

The Impact of Photography



History of Information 103
Geoff Nunberg

March 14, 2013



A word to the wise...

Harley, 1st Earl of Oxford and Earl Mortimer

is, the free encyclopedia

Harley, 1st Earl of Oxford and Earl Mortimer KG (5 December 1661 – 21 May 1724) was a British politician in of the late *Stuart* and early *Georgian* periods. He began his career as a *Whig*, before defecting to a new . Between 1711 and 1714 he served as *First Lord of the Treasury*, effectively *Queen Anne's* chief minister, called a *Prime Minister*,^[1] though it is generally accepted that the position was first held by Sir Robert '21.

mment agreed the *Treaty of Utrecht* with France in 1713, bringing an end to twelve years of British in the *War of the Spanish Succession*. In 1714 he fell from favour following the accession of the first *House of Hanover*, *George I* and was for a time imprisoned in the *Tower of London* by his political

a noted literary figure and served as a patron of both the *October Club* and the *Scrabblers Club*. Harley times said to be named after him, although it was his son *Edward Harley* who actually developed the

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1661–1688
evolution: 1688–1689
1 MP: 1689–1701
1 the House of Commons: 1701–1705
secretary: 1704–1708
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r of the Exchequer: 1710–1711
Treasurer: 1711–1714
ent: 1714–1715
1715–1724
importance

es

The Right Honourable
The Earl of Oxford and I
KG



Lord High Treasu

In office

30 May 1711 – 30 Jul

Monarch Anne

Preceded by Commission of



Agenda, 3/14

Why photograph? The birth of the "information age";
photography and information

Photography as a technology

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

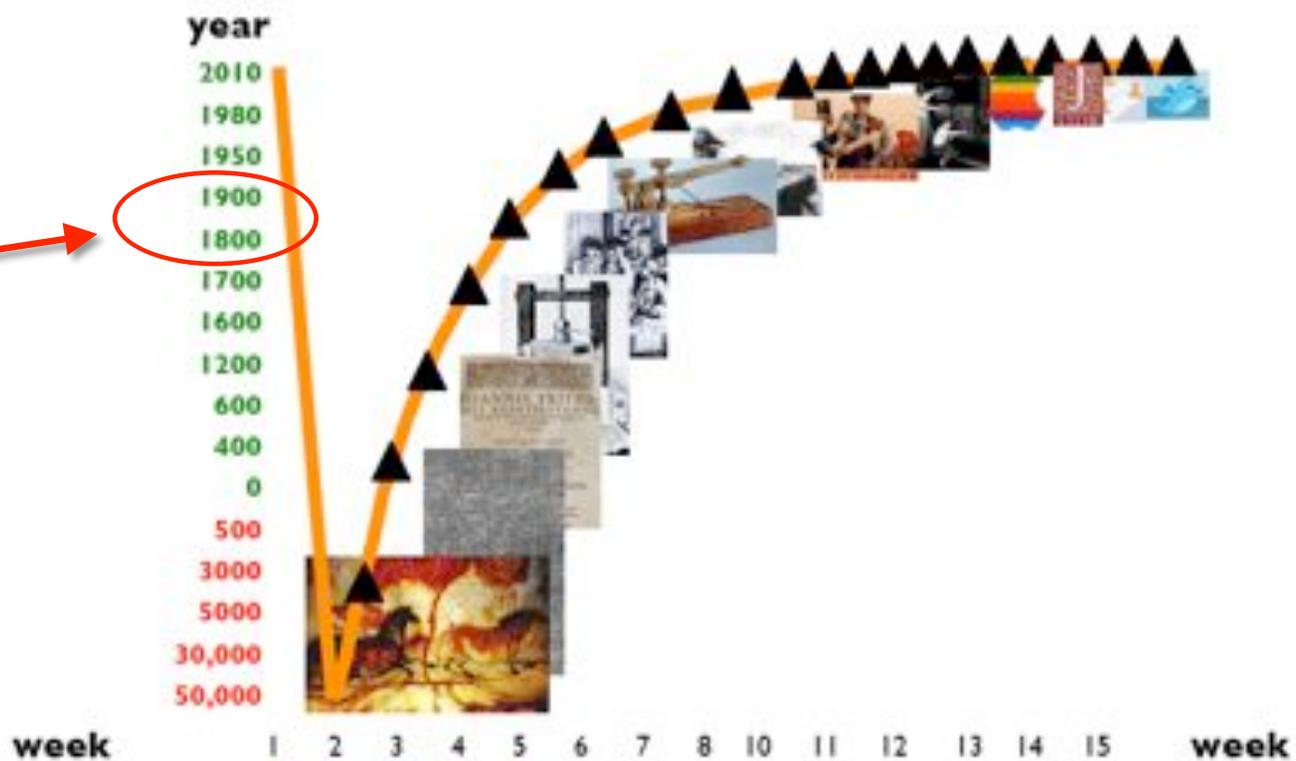
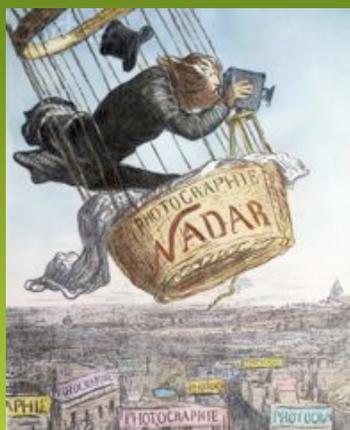
(What's left out: photography as art, popular form, etc.)



Where We Are

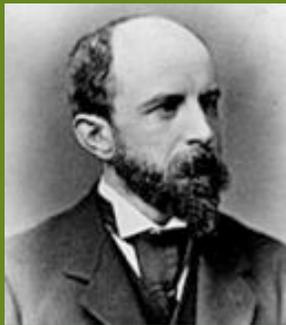


The birth of the information age





Modern Marvels



Henry Adams
1838-1928

"Only on looking back, fifty years later, at his own figure in 1854, and pondering on the needs of the twentieth century, he wondered whether, on the whole, the boy of 1854 stood nearer to the thought of 1904, or to that of the year 1 ... Before the boy was six years old [i.e., 1844] he had seen four impossibilities made actual—the ocean-steamer, the railway, the electric telegraph, and the Daguerreotype."

--Henry Adams, *The Education of Henry Adams* [1905]



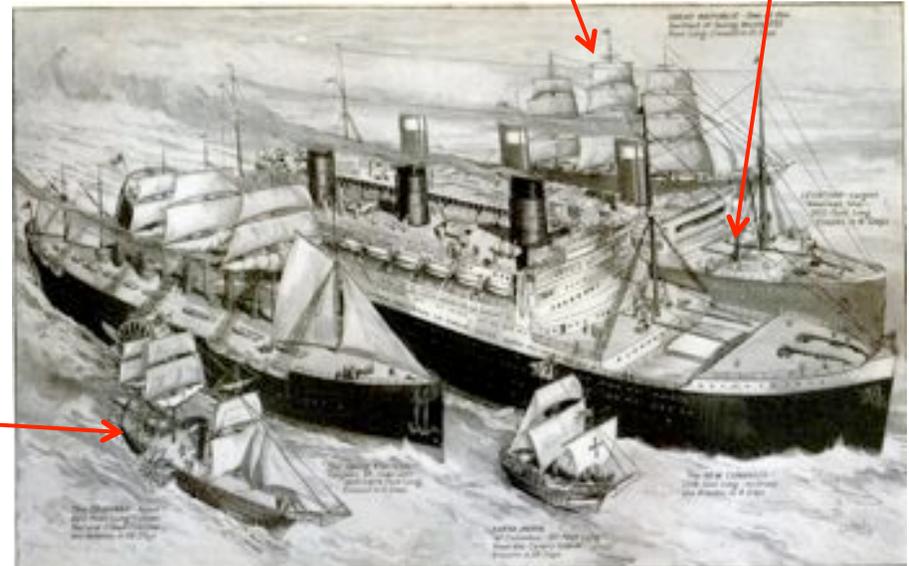
Modern Marvels

“... the ocean-steamer, the railway, the electric telegraph, and the Daguerreotype.”



