The Impact of Photography

History of Information 103
Geoff Nunberg

March 9, 2010
The birth of the "information age"; photography and information

The photographic "truth"

Manipulating & questioning the photographic truth, then and now

Photography as documentation

Fixing identities
  Documenting the deviant
  Representing the other

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

(What's left out: photography and art)
The birth of the information age
The birth of "information"
The birth of "information"

Some properties of information:

**Autonomous:** "The intelligence that came from afar ... possessed an authority which gave it validity.... Information, however, lays claim to prompt verifiability. The prime requirement is that it appear "understandable in itself." It is indispensable for information to sound plausible. (Walter Benjamin, "The Storyteller")

i.e., the plausibility of information is implicit in the immediate context

**Objective**: information gives us the world without point of view or subjective values.
Photography influences the conception of information:

**Directly**: Seems to present the world "as it is," independent of human interpretation or intervention.

**Indirectly**: Provides a model or metaphor for "objective" representation of all sorts.
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.
Photography Before Photographs
Photography Before Photographs

The camera obscura: images from nature

Ibn al-Hatham
965-1039
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 Addision, in the Spectator, 1712, on the camera obscura at Greenwich.
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 Wedgwood 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."

Sir John Herschel, photographed by Julia Cameron, 1867
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 transparent negatives with sharp (multiple) 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

In Daguerreotype, we beat the world.
Horace Greeley

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

"General" Tom Thumb

Sarah Bernhardt, by Nadar
The photographic truth
"[It] is not merely an instrument which serves to draw Nature; it gives her the ability to reproduce herself." Louis Daguerre. 1837

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
The photographic truth

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

1838: In photograph of rue du Temple, Daguerre inadvertently makes first photograph of a person.
The truth of photographs

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, of five-panel daguerreotype panorama of San Francisco
The photograph as a model for journalistic objectivity

“The Sun … will endeavour to present its daily photograph of the whole world’s doings in the most luminous and lively manner.” 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.
The Photographic Document: War Photography
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.  
Theirs not to make reply,  
Theirs not to reason why,  
Theirs but to do and die...  
Alfred Tennyson
Crimea: The First Photographed War

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
Photographing the Civil War

Matthew Brady

Wounded Union Soldiers, Fredrickburg, VA

Union batteries at Fredrickburg, VA
Photographing Battle

Earliest known battle photo, Sédan, 1870

What newspaper readers saw
Photographing the Dead

"Mr Brady has brought home to us the terrible reality and earnestness of war."

"If we could really photograph war as it is, in all its monstrous actuality, that could be a great deterrent to war."

Edward Steichen,
Assignment for March 9

Since the first war photographers in the Crimea in 1855, writers have said that photography would change our perception of war by forcing us to confront the undeniable realities of warfare. ("If we had been there, we would have seen it so.") Does this claim seem justified? Discuss, with reference to the three iconic war photographs below.

Alexander Gardner, home of a rebel sharpshooter, Gettysburg, PA 1863

Robert Capa, "Death of a Loyalist Militiaman," Spain 1937

Eddie Adams, general killing Viet Cong prisoner, Vietnam, 1968
Manipulating Photographic "Truth"
Manipulating Photographic Truth

The case of the moved body
The Case of the (Dis?)appearing Cannonballs

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

Mao Zedong and Bo Gu (l.), 1936
Modern alterations: A shifting standard?
Modern alterations: A shifting standard?
Modern alterations: A shifting standard?
Modern alterations: A shifting standard?
Modern alterations: A shifting standard?
Modern alterations: A shifting standard?
Modern alterations: A shifting standard?
Modern alterations: A shifting standard?
Modern alterations: Coloring the truth

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

Kent State, 1970
Photography as Documentation
Fixing Identities

Communards, Paris 1871

Gustave Courbet
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
Public obsession with crime-scene photos

Arthur Fellig ("WeeGee"), 1930s

Police display body of Baby-Face Nelson, 1934

Murder scenes, Paris, 1890s
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"
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"
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
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.
Composite Types & "Objectivity"

"... 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
Eugenics and Photography

"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."

Francis Galton
Documenting the Other

Photography as an instrument of social control

“Auschwitz documentary photo

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

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

Photographs of Modoc Indians made by gov't following 1874 war.
Documenting the other, 2

Photography and the awakening of social conscience

Jacob Riis: How the Other Half Lives

Lithograph prepared from Riis photo
"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."

-- 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 in Science
The virtues of the typical

...an anatomical archetype \textit{[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. \ldots 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 \textit{[Muster]} for the whole.' Goethe

But rendering the typical leaves too much discretion to "subjective" judgment...
Photography in Science

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
The Specificity of the Photograph
The Specificity of the Photograph

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

From Norman Rockwell’s “Four Freedoms” paintings, 1941
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.
Fictionalizing Photos

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

Tina Barney

Sam Taylor-Wood

Paul Outerbridge, The Coffee Drinkers, 1939
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.

Ludwig Wittgenstein, *Philosophical Investigations*, IIxii