History of photography (part 1): age of portraits

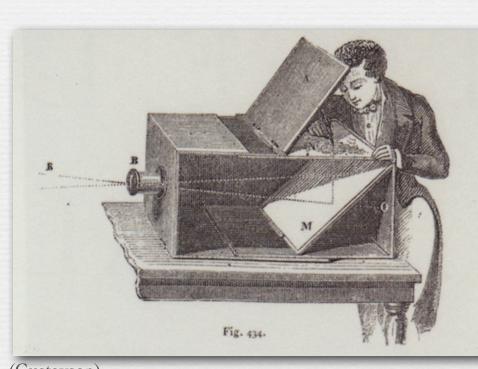
CS 178, Spring 2014



Marc Levoy Computer Science Department Stanford University

Outline

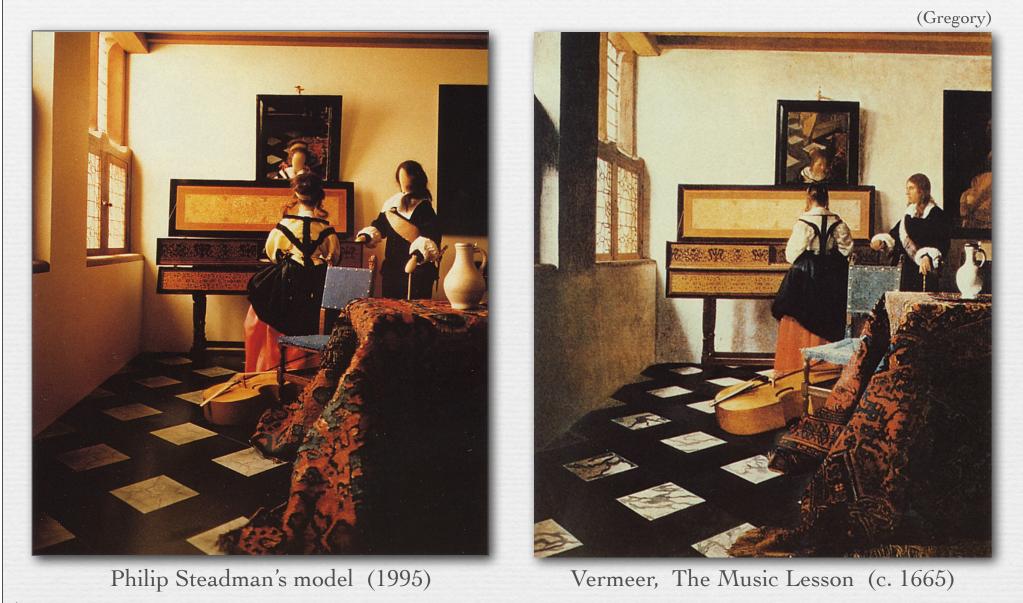
- invention of photography
- daguerreotypes and the age of portraits
- ♦ more in later lectures...



(Gustavson)

