



UC Berkeley School of Information

# The Impact of Photography

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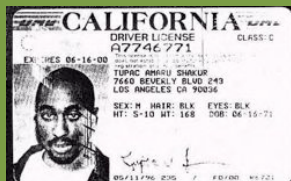
**History of Information 103**  
**Geoff Nunberg**

**April 1, 2009**



# 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)*



# Puzzlers

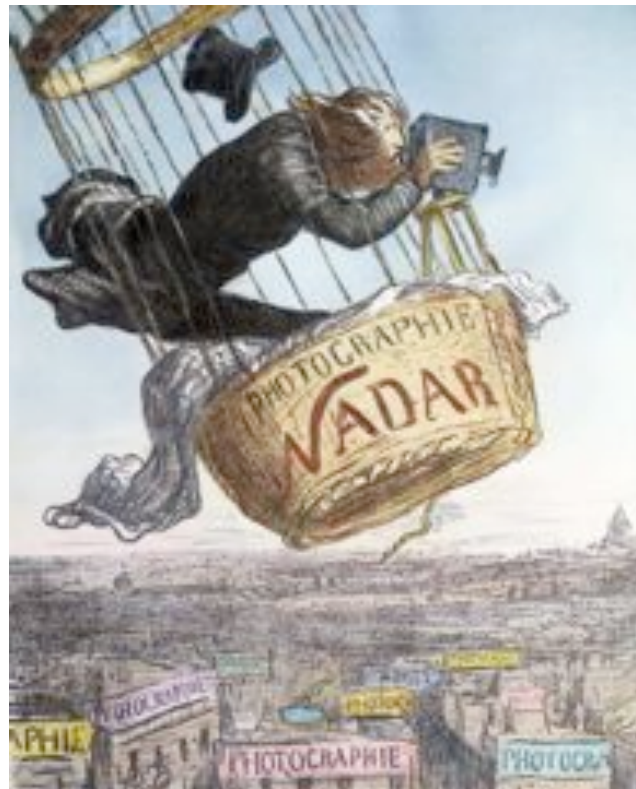
Who made the first aerial photographs?





# Puzzlers

Who made the first aerial photographs?