Great Republic 1853
13 days

Leviathan 1914
5 days



Savannah 1818
26 days





The birth of "information"



Photography and Information

Photography influences the conception of information:

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

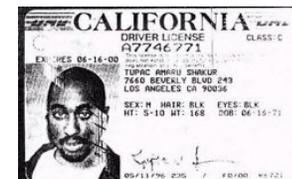
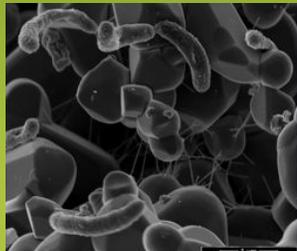
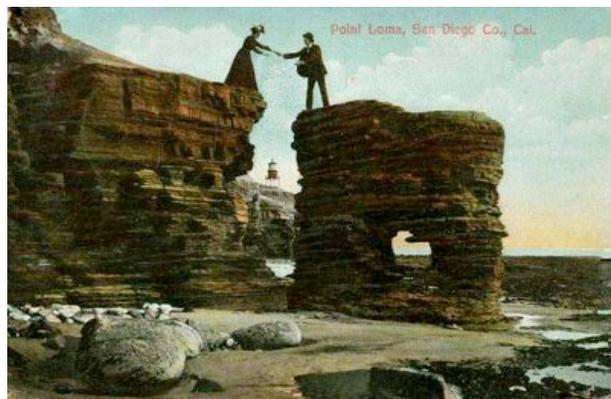
Indirectly: Provides a model or metaphor for "objective" representation of all sorts.





The Range of Photography

Things we count as “photography”....





The Range of "Photography"

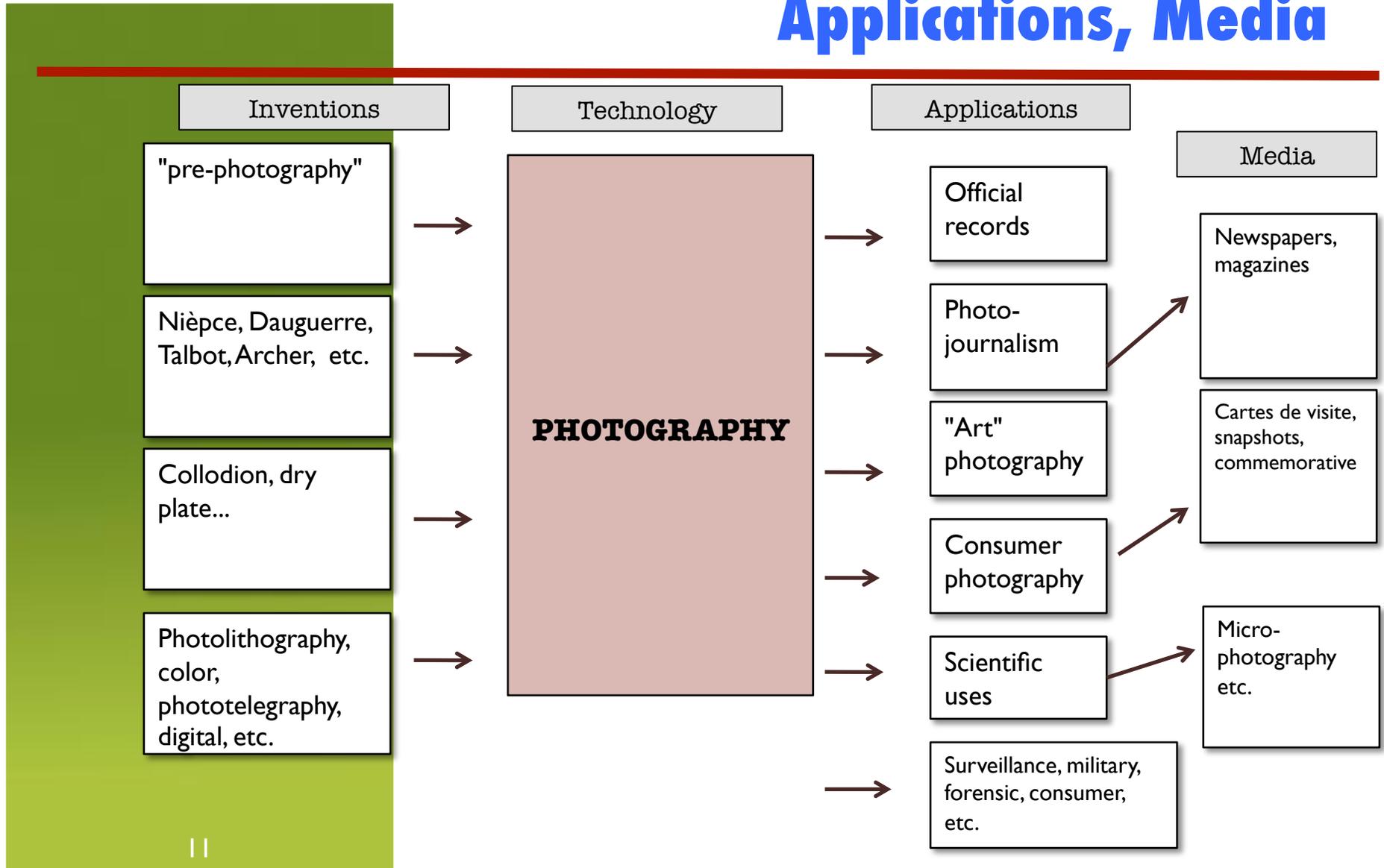
And by extension, to broadcast, cinema, x-ray, etc.

What defines a "technology"? Features of use, distribution, markets etc.



