The Impact of Photography

History of Information 103
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The Range of Photography

Inventions, technologies, applications, media...
The Range of Photography

Inventions, technologies, applications, media…

And by extension, to broadcast, cinema, x-ray, etc.
Agenda

The invention(s) of photography

The photographic "truth"

Manipulating & questioning the photographic truth, then and now

Photography as documentation

Fixing identities
  - Documenting the deviant
  - The physical classification of deviance

Photography High and Low

How we read photographs: as particular, real, veridical, "objective"

*(What's left out: photography and art)*
Who made the first aerial photographs?
Puzzlers

Who made the first aerial photographs?
Photography Before Photographs

The camera obscura: images from nature

Ibn al-Hatham
965-1039
Photography Before Photographs

The prettiest Landskip I ever saw was one drawn on the Walls of a dark Room, which stood opposite on one side to a navigable River.... Here you might discover the Waves and Fluctuations of the Water in strong and proper Colours, with a Picture of a Ship entering at one end and sailing by Degrees through the whole Piece. I must confess, the Novelty of such a Sight may be one occasion of its Pleasantness to the Imagination, but certainly the chief reason is its near resemblance to Nature. Joseph Addison, in the *Spectator*, 1712, on the camera obscura at Greenwich

Greenwich Royal Observatory

G. Canaletto, London
Greenwich Hospital from the North Bank of the Thames, 1753

Camera obscura at Cliff House, Ocean Beach
Photography Before Photographs

The camera lucida
Photography Before Photographs

Lenses and mirrors -- an old masters' "cheat"?

Detail from Jan van Eyck's Arnolfini portrait, 1434
Creating a permanent image

1725: Johann Heinrich Schulze demonstrates that silver compounds are visibly changed by the action of light; makes stencil impressions on glass, but does not try to capture images from nature.

1800: Thomas Wedgewood makes images on leather impregnated with silver nitrate, but is unable to prevent progressive darkening.

1819: Sir John Herschel discovers that sodium hyposulfite ("hypo") will dissolve silver halides, can be used to "fix" photographic prints. Later invents the words "negative" and "positive" and "photography".
The earliest photographs

1826: Nicéphore Niépce makes "heliograph" on plate from window in Gras; requires > 8 hr. exposure.

From 1829, Niépce collaborates with Louis Daguerre, who announces in 1837 a new "chemical and physical process" which "is not merely an instrument which serves to draw Nature; it gives her the ability to reproduce herself."
The earliest photographs

1839: William Henry Fox Talbot invents "photogenic drawing": method of printing on paper, later the calotype, which makes use of latent image, permitting 1-3 min exposures.

Permits multiple prints, less sharp than daguerrotype with "painterly" effects.

1851: Collodion process permits sharp printing on paper
The brief, happy reign of the Daguerreotype

By 1840's, improved lens and increased sensitivity of plates reduce exposure time for portraits. Daguerreotype becomes "the mirror with a memory" (Oliver Wendell Holmes)
The brief, happy reign of the Daguerreotype

The photograph as a record of personal existence, family continuity
The brief, happy reign of the Daguerreotype

The Daguerreotype as an instrument of fame

1854: Phineas Barnum stages first modern beauty pageant, using Daguerrotypes for judging

"General" Tom Thumb

Sarah Bernhardt, by Nadar

In Daguerrotype, we beat the world.
Horace Greeley
The photographic "truth"
1839: In truth, the Daguerreotyped plate is infinitely more accurate in its representation than any painting by human hands. If we examine a work of ordinary art, by means of a powerful microscope, all traces of resemblance to nature will disappear -- but the closest scrutiny of the photographic drawing discloses only a more accurate truth, a more perfect identity of aspect with the thing represented.

E.A. Poe
1839: In photograph of rue du Temple, Daguerre inadvertently makes first photograph of a person.
The photographic truth

1839: In photograph of rue du Temple, Daguerre inadvertently makes first photograph of a person
The truth of photographs

While we give [sunlight] credit only for depicting the merest surface, it actually brings out the secret character with a truth that no painter would ever venture upon, even if he could detect it.