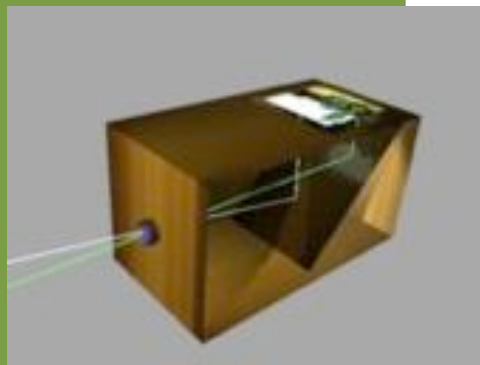




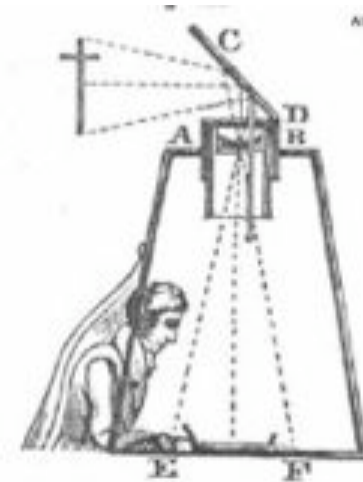
# Photography Before Photographs



Ibn al-Hatham  
965-1039



The camera obscura: images from nature





# 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

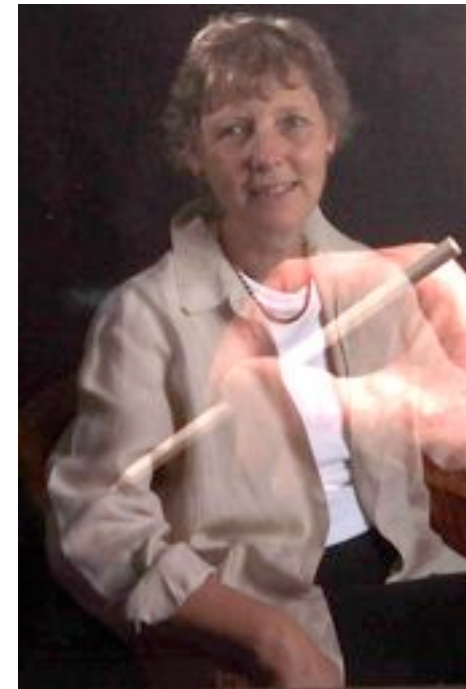
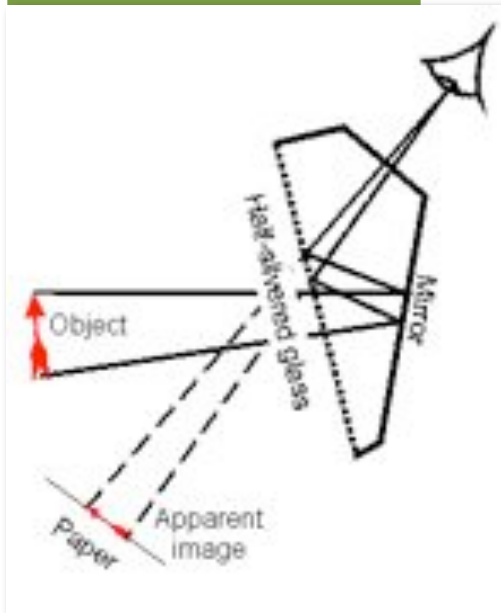




# Photography Before Photographs



The camera lucida

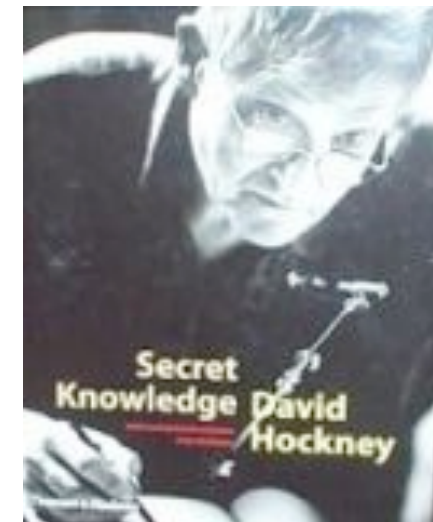




# Photography Before Photographs



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



Detail from Jan van Eyck's Arnolfini portrait, 1434



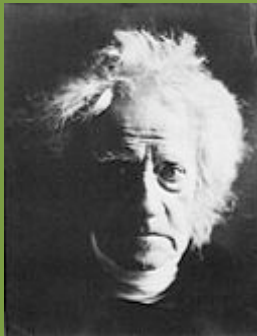
## Creating a permanent image



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 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 sharp printing on paper

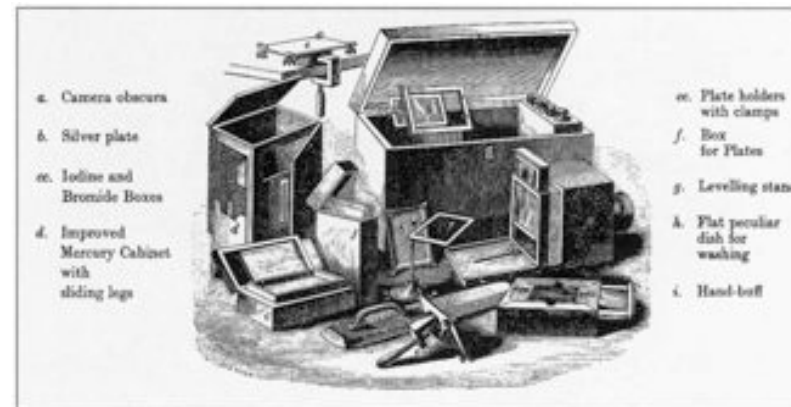


Cuneiform tablet,  
Ninevah



# The brief, happy reign of the Daguerreotype

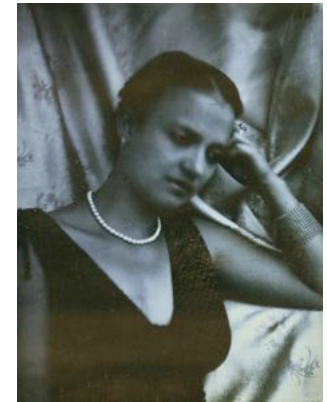
By 1840's, improved lens and increased sensitivity of plates reduce exposure time for portraits. Daguerreotype becomes "the mirror with a memory" (Oliver Wendell Holmes)





