# History of photography (part 1): age of portraits

CS 178, Spring 2009



Marc Levoy
Computer Science Department
Stanford University

#### Outline

- invention of photography
- daguerreotypes and the age of portraits
- → more in later lectures...

2

#### Nicéphore Niépce (1765-1833)

♦ first photographic image



View from the window at Le Gras, 1826



- bitumen on pewter plate
- 8-hour exposure

#### painter

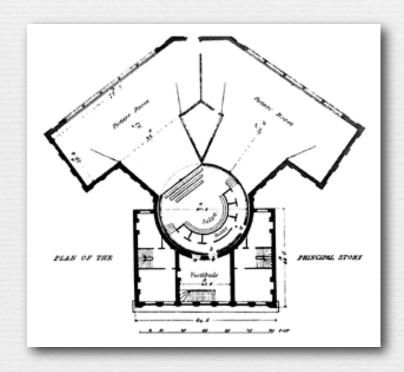


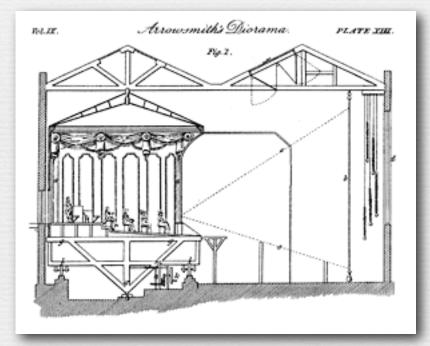
The Effect of Fog and Snow Seen through a Ruined Gothic Colonnade, 1826



inventor of the diorama







Diorama in Regent's Park, London, 1823



modern diorama at the American Museum of Natural History

♦ the daguerreotype





- silver halide on polished metal
- no negative, so cannot reproduce
- tone reversal unless lit carefully

(Newhall)

Still life, 1837

♦ the daguerreotype





- silver halide on polished metal
- no negative, so cannot reproduce
- tone reversal unless lit carefully

(Newhall)

Still life, 1837

#### William Talbot (1800-1877)

the calotype



Latticed window at Lacock Abbey, 1835



- paper impregnated with silver chloride
- fading arrested with hyposulfite of soda ("hypo")
- negative, so allows any number of positive prints
- name "photography" suggested by F. W. Herschel

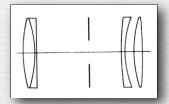
# The daguerreotype portrait



making a daguerreotype, 1843

(Rosenblum)

- sitter's head stabilized with a metal brace
- hands clenched to avoid movement
- Petzval's lens (1840) reduced exposure time 20×



exposure still long, typically 5-8 seconds

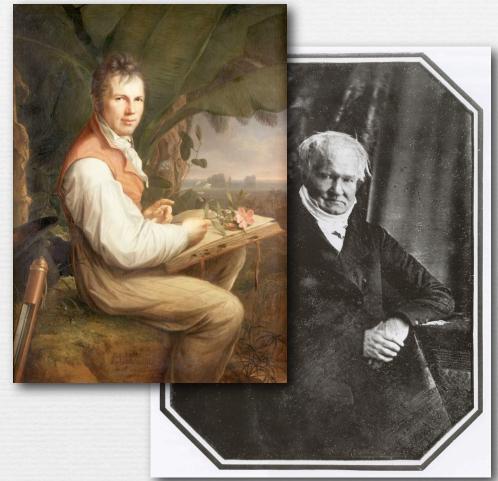
# The daguerreotype portrait



(Rosenblum)