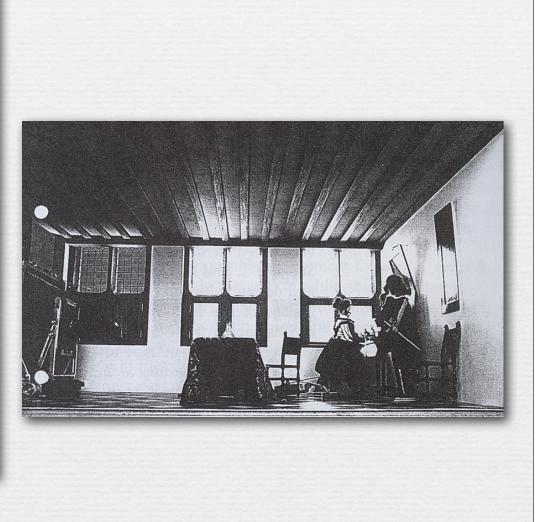


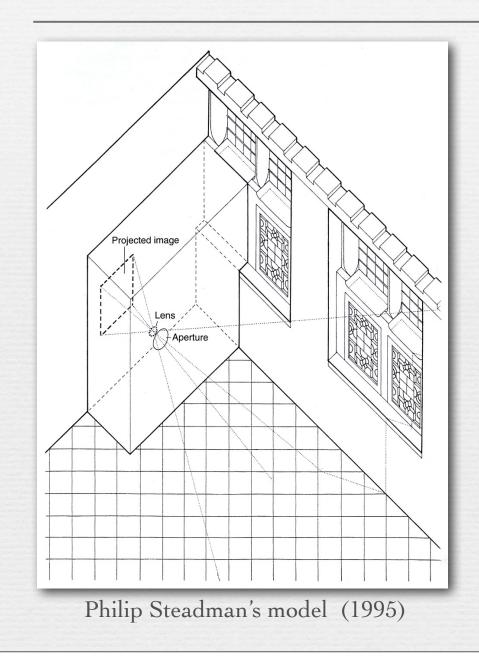
Vermeer, The Music Lesson (c. 1665)

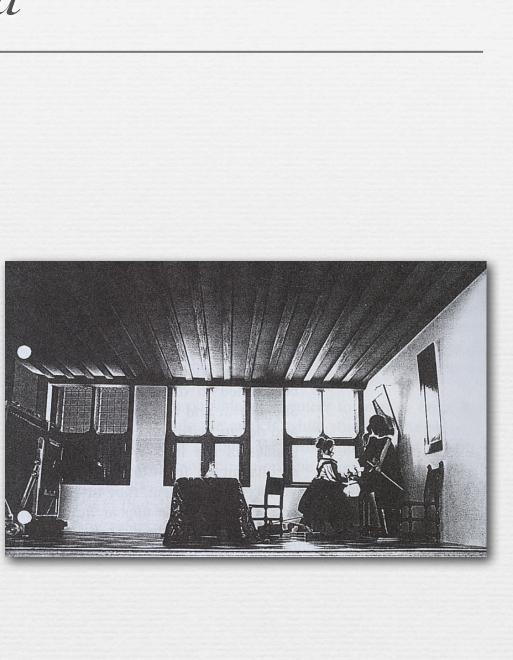




Philip Steadman's model (1995)

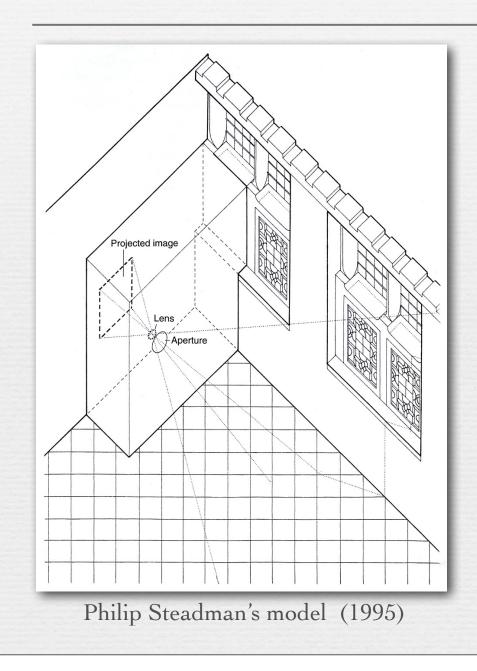






© Marc Levoy

6



7

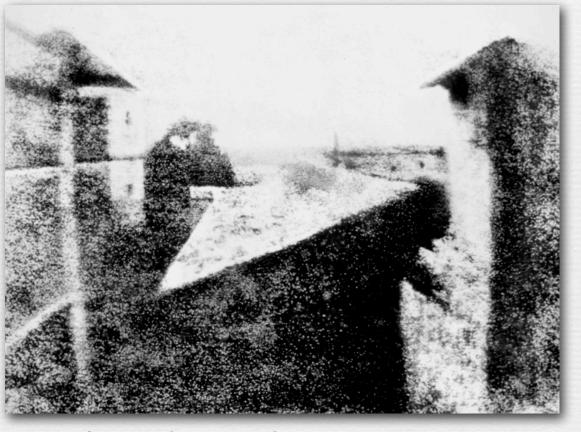


Vermeer, The Music Lesson (c. 1665)