# The brief, happy reign of the Daguerreotype

The photograph as a record of  
personal existence, family continuity



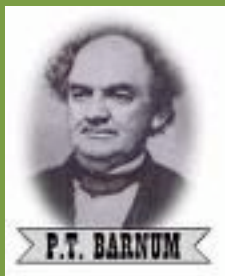
modern  
daguerreotype



# The brief, happy reign of the Daguerreotype



In Daguerrotype, we  
beat the world.  
Horace Greeley



## The Daguerrotype as an instrument of fame



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



Sarah Bernhardt, by Nadar



"General" Tom Thumb





# The photographic "truth"

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# The truth of photographs

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1839: In truth, the Daguerreotypied 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



## The photographic truth

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

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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

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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



## Second Thoughts



Charles  
Baudelaire

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**

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# Manipulating 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





# Crimea: The First Photographed War



Roger Fenton

1855: Roger Fenton sent to the Crimea at the urging of Prince Albert to make photos to counter anti-war reports from Wm, Howard Russell in the *Time*:



Wm, Russell





# 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.  
Theirs not to make reply,  
Theirs not to reason why,  
Theirs but to do and die...





# The Case of the (Dis?)appearing Cannonballs



“The Valley of Death,” photographs by James Fenton, April 4, 1855



# Doctoring the Truth

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?

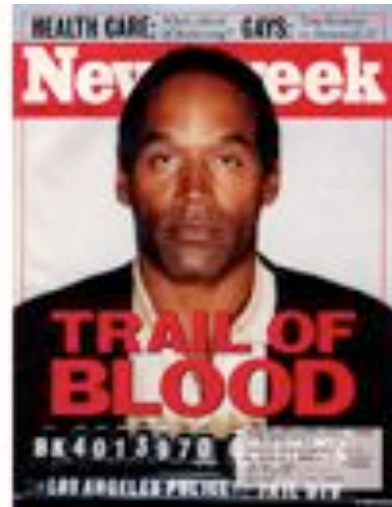


Photo of Beirut following Israeli raid, 8/5/6, as published by Reuters and as originally taken





# Modern alterations: A shifting standard?



Fonda Speaks To Vietnam Veterans At Anti-War Rally



Actress And Anti-War Activist Jane Fonda Speaks to a crowd of Vietnam Veterans as Activist and former Vietnam Vet John Kerry (LPT) listens and prepares to speak next concerning the war in Vietnam (AP Photo)



Kent State, 1970





# Photography as Documentation

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# Fixing Identities

## Communards, Paris 1871



Figure 1. Anonymous, Communards, Boulevard de la Ville (près des Pyramides), 20th arrondissement, March 1871. *Illustration: Bibliothèque nationale de France*



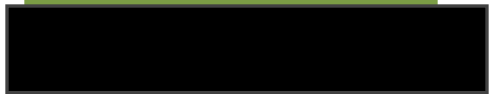
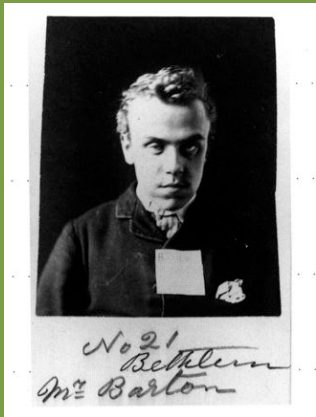
# Fixing Identities

