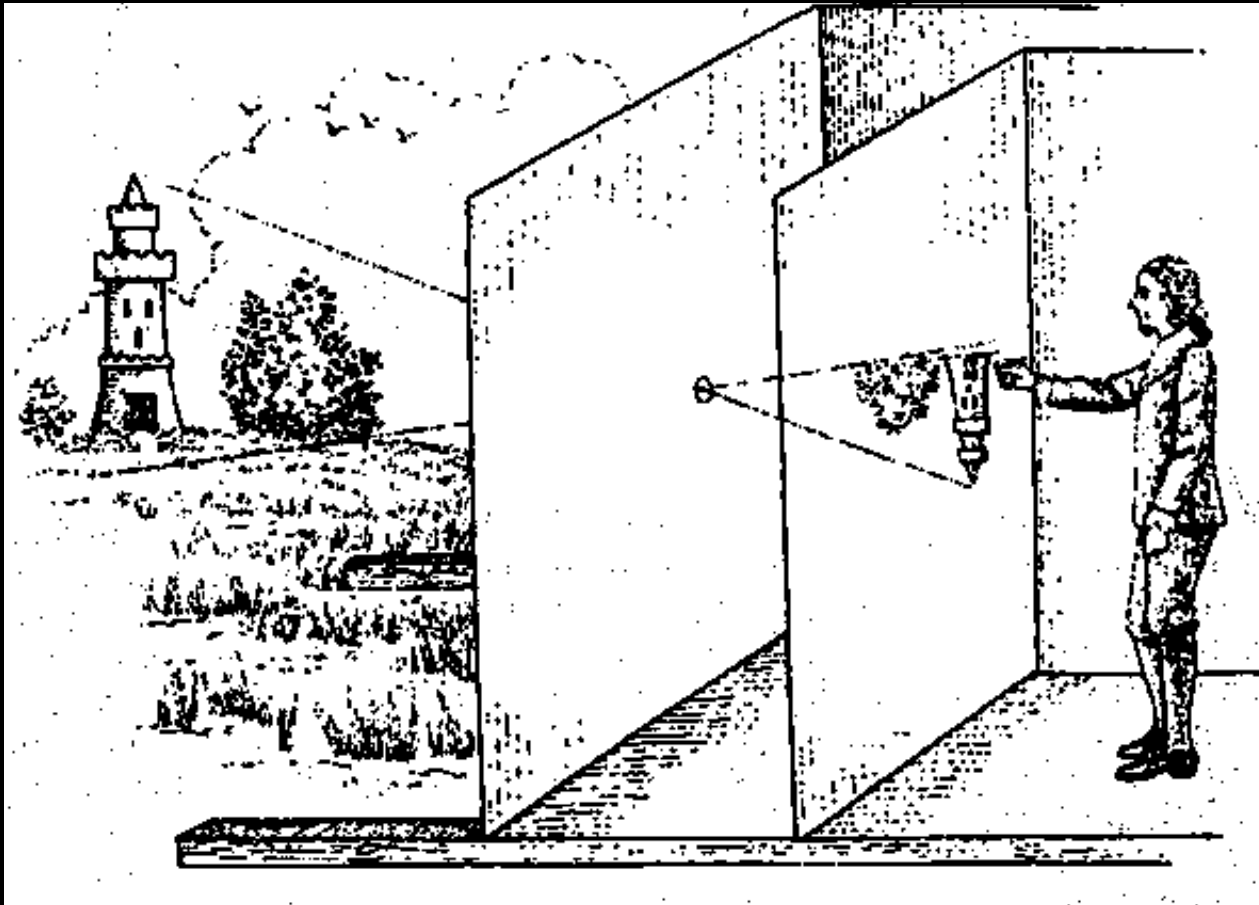


# History of Photography

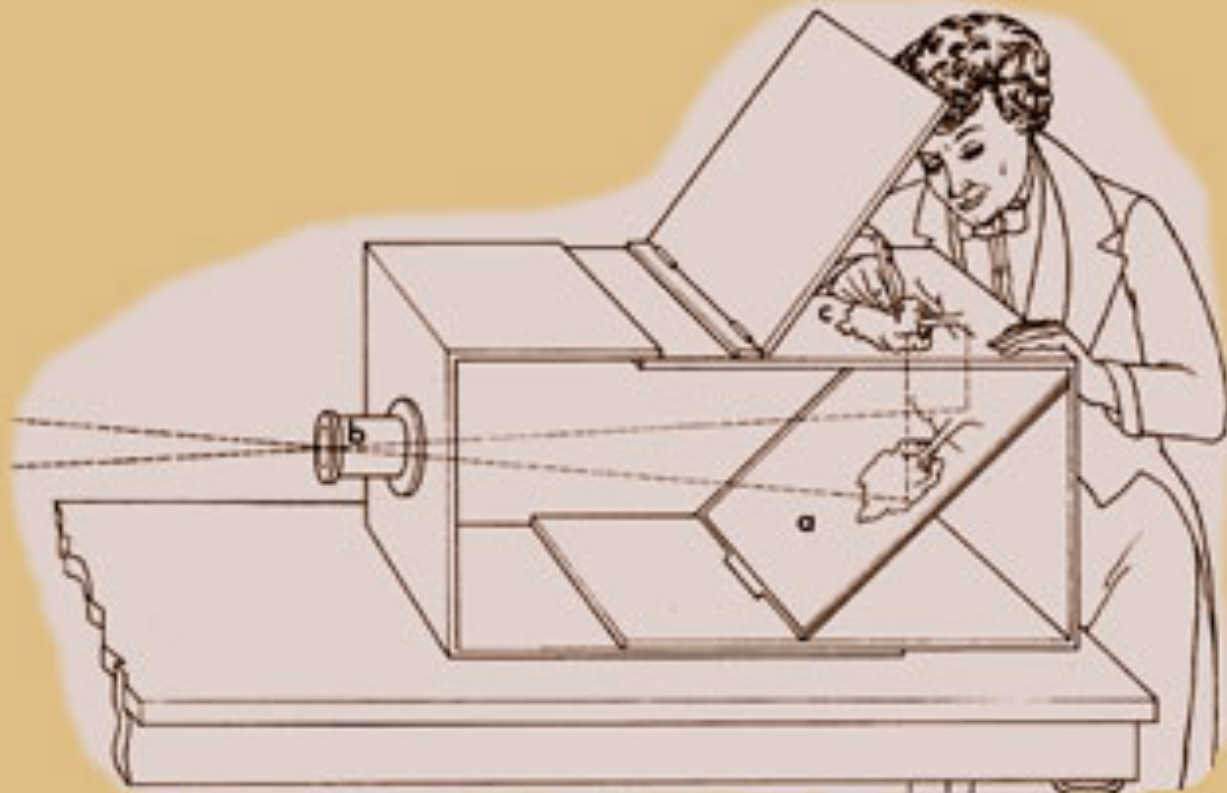
**ancient times:** Camera obscuras used to form images on walls in darkened rooms; image formation via a pinhole



**16th century:** Brightness and clarity of camera obscuras improved by enlarging the hole inserting a telescope lens



**17th century:** Camera obscuras in frequent use by artists and made portable.



A typical camera obscura at the beginning of the 19th Century, somewhat larger than the replica shown above, incorporating a mirror (a), which reflects the image from the lens (b) onto a glass plate (c) which holds a sheet of paper on which the image is being traced. The double interlocking box enables precise focusing.

After Brian Coe, *Cameras: From Daguerrotypes to Instant Pictures* (Gothenberg, Sweden: Nordbok; New York: Crown Press, 1978), p. 2.

**1816:** Nicéphore  
Niépce combines the  
camera obscura with  
photosensitive paper





**1826:** Niépce creates a permanent image

View from Niepce's Window at Le Gras.

**1837:** Louis Daguerre creates images on silver-plated copper, coated with silver iodide and "developed" with warmed mercury; Daguerre is awarded a state pension by the French government in exchange for publication of methods and the rights by other French citizens to use the Daguerreotype process.