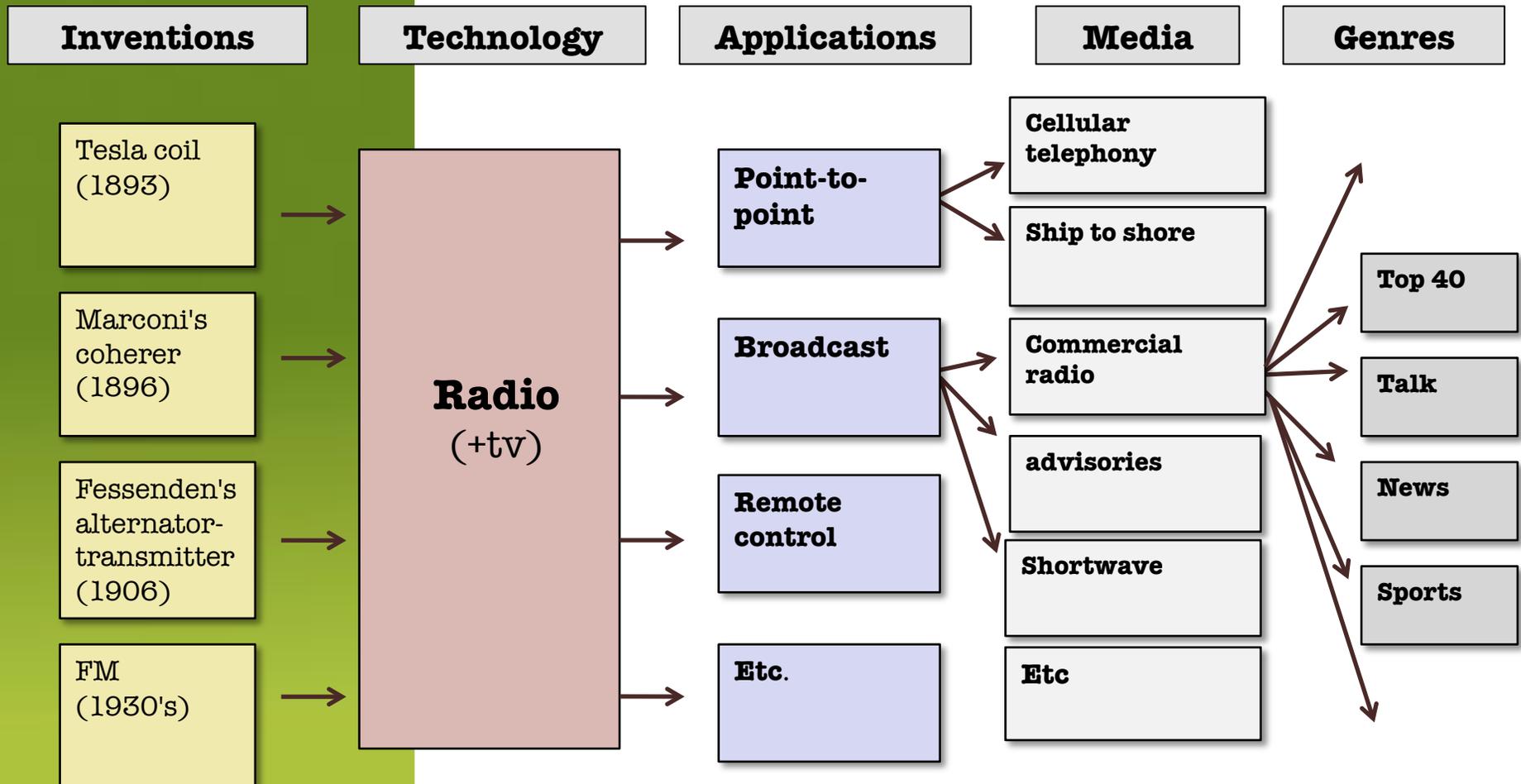


Inventions, Technologies, Applications, Media



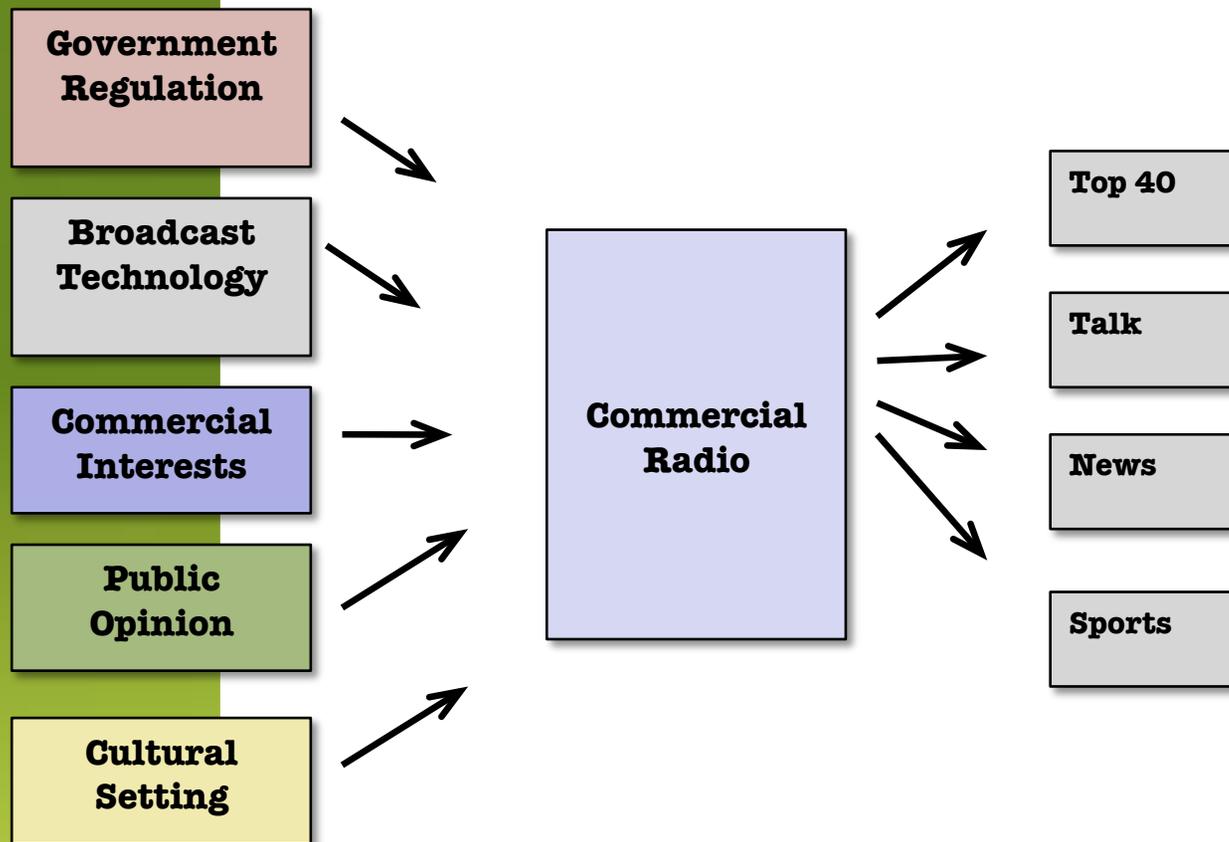


Inventions, Technologies, Applications, Media, Genres



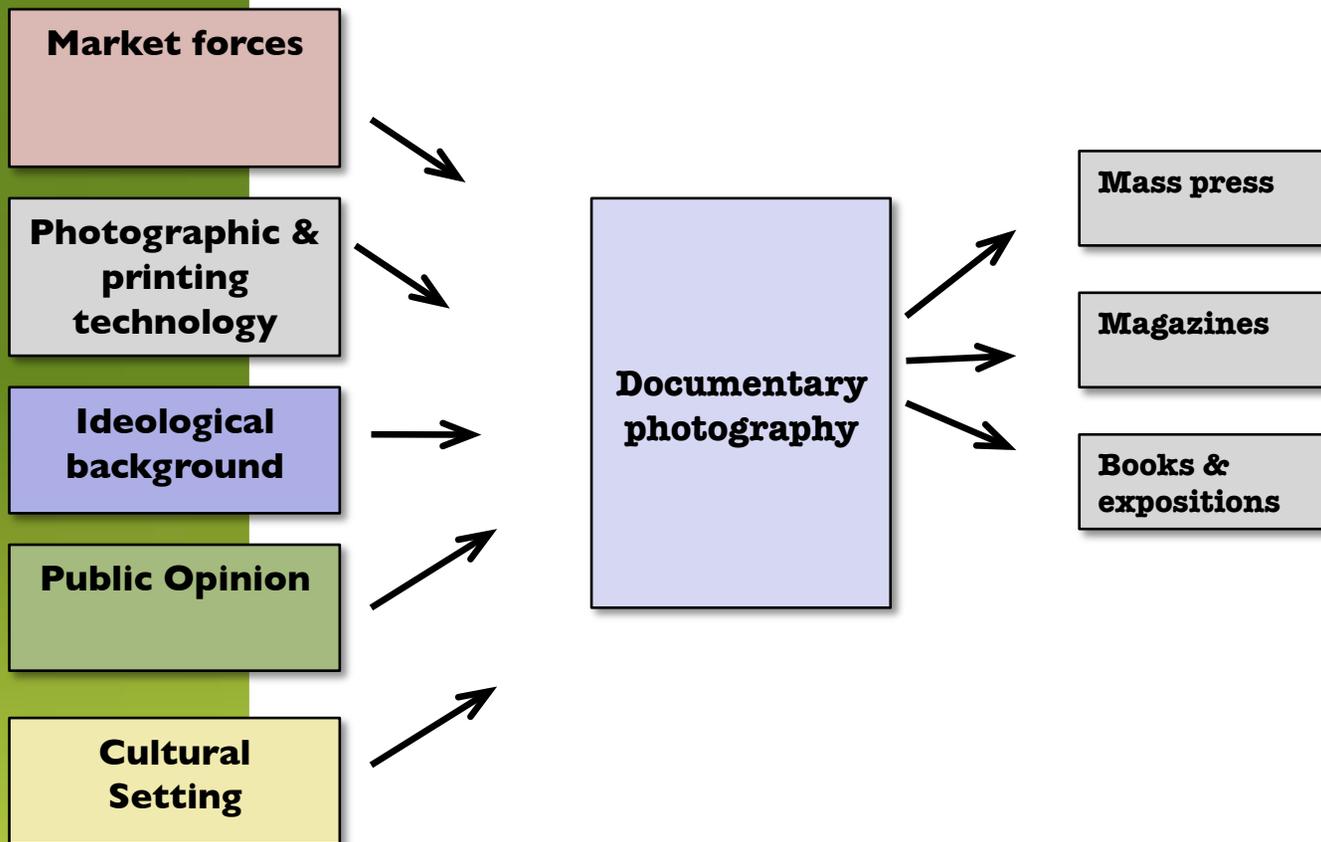


Multiple Influences





Multiple Influences





Photography Before Photographs

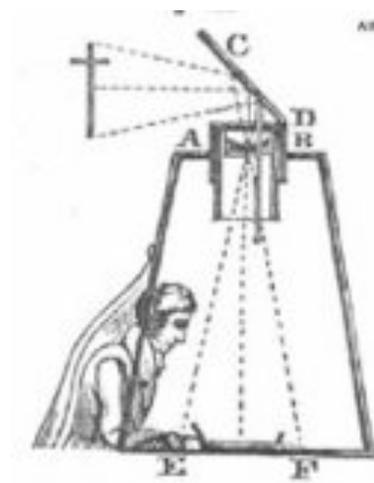
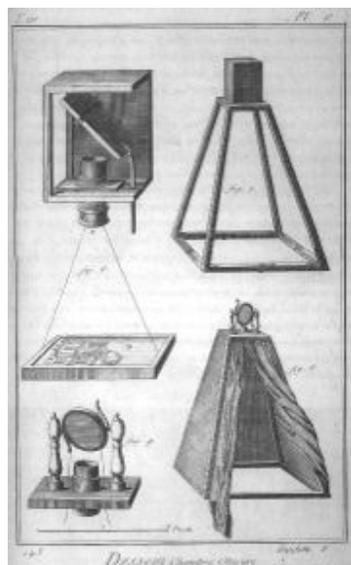


Photography Before Photographs

The camera obscura: images from nature



Ibn al-Hatham
965-1039

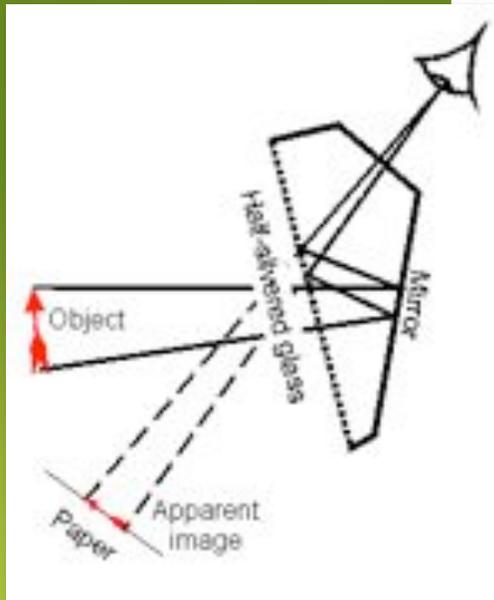