Communards, Paris 1871

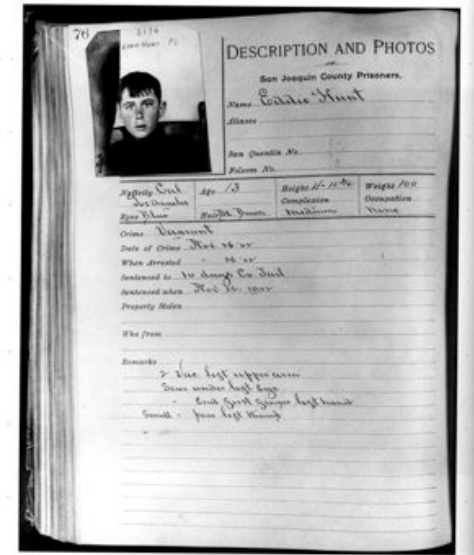


Figure 3. Assassinations, Communards, 1871. Illustration by [unreadable]

# Documenting the Deviant



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



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



# The Sordid Details



Arthur Fellig  
("WeeGee"), 1930s

Public obsession with crime-scene photos



Murder scenes, Paris, 1890s



Police display body of Baby-Face Nelson, 1934



# The Documentation of Death

Kent State, 1970



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



Robert Capa, The Falling Soldier, Spain, 1936



# Documenting the Other



Photography as an instrument of social control



Auschwitz documentary photo



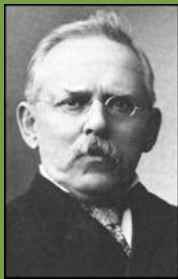
One of a set of images prepared for Harvard naturalist Louis Agassiz to support thesis that human races were different species. *Truth before all. The more pity I felt at the sight of this degraded and degenerate race, the more impossible it becomes for me to repress the feeling that they are not of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







## Documenting the other, 2



Jacob Riis:  
*How the Other Half  
Lives*



AN ALL-NIGHT TWO-CENT RESTAURANT IN "THE BEND."

Lithograph prepared  
from Riis photo



# Documenting the Other

Lewis Hine, Carolina Cotton Mill, 1909



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



"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."



# Documenting the Other



Walker Evans



Image from  
"Let Us Now  
Praise Famous  
Men"

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



Evans



Lange, photos of Dust Bowl and Japanese relocation in  
WWII





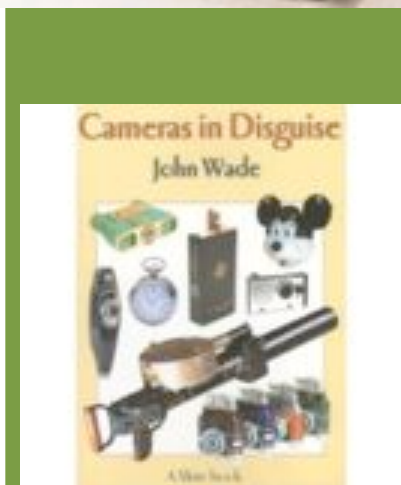
# Photography High and Low

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# 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



Emil Mayer, "The Hand-Scale," from *Viennese Types*. Bromoil process, 1910



Edward Steichen, Rodin/"The Thinker," 1902



# The New Realism/"Straight Photography"



Paul Strand



Edward Weston



Cartier-Bresson



Andre Kertesz

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"



Leica I, 1924



# How we read photographs

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Photographs are read as  
particular  
real  
veridical (= truthful)  
"objective"



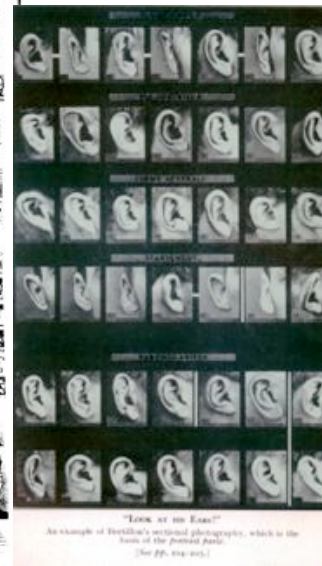


# Classifying Deviance



Alphonse Bertillon

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."



