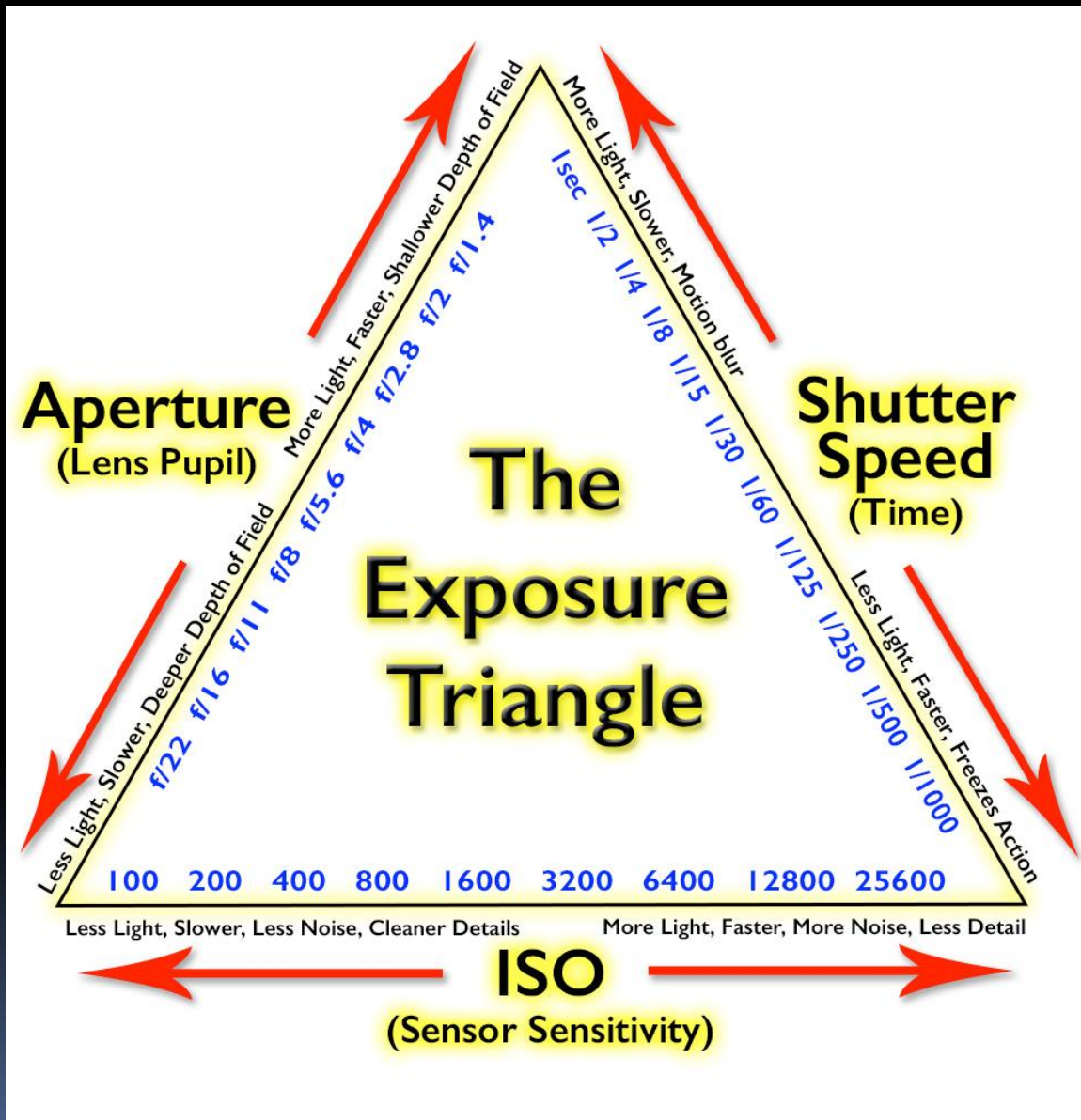
Light Meter

THE EXPOSURE TRIANGLE







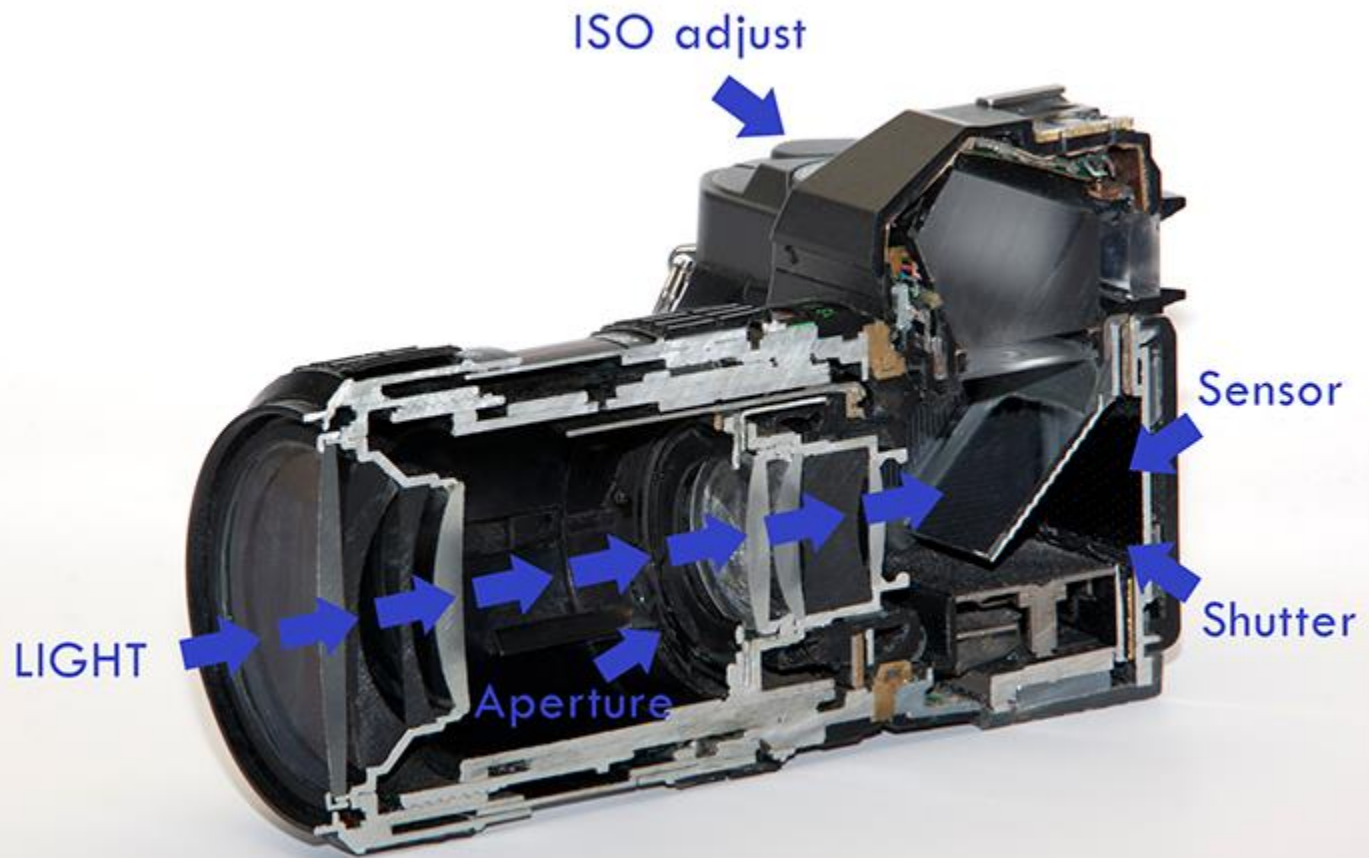




APERTURE is the gap
between the curtains.

SHUTTER
SPEED is
the speed
that you open
and close the
curtains.

ISO is
the darkness
of your
sunglasses.