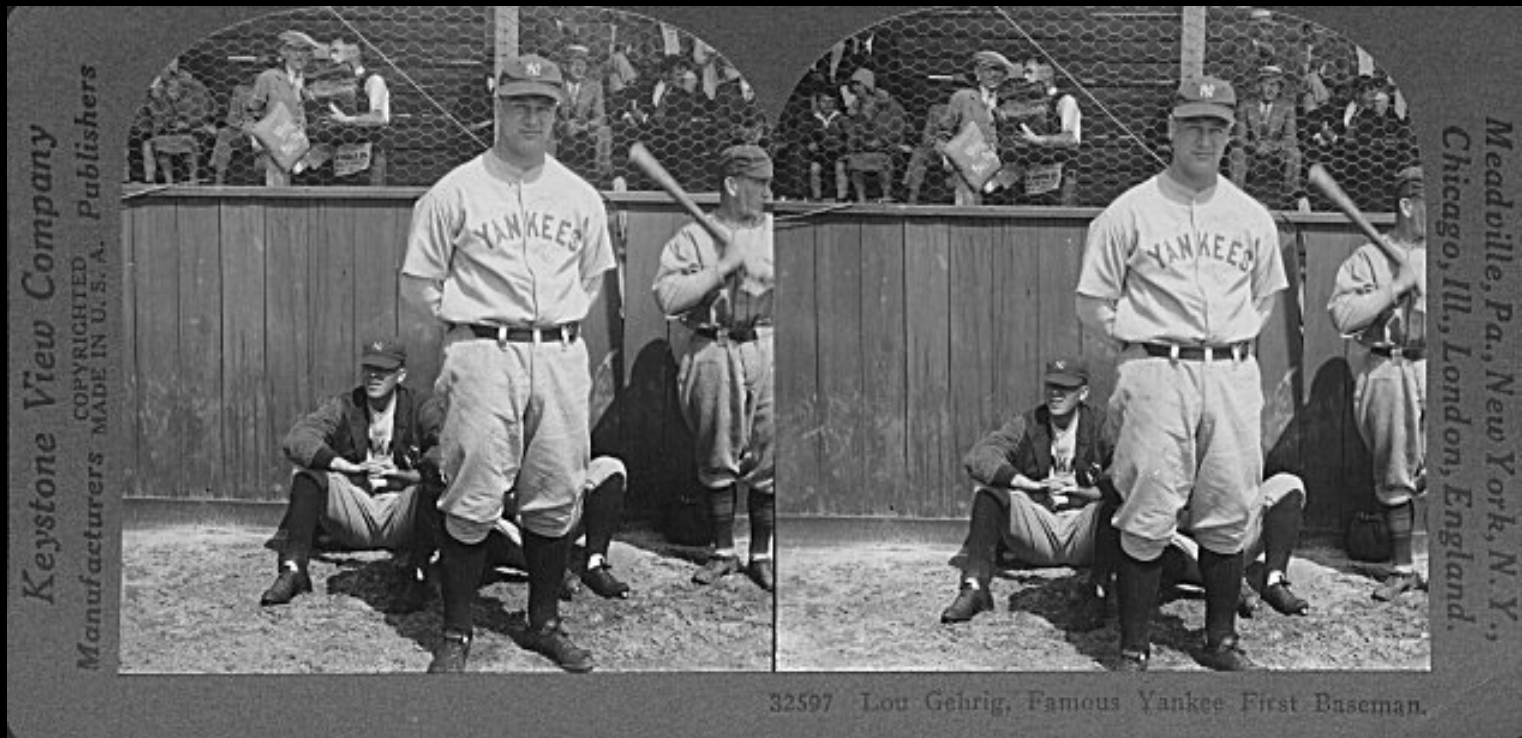
**1834:** Henry Fox Talbot creates permanent (negative) images using paper soaked in silver chloride and fixed with a salt solution. Talbot created positive images by contact printing onto another sheet of paper.



**1841:** Talbot patents his process under the name "calotype".

Known also as "Tintypes"

# 1855: Beginning of stereoscopic era



**1861-65:** Mathew Brady and staff (mostly staff) covers the American Civil War, exposing 7000 negatives









Cameron's photographic career was short, spanning eleven years of her life (1864–1875). She took up photography at the relatively late age of 48, when she was given a camera as a present. Although her style was not widely appreciated in her own day, her work has had an impact on modern photographers, especially her closely cropped portraits.

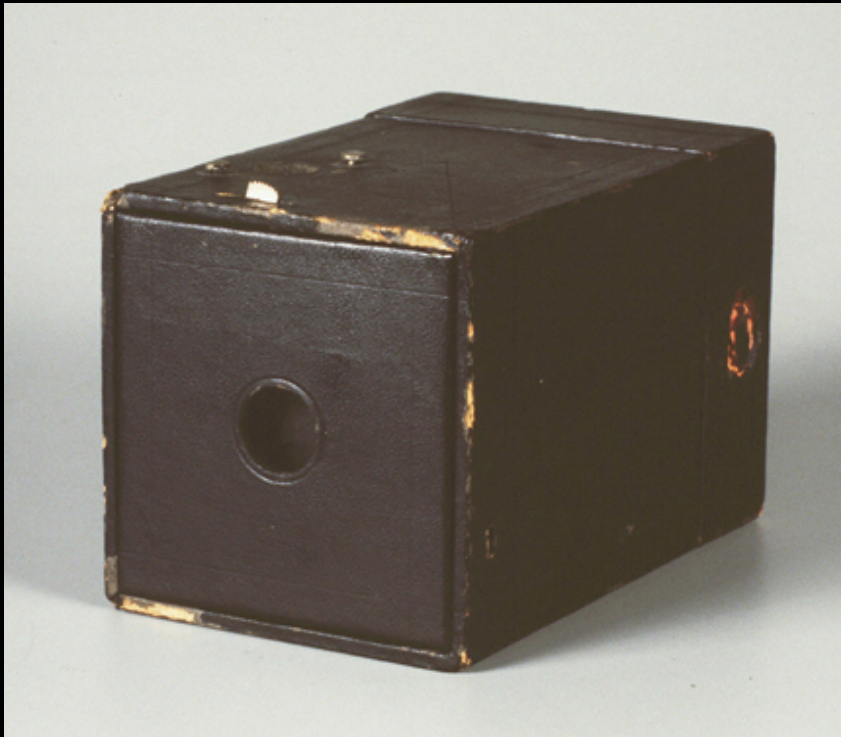
**1880:** George Eastman, age 24, sets up Eastman Dry Plate Company in Rochester, New York. First half-tone photograph appears in a daily newspaper, the *New York Graphic*.



**1878:** Dry plates being manufactured commercially.



**1900:** Kodak Brownie box roll-film camera introduced.



**1888:** First Kodak camera, containing a 20-foot roll of paper, enough for 100 2.5-inch diameter circular pictures.

**1889:** Improved  
Kodak camera with  
roll of film instead of  
paper



VOLUME LIV

NUMBER FOUR

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OCTOBER, 1928

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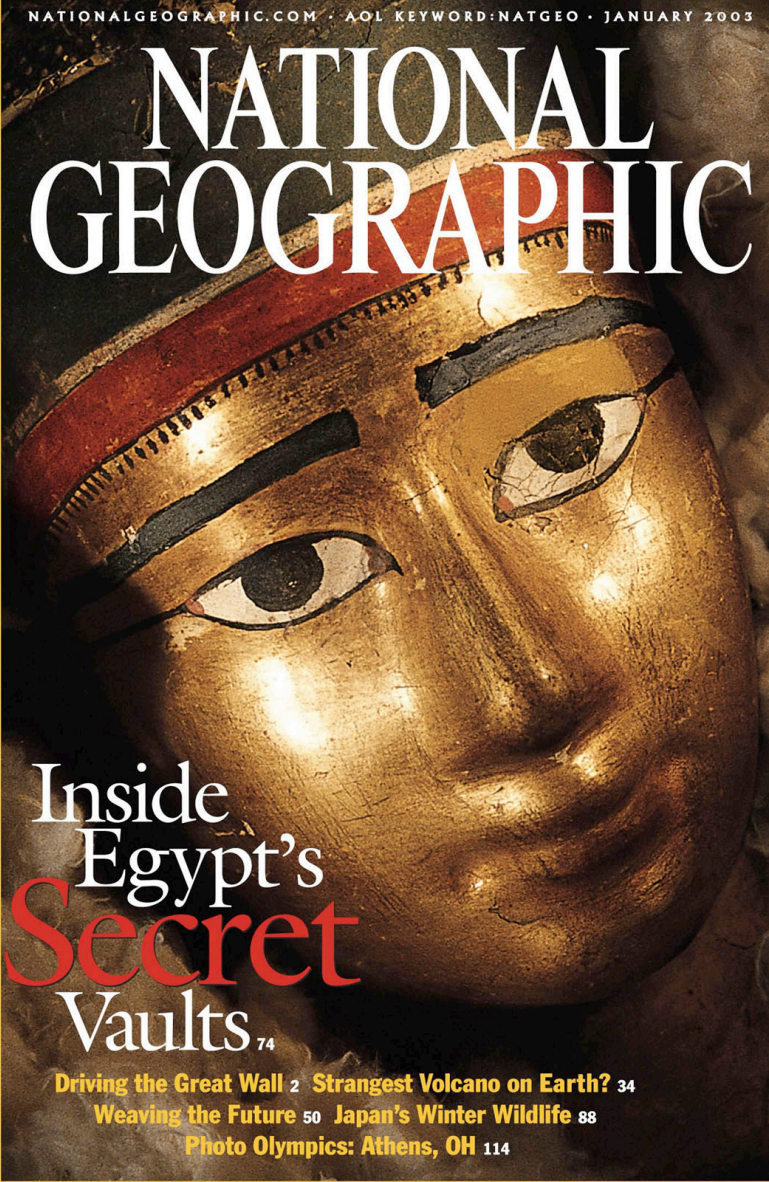
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# NATIONAL GEOGRAPHIC



## Inside Egypt's **Secret** Vaults<sup>74</sup>

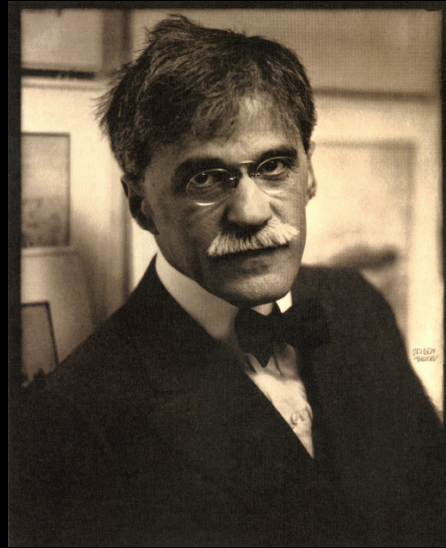
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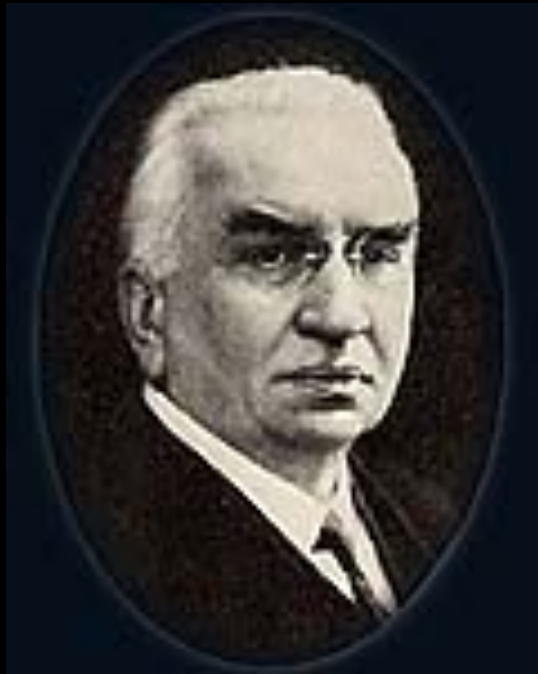
Photo Olympics: Athens, OH 114