The Daguerrotypist Holgrave, in Nathaniel Hawthorne’s *The House of Seven Gables*, 1851

What he [the camera] saw was faithfully reported, exact, and without blemish.

Am. Photographer James F. Ryder in 1902, recalling his first camera from the 1850’s

[A photograph] cannot be disputed—it carries with it evidence which God himself gives through the unerring light of the world’s greatest luminary...it will tell its own story, and the sun to testify to its truth...

Cal. Newspaper, 1851
The photograph as a model for journalistic objectivity

The news as “A daily photograph of the day's events.” (Charles Dana)

The New York Herald is now the representative of American manners, of American thought. It is the daily daguerreotype of the heart and soul of the model republic. It delineates with faithfulness the American character in all its rapid changes and ever varying hues. London Times, 1848
During this lamentable period, a new industry arose which contributed not a little to confirm stupidity in its faith and to ruin whatever might remain of the divine in the French mind. The idolatrous mob demanded an ideal worthy of itself and appropriate to its nature. In matters of painting and sculpture, the present-day Credo of the sophisticated, above all in France is this: “I believe that Art is, and cannot be other than, the exact reproduction of Nature. Thus an industry that could give us a result identical to Nature would be the absolute of Art.” A revengeful God has given ear to the prayers of this multitude. Daguerre was his Messiah. ... From that moment our squalid society rushed, Narcissus to a man, to gaze at its trivial image on a scrap of metal.
Manipulating & questioning the photographic truth
1854-55: Wm. Howard Russell reports for *Times* from Crimea on incompetence of general staff, suffering of troops.

1855: At urging of Prince Albert, Roger Fenton sent to Crimea to take photos to counter Russell’s *Times* reports.
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**Crimea: The First Photographed War**
Crimea: The First “Reported” War

Oct 25, 1854: Light Brigade charges the Russian guns at Balaclava

Half a league, half a league,
Half a league onward,
All in the valley of Death
Rode the six hundred.
"Forward the Light Brigade!
Charge for the guns!" he said.
Into the valley of Death
Rode the six hundred.
Forward, the Light Brigade!"
Was there a man dismay'd?
Not tho' the soldier knew
Some one had blunder'd.
Their's not to make reply,
Their's not to reason why,
Their's but to do and die...
The Case of the (Dis?)appearing Cannonballs

“The Valley of Death,” photographs by James Fenton, April 4, 1855
1871: Paris Commune: Photographs of executions by communards are doctored to change identity of victims.
In Search of Ghosts

Arthur Conan Doyle

“Spirit photograph” taken by the paranormal hoaxer William Hope in 1922
Modern alterations: A shifting standard?

I discover my photographic death.
Do I exist?
I am a little black,
I am a little white,
I am a little shit,
On Fidel's vest.
Carlos Franqui
Modern alterations: A shifting standard?

Photo of Beirut following Israeli raid, 8/5/6, as published by Reuters and as originally taken.
Modern alterations: A shifting standard?

Kent State, 1970
Photography as Documentation
Fixing Identities

Communards, Paris 1871
Fixing Identities

Communards, Paris 1871
Documenting the Deviant

Wanted posters for Lincoln assassins, Butch Cassidy

"Bank book" prepared for bank clients by Pinkerton Detective Agency, ca. 1875

Inmate of Bethlam Royal Hospital for the Criminally Lunatic, 1870s

Entry for 13-year-old "vagrant," San Joaquin County Jail, ca. 1900
The Sordid Details

Public obsession with crime-scene photos

Arthur Fellig ("WeeGee"), 1930s

Police display body of Baby-Face Nelson, 1934

Murder scenes, Paris, 1890s
The Documentation of Death

Robert Capa, The Falling Soldier, Spain, 1936

Eddie Adams: South Vietnam police chief executing Viet Cong captain, Feb 1, 1968

Kent State, 1970
Documenting the Other

Photography as an instrument of social control

Photographs of Modoc Indians made by gov't following 1874 war.

Photos of Downieville CA Chinese prepared by Justice of the Peace, ca. 1890.

