

Chapter 5

Visual Technologies, Reproduction and the Copy

Visualization and Technology

About Technology:

- New designs and implementation → Complex and multi-phased
- Intimately tied to changes in worldview
- Different people = different uses of tech in different ways
 - Often unintended uses, “Mistakes” become common practice
- Serves mundane and profound practices (Flashlight vs. citizen journalism)
- Intentions for use change/falter as tech is adapted or hacked

Book basically gives these overarching ideas in the first part of this section about changes in reproduction technologies and how they are used. It's asserted that these changes are complex and are a part of broader shifts in knowledge politics and practices.

Some of the qualities are:

- **New designs and shifts in technology are complex and multi-phased → Not just one invention.**

---Example: Smartphones weren't just one big idea. You have phones built into cars for travel and then “The Brick” → fast forward through Nokias and flip phones all the way to smart phones.

- **Intimately tied to changes in worldview**

---Example: Desktop computers can be considered something that is a key way for older generations to connect to the internet whereas many who grew up in these markets have developed into thinking a smart phone or tablet as a key device in accessing networks or for usage in general.

- **Different People = different uses for technology → Mistakes can become common practice**

---This one is kind of a given. I can guarantee that people use their phones differently throughout this room. I use my phone not even as a real phone.

- Serves Mundane and profound practices
- Flashlight versus citizen journalism
- Intentions for use change/falter as tech is adapted/hacked
- ARPANET NEXT SLIDE

Example: ARPANET in 1969

- ARPANET becoming the Internet → Example of the unpredictability of technology
- Viewers Make meaning is to tech users shaping the use, design, redesign of Tech production/reproduction.

-Unpredictability: Technology is difficult to control, shape, and predict.

---Example: in 1969 the US Department of Defense first implemented the computer communication system called ARPANET.

The original purpose of this network was to link Pentagon-funded research institutions over telephone line. This was during the Cold War and the Department of Defense wanted a network that didn't have a physical base and it basically couldn't be destroyed. This was the first technical plan of what later on became the internet.

-Main point: Technology users (authorized and unauthorized) shape the use and designs/redesigns of technological production/reproduction.

Technology and Nature

- Leo Marx → criticizes machine as an intrusion on life's natural order
 - 1964 book *The Machine in the Garden* → impact of technology on the modern landscape → Industrialization Clashes with pastoral landscape
 - Tractors/trains → \$\$\$ Productivity and power
 - Horse Drawn Buggy vs. Civil War Steam Engine → Latter "sending passenger catapulting across the pastoral landscape"
 - Consider Romantic Tradition of painting → cusp of photography era
- Landscape transformed → view in which viewers experienced surging industrialization

Criticism of technology that it often disrupts/interrupts nature:

Leo Marx 1964 handbook

- Civil War Steam Engine versus a horse drawn buggy → catapulting passengers through the landscape → psychic struggle with industrialization

1801: Trains replaced horse drawn trains

---Landscapes were altered by the train itself → Industrialization separates us from the landscape through the experience of industrial advances. Industrialization interrupts the pastoral view because the landscape become secondary to the views of industrialization.

This book was written right before the age of mass computing advances.

---I looked up and read bits of the book, it's loaded with many literary examples of metaphors that back up this psychic struggle, but the basic notion was that the ideals that Americans held that were invested in this pastoral landscape that was just discovered could not truly be embodied, and that the inherited symbols have had their meanings removed.

How do you all feel about this idea of the pastoral taking a back seat?

Constable Vs. JMW Turner



Dedham Vale
John Constable, 1802

Rain, Speed, and Steam
– *The Great Western Railway*
JMW Turner, 1844

LET'S COMPARE AND CONTRAST!

- Based on what I mentioned about the pastoral landscape being a view-scape for industrial advancements... How do these paintings contrast each other?
- What does the book state about the viewpoint into the painting?