ISO

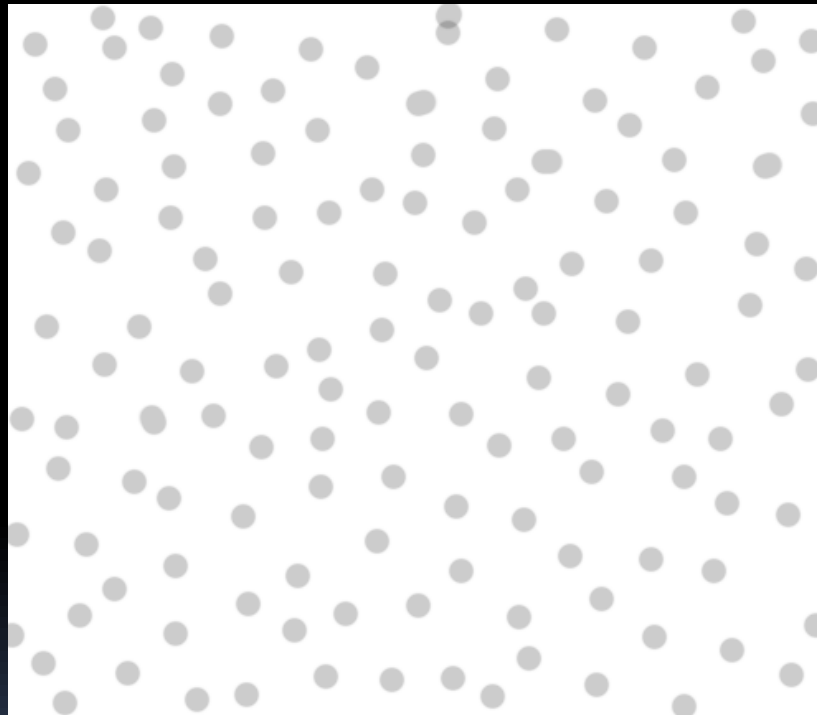




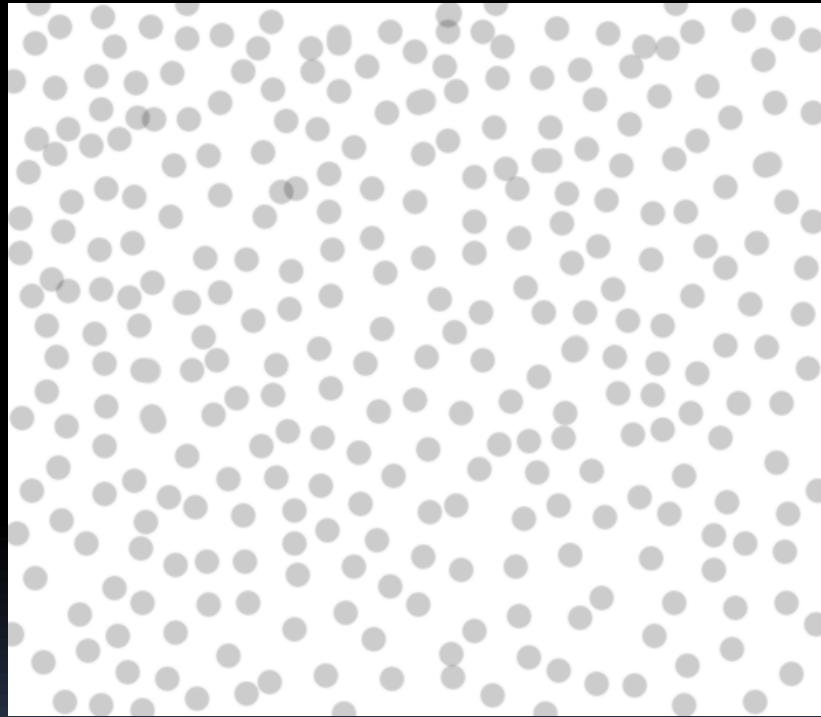
ISO and ASA

- ISO – International Standards Organization
 - ASA – American Standards Association
- 

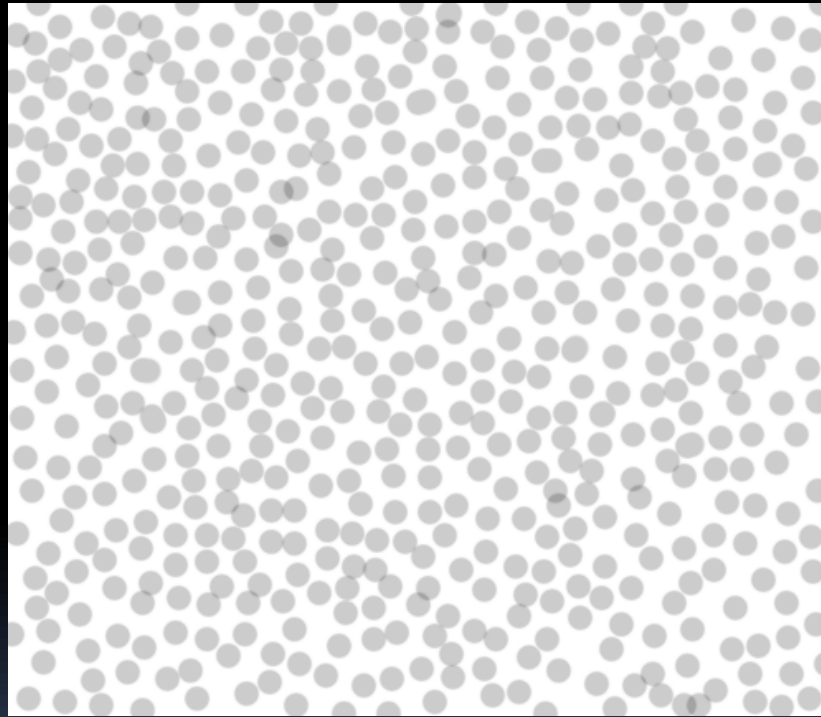
800 ISO



400 ISO

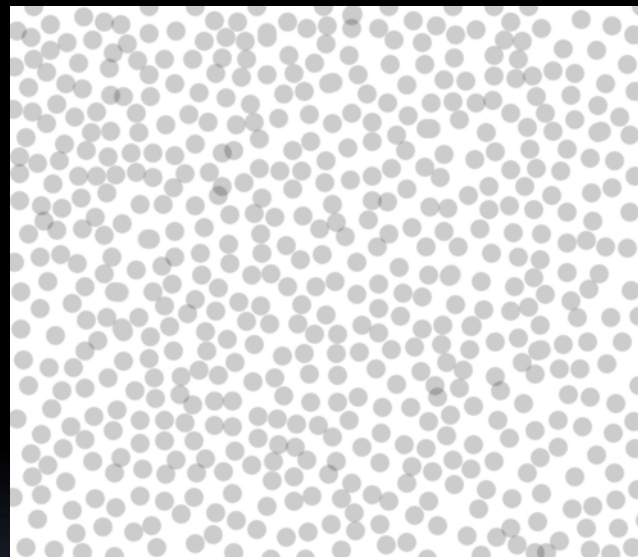
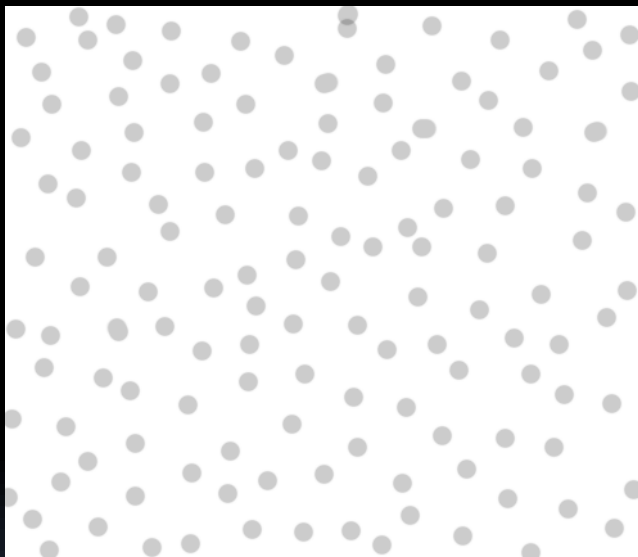