# 1902: Alfred Stieglitz organizes "Photo Secessionist" show in New York City



**1907:** First commercial color film, the Autochrome plates, manufactured by Lumiere brothers in France



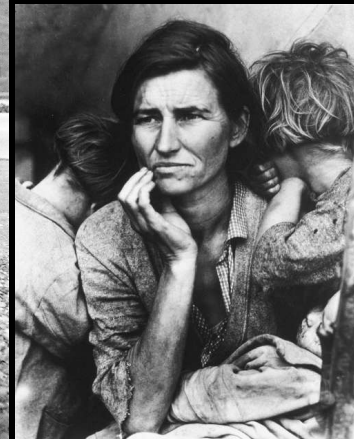


**1909:** Lewis Hine hired by US National Child Labor Committee to photograph children working mills.









# Dorothea Lange

May 25, 1895 – October 11, 1965

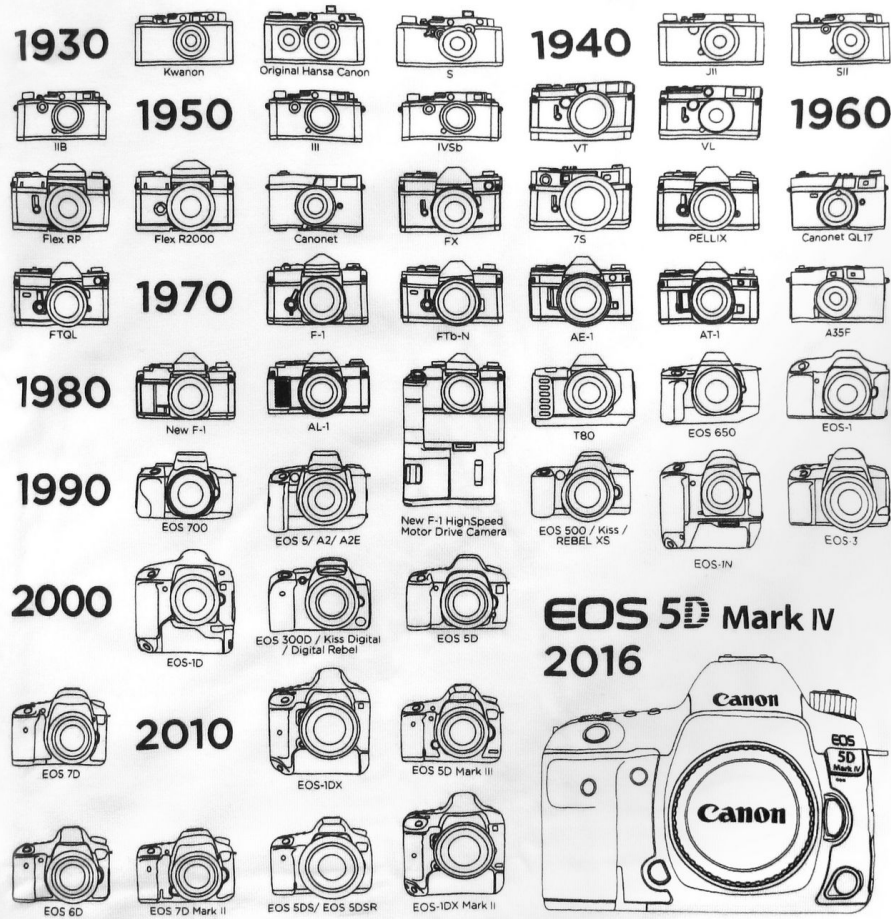
**1917:** Nippon Kogaku K.K., which will eventually become Nikon, established in Tokyo.

First Nikon camera:  
The Nikon 1





**Canon**  
SEE IMPOSSIBLE





The 35mm Camera 1927

**1924:** Leitz markets a derivative of Barnack's camera commercially as the "Leica", the first high quality 35mm camera.



Rollei introduces the Rolleiflex twin-lens reflex producing a 6x6 cm image on rollfilm



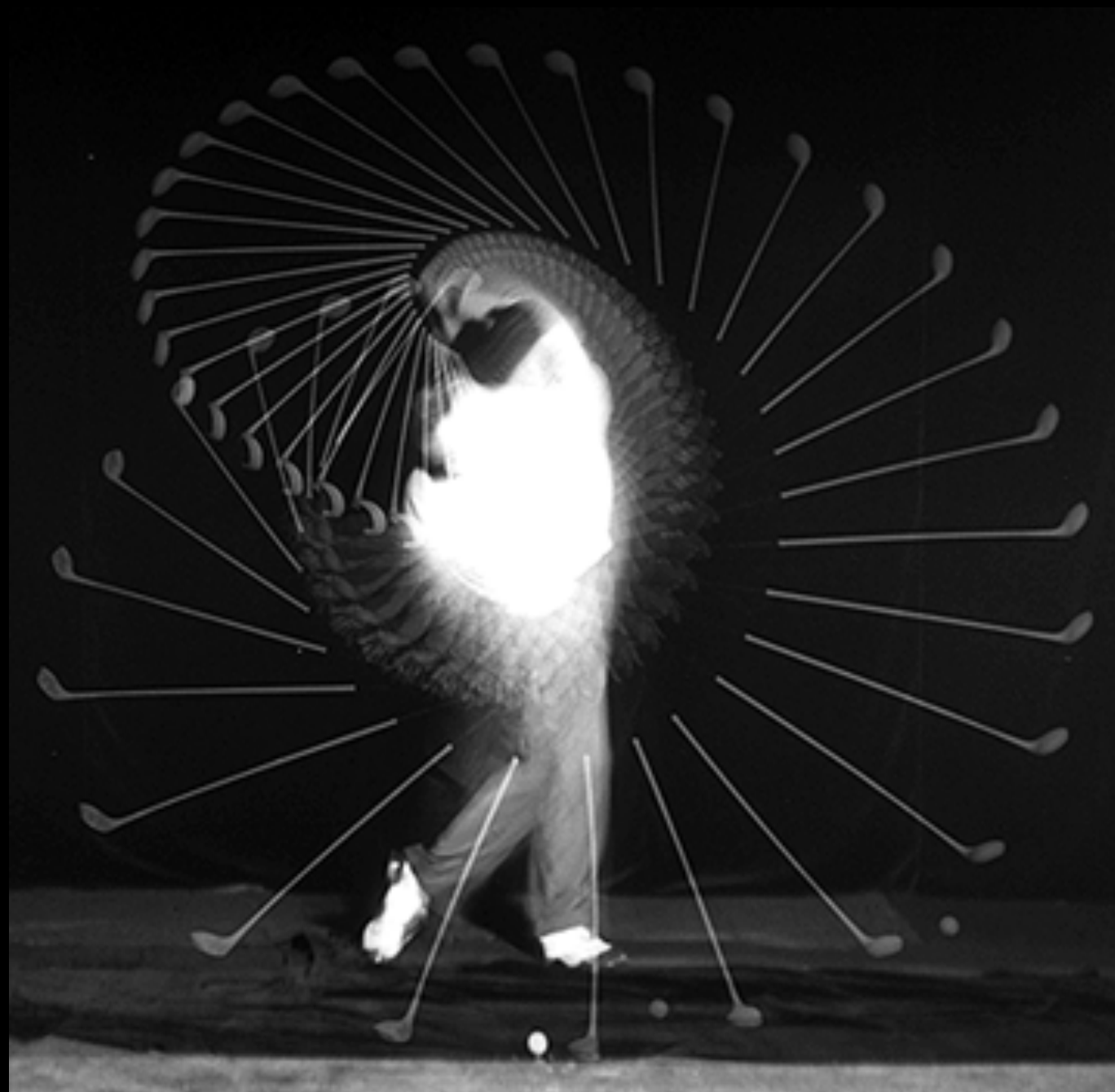
**1921:** Man Ray begins making photograms ("rayographs") by placing objects on photographic paper and exposing the shadow cast by a distant light bulb; Eugene Atget, aged 64, assigned to photograph the brothels of Paris

