



History of Photography Timeline

by [Philip Greenspun](#), June 1999 (updated January 2007)

- **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 in the form of [sedan](#) chairs
- **1727:** Professor J. Schulze mixes chalk, nitric acid, and silver in a flask; notices darkening on side of flask exposed to sunlight. Accidental creation of the first photo-sensitive compound.
- **1800:** Thomas Wedgwood makes "sun pictures" by placing opaque objects on leather treated with silver nitrate; resulting images deteriorated rapidly, however, if displayed under light stronger than from candles.
- **1816:** Nicéphore Niépce combines the camera obscura with photosensitive paper
- **1826:** Niépce creates a permanent image
- **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.
- **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.
- **1841:** Talbot patents his process under the name "calotype".
- **1851:** Frederick Scott Archer, a sculptor in London, improves photographic resolution by spreading a mixture of collodion (nitrated cotton dissolved in ether and alcohol) and chemicals on

sheets of glass. Wet plate collodion photography was much cheaper than daguerreotypes, the negative/positive process permitted unlimited reproductions, and the process was published but not patented.

- **1853:** Nadar (Felix Toumarchon) opens his portrait studio in Paris
- **1854:** Adolphe Disderi develops *carte-de-visite* photography in Paris, leading to worldwide boom in portrait studios for the next decade
- **1855:** Beginning of stereoscopic era
- **1855-57:** Direct positive images on glass (ambrotypes) and metal (tintypes or ferrotypes) popular in the US.
- **1861:** Scottish physicist James Clerk-Maxwell demonstrates a color photography system involving three black and white photographs, each taken through a red, green, or blue filter. The photos were turned into lantern slides and projected in registration with the same color filters. This is the "color separation" method.
- **1861-65:** [Mathew Brady](#) and staff (mostly staff) covers the American Civil War, exposing 7000 negatives
- **1868:** Ducas de Hauron publishes a book proposing a variety of methods for color photography.
- **1870:** Center of period in which the US Congress sent photographers out to the West. The most famous images were taken by William Jackson and Tim O'Sullivan.
- **1871:** Richard Leach Maddox, an English doctor, proposes the use of an emulsion of gelatin and silver bromide on a glass plate, the "dry plate" process.
- **1877:** [Eadweard Muybridge](#), born in England as Edward Muggridge, settles "do a horse's four hooves ever leave the ground at once" bet among rich San Franciscans by time-sequenced photography of Leland Stanford's horse.
- **1878:** Dry plates being manufactured commercially.
- **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*.
- **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
- **1890:** [Jacob Riis](#) publishes *How the Other Half Lives*, images of tenement life in New York City
- **1900:** Kodak Brownie box roll-film camera introduced.
- **1902:** [Alfred Stieglitz](#) organizes "Photo Secessionist" show in New York City

- **1906:** Availability of panchromatic black and white film and therefore high quality color separation color photography. J.P. Morgan [finances](#) Edward Curtis to document the traditional culture of the North American Indian.
- **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.
- **1914:** Oscar Barnack, employed by German microscope manufacturer Leitz, develops camera using the modern 24x36mm frame and sprocketed 35mm movie film.
- **1917:** Nippon Kogaku K.K., which will eventually become Nikon, established in Tokyo.
- **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
- **1924:** Leitz markets a derivative of Barnack's camera commercially as the "Leica", the first high quality 35mm camera.
- **1925:** [André Kertész](#) moves from his native Hungary to Paris, where he begins an 11-year project photographing street life
- **1928:** Albert Renger-Patzsch publishes *The World is Beautiful*, close-ups emphasizing the form of natural and man-made objects; Rollei introduces the Rolleiflex twin-lens reflex producing a 6x6 cm image on roll film.; Karl Blossfeldt publishes *Art Forms in Nature*
- **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".; Henri Cartier-Bresson [buys](#) a Leica and begins a 60-year career photographing people; On March 14, George Eastman, aged 77, writes suicide note--"My work is done. Why wait?"--and shoots himself.
- **1933:** [Brassaï](#) publishes *Paris de nuit*
- **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.

- **1936:** Development of Kodachrome, the first color multi-layered color film; development of Exakta, pioneering 35mm single-lens reflex (SLR) camera
- **World War II:**
 - Development of multi-layer color negative films
 - Margaret Bourke-White, Robert Capa, Carl Mydans, and W. Eugene Smith cover the war for LIFE magazine
- **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.
- **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 Weimaraner, Man Ray.
- **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
- **1976:** First solo show of color photographs at the Museum of Modern Art, [William Eggleston's Guide](#)
- **1977:** Cindy Sherman begins work on *Untitled Film Stills*, completed in 1980; [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)
- **1985:** Minolta markets the world's first autofocus SLR system (called "Maxxum" in the US); *In the American West* by Richard Avedon
- **1988:** [Sally Mann](#) begins publishing nude photos of her children
- **1987:** The popular Canon EOS system introduced, with new all-electronic lens mount
- **1990:** Adobe Photoshop released.
- **1991:** Kodak DCS-100, first digital SLR, a modified Nikon F3
- **1992:** Kodak introduces PhotoCD
- **1993:** Founding of photo.net (this Web site), an early Internet online community; 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
- **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; *Portraits* by Rineke Dijkstra