Photography Before Photographs



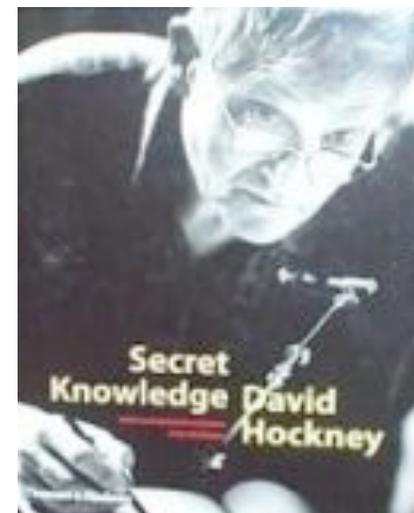
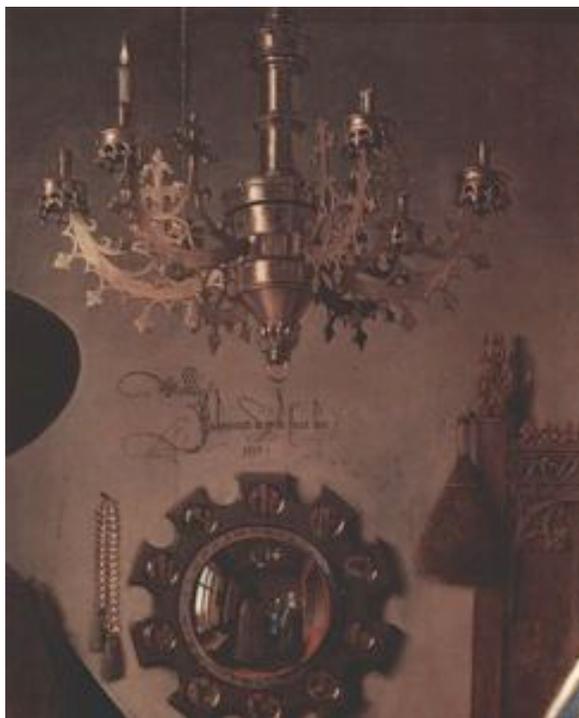
The camera lucida





Photography Before Photographs

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



Detail from Jan van Eyck's Arnolfini portrait, 1434



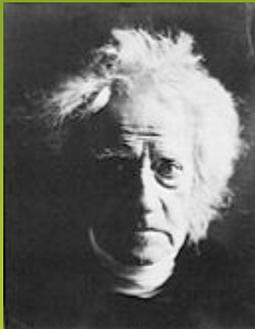
Creating a permanent image: Invention by committee



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... *or was he?*



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



Leaf by Fox Talbot ca. 1830?
Or Wedgwood ca. 1790?