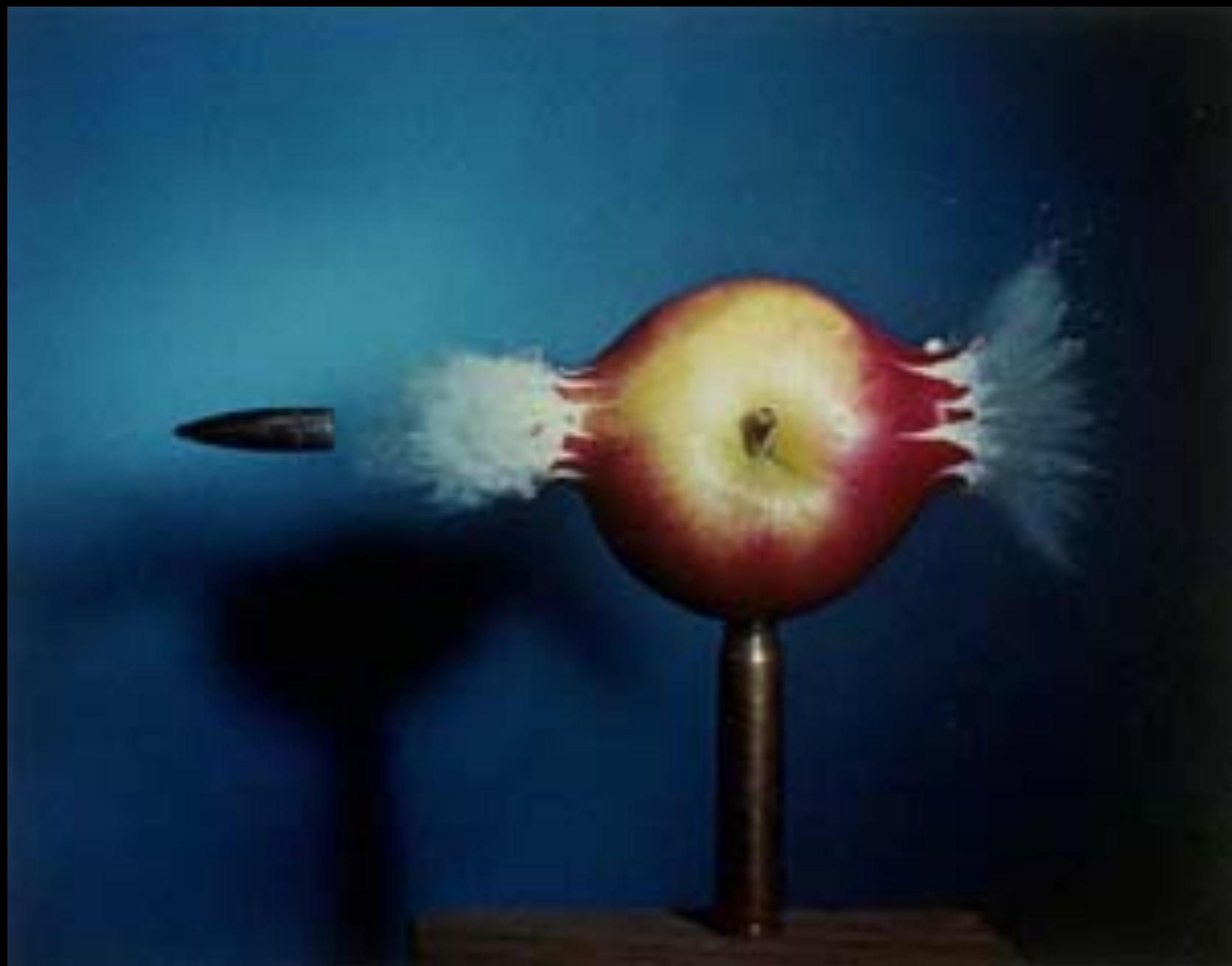




**1931:** Development  
of strobe photography  
by Harold ("Doc")  
Edgerton at MIT







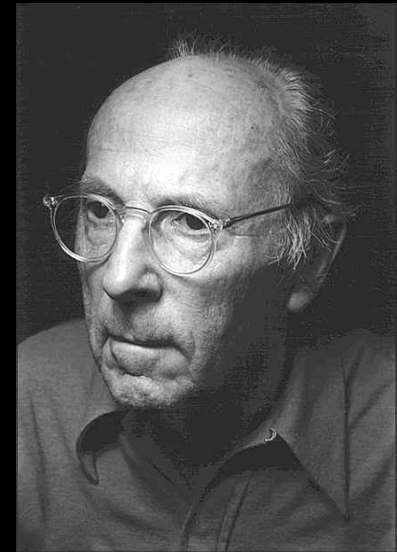
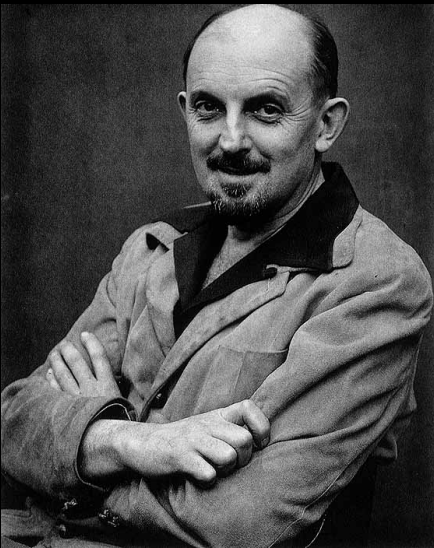




**1932:** Inception of Technicolor for movies, where three black and white negatives were made in the same camera under different filters

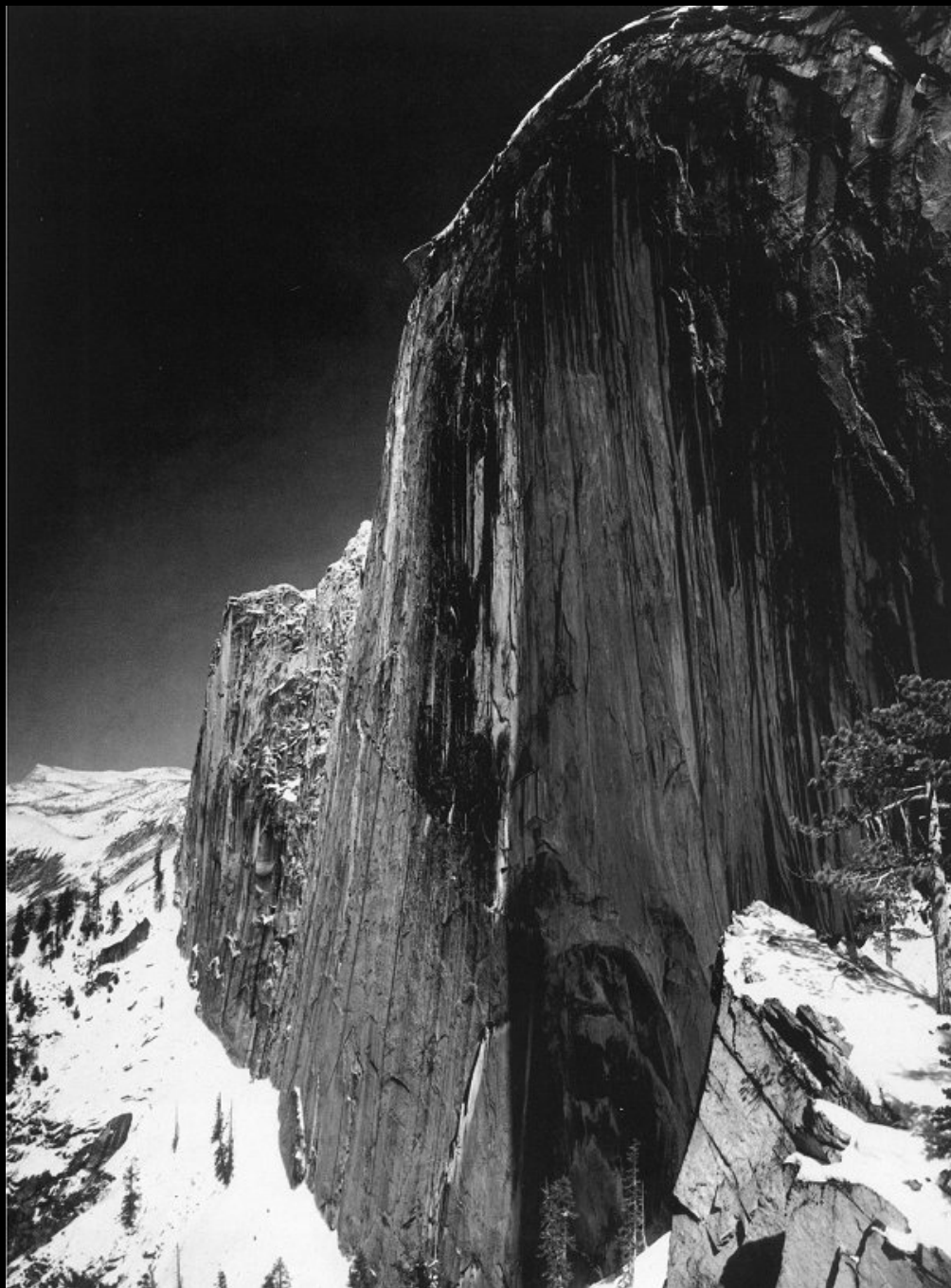


Ansel Adams, Imogen Cunningham, Willard Van Dyke, Edward Weston, et al, form Group f/64 dedicated to "straight photographic thought and production"