John Constable:

---Painted Dedham Vale before Steam trains took over England. Created paintings of relatively untouched landscapes while industrialization was happening around him.

JMW Turner:

---Turned attention toward the Industrial transformation of the British landscape. This was painted 5 years after the introduction of photography and 6 after Great Western was introduced.

Dedham Vale Vs. Rain, Speed, and Steam – The Great Western Railway

- Dedham Vale – Eye drawn in via river to small town in pastoral landscape
- Rain, Speed, and Steam – Bridge draws gaze out of the city obscured by haze
 - Rabbit flees → Fleeing industrial modernization?
 - Viewpoint unstable
- BIG DIFFERENCE: Constable → Nature contains culture **VS** JMW Turner → Technology

consumes the pastoral

- Turner → Blurred vision like passenger on the train

Historian Wolfgang Schivelbush

- Discusses how railway travel transformed 19th century vision
 - Passengers experienced cinematic visuality from the train window
 - Literal transformation of landscape to build railway
 - Industrialization favored towns with stations, while rural areas declined.

-This effect is one that JMW Turner captures in the blur from the train.

-Schivelbush highlights that there are both positive and negative effects of this new visuality

---Negative: That the more of the landscape that gets processed the less quality the perception is

---Positive: The landscape basically becomes a new one, in which one could only appreciate it from the higher velocities and unique perspective of the railway carriage.

Jacques Ellul

- Technology Studies Scholar
- Technology rushing into all aspects of life has capabilities of becoming autonomous
 - Can define, threaten life
- “Technique has taken over the whole of civilization”
 - Machine performance of human labor
 - Technological transformation of organic life
- Example: Drones/UAVs

Example: Drones have been used by the US military to surveil and bomb areas of the Middle East for the “War on Terror.” The same technology is simply outfitted with a camera alone and also sold as a consumer product.

Example of this concept: Video Games → Sonalysts and just personal games, Ender’s Game

-Book about this boy and another character who are selected for training for this war with these bug aliens. They take him to this academy where he plays simulations for practice to go into combat eventually, eventually he beats the entire simulation and he finds out that he actually was in combat the whole time and was actually killing an entire population.

Any other examples?

Ask about next slide too!

“How can we begin to understand shifts in human agency across this long era of machine agency?”

- Technologically Deterministic
 - Technology motivates social change
- Countering Technological determinism
 - Social change motivates technological change → No human will/direction = no technological advancement
- Langdon Winner
 - “Do Artifacts Have Politics?” → argues technology and culture are interdependent. Outcome of tech driven agency isn’t necessarily human destruction.
 - Social/political perspectives embedded in machine design → put into play in use, often involuntary/unintentional
 - Example: Drones

Extra Notes:

Example of the social/political perspectives embedded in machine design:

- Tomato Harvesters of 1960’s and the Long Island Southern State Parkways
- Design in machinery holding meaning is crucial to contemporary research about values in design

Questions over intentionality of both of these designs

-Drone once again is an example of these ideas.

- Programmer disconnected in time and space from the drone’s act of killing
- May not even be a witness to it directly

Social/Political Dimensions of Technologies → Using Machines Differently

Black Hawk Paint (2008)

Addie Wagenknecht

Acrylic on canvas, 39"x59"

- Drones as paintbrushes to render paintings
- Turns conventional use of drones around to be something uncommon
- <https://vimeo.com/91715420>



Winner asserts that not all uses of technology are destructive.