Gustav Oehme, Three Young Girls, c. 1845

#### Pop quiz - who are these people?

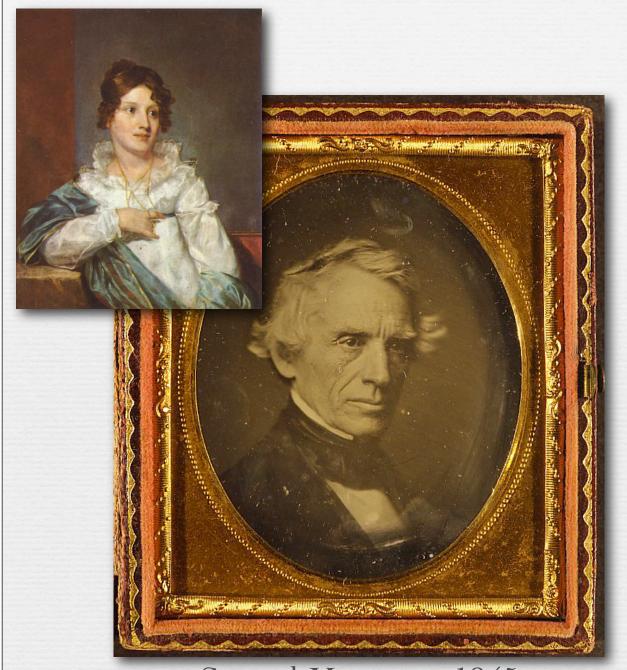


Alexander von Humboldt, 1847

(photograph by Hermann Blow)

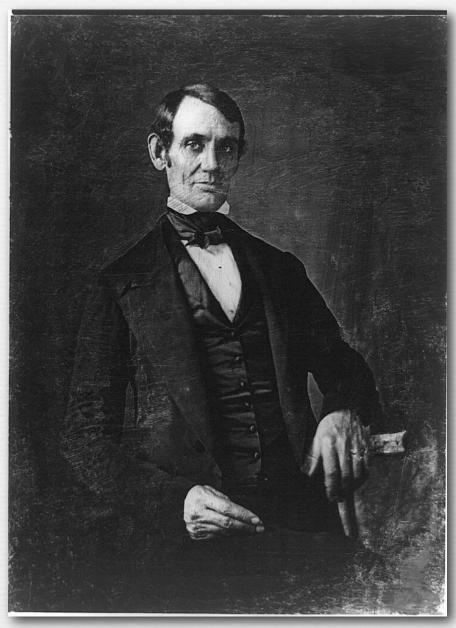
(Rosenblum)

- naturalist and explorer of Central and South America
- father of modern meteorology
- magnetic declination,
   igneous origin of rocks, etc.

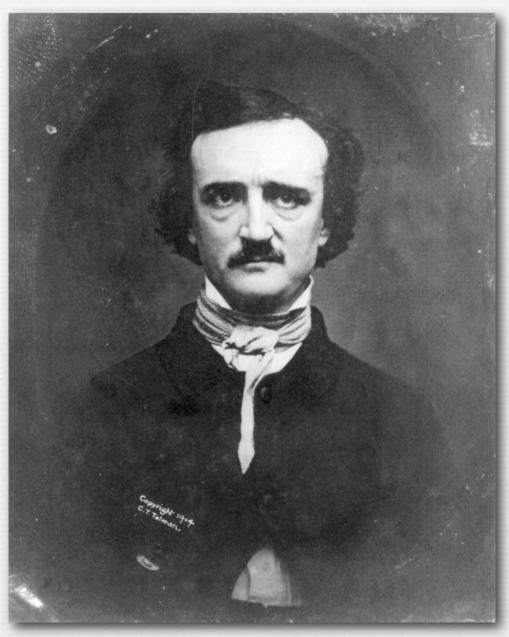


Samuel Morse, ca. 1845

- inventor of the telegraph (and Morse code)
- painter



Abraham Lincoln, c. 1846 (photograph by Nicholas Shepherd)



Edgar Allen Poe, 1848 (photograph by W.S. Hartshorn)



Lewis Caroll, 1863 (photograph by Oscar Rejlander)

(Rosenblum)

- mathematician and author of children's books (Alice in Wonderland)
- albumen print (from here on)

(Rosenblum)

• most famous actress of the 19th century ("divine Sarah")

Sarah Bernhardt, 1865 (photograph by Gaspard Tournachon)



mother of the author Virginia Woolf

(photograph by Julia Margaret Cameron)

#### Slide credits

- Newhall, B., The History of Photography, Little, Brown & Co., 1982.
- Rosenblum, N., A World History of Photography (4th ed.), Abbeville Press, 2007.
- http://wikipedia.org

19