Ansel Adams







Imogen Cunningham



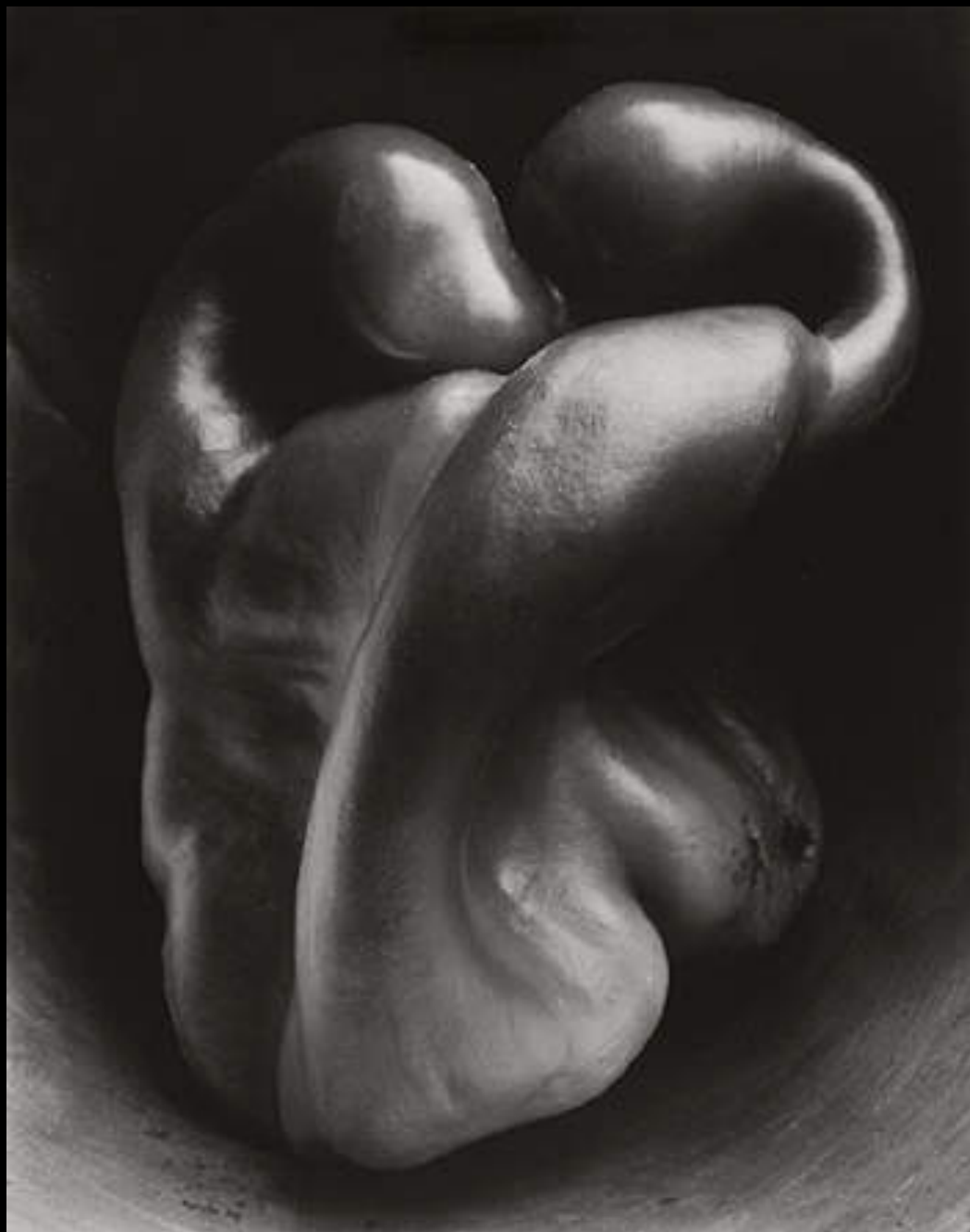






Edward weston





Henri Cartier-Bresson buys a Leica and begins a 60-year career photographing people







HENRI CARTIER-BRESSON

Henri Cartier-Bresson, Magnum, Paris, 1954







March 14, 1932 George Eastman, aged 77,  
writes suicide note--"My work is done. Why  
wait?"--and shoots himself.

**1933:** Brassai publishes *Paris de nuit*







B R A S S A I

PONT NEUF, PARIS, 1949

EDIZIONE

**1934:** Fuji Photo Film founded. By 1938, Fuji is making cameras and lenses in addition to film.



**1935:** Farm Security Administration hires Roy Stryker to run a historical section. Stryker would hire Walker Evans, Dorothea Lange, Arthur Rothstein, et al. to photograph rural hardships over the next six years. Roman Vishniac begins his project of the soon-to-be-killed-by-their-neighbors Jews of Central and Eastern Europe.

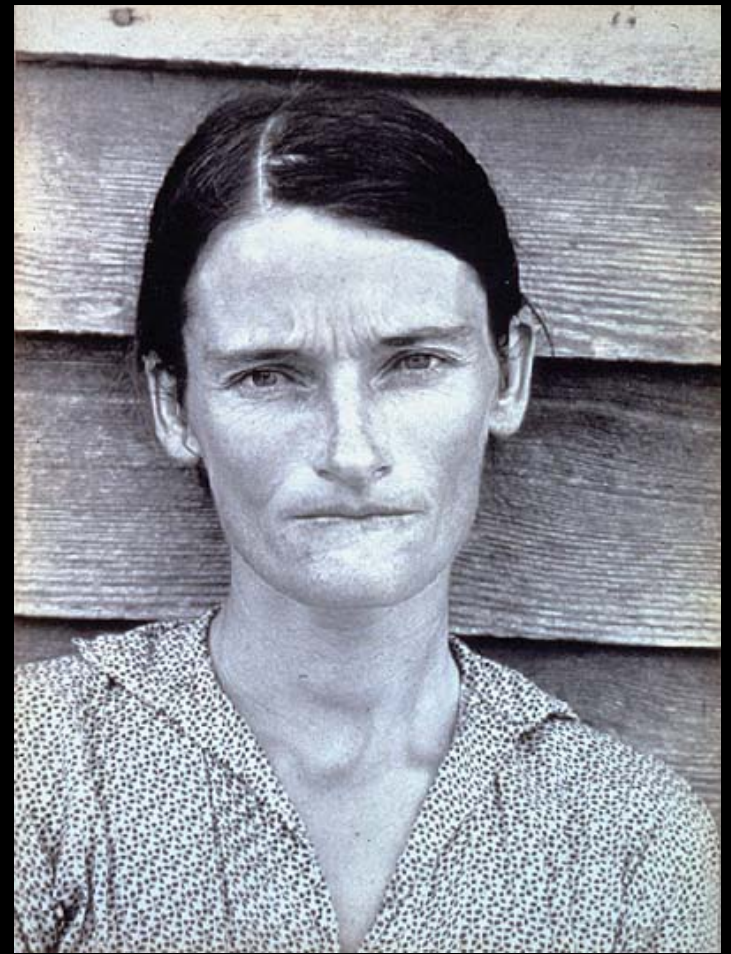




Roman Vishniac







Walker Evans



18541-C



**1936:** Development of Kodachrome, the first color multi-layered color film; development of Exakta, pioneering 35mm single-lens reflex (SLR) camera