100 ISO



Low Density

High Density

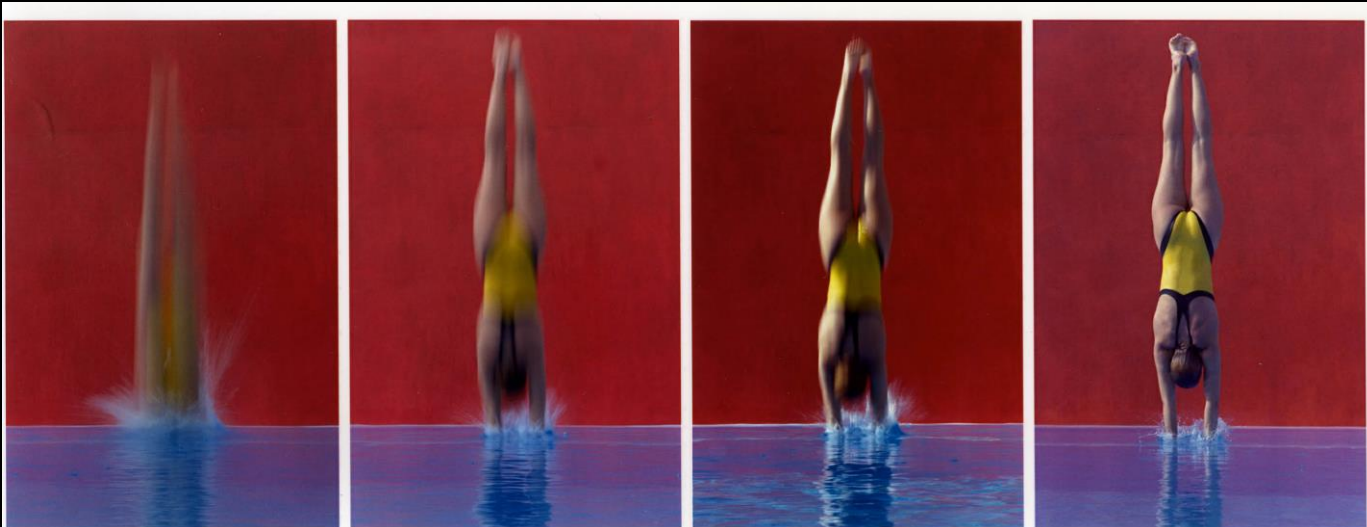




100 Speed Film



Kodak Max Versatility Plus 800 Speed



100 Speed Film — 200 Speed Film

Kodak Max
Versatility Plus
400 Speed

Kodak Max
Versatility Plus
800 Speed



100 Speed Film



200 Speed Film



Kodak Max
Versatility Plus
400 Speed



Kodak Max
Versatility Plus
800 Speed




How does ISO affect print quality

Lower ISO

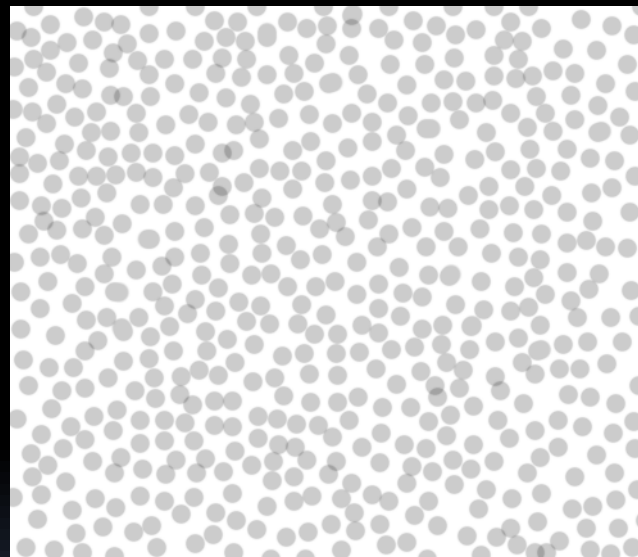
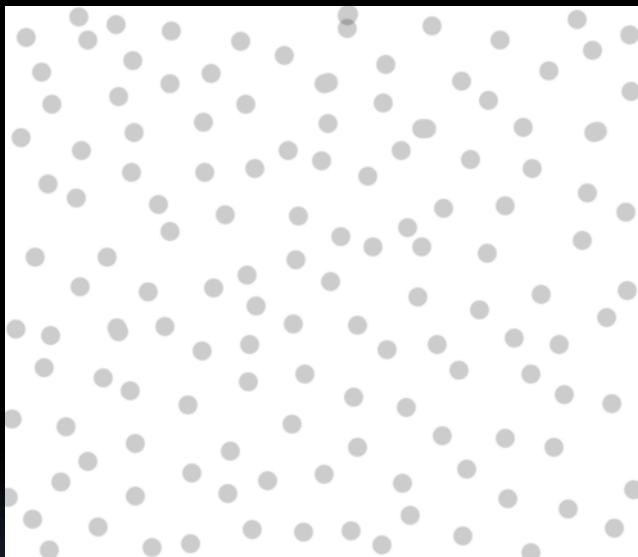
- Films are more dense, and thus are less grainy when made into a print
- Digital: CCD sensors are more dense = less noise

Higher ISO

- Films are less dense, and thus can be more grainy when enlarged
 - Digital: CCD sensors are less dense = more noise
- 

Low Density

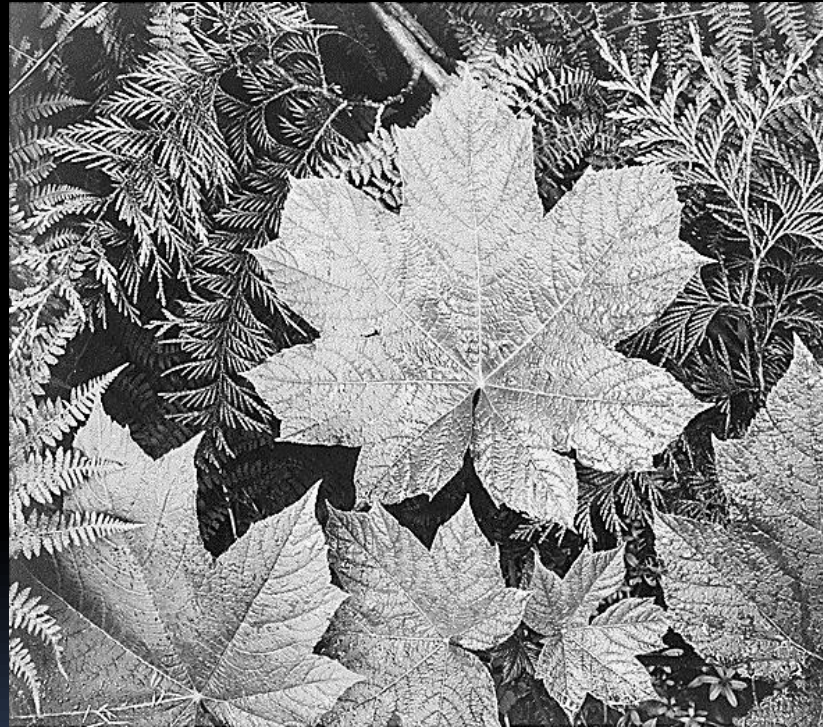
High Density



High ISO (maybe 3200 ISO)



Low ISO (maybe 64 ISO)

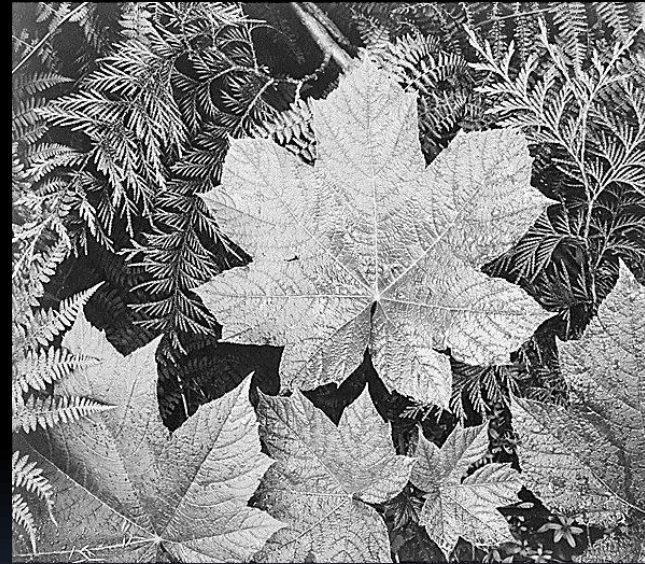


Ansel Adams

Low Density



High Density



Higher ISO allows for faster shutter speeds but noise can be created



f/5 @ 1/60 (slow)
ISO 200 (lower number)

(aperture setting
remains constant)



f/5 @ 1/80 (a little faster)
ISO 400 (a little higher)