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."





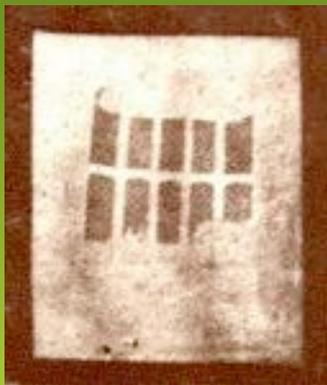
The earliest photographs



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



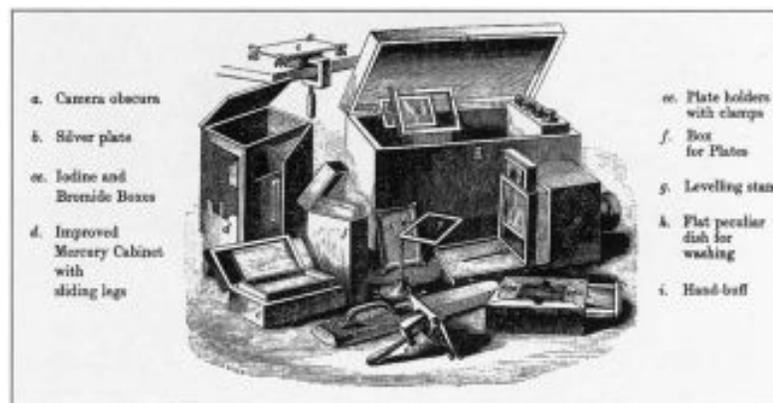
Cuneiform tablet,
Ninevah



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



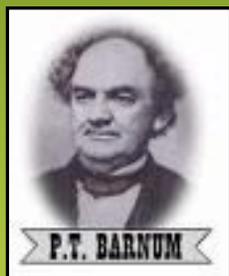
The brief, happy reign of the Daguerreotype



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



Second Thoughts



Charles
Baudelaire

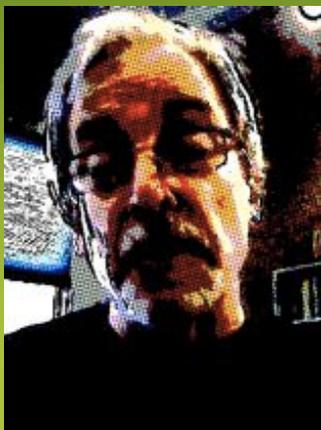
During this lamentable period, a new industry arose which contributed not a little to confirm stupidity in its faith and to ruin whatever might remain of the divine in the French mind. The idolatrous mob demanded an ideal worthy of itself and appropriate to its nature. In matters of painting and sculpture, 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.



The photographic truth



The photographic truth

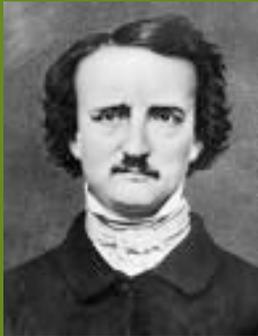


Iconic and indexical signs

Why do photographs seem more truthful than other kinds of pictures? One of the most intuitive explanations... is that the photograph... has a direct relationship to the thing it represents. This relationship has been called “indexical”... a sign that has a causal connection to the thing it represents, such as smoke to a fire.... Mia Fineman, *Faking It*



The truth of photographs



"[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 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, 1839



The photographic truth

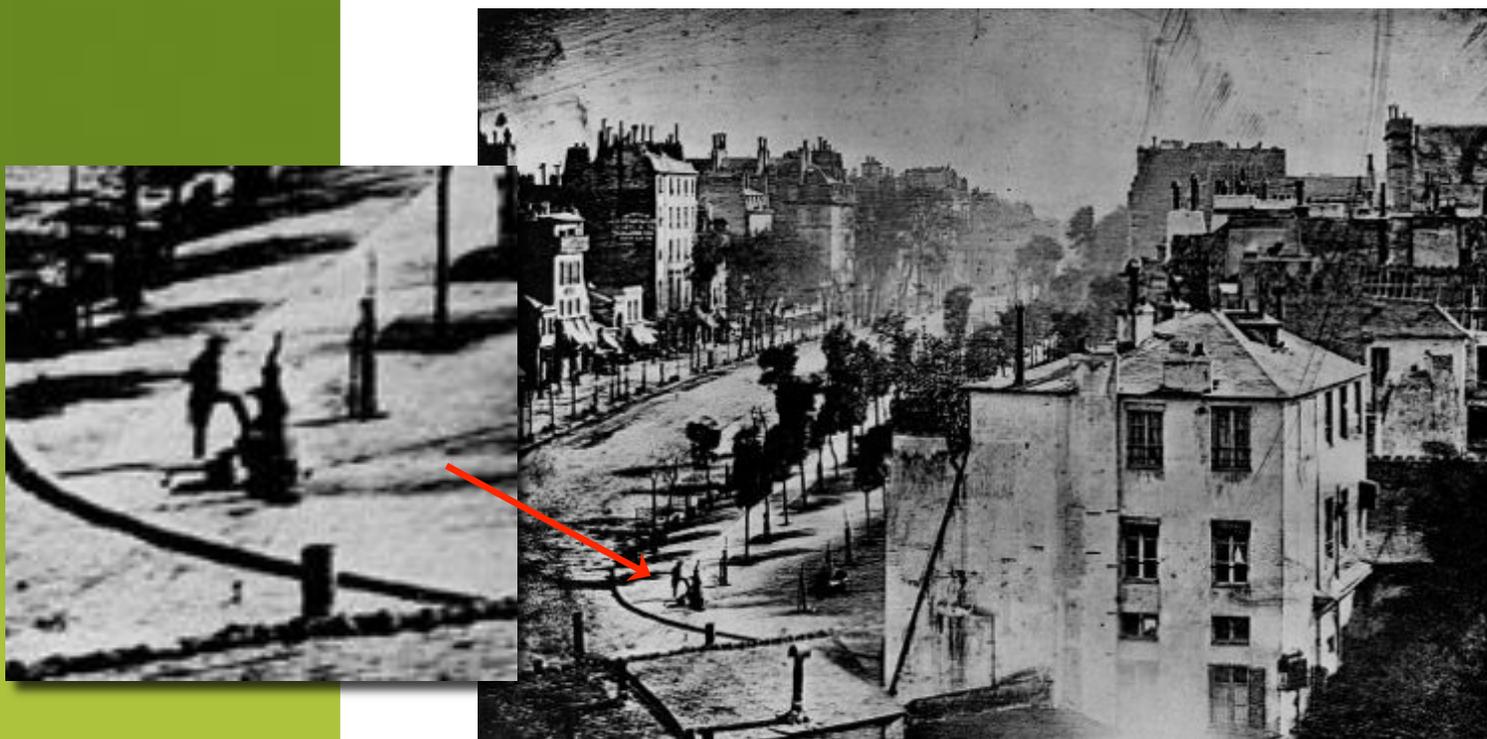
1839: In photograph of rue du Temple, Daguerre inadvertently makes first candid photograph of a person