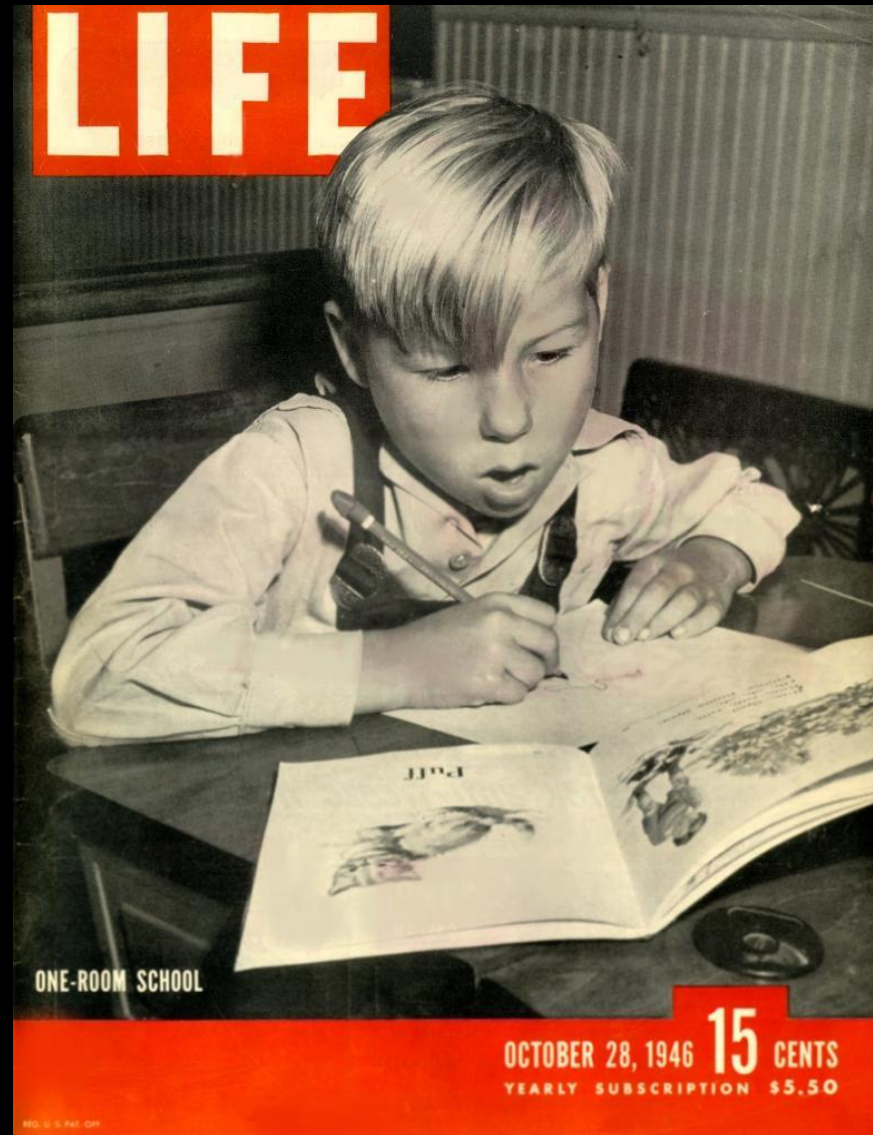




Hindenburg Explosion 1937

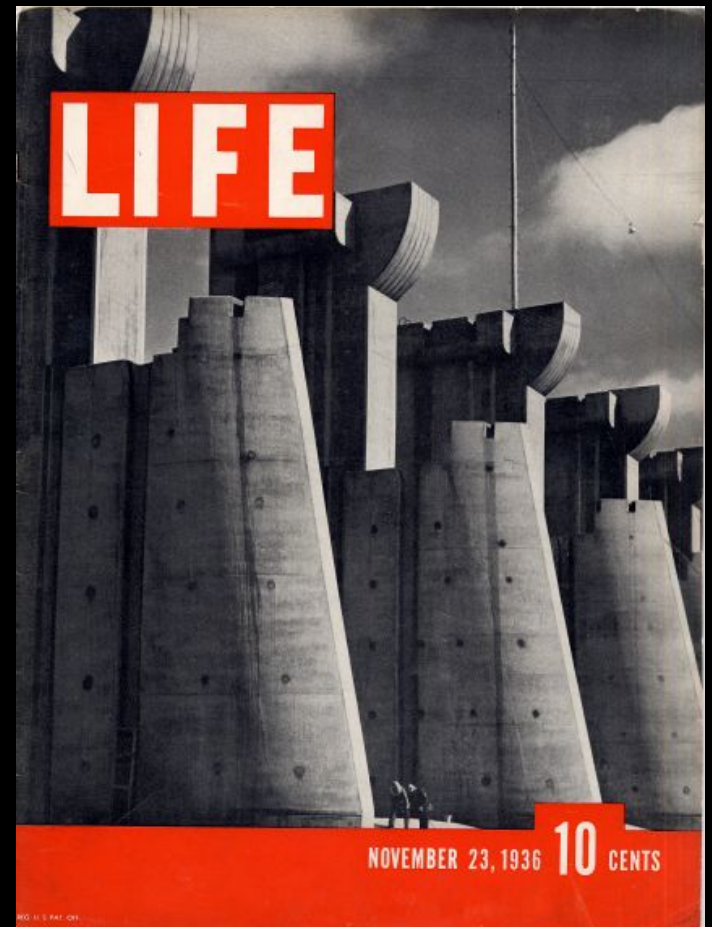


Nov. 23, 1936

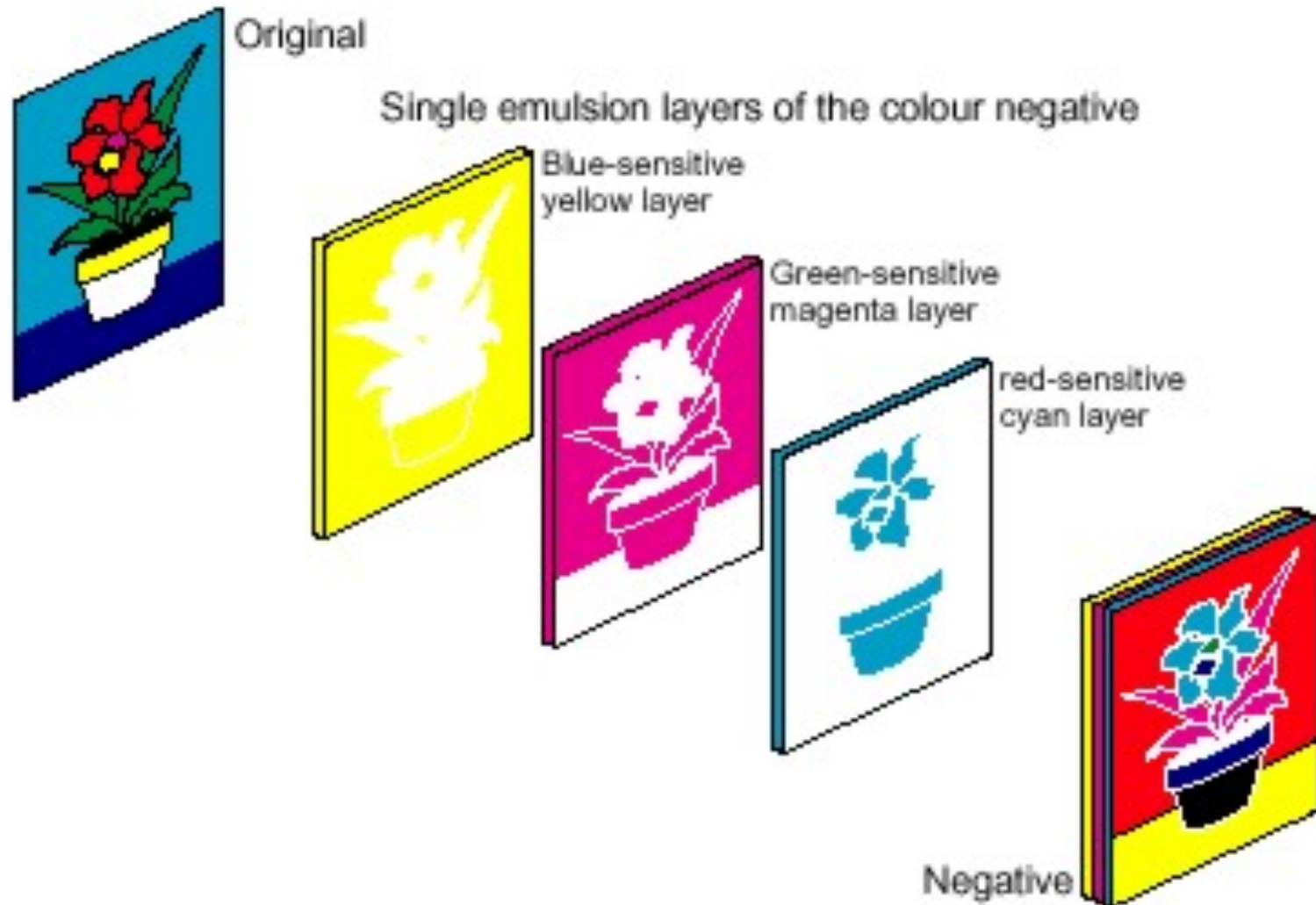


LIFE magazine covers the war with help from Margaret Bourke-White, Robert Capa, Carl Mydans, and W. Eugene Smith

First Life color 1936



## Further Development of the multi-layer color negative





Margaret Bourke-White





# WORLD'S HIGHEST STANDARD OF LIVING



*There's no way  
like the  
American Way*







Robert Capa, *Death of a Loyalist Soldier*, 1936.