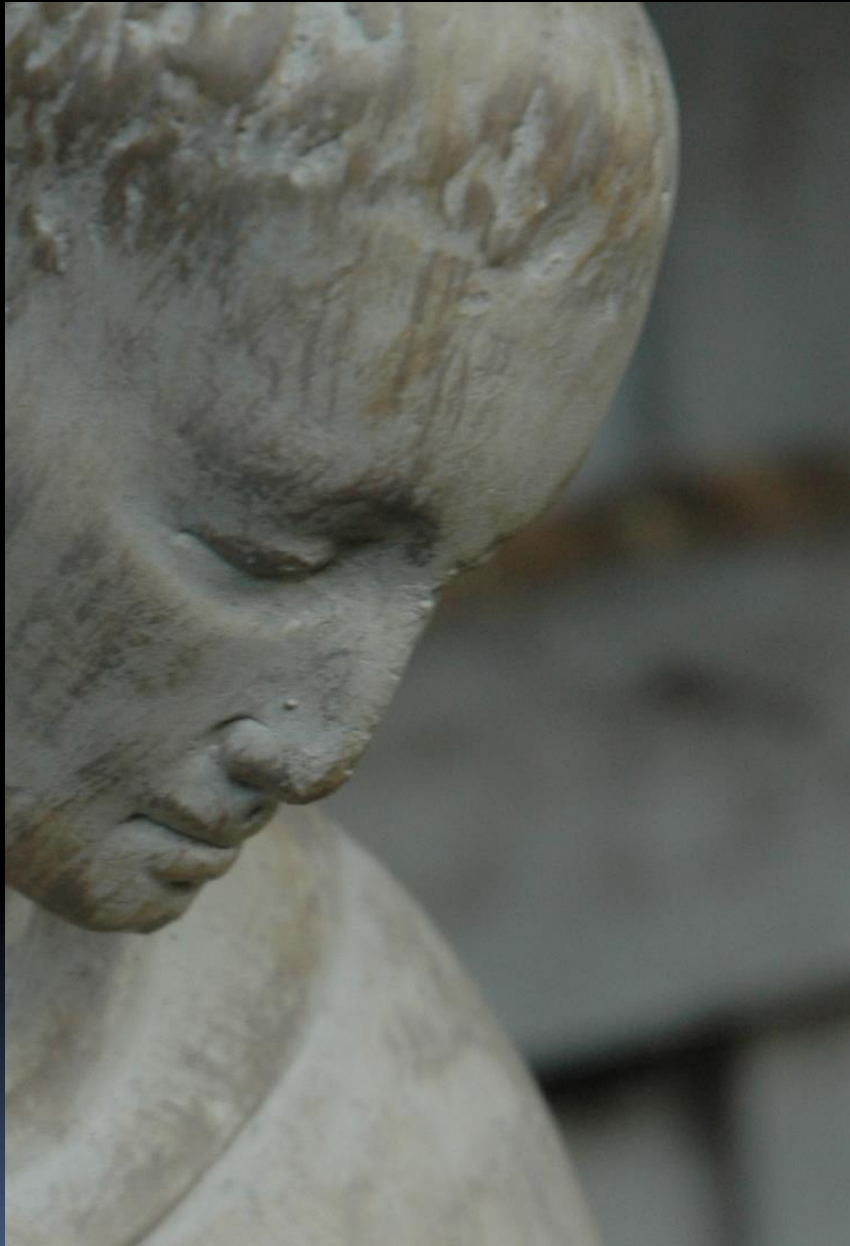


f/5 @ 1/200 (faster)
ISO 800 (higher)

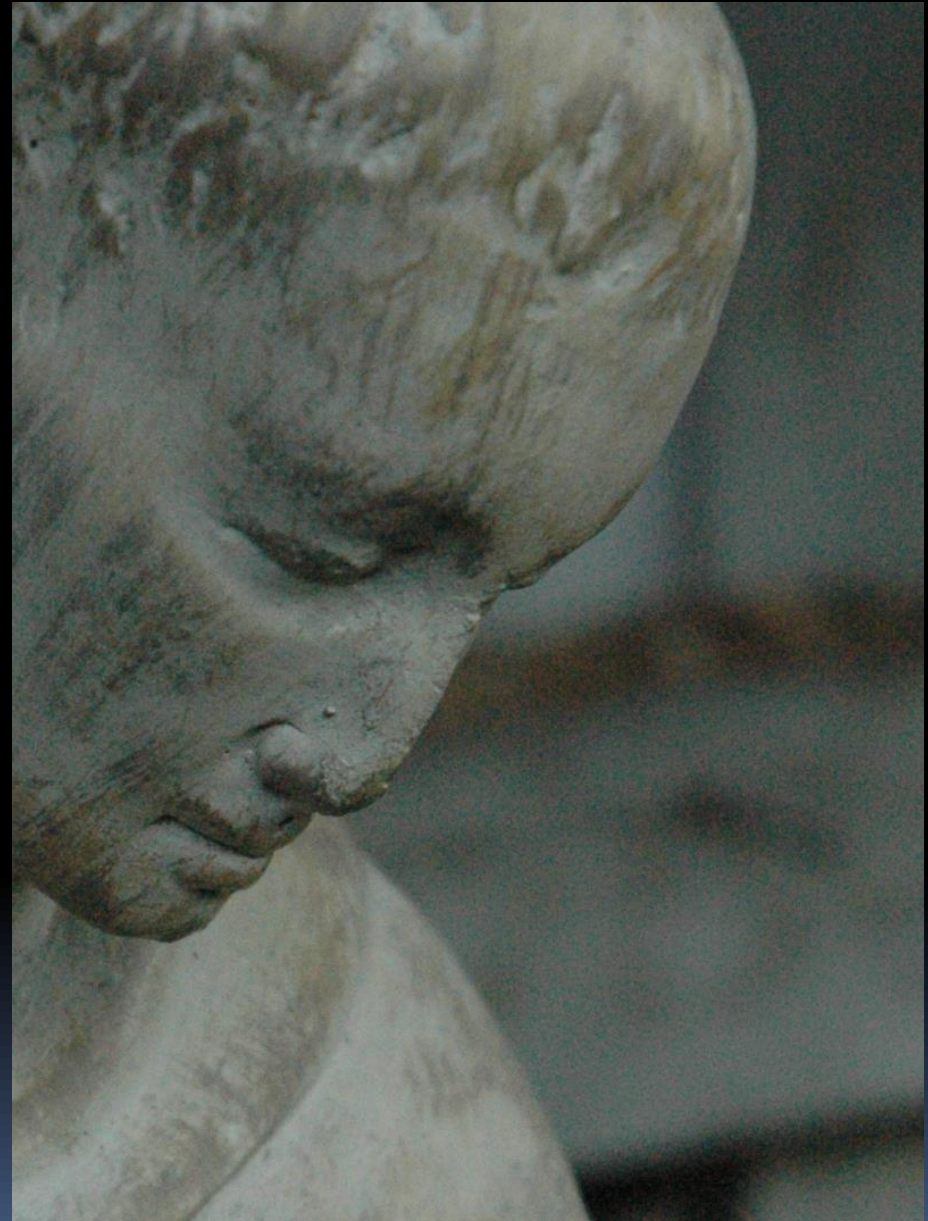


f/5.0 @ 1/400 (quite fast)
ISO 1600 (much higher)

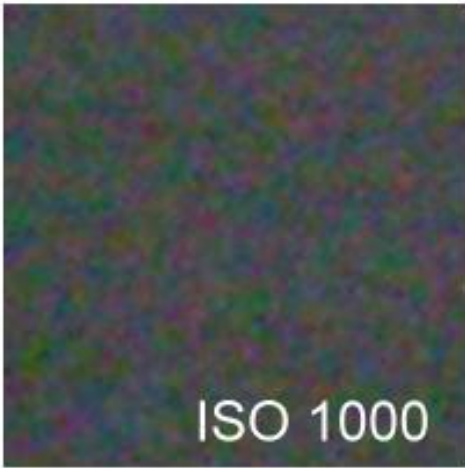
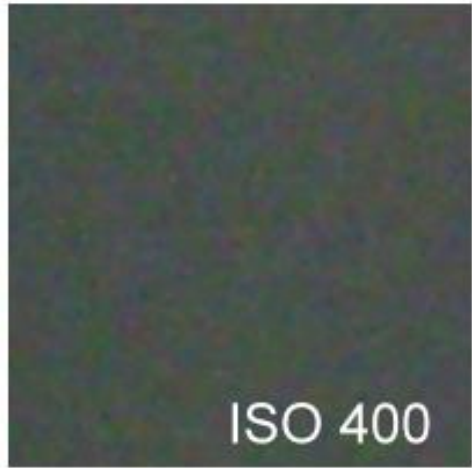
More noise present