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

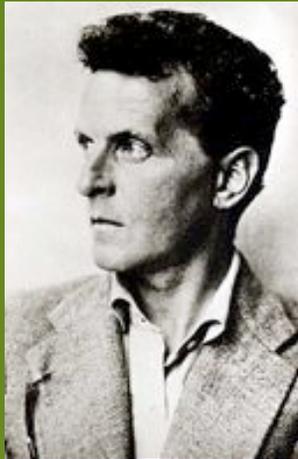
[A photograph] cannot be disputed—it carries with it evidence which God himself gives through the unerring light of the world's greatest luminary. . . . it will tell its own story, and the sun to testify to its truth. . .

1 of 5-panel daguerreotype panorama of San Francisco, 1851





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*, II



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



The Photographic Document: War Photography

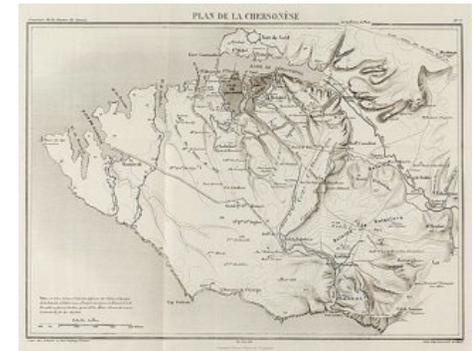


Crimea: The First "Reported" War

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...
Alfred Tennyson





Crimea: The First Photographed War



Roger Fenton

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



Wm. Russell





Photographing the Civil War



Matthew Brady



Wounded Union Soldiers,
Fredrickburg, VA



Union batteries at Fredrickburg, VA





Photographing the Dead



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



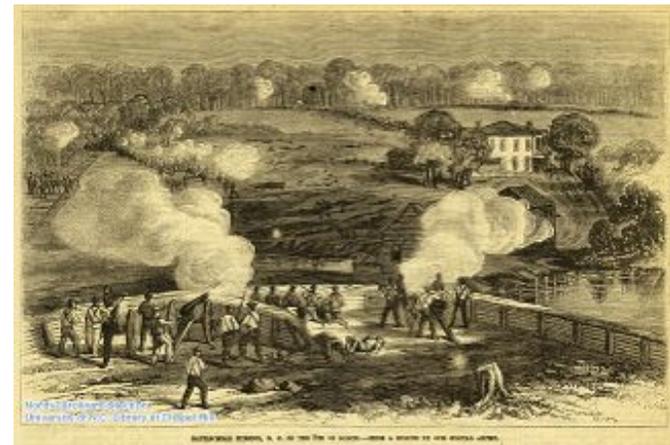
"If we could really photograph war as it is, in all its monstrous actuality, that could be a great deterrent to war."
Edward Steichen,



Photographing Battle



Earliest known battle photo, Sedan, 1870



What newspaper readers saw



Photographs as Symbols



Robert Capa 1936



Joe Rosenthal, 1945



Yvgeny Khaldei 1945



The Vietnam Narrative



Eddie Adams 1968



Nick Ut 1972





Manipulating Photographic "Truth"



Manipulating Photographic Truth



“[Alexander] Garner’s dead sharpshooter, his long rifle gleaming by his side, is not imagined. This man lived; this is the spot where he fell; this is how he looked in death... The camera records what is focussed upon the ground glass. If we had been there, we would have seen it so.... We have been shown again and again that this is pure illusion. Subjects can be misrepresented, distorted, faked... but this knowledge cannot shake our implicit faith in the truth of a photographic record.”
Newhall, p. 71



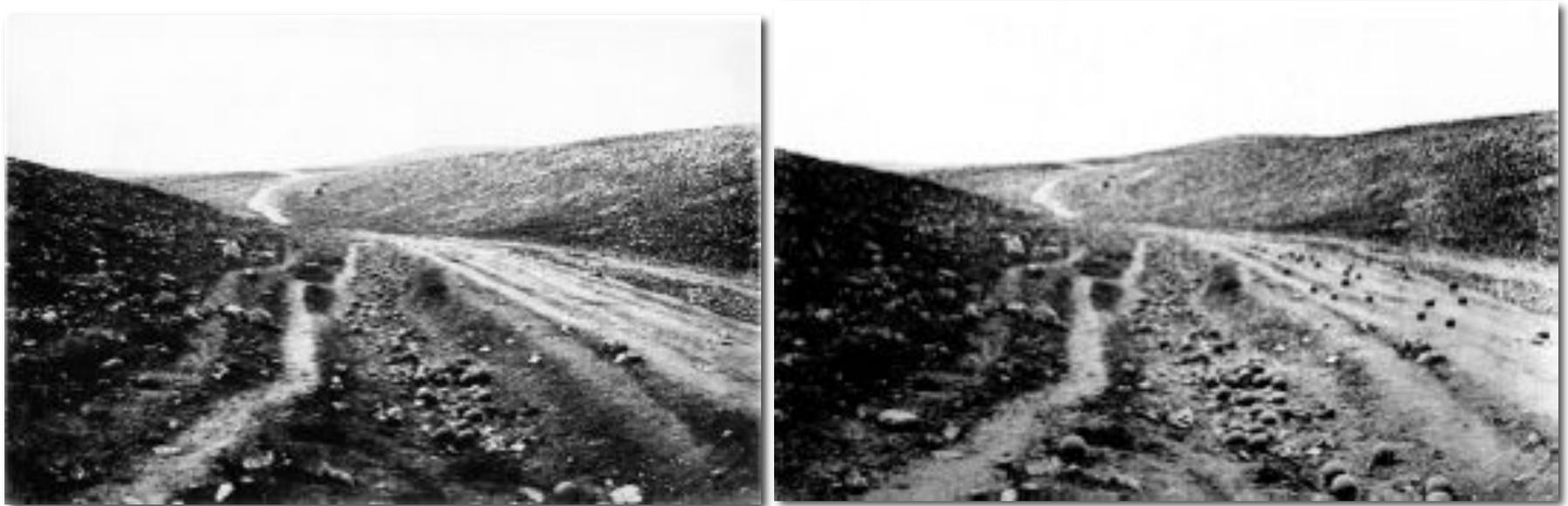
Manipulating Photographic Truth

"We have been shown again and again that this is pure illusion. Subjects can be misrepresented, distorted, faked... but this knowledge cannot shake our implicit faith in the truth of a photographic record."





