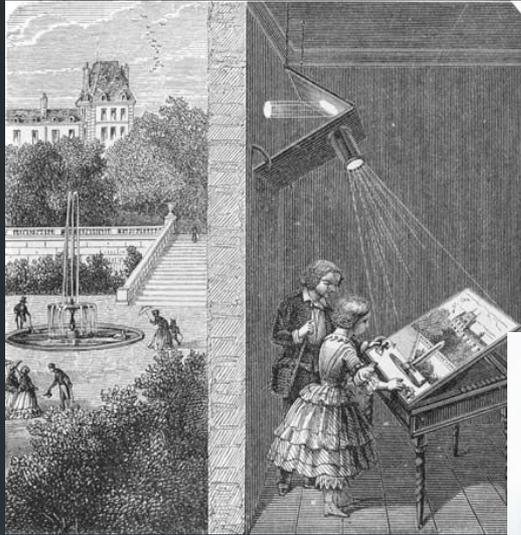# A History of Photography: From Representation Towards Expression

Matthew Chun

Camera Obscura

Camera Obscura Today

Pinhole photography eg. solargraphy

https://vimeo.com/71673549

Chemical Processes - Silver

Attempt 1 - Silver Nitrate (Angela Sala 1614)

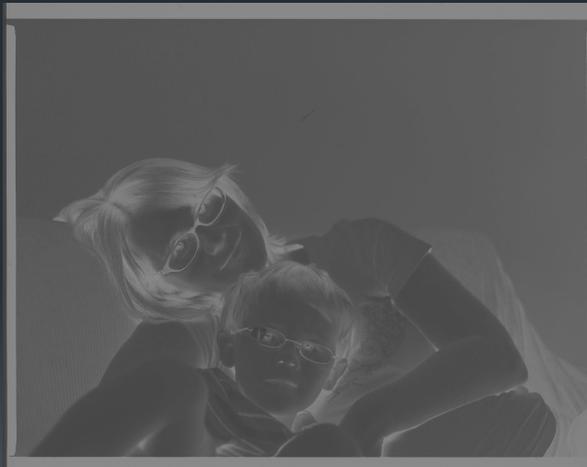"... no practical application"

Chemical Processes - Silver

Attempt 2 - Silver Chloride (Nicephore Niepce 1816)

Negative via Camera Obscura

www.explainthatstuff.com

Chemical Processes - Tin

Attempt 3 - Niepce again (1826/1827) , further refined by Louis Daguerre

Positive via pewter and bitumen -> First permanent image!

Refined Processes - Daguerreotype & Calotype

Daguerreotype (Louis Daguerre) - Much shorter exposure time, hard to reproduce

Calotype (Henry Fox Talbot) - Also shorter exposure time, easier to reproduce (the origin of later modern film development processes)

But daguerreotype was more popular due to patents on calotype

Early Use Cases - Hidden Mother Portraits

Early Use Cases - Hidden Mother Portraits

Early Use Cases - Spirit Photography

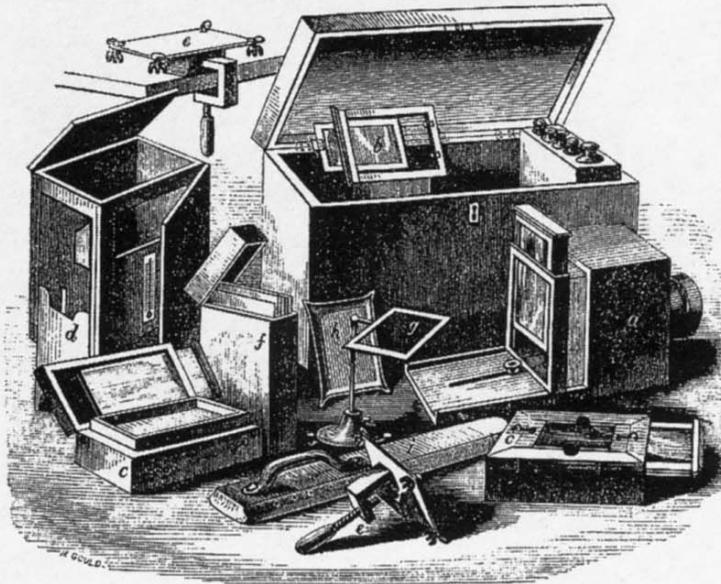Exploiting exposure time (double exposure) to spread fake information... like ghosts

