What Makes a Great Picture?

© Robert Doisneau, 1955

With many slides from Yan Ke and Fredo Durand, as annotated by Tamara Berg

CS194: Intro to Computer Vision and Comp. Photo
Alexei Efros, UC Berkeley, Fall 2020
Photography 101: the *where* and *when*

- **Composition**
  - Framing
  - Rule of Thirds
  - Leading Lines
  - Textures and Patterns
  - Simplicity

- **Lighting**
  - Light Direction
  - Color coordination / balance
  - Sunny vs. cloudy
  - “Golden Hour”
  - B&W to focus attention
  - (sur) realism
Framing

“Photography is all about framing. We see a subject -- and we put a frame around it. Essentially, that is photography when all is said and done.”

-- from photo.blorge.com
Frame serves several purposes:

1. It gives the image depth
2. If used correctly, framing can draw the eye of the viewer of an interest to a particular part of the scene.
3. Framing can bring a sense of organization or containment to an image.
4. Framing can add context to a shot.

http://digital-photography-school.com/blog/frame-your-images/
Examples of nice framing

http://flickr.com/photos/paulosacramento/226545698/
http://flickr.com/photos/chrisbeach/13868545/
http://flickr.com/photos/74531485@N00/929270814/
http://flickr.com/photos/freakdog/223117229/
http://flickr.com/photos/253805482/
Rules of Thirds

http://www.photo96.com/blog/?p=371
Other examples
Don’t center, especially for motion

By Fredo Durand
Don’t center, especially for motion

By Fredo Durand
... or do center

By Fredo Durand
Leading Lines
More examples
Textures and Patterns
Simplicity

Prof - Obvious what one should be looking at ie easy to separate subject from the background. Snap – unstructured, busy, filled with clutter.

“Look Into” by Josh Brown @ Flickr
Simplicity

“alien flower” by Josef F. Stuefer @ Flickr
Simplicity

“Waiting in line!” by Imapix @ Flickr
B&W for Simplicity
B&W for Simplicity

Photo by A. A. Efros
…but not always
...but not always
Crop for Simplicity

By Fredo Durand
If your pictures aren't good enough, you're not close enough" — Robert Capa

By Fredo Durand
Clean Backgrounds

By Fredo Durand
And now, all together…

Photo by A. A. Efros
Get low

Try to be at eye level

By Fredo Durand
Bad angles

https://www.youtube.com/watch?v=8EmRZO9fwvk&feature=youtu.be

By Fredo Durand
Eye level

By Fredo Durand
Or really get high

As usual, follow a rule or really break it.

By Fredo Durand
Front Lighting
Side Lighting
Back Lighting
Complementary colors (of opposite hue on color wheel)
Go in the shade

Light is more diffuse

Bad

Better

By Fredo Durand
Overcast days are the best

Just don’t put the sky in the frame

The weather conditions

The pictures

Other overcast-day pictures

By Fredo Durand
Bottom line

Don't get married on a sunny day!

By Fredo Durand
Best time of day: sunset & sunrise

+/- 1 hour

“Golden hours”

Night photography: always near sunset/sunrise
  - because of nice diffuse light

Mid day: often not great

lesser than 1 hour after sunrise/before sunset

During sunset or sunrise

After sunset

By Fredo Durand
“Golden Hour”
During sunset/sunrise

After sunset

less than 1 hour after sunrise

By Fredo Durand
After sunset: blue hour

By Fredo Durand
Blue Hour (Russian River)

Photo by A. A. Efros
(Sur) Realism

“Golden Gate Bridge at Sunset” by Buzz Andersen @ Flickr

“Golden Gate 3” by Justin Burns @ Flickr
Anyone can take great pictures...
I am a sucky photographer...
…but I am a pretty good photo critic!

http://flickr.com/photos/aaefros/

# of my Paris photos on Flickr: 32
Total # of my Paris photos: ~1250
The Postmodern Photographer

The Old Days: a pre-process

- Load film
- Find subject
- Position camera
- Set all the settings “just right”
- Take a deep breath…
- ...Press button!

The New Digital Days: a post-process

- Get a 16 GB memory cartridge
- Take pictures like there is no tomorrow!!!
- ...
- Back home, spend hours of agony trying to find 1-2 good ones
Lucky Imaging
What’s next?

- CS189 Machine Learning
- CS182 (?) Deep Learning
- CS184 Comp. Graphics
- CS280 Grad Comp. Vision

- Read books
- SIGGRAPH, CVPR proceedings, etc.
- Play with stuff!
THANK YOU!

That's All Folks