The Case of the (Dis?)appearing Cannonballs



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



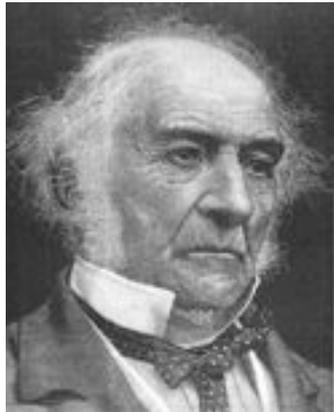
Doctoring the Truth

1871: Paris Commune: Photographs of executions by communards are doctored to change identity of victims.





Doctoring the Truth



W. Gladstone



Figure 18.1 Prime Minister Gladstone shown standing outside a London pub. Combination print photograph reproduced by Messrs. Boning and Small by making two exposures. (From Jellic 1894, 520).



Rewriting history



Mao Zedong and Bo Gu (1.), 1936

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



Rewriting history

Fonda Speaks To Vietnam Veterans At Anti-War Rally

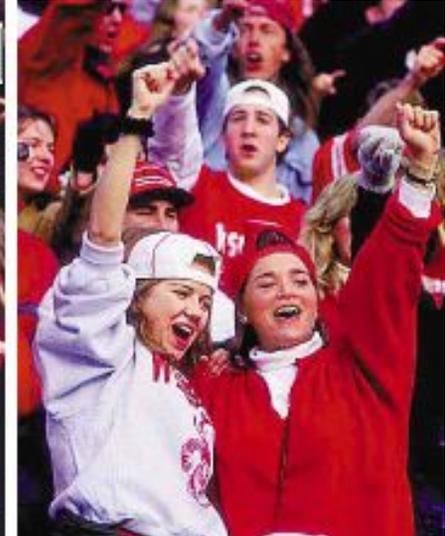
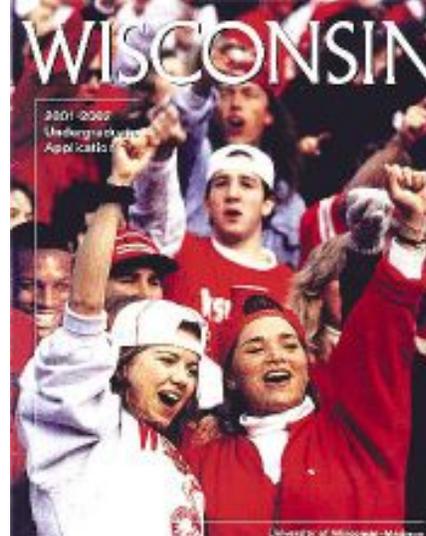
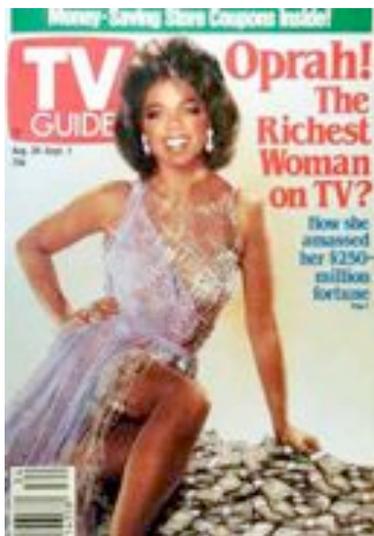


Actress And Anti-War Activist Jane Fonda Speaks To a crowd of Vietnam Veterans as Activist and former Vietnam Vet John Fonda (LFT) listens and prepares to speak next concerning the war in Vietnam (AP Photo)





Modern alterations: A shifting standard?





Modern alterations: A shifting standard?





Modern alterations: A shifting standard?





Modern alterations: Aesthetic choices?



Pulitzer Prize winning photo by John
Filo, Kent State, 1970



Photography as Documentation



Fixing Identities

Communards, Paris 1871



Gustave Courbet





Fixing Identities

Communards, Paris 1871



Figure 1. Anonymous, Communards, 1871. Wikimedia Commons.



Documenting the Deviant



Documenting the Deviant

Creating the mug shot



Figure 2. "The Inspector's Model" from Thomas Byrnes, *Professional Criminals of America* (New York: Cassell, 1886), between 52 and 53.



Classifying Deviance: 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."

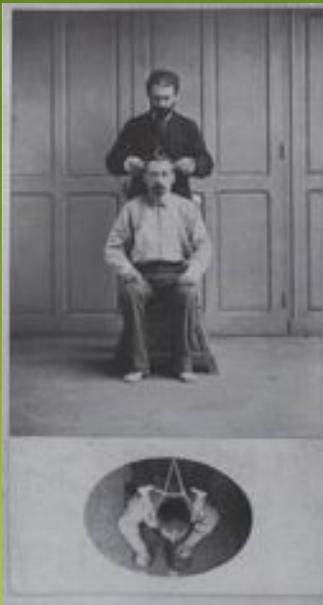
"Revolutionaries and political criminals
-- the semi-insane and morally insane"



Classifying Deviance



Alphonse Bertillon

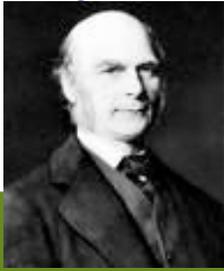


1882: Bertillon presents system of criminal identification, anthropometry ("Bertillonage")



"Unchangeable in form from birth, this organ [the ear] is the immutable legacy of heredity and intrauterine life."



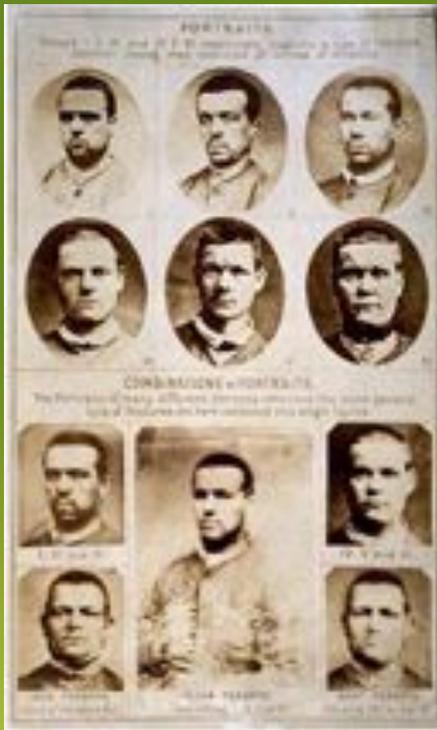


Francis Galton

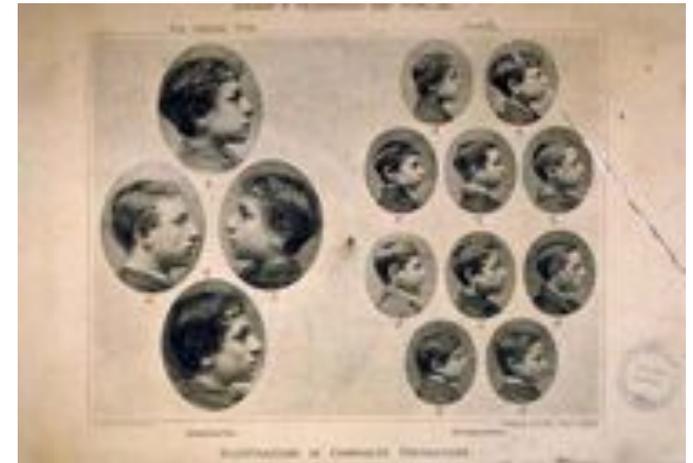
Eugenics and Photography

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.