One of a set of images prepared for Harvard naturalist Louis Agassiz to support thesis that human races were different species. Truth before all. The more pity I felt at the sight of this degraded and degenerate race, the more impossible it becomes for me to repress the feeling that they are not of the same blood as we are. 1846

Auschwitz documentary photo
Documenting the other, 2

Photography and the awakening of social conscience

Jacob Riis: How the Other Half Lives

Lithograph prepared from Riis photo
Documenting the Other

Lewis Hine, Carolina Cotton Mill, 1909

"Some boys and girls were so small they had to climb up on to the spinning frame to mend broken threads and to put back the empty bobbins. Bibb Mill No. 1. Macon, Ga."

The golf links lie so near the mill
That almost every day
The laboring children can look out
And see the men at play.

-- Sarah Norcliffe Cleghorn, 1916
Documenting the Other

Walker Evans and Dorothea Lange, Farm Security Administration, mid-1930s

Image from "Let Us Now Praise Famous Men"

Evans

Lange, photos of Dust Bowl and Japanese relocation in WWII
Photography High and Low
Photos for the millions

1884 George Eastman invents paper roll film;
1888 introduces Kodak camera
1900 introduces Brownie camera for $1
Pictorialism: An Aesthetes' Reaction to Popular Photography?

My picture, 'Fifth Avenue, Winter' is the result of a three hours' stand during a fierce snow-storm on February 22nd 1893, awaiting the proper moment. My patience was duly rewarded. Of course, the result contained an element of chance, as I might have stood there for hours without succeeding in getting the desired pictures.” Alfred Stieglitz
Sometimes it happens that you stall, delay, wait for something to happen. Sometimes you have the feeling that here are all the makings of a picture—except for just one thing that seems to be missing. … You wait and wait, and then finally you press the button—and you depart with the feeling (though you don’t know why) that you’ve really got something…

If you start cutting or cropping a good photograph, it means death to the geometrically correct interplay of proportions. Besides, it very rarely happens that a photograph which was feebly composed can be saved by reconstruction of its composition under the darkroom’s enlarger; the integrity of vision is no longer there.

Henri Cartier-Bresson, "The Decisive Moment"
How we read photographs

Photographs are read as particular, real, veridical (= truthful), "objective"
1882: Bertillon presents system of criminal identification, anthropometry (later called Bertillonage)

"Unchangeable in form from birth, this organ [the ear] is the immutable legacy of heredity and intrauterine life."
"I came to you, Mr. Holmes, because I recognized that I am myself an unpractical man and because I am suddenly confronted with a most serious and extraordinary problem. Recognizing, as I do, that you are the second highest expert in Europe ------"

"Indeed, sir! May I inquire who has the honour to be the first?" asked Holmes with some asperity.

"To the man of precisely scientific mind the work of Monsieur Bertillon must always appeal strongly."

"The Hound of the Baskervilles"
The "Criminal Type"

Lombroso: Hereditary criminals are identified by large jaws, handle-shaped ears, shifty eyes, etc.

The criminal is "an atavistic being who reproduces in his person the ferocious instincts of primitive humanity and the inferior animals."

"Revolutionaries and political criminals -- the semi-insane and morally insane"
Eugenics and Photography

1870's: Darwin's cousin Francis Galton makes composite photographs, part as aid to criminology, part as effort to apply Darwinism to human differences. Coins eugenics, "nature vs nurture," "regression to the mean," notion of statistical correlation, pioneers questionnaires and surveys.

With Wm. Herschel, tries to put study of fingerprints on a scientific basis.
Eugenics and Photography

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"My general object has been to take note of the varied hereditary faculties of different men, and of the great differences in families and races, to learn how far history may have shown the practicability of supplanting the human stock by better strains, and to consider whether it might not be our duty to do so by such efforts as may be reasonable, thus exerting ourselves to further the ends of evolution more rapidly and with less distress than if events were left to their own course."
"... the imaginative power even of the highest artists is far from precise, and... no two artists agree in any of their typical forms. The merit of the photographic composite is its mechanical precision, being subject to no errors beyond those incidental to all photographic productions." Francis Galton
Photography in Science