Nicéphore Niépce (1765-1833)

first photographic image

8



View from the window at Le Gras, 1826



• bitumen on pewter plate

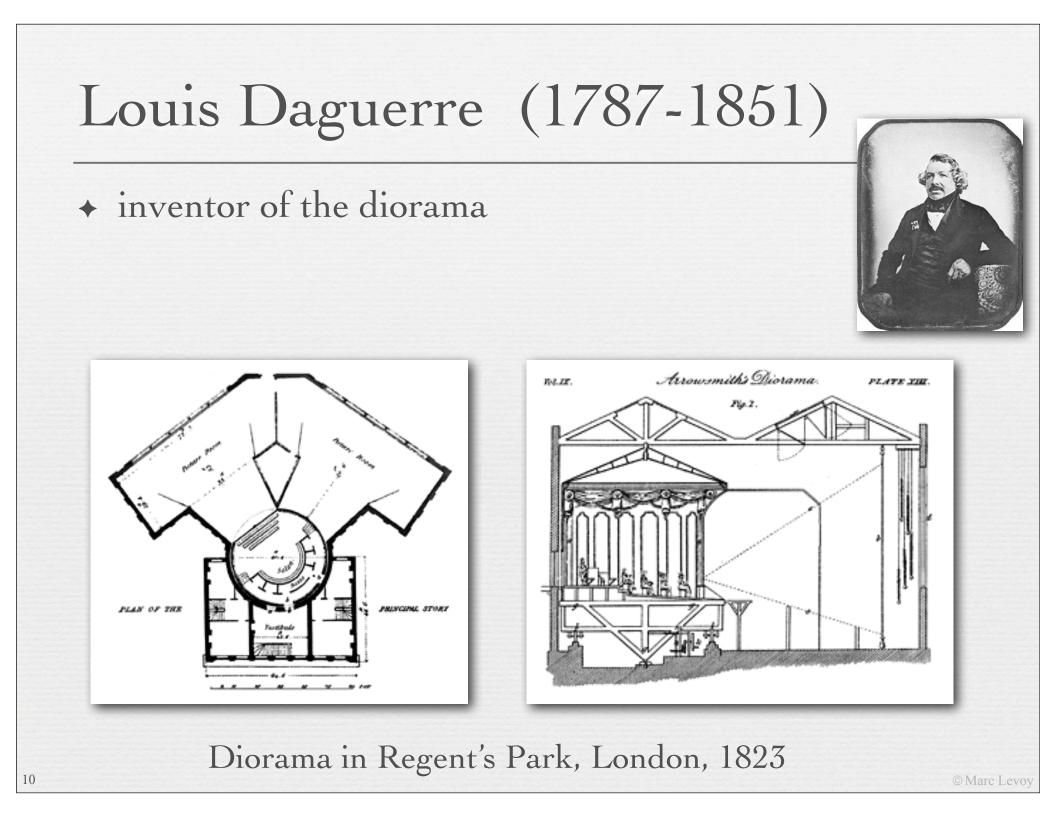
• 8-hour exposure

♦ painter

9



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

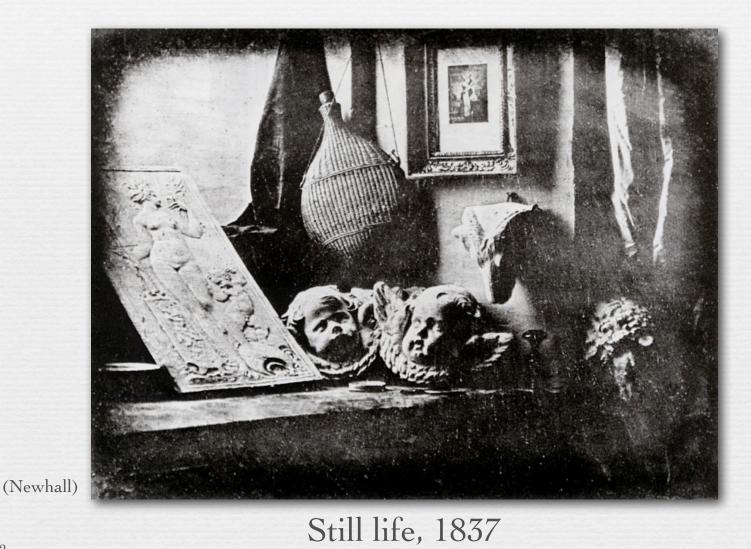




modern diorama at the American Museum of Natural History

11

the daguerreotype





• silver halide on polished metal

• no negative, so cannot reproduce

• tone reversal unless lit carefully

the daguerreotype





• silver halide on polished metal

• no negative, so cannot reproduce

• tone reversal unless lit carefully