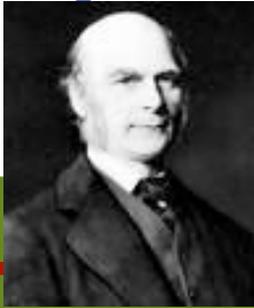
With Wm. Herschel, tries to put study of fingerprints on a scientific basis.



Composite:
Violent
Criminals



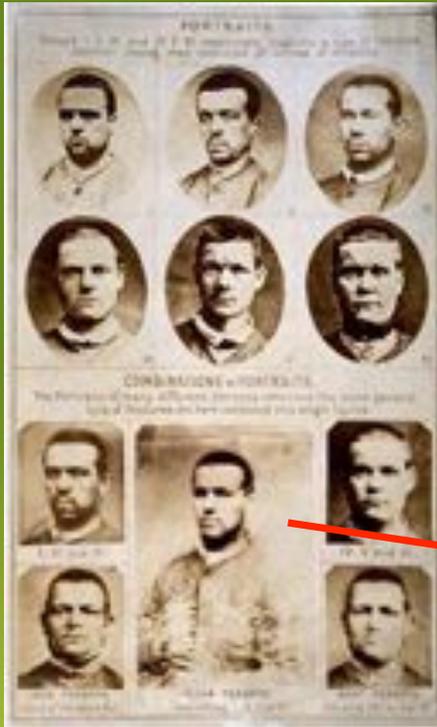
Composite: Jews



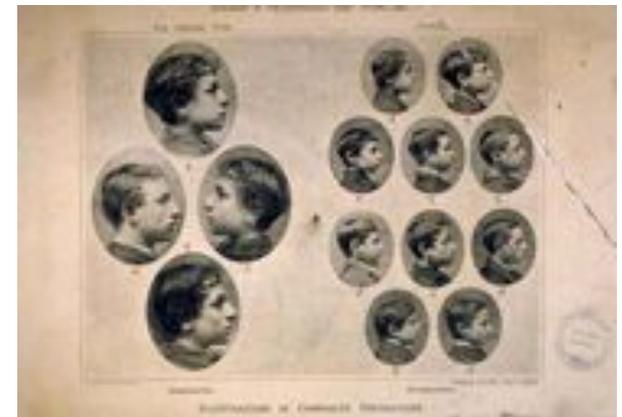
Francis Galton

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



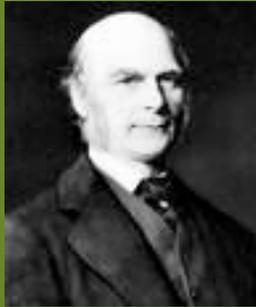
Composite:
Violent
Criminals



Composite Jews



Eugenics and Photography



Francis Galton

"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."



Documenting the Other

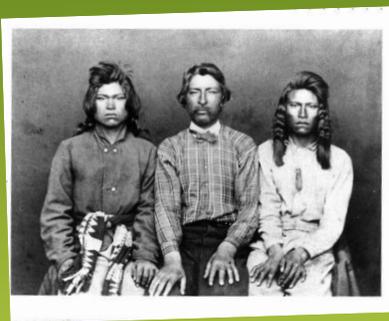


Documenting the Other

Photography as an instrument of social control



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



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



Image prepared for Louis Agassiz

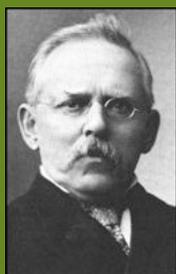
Truth before all. The more pity I felt at the sight of this degraded and degenerate race, the more impossible it becomes for me to repress the feeling that they are not of the same blood as we are. 1846



Auschwitz documentary photo



Documenting the other, 2



Jacob Riis:
How the Other Half Lives



Photography and the awakening of social conscience



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



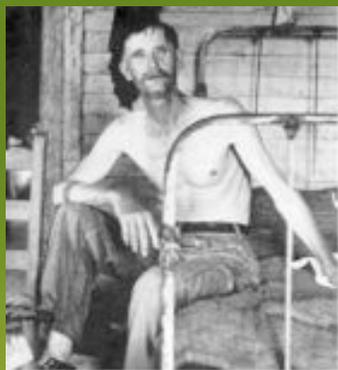
"Some boys and girls were so small they had to climb up on to the spinning frame to mend broken threads and to put back the empty bobbins. Bibb Mill No. 1. Macon, Ga."



Documenting the Other



Walker Evans



"Let Us Now
Praise Famous
Men"

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



Lange, photos of Dust Bowl and Japanese relocation in
WWII



Photography in Science



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... 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

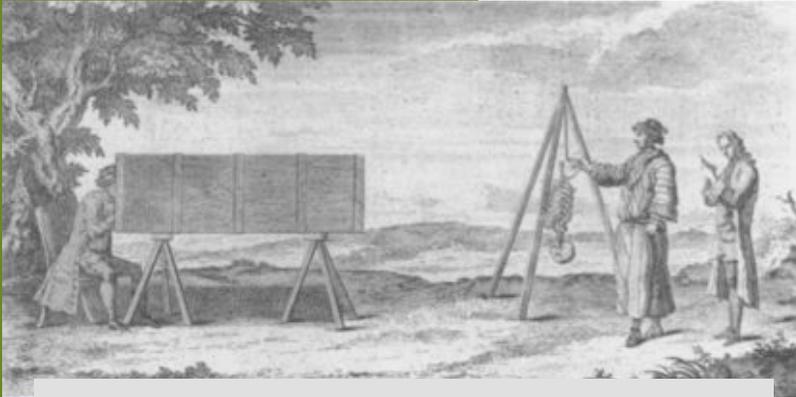
The virtues of the typical

...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 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



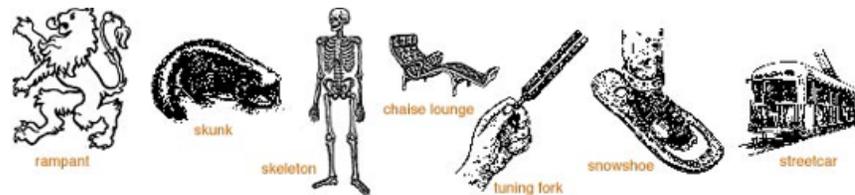
From Norman Rockwell's "Four Freedoms" paintings, 1941



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*.



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



For Tuesday, 3/19

Schudson, Michael. 2 *The Sociology of News*, Norton. Pp. 64-89.

Marlin, Randall, 2002. "History of Propaganda," pp. 62-94 in *Propaganda and the Ethics of Persuasion*, Toronto: Broadview Press.

Additional Materials

Watch the first 10-minute segment of "Divide and Conquer," one of the "Why We Fight" films that Frank Capra made for the Office of War Information in WWII. (If you want more, there are the other segments on this page.) Watch this brief video on the background of these films.

Watch the first 7-10 minutes of Leni Riefenstahl's "Triumph of the Will," and browse the rest to get the flavor of the rallies — it's pretty repetitive.