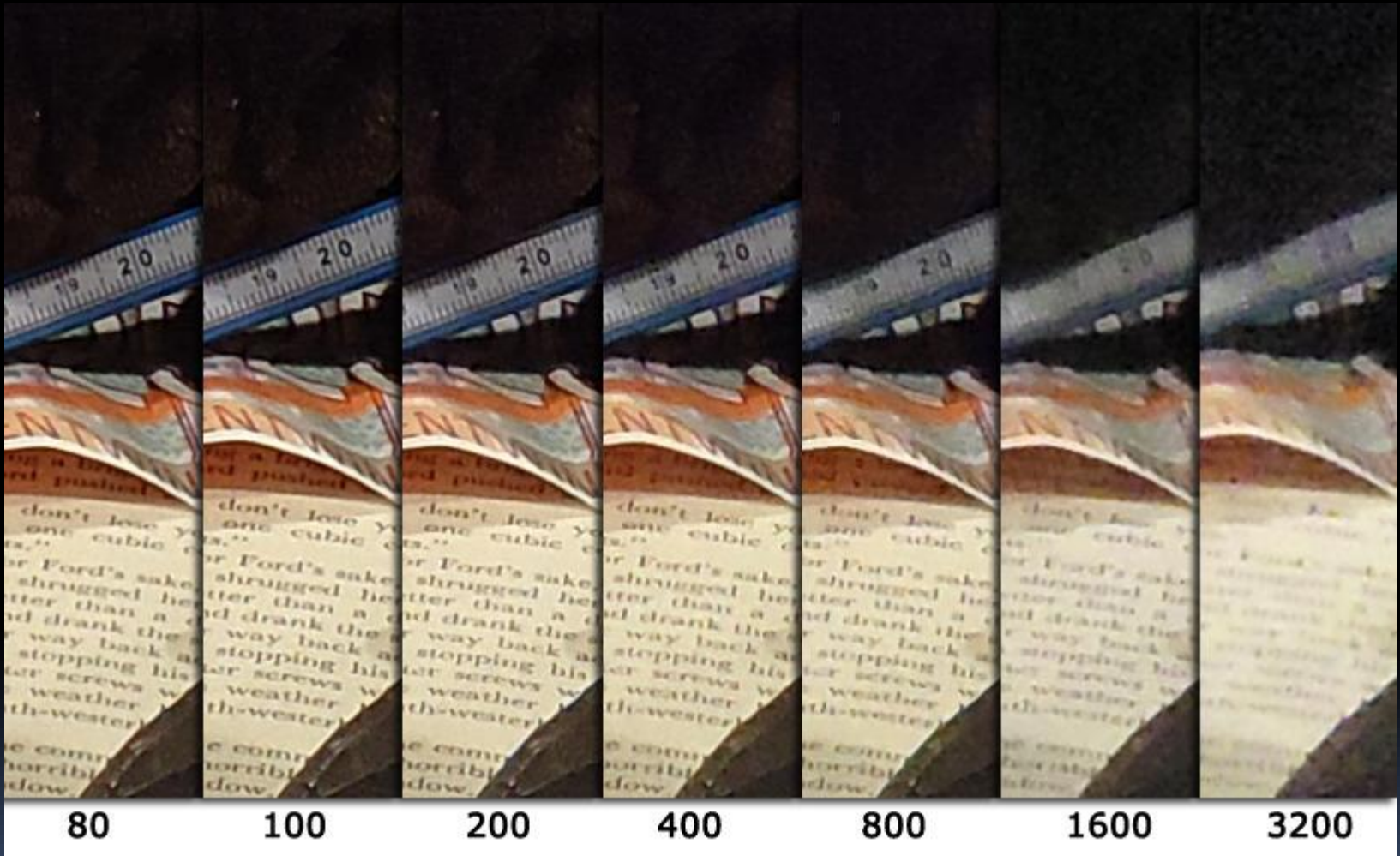


200 ISO



1600 ISO





80

100

200

400


800

1600

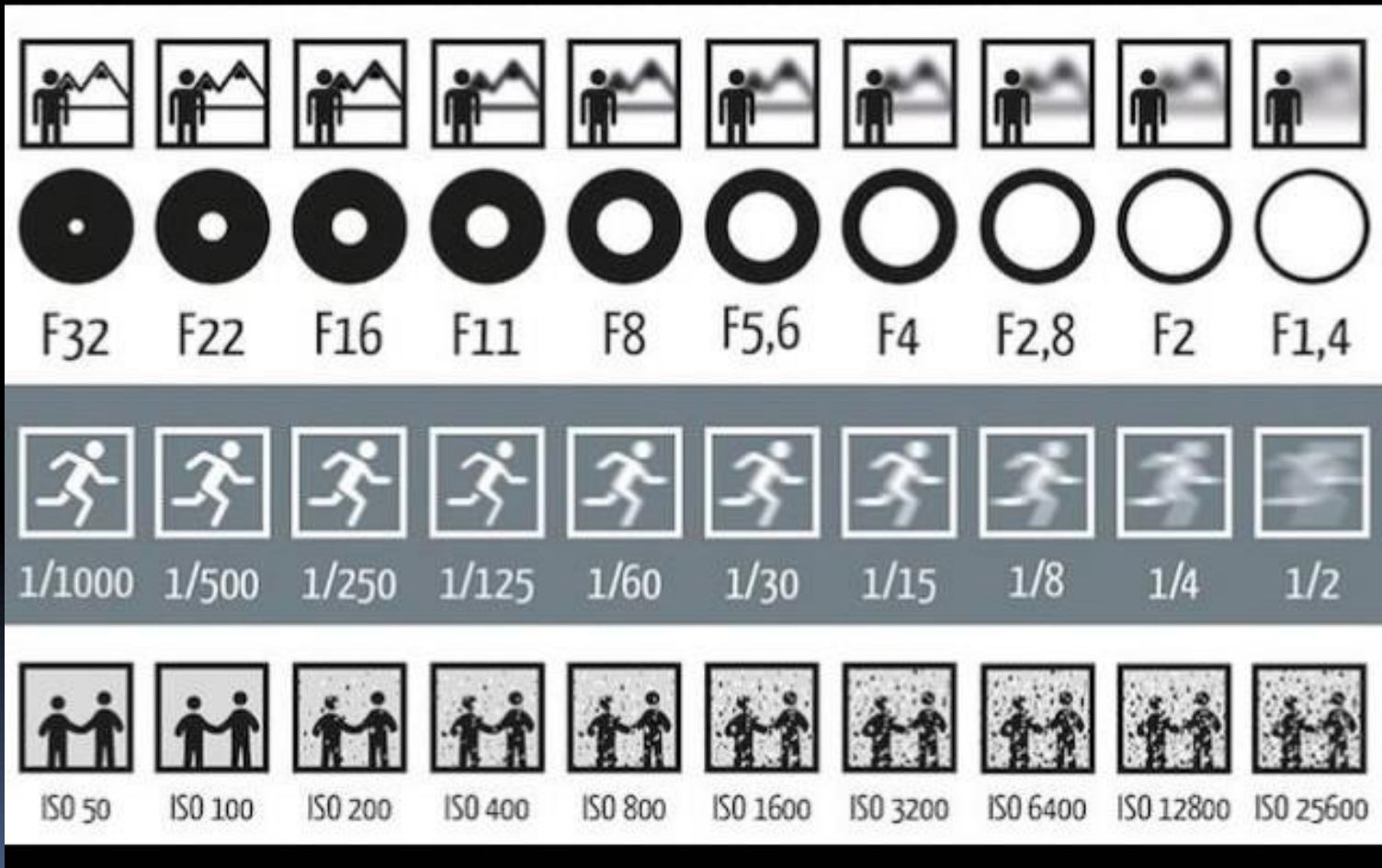
3200



ISO rating on your film/digital camera

- ISO designates the film's degree of sensitivity to light
 - Higher number ISOs mean more sensitive to light – can be used in lower light settings (generally)
 - Lower number ISOs mean it is less sensitive to light and is used for brighter settings (generally)
- 

Three parts of the triangle





LIGHT METER





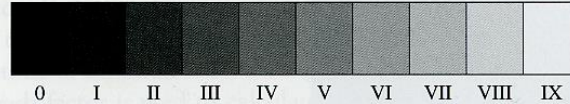
Light Meter

- Purpose = tells you **how much light** is being allowed into the camera based on the current **APERTURE, SHUTTER SPEED,** and **ISO settings**
- Averages all light in scene to **18% gray** which is **ZONE V** on Zone system scale
- Is correct most of the time