William Talbot (1800-1877)

the calotype





• 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

Latticed window at Lacock Abbey, 1835

The daguerreotype portrait



making a daguerreotype, 1843

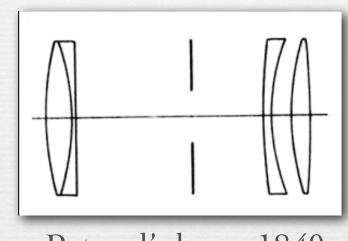
(Rosenblum)

• sitter's head stabilized with a metal brace

 hands clenched to avoid movement

The daguerreotype camera





- Petzval's lens, 1840
- f/3.7 instead of f/16.7
- reduced exposure time 20×
- exposure still 5-8 seconds

The daguerreotype portrait

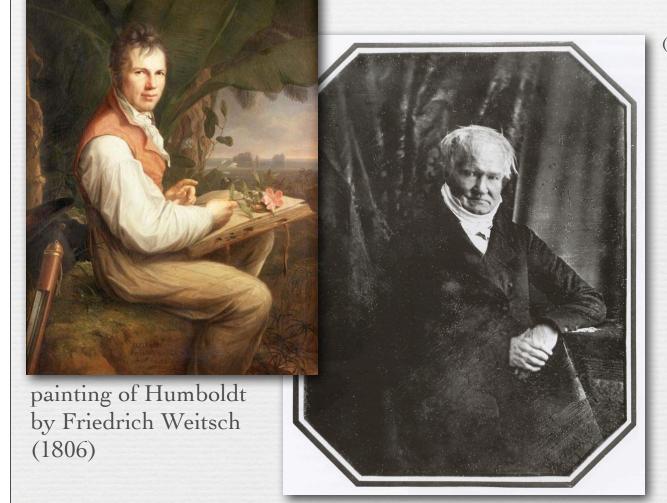


(Rosenblum)

Gustav Oehme, Three Young Girls, c. 1845

17

Pop quiz - who are these people?