Scientific Atlases: The tension between the typical and the characteristic

As skeletons differ from one another, not only as to the age, sex, stature and perfection of the bones, but likewise in the marks of strength, beauty and make of the whole; I made choice of one that might discover signs of both strength and agility; the whole of it elegant… Yet however it was not altogether so perfect, but something occurred in it less complete than one could wish. As therefore painters, when they draw a handsome face, if there happens to be any blemish in it mend it in the picture, thereby to render the likeness the more beautiful; so those things which were less perfect, were mended in the figure, and were done in such a manner as to exhibit more perfect patterns…” Albinus

From Bernhard Albinus’ Table of the Skeleton and Muscles of the Human Body, 1749

Rhododendron argentum, Joseph Hooker, 1849
Photography in Science

The virtues of the typical

...an anatomical archetype [Typus] will be suggested here, a general picture containing the forms of all animals as potential, one which will guide us to an orderly description of each animal....The mere idea of an archetype in general implies that no particular animal can be used as our point of comparison; the particular can never serve as a pattern [Muster] for the whole.' Goethe

But rendering the typical leaves too much discretion to "subjective" judgment...
Portraying the particular:

We have no Lionardo [sic] de Vinci, Calcar, Fialetti, or Berrettini, but the modern draughtsman makes up in comprehension of the needs of science all that he lacks in artistic genius. We can boast no engravings as effective as those of the broadsheets of Vesal, or even of the plates of Bidloo and Cheselden, but we are able to employ new processes that reproduce the drawings of the original object without error of interpretation, and others that give us very useful effects of colour at small expense. Wm Anderson, 1885
Photographic exhibits: The debate over interpretation

The limits of X-rays to display micro-anatomy, the temptation to "clarify" images:

"I have vigorously avoided artistic aids; in those few cases where, because of the uneven covering of the emulsion [Deckung] on the negative, a few visible contours had to be added afterwards, I have explicitly so indicated." Rudolph Grashey, 1905
Photographing "Types"

Photographs by August Sander, "Man in the Twentieth Century" 1929
Photographing Types

From Norman Rockwell’s “Four Freedoms” paintings, 1941
Photos of Concepts

Sandy Skoglund, “Shelter,” “Clothing,” “Food”
Photos of Concepts

Can a photo illustrate a concept?

"Photographs are necessarily of unidealized individual things, whether zebras, geese, or medieval churches [whereas] drawings may represent a composite distillation." Sydney Landau

Merriam-Webster illustrations for rampant, skunk, skeleton, etc.

American Heritage illustrations for brioche, brocade, espadrille.
The arbitrariness of photographic "truth"

We regard the photograph, the picture on our wall, as the object itself (the man, landscape, and so on) depicted there.

This need not have been so. We could easily imagine people who did not have this relation to such pictures. Who, for example, would be repelled by photographs, because a face without color and even perhaps a face in reduced proportions struck them as inhuman.

Cf Victorian uses of photographs in illustrations,

"Any dodge, trick and conjuration of any kind is open to the photographer's use.... It is his imperative duty to avoid the mean, the base and the ugly, and to aim to elevate his subject.... and to correct the unpicturesque....." Henry Peach Robinson

Julia Cameron, Lancelot and Guinevere, 1875

Henry Peach Robinson, Fading Away, 1858
Fictionalizing Photos

Henry Peach Robinson
The Lady of Shalott

Illustration to Henry James’
The Golden Bowl, 1904
Modern Photographic Fictions

fotonovelas

Tina Barney

Sam Taylor-Wood

Paul Outerbridge, The Coffee Drinkers, 1939
Modern Photographic Fictions

Yinka Shonibare, from "Diary of a Victorian Dandy"

Cindy Sherman
The Particularity of Photos

Cf Victorian uses of photographs in illustrations, tableaux

Oscar Rejlander, “The Two Ways of Life,” 1858
Revisiting Allegory

Joel Peter Witkin, Las Me ninas
Revisiting Allegory

Eleanor Antin, The Triumph of Pan, 2004