Light Meter



Zone Ruler



ZONE	DESCRIPTION
0	Maximum black
I	The first tone distinguishable from black with no detail
II	The first visible texture in a very dark area
III	Black with detail—a highly textured dark area with distinct detail; this zone is considered the shadow detail area for average value metering
IV	Dark gray
V	Middle gray, with 18 percent reflectance
VI	Light gray
VII	White with detail; the lightest area in the photograph that will have distinct texture or detail; this is the highlight area for the average value method
VIII	The brightest tone distinguishable from white
IX	Paper white

Zone Ruler

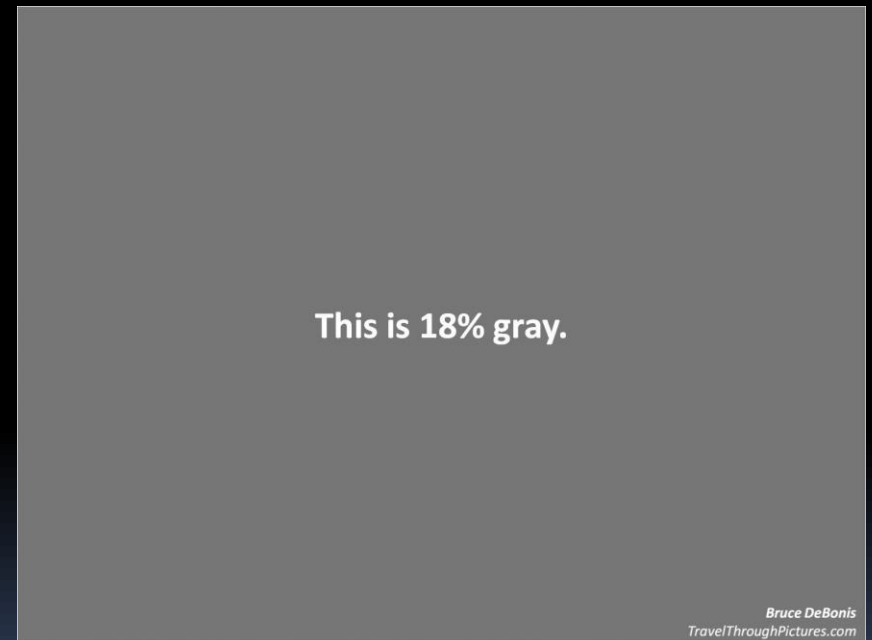


0 I II III IV V VI VII VIII IX



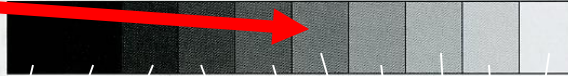
18% gray

- Tone to which all light meters average the light given off by the scene which is being photographed