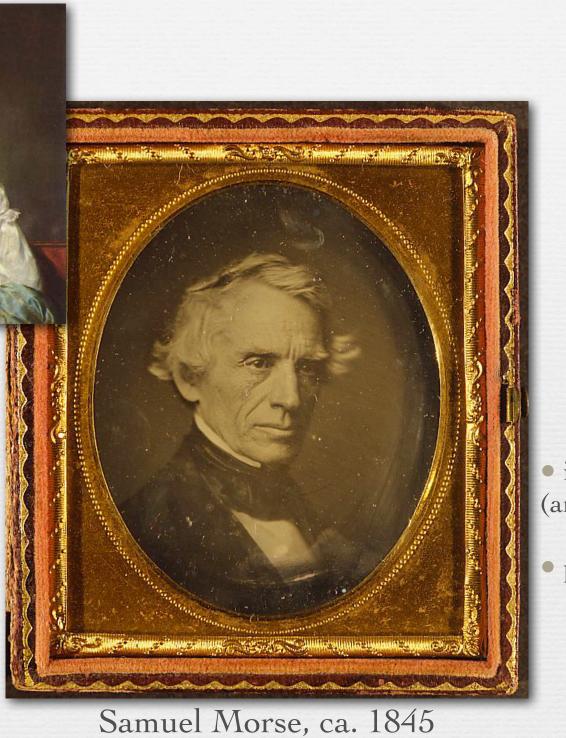
(Rosenblum)

 naturalist and explorer of Central and South America

 father of modern meteorology

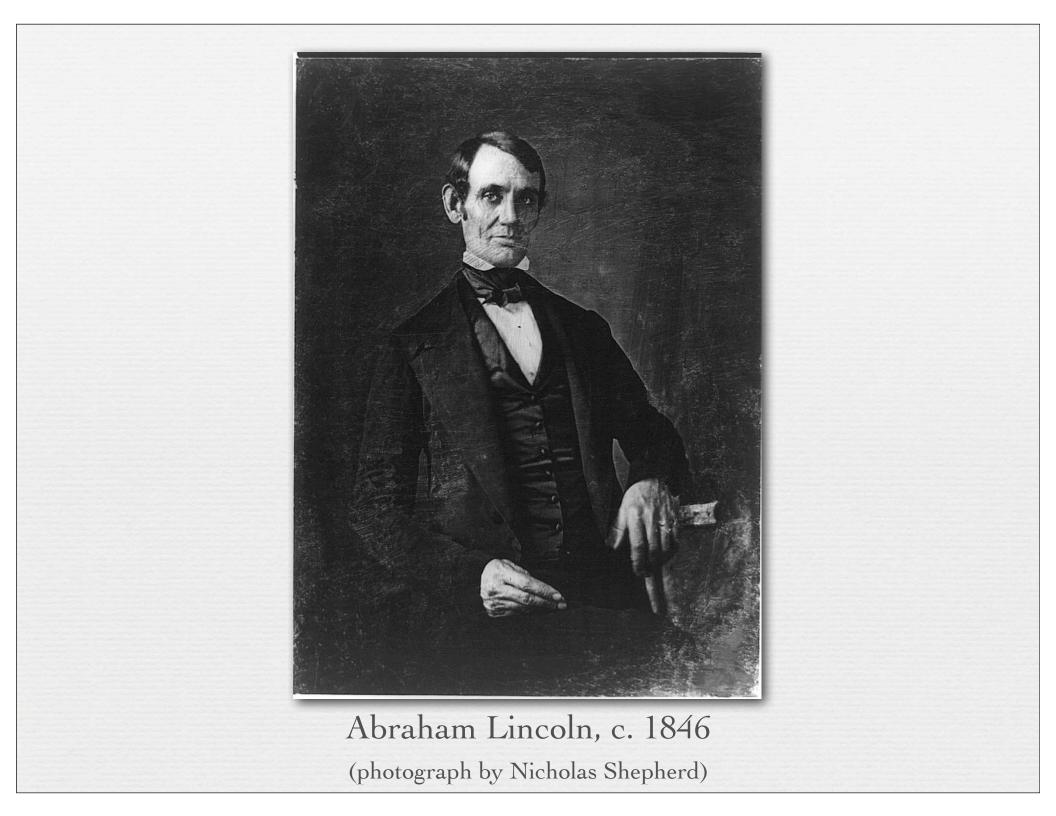
magnetic declination,
igneous origin of rocks, etc.