Carl Hyland and Dick Douglas-Duncan

Korea 1950



W. Eugene Smith

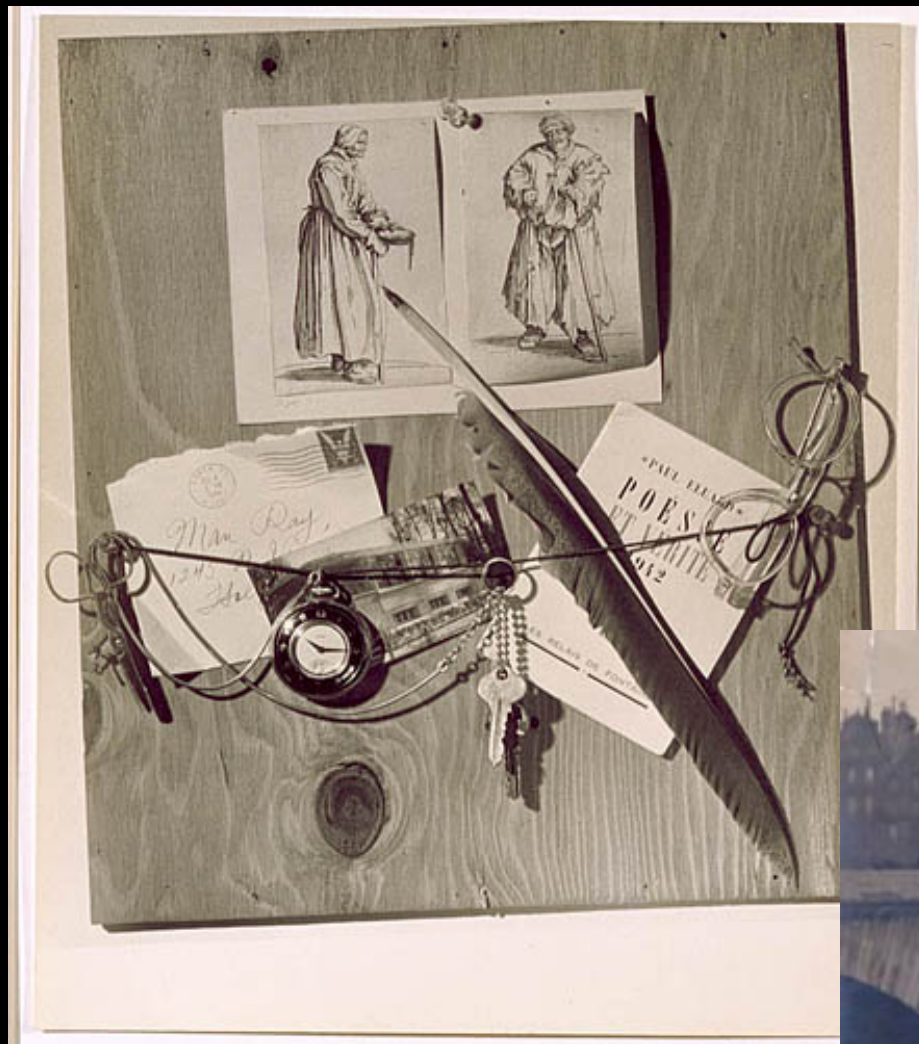






**1947:** Henri Cartier-Bresson, Robert Capa, and David Seymour start the photographer-owned Magnum picture agency



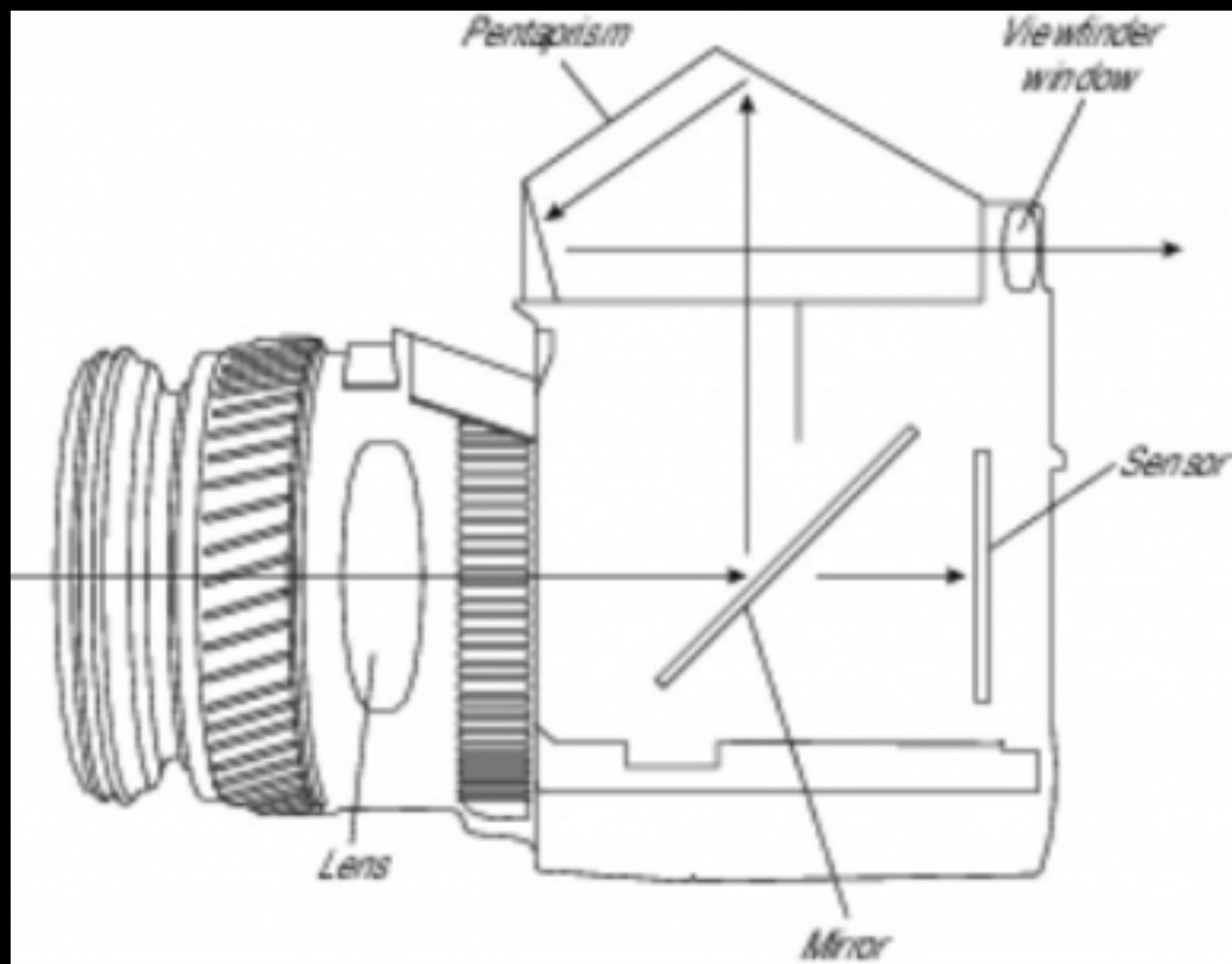


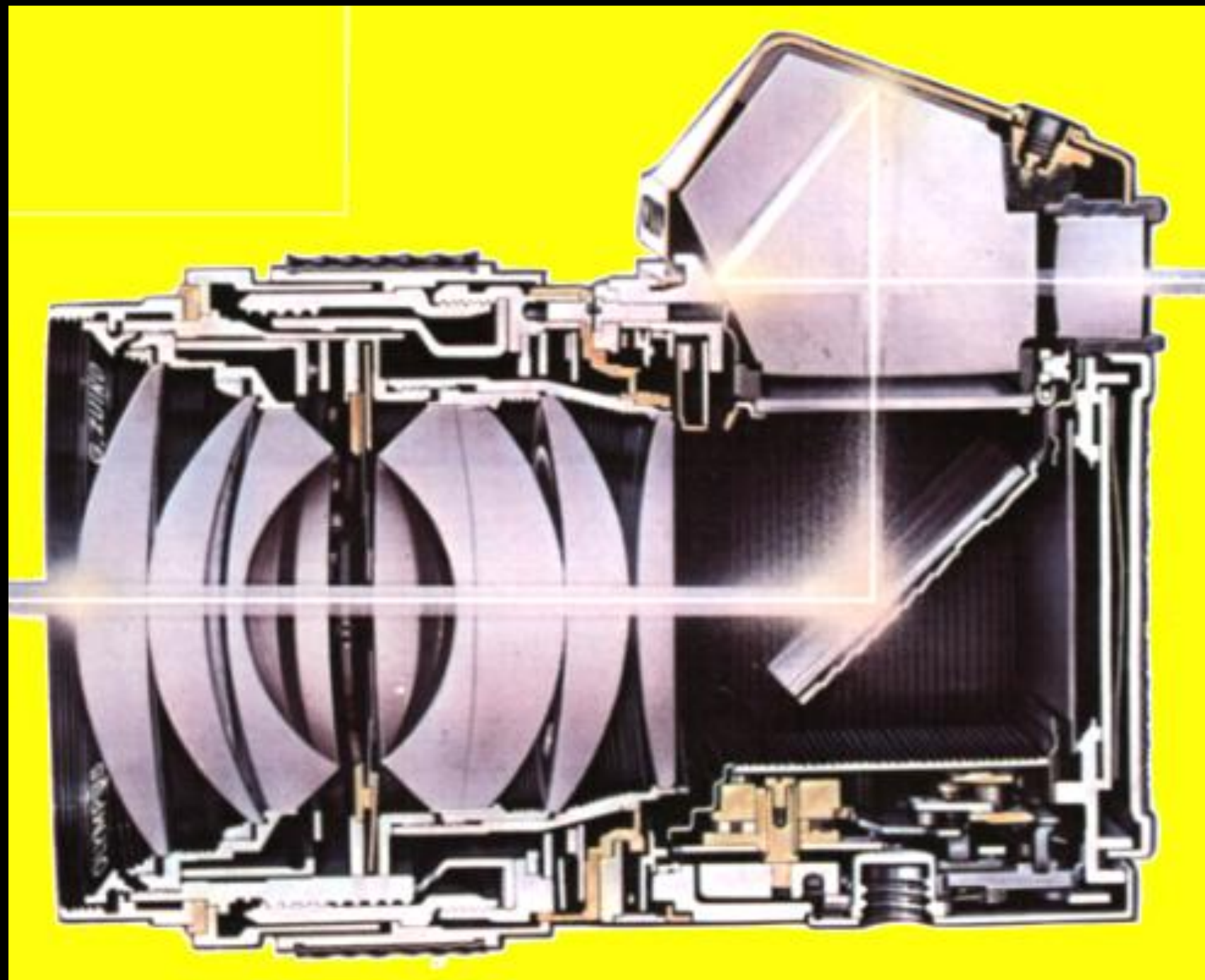
**1948:** Hasselblad in Sweden offers its first medium-format SLR for commercial sale; Pentax in Japan introduces the automatic diaphragm; Polaroid sells instant black and white film



**1949:** East German Zeiss develops the Contax S, first SLR with an unreversed image in a pentaprism viewfinder







# **1955:** Edward Steichen curates Family of Man exhibit at New York's Museum of Modern Art



# 1959: Nikon F introduced





# Speedgraphic Camera

Standard equipment for press photographers  
in the 1960s

**1960:** Garry Winogrand begins photographing women on the streets of New York City.







**1963:** First color instant film developed by Polaroid



# Instamatic released by Kodak



first purpose-built underwater introduced,  
the Nikonos



**1970:** William Wegman begins photographing his Weimaraners.



**1972:** 110-format cameras introduced by Kodak with a 13x17mm frame



**1973:** C-41 color negative process introduced, replacing C-22



1975: Nicholas Nixon takes his first annual photograph of his wife and her sisters: "The Brown Sisters"



# Steve Sasson at Kodak builds the first working CCD-based digital still camera

Steven Sasson holds the prototype digital camera he built in 1975 at the Eastman Kodak Co. headquarters in Rochester, N.Y. It recorded a black-and-white image on a digital cassette tape.



# 1976: First solo show of color photographs at the Whitney Museum of American Art :



1977: Cindy Sherman begins  
work on Untitled Film Stills,  
completed in 1980



1977: Jan Groover begins  
exploring kitchen utensils



1978: Hiroshi Sugimoto begins  
work on seascapes.