Zone Ruler

18% gray



0 I II III IV V VI VII VIII IX



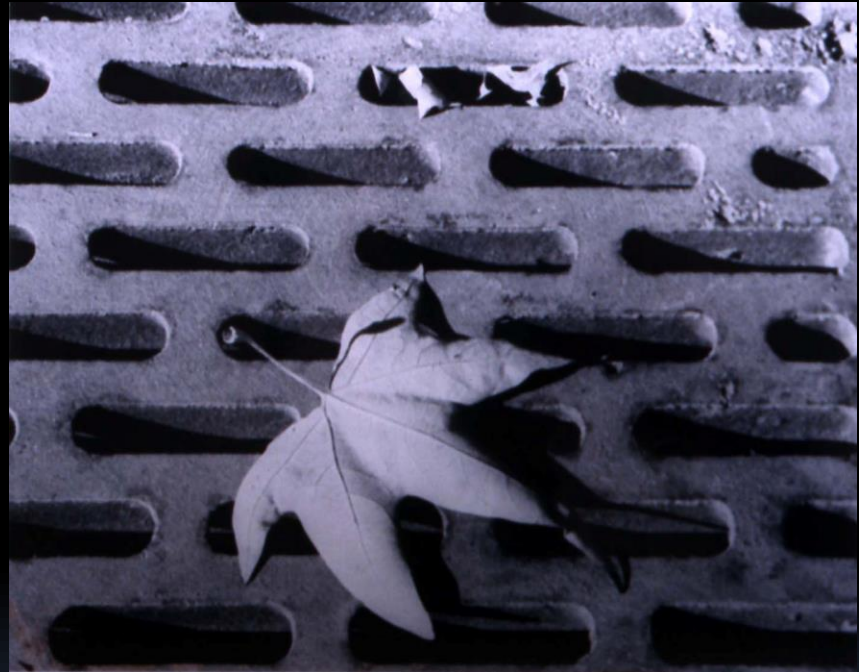


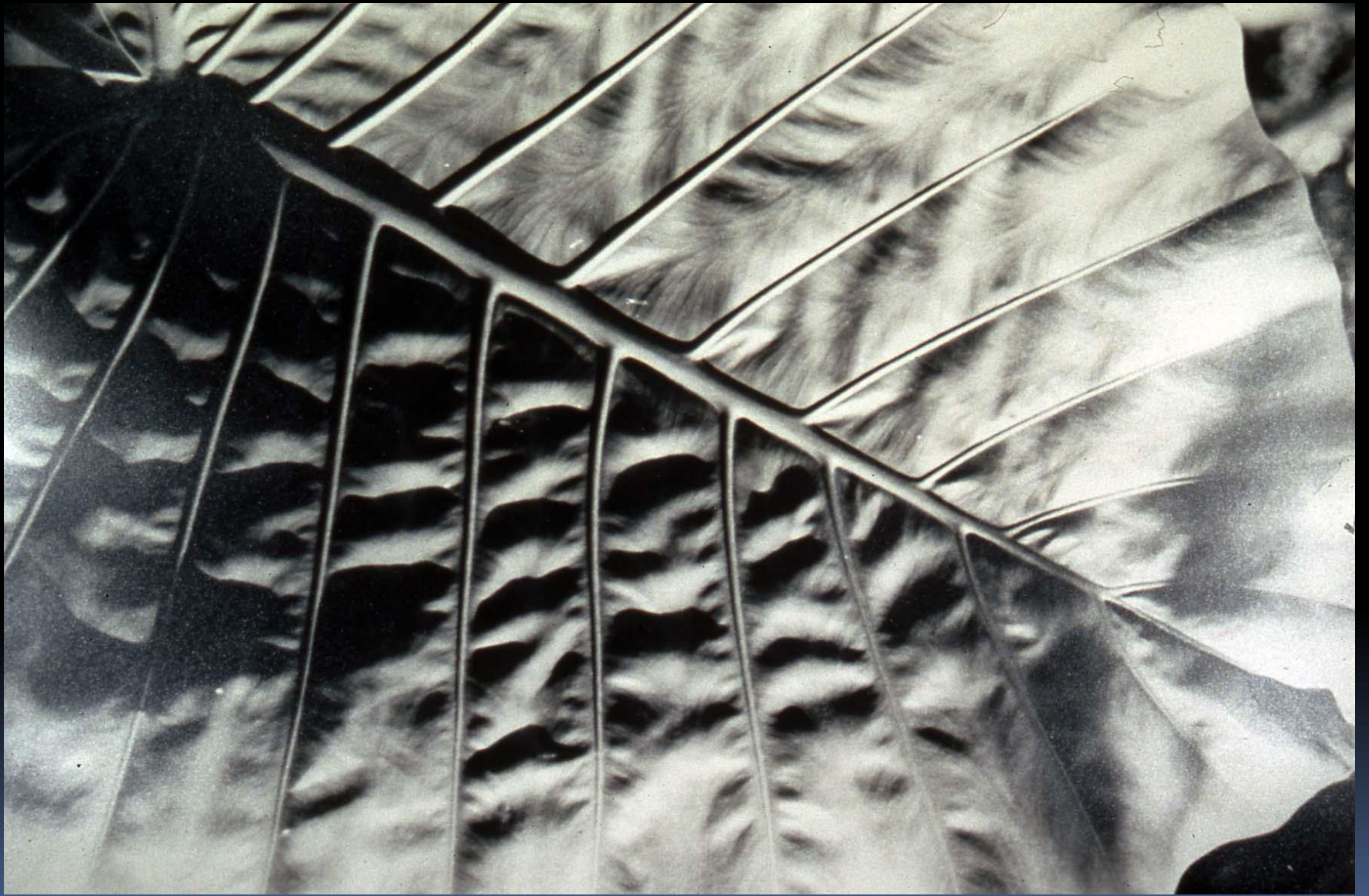
Composition Lesson

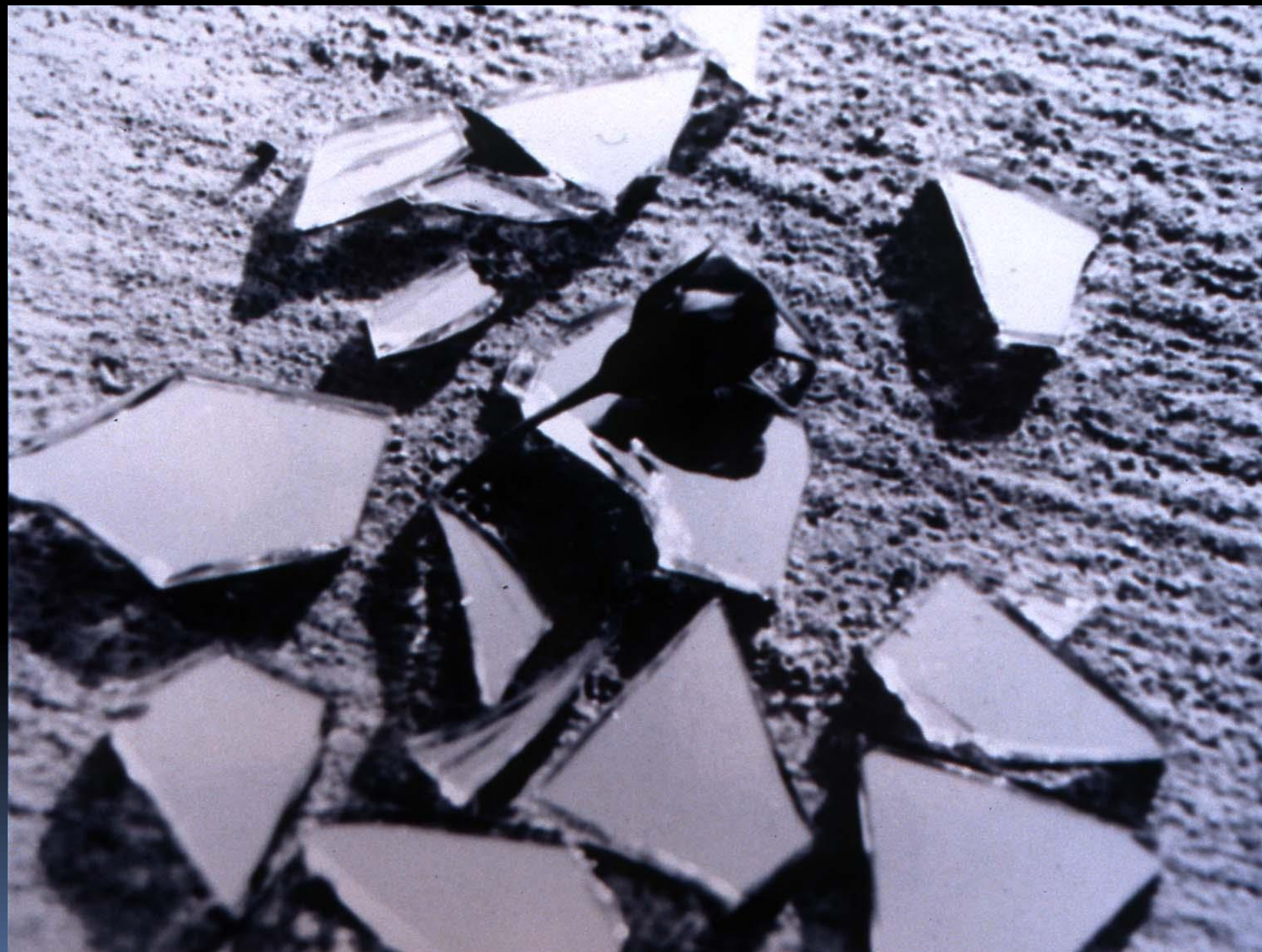
TEXTURE

Composition

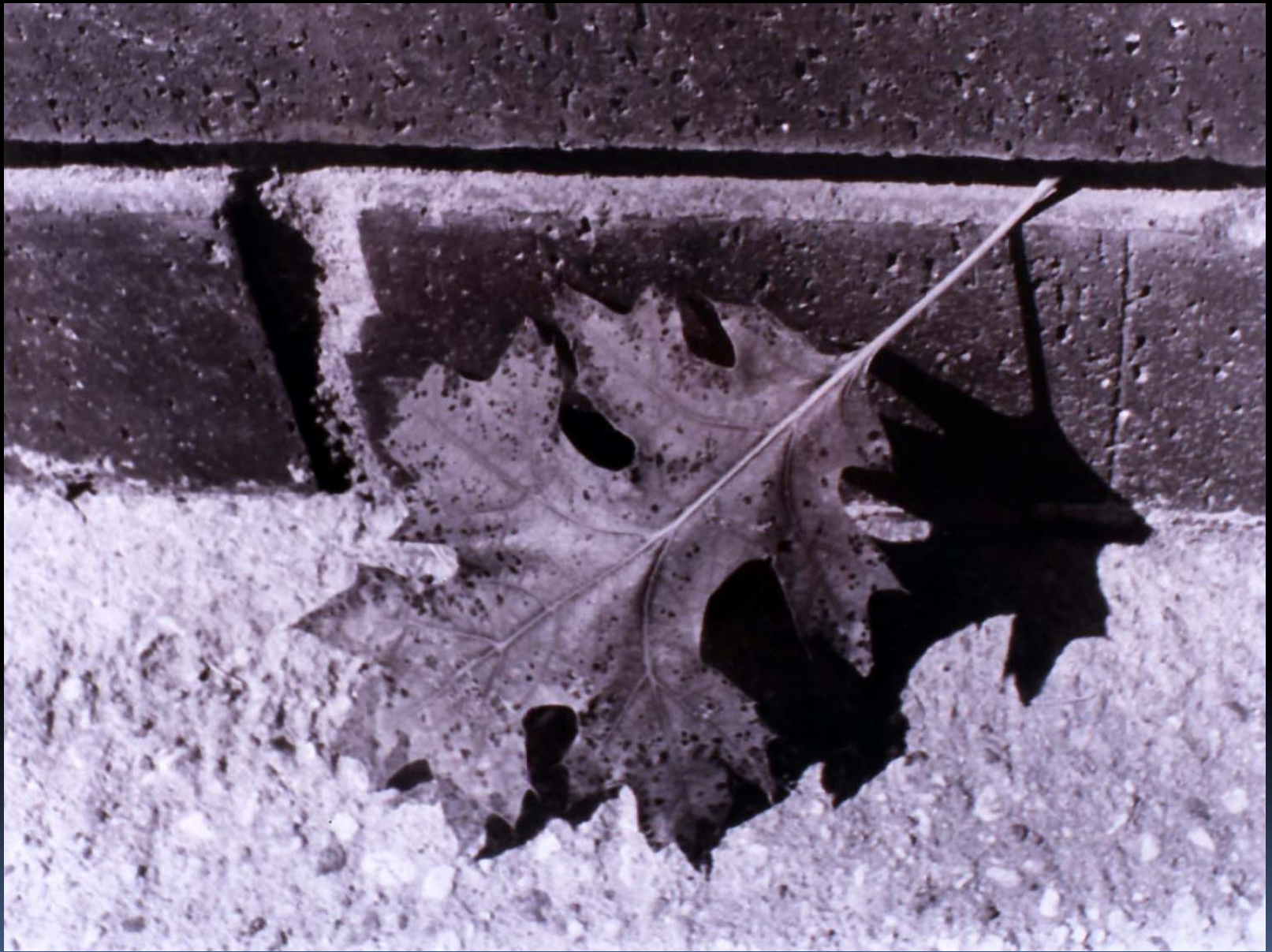
- Dominance
- Subordination
- Rule of thirds
- Simplicity - Primary subject is evident