Early Use Cases - Death Photography

People died a lot younger back then

Getting better but still a pain

a. Camera obscura

b. Silver plate

cc. Iodine and Bromide Boxes

d. Improved Mercury Cabinet with sliding legs

ee. Plate holders with clamps

f. Box for Plates

g. Levelling stand

h. Flat peculiar dish for washing

i. Hand-buff

A lot of equipment to carry around

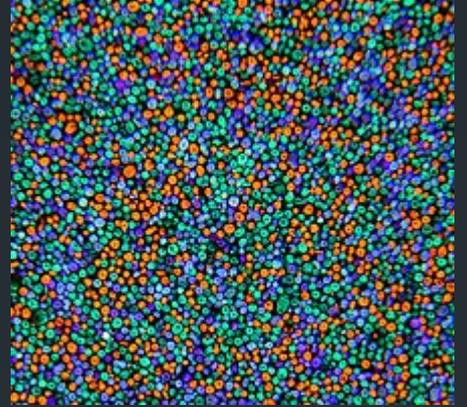# Kodak - "You press the button, we do the rest"

George Eastman developed dry gel on paper (film) , no more heavy plates and equipment/chemicals to carry! (1884)

1901 release of Kodak "Brownie" democratized cheap photography -> more "snapshots" less portraits

How about ... colour?

Thanks to... potatoes!

And Lumiere Brothers

Autochrome Lumiere (1903)

20th Century in Color

Massive historical events in 20th century - Albert Kahn

Photographic Deception

GENERAL GRANT   AT CITY POINT

Stalin-brushed

Photoshopping
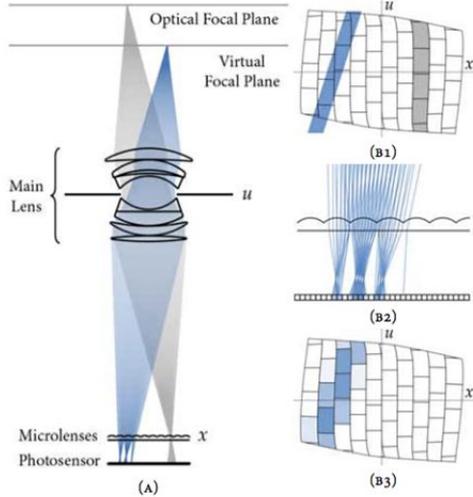

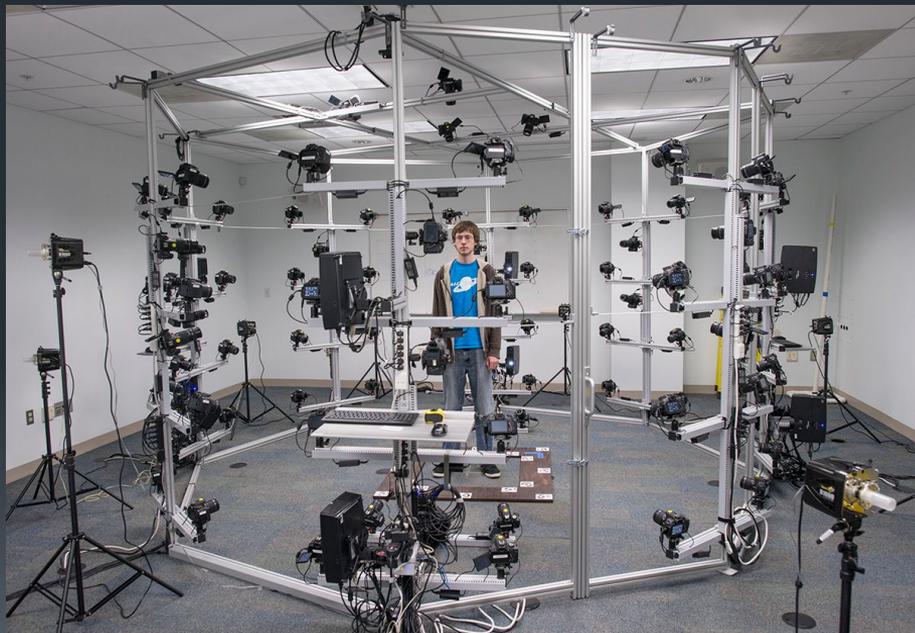The Actual Photos

The Altered Photo

Can go wrong

Where are we going now?

Light Field Cameras

Photogammetry

VR? Free View Point

Front focus

Displayed pattern on front LCD

Displayed pattern on rear LCD

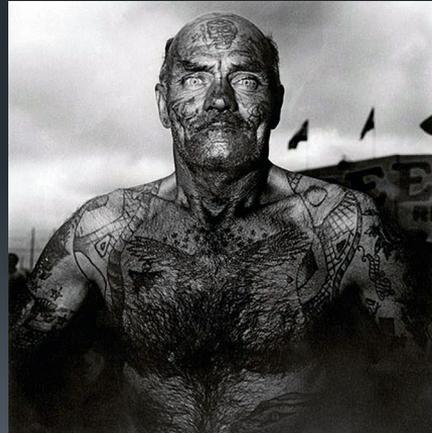Multiplicative 4D factorization of the light field

Bonus: Famous Photographers

Diane Arbus - Human Condition

Known for photographing marginalized people eg. transgender, nudists, circus performers, etc

Robert Frank - Post-war America

Robert Capa - War Journalist

Richard Avedon - Fashion