## The Renown of Bertillon



"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"



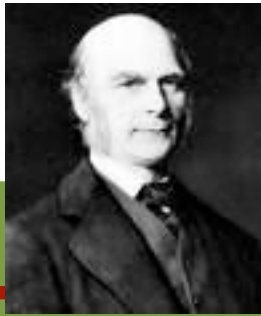
Cesare Lombroso

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"



Francis Galton

# 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.



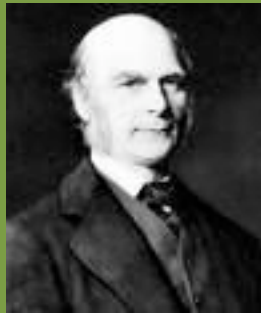
Composite:  
Violent  
Criminals



Composite: Jews



# Eugenics and Photography

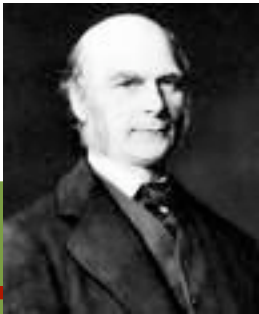


Francis Galton

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.

"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."

# Composite Types & "Objectivity"



Francis Galton

"... 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



Composite:  
Violent  
Criminals



Composite Jews



# Photography in Science

## Scientific Atlases: The tension between the typical and the characteristic



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

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



Rhododendron argenteum, Joseph Hooker, 1849



# Photography in Science

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## The virtues of the typical

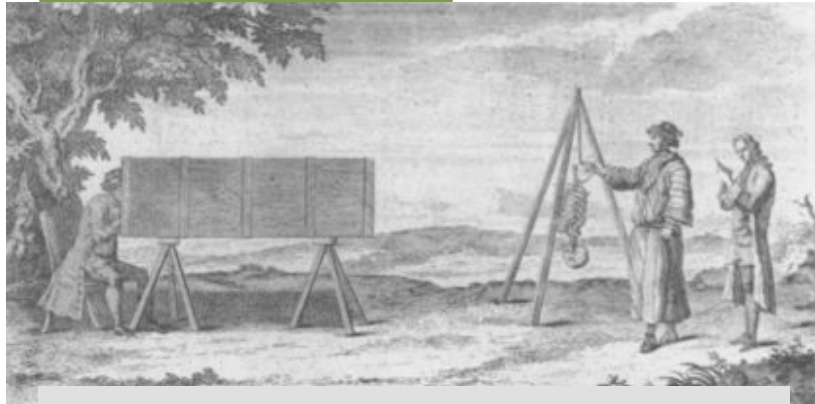
...an anatomical archetype [*Typus*] will be suggested here, a general picture containing the forms of all animals as potential, one which will guide us to an orderly description of each animal. . . .The mere idea of an archetype in general implies that no particular animal can be used as our point of 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...





# Photography in Science



Cheselden preparing an anatomical atlas, 1733

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

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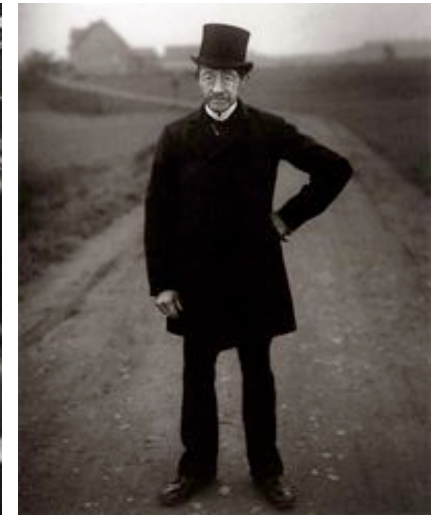
The limits of X-rays to display micro-anatomy, the temptation to "clarify" images:

"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



60



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



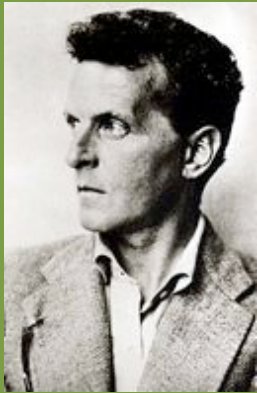
Merriam-Webster illustrations for *rampant*, *skunk*, *skeleton*, etc.



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.

Ludwig Wittgenstein, *Philosophical Investigations*, IIxi



# 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



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