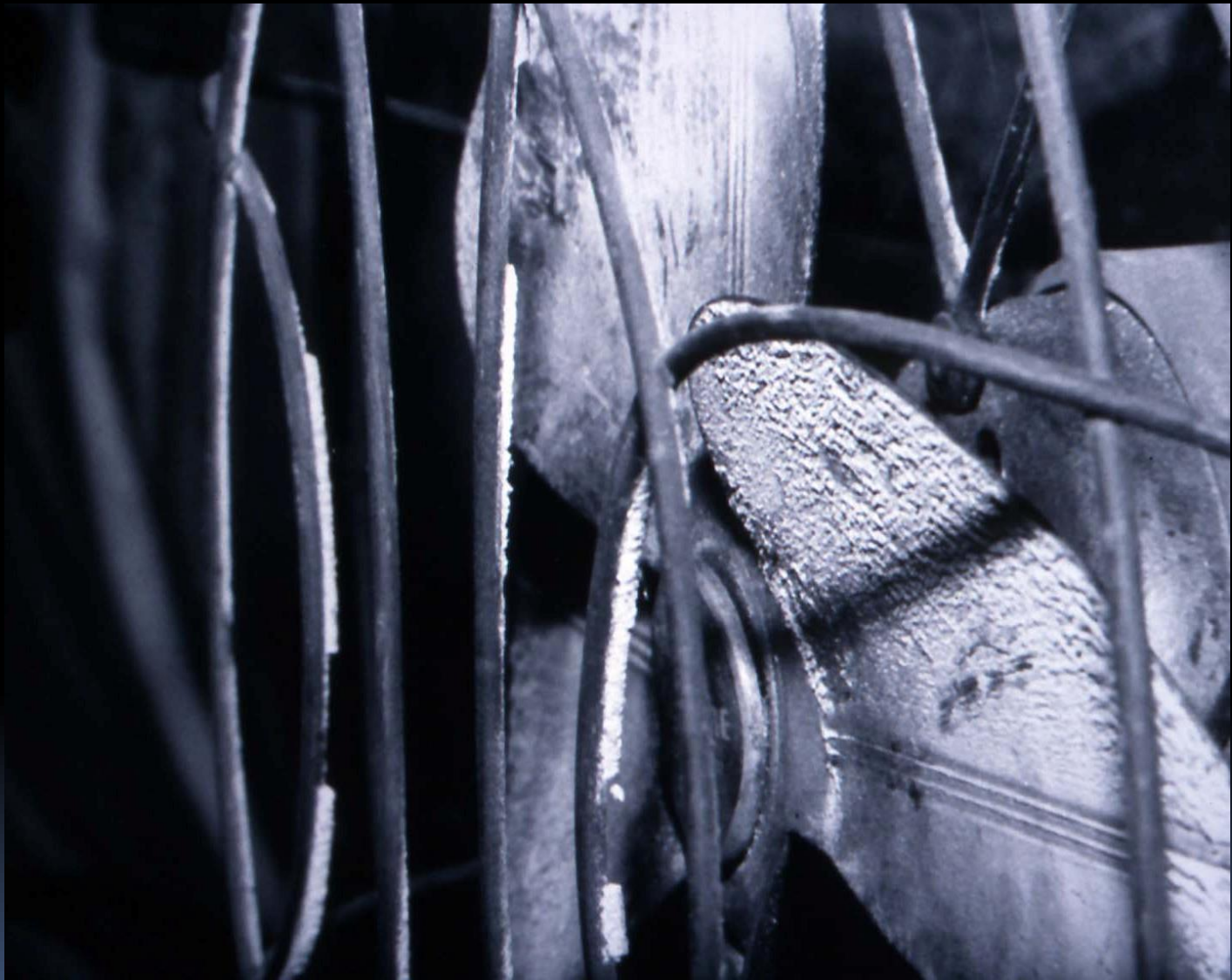






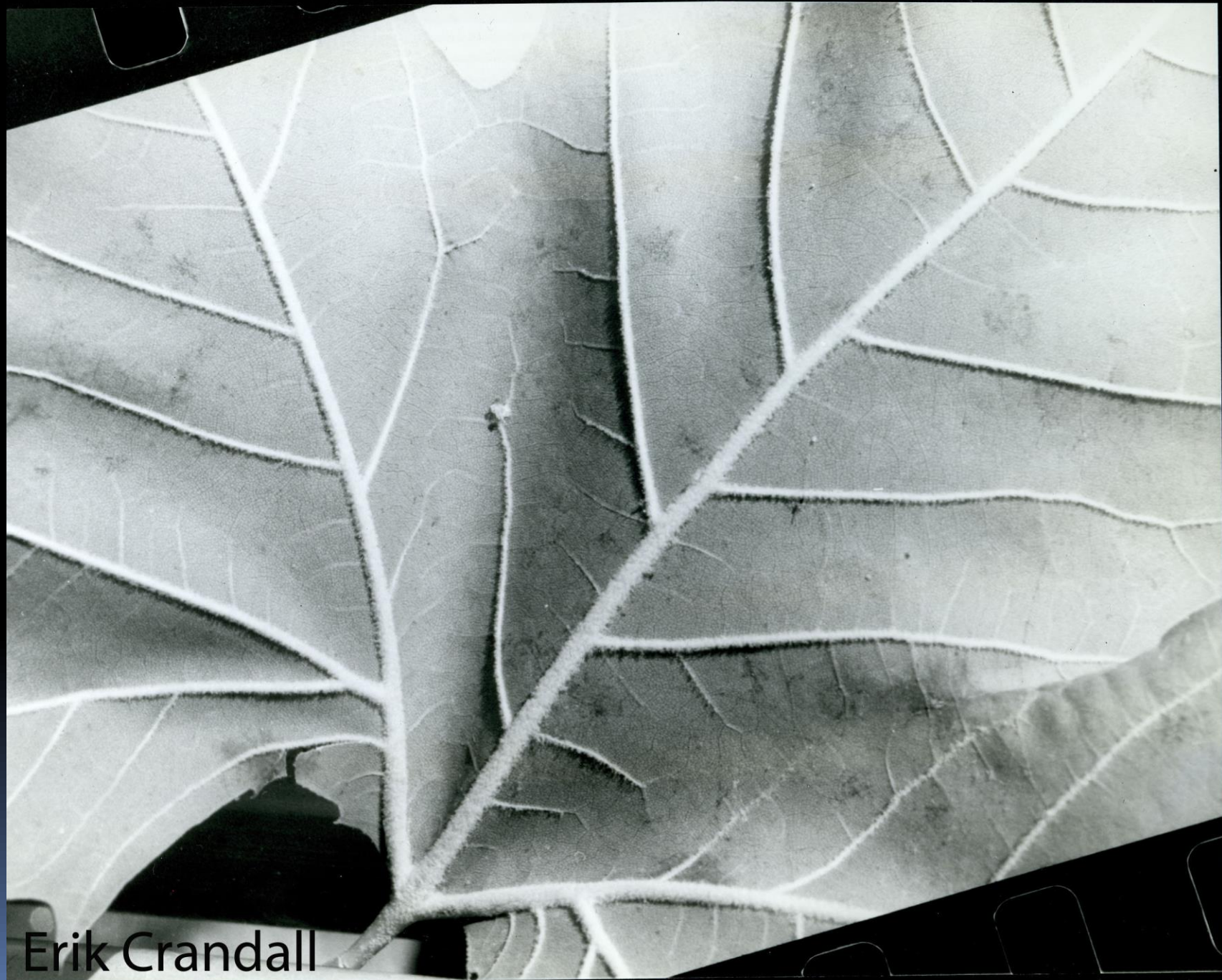












Erik Crandall



Compositional Goal for the Course

THE WORD AND THE PHOTO




Blessed are the pure in heart, for they shall see God.

Matthew 5:8

*I tell you the truth, unless a kernel of wheat falls to the ground and dies,
it remains only a single seed. But if it dies, it produces many seeds. (John 12: 24)*





**Come to me, all who are
weary & burdened**

& I will give you rest.

-Mathew 11:28

Ecclesiastes 3:1-8

- Biblical Chapter and verses of the week
- Song covered by the Byrds
- Composed by Peter Seeger



Week Two Assignment

- Shoot Textural Images using the exposure triangle
- See handout for specific directions
- At least 3 texture shots
- At least three more of texture or any topic of your choosing



Good app for smartphones or tablets



- Camera +
- (not Camera Plus)
- You can control exposure (too an extent)
- Shoots on manual mode
- Allows control of ISO and Shutter Speed

Next Week: The Aperture, Depth of Field, Portrait and Landscape