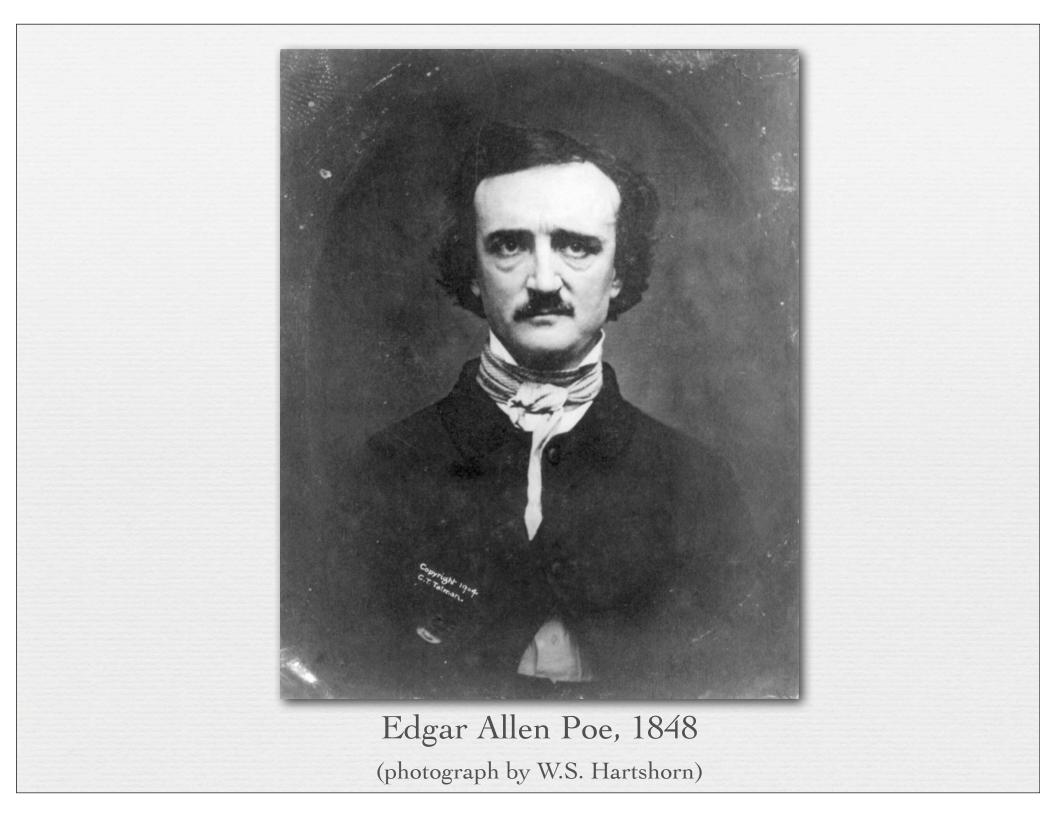
Alexander von Humboldt, 1847 (photograph by Hermann Blow) painting by Morse of Mrs. Bacot (1830)



inventor of telegraph (and Morse code)

painter





photograph by Lewis Caroll of Alice Lidell (1858)



Lewis Caroll, 1863 (photograph by Oscar Rejlander) mathematician and author of children's books (Alice in Wonderland)

(Rosenblum)

• albumen paper print made from wet-plate collodion negative (from here on)



Sarah Bernhardt, 1865 (photograph by Gaspard Tournachon)

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



Slide credits

- Newhall, B., The History of Photography, Little, Brown & Co., 1982.
- Rosenblum, N., A World History of Photography (4th ed.), Abbeville Press, 2007.
- Gustavson, T., *Camera*, Sterling Publishing, 2009.
- Gregory, R., et al., *The Artful Eye*, Oxford University Press, 1995.
- <u>http://wikipedia.org</u>