# 1980: Elsa Dorfman begins making portraits with the 20x24" Polaroid.



# 1982: Sony demonstrates Mavica "still video" camera



1983: Kodak introduces disk camera, using an 8x11mm frame (the same as in the Minox spy camera)



# Richard Avedon “In the American West”



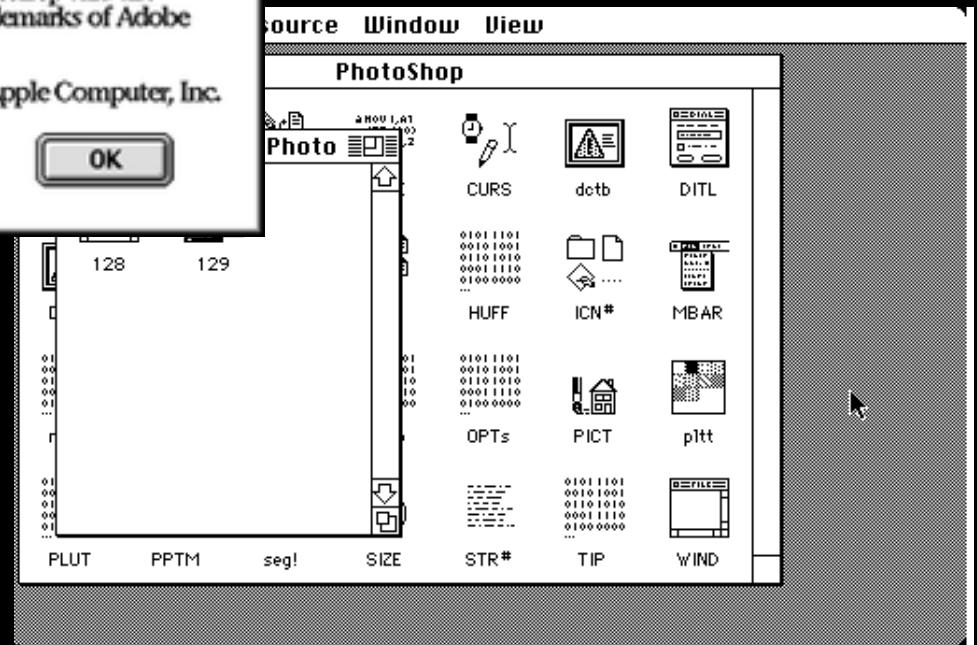
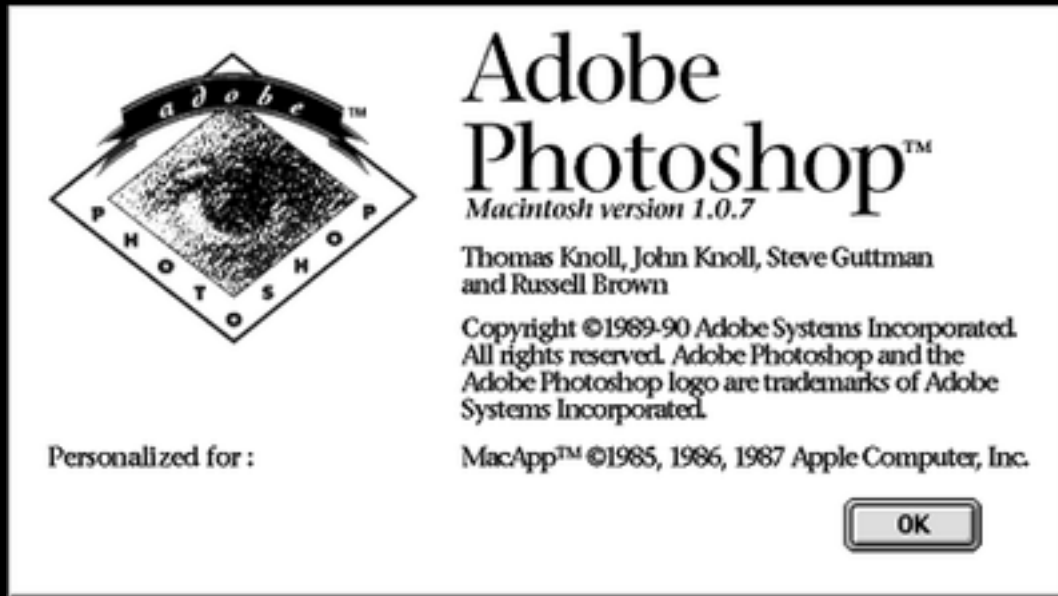
1987: The popular Canon EOS system introduced, with new all-electronic lens mount



1985: Minolta markets the world's first autofocus SLR system (called "Maxxum" in the US)



# 1990: Adobe Photoshop 1.0 released.



1991: Kodak DCS-100, first digital SLR, a modified Nikon F3



# 1992: Kodak introduces PhotoCD



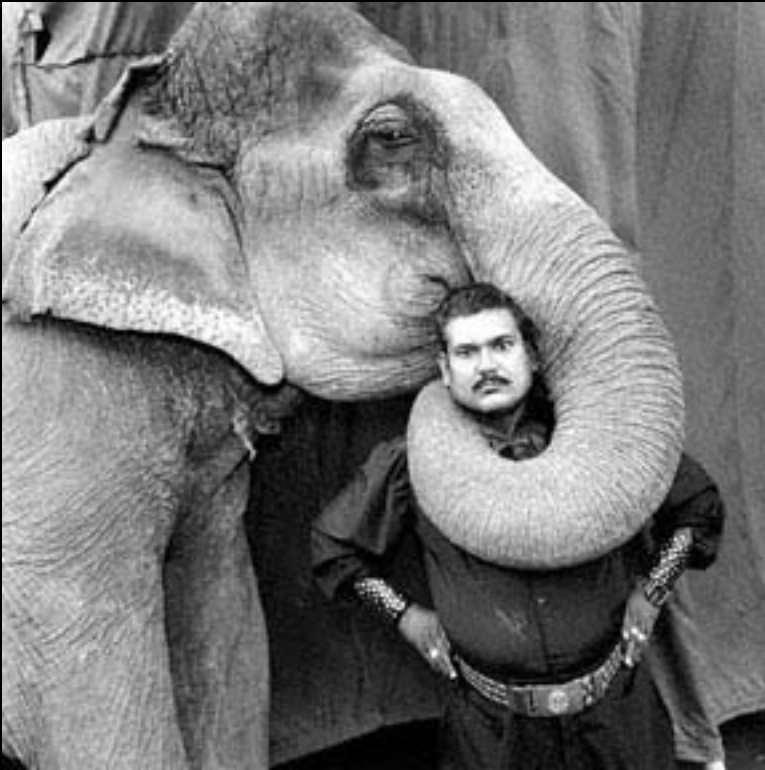
# Sebastiao Salgado publishes Workers







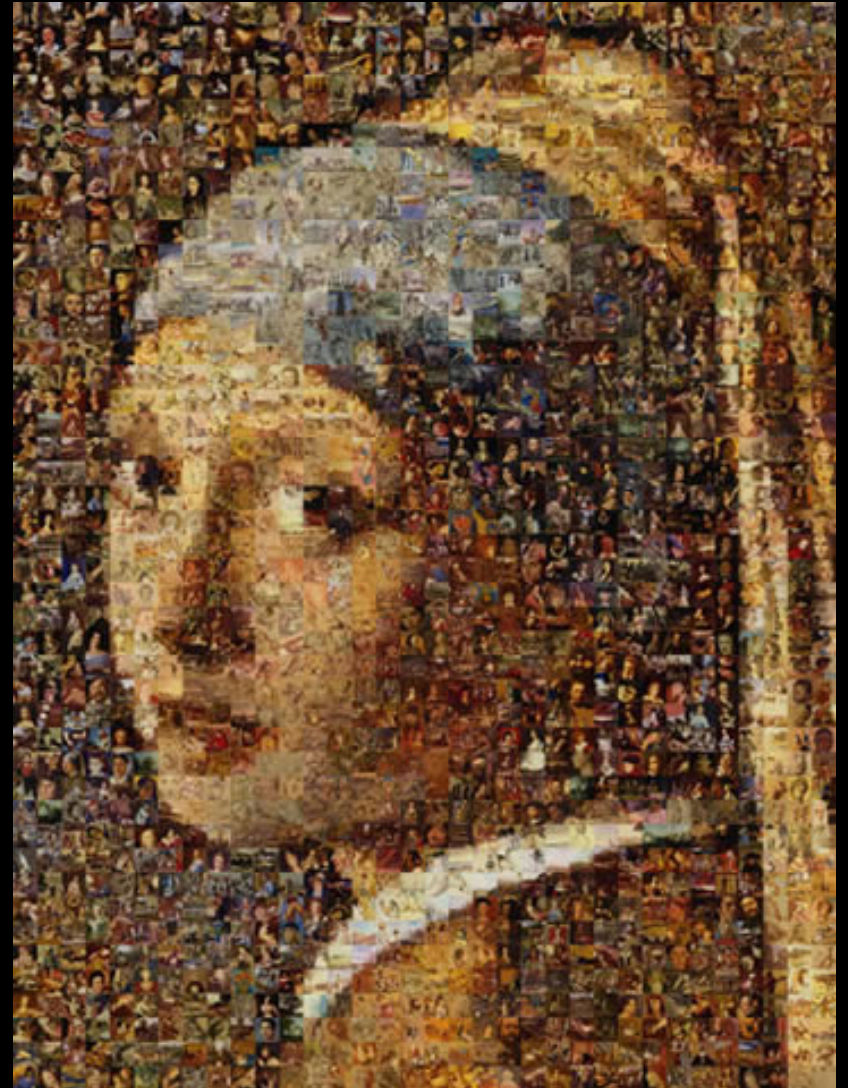
Mary Ellen Mark publishes book documenting life in an Indian circus.



# 1995: Material World, by Peter Menzel published.



# 1997: Rob Silvers publishes Photomosaics



1999: Nikon D1 SLR, 2.74 megapixel for \$6000, first ground-up DSLR design by a leading manufacturer.



2000: Camera phone introduced  
in Japan by Sharp/J-Phone



2001: Polaroid goes bankrupt

2003: Four-Thirds standard for compact digital SLRs introduced with the Olympus E-1



# Canon Digital Rebel introduced for less than \$1000



© 2003 CNET Networks, Inc.

2004: Kodak ceases production  
of film cameras

2005: Canon EOS 5D, first consumer-priced full-frame digital SLR, with a 24x36mm CMOS sensor for \$3000

