History of photography (part 2): documenting the world

CS 178, Spring 2013

Marc Levoy
Computer Science Department
Stanford University
Outline

- everyday scenes
- architecture and archaeology
- wonders of the industrial age
- notable events
- the beginning of photojournalism
- wet plate photography
- Matthew Brady and the Civil War
- surveying the West
Everyday scenes

Porta della Ripetta, Rome, 1846
(photograph by Calvert Jones)
Everyday scenes

Banks of the Seine at Sèvres, 1851
(photograph by Victor Regnault)

Harbor of La Rochelle, 1851
(painting by Corot)
Architecture and archaeology

The Parthenon, 1869
(photograph by William James Stillman)
Architecture and archaeology

Notre Dame cathedral, 1851
(photograph by Charles Negre)
Wonders of the industrial age

The Crystal Palace, London, c. 1853
(photograph by Philip Henry Delamotte)
Wonders of the industrial age

The Great Eastern being launched, 1858
(photographer unknown)
Isambard Brunel, Builder of the Great Eastern
(photograph by Robert Howlett)
Notable events

Meeting of the Rails, 1869
(photograph by Andrew J. Russell)
The beginnings of photojournalism

(Rosenblum)
The beginnings of photojournalism

Execution of the co-conspirators, 1865
(photograph by Alexander Gardner)
The beginnings of photojournalism

Abraham Lincoln, 1865
(photograph by Alexander Gardner)

John Wilkes Booth
(Rosenblum)
Wet-plate collodion photography

- developed in 1851 by Frederick Scott Archer
  - **clean** the glass plate (extremely well)
  - **flow** the glass plate with "salted" (iodide/bromide) collodion
  - **immerse** the plate in a silver nitrate bath (for 3-5 minutes)
  - **expose** the plate (from one second to several minutes)
  - **develop** the plate (using an ferrous sulfate based developer)
  - **fix** the plate (with potassium cyanide or sodium thiosulfate)
- any number of prints can be made
- exposure must immediately follow silvering, so requires a traveling darkroom
Matthew Brady (1822-1896)

a wet plate photographer at work, circa 1877

(illustrator unknown)
Colonels of the 164th New York Cavalry
Matthew Brady and the Civil War

Camp life

(Garrison)
Matthew Brady and the Civil War

Artillery
Matthew Brady and the Civil War

Fortifications
Matthew Brady and the Civil War

Lincoln visiting Antietam, 1862
Matthew Brady and the Civil War

Dead at Antietam, 1862
(photograph by Alexander Gardner)

- bloodiest battle in American history (23,000 casualties)
- this photograph was probably posed
Matthew Brady and the Civil War

The Ruins of Richmond, Virginia, 1865

(Archives)
Matthew Brady and the Civil War

General William Tecumseh Sherman, 1865
Surveying the West

The Hayden Survey, 1870
(photographed by William Henry Jackson)
Hayden Survey map of Colorado and Utah, 1874

route of Prof. Levoy’s 1984 bicycle trip
Landscape tourism

Thomas Cole, Crawford Notch, 1839

(Truettner)
Landscape tourism

Alfred Bierstadt, The Rocky Mountains, 1863
Surveying the West

Grand Canyon, 1882
(ink and watercolor by William Holme)

Grand Canon of the Colorado River, 1871
(photographed by John K. Hillers)
The founding of Yellowstone Park

Grand Canyon of the Yellowstone, 1871
(photographed by William Henry Jackson)
The founding of Yellowstone Park

Grand Canyon of the Yellowstone, 1872

(watercolor by Thomas Moran)
Slide credits