- We need to better understand the political/social dimensions of these technologies and use our machines differently.
- “Mistakes” can become commonplace

Politics Structuring Technologies

- Example: Search Engines, Software programs
 - Help choose trusted info sources/select goods
 - These offers are not objectively ranked → Algorithms, popularity
- Algorithms shape tastes and markets

-Companies bid on ad words with search companies like Google
-Search engine companies make \$\$\$ when you click on ads
-Reflects on ideology of Neoliberalism → aimed at giving user a wide range of choices
---This is changed with the algorithms because they are designed to optimize some choices over others

Changing the Episteme

- Using a camera and adapting to new ways of making and sharing images = Shape episteme in new ways
- Every use of an image isn't just between the individual and the machine.
 - Also involves the individual citizen, the community, and the state
- Machines act upon world with values/ideologies, often supporting the state. Understanding this though helps address this issue

In chapter four they discussed how perspective reflects era-specific values and notions of truth and that they are relative to the individual human subject's gaze and visibility
-Values are reproduced but the perspective changes

We store photos in phones and can use them throughout the day
-Return to them for family reminiscence
-Citizen Journalism

Addressing the issue of state favored machinery
-Unmasking state violence → Body and dash cams to regulate the state
-Generates Activist Countervisuality

Inner Workings

- 1980s → Examine interior of technology → Examine inner workings
- Structure of a machine could indicate social plans/processes
- Understanding design, creation and use of tech is as important as what it produces
- Jean-Louis Comolli and Jean-Louis Baudry – Apparatus Theory Proponents
- Studying any technology as a social system = Considering range of social uses/consequences

-Jean-Louis Comolli

---"Machines of the Visible"

---Argues that the camera is reduced to a marginal tool that has no power without the social desires that drive it. Basically the films produced from the camera are driven by social desires

-Jean-Louis Baudry

---Defines the cinema as apparatus of the camera, projector and screen.

Context: 1968, motivated by Louis Althusser → We should study capitalism's structure and modes in order to disarm it

Langdon Winner's Question

- “How do a given technology's structure /function delimit and transform personal experience and social relationships?”
 - Surveillance → Often used for control, can be turned and used for monitoring authority → 2014 trial for the murder of Laquan McDonald
- Surveillance not only used to socially control public, can be seen as protection.

-Footage of the murder was concealed for over a year

-This footage from the dash cam not only convicted a murderer, but also inspired demonstrations.

--Push for police accountability and less evidence suppression

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Visual Technologies

"The fact that visual technologies emerge out of particular social and epistemic contexts means that their possibility often precedes their development.
Ex: perspective; photography.

This section expands on the idea of technological determinism that we touched on in the first section. The relationship between how technology forms our culture and how our culture and our needs or values shape technological development. So they give an example of-

Example: Greeks understanding the logic of perspective but not utilizing it as it didn't align with their philosophical values at the time. "Trickery" as opposed to accuracy. Photography was a technology (light and chemical processes) we already had, but was used institutionally or for documentation. As epistemic interests in the 19th century shifted, then shifted our use of photography and its development.

Summary:

A technique like perspective can come about and begin to be used not as a result of a technological development but as a result of a culture or episteme.

“Narratives of inevitability are a key aspect of technological determinism”



<https://www.boweryboyshistory.com/2008/09/original-imax-jacob-ris-and-his-magic.html>



<https://www.etsy.com/listing/224254468/eadward-muybridge-photo-vintage-motion>

Adding onto the idea of technological determinism and the push and pull between what's influencing what- some examples of technologies or things people were participating in that are now considered “proto-cinematic” or precursors for cinema-

Magic lantern show: theatrical techniques that become prominent parts of cinema- sequential arrangement of images, projection for a group, and voice-over narration.

Eadward Muybridge: using photography to settle a bet as to whether or not a horse ever goes completely airborne when running.

Summary:

While work like Muybridge's supports the idea that the development of cinema was inevitable, there was also earlier forms of film viewing that took place in “one-person viewing machines” This goes to show that the development of visual technologies is not as straight-forward as technological developments alone, there are more components playing a role. *p187



Pinterest



<https://www.cgtrader.com/3d-models/electronics/video/kodak-brownie-target-six-20>

The book references technology like the factory production line to talk about the episteme at the time and value of reproducibility. The development of photography in particular captured the era of modernity.

Example: Factory production line vs Kodak: A technology with the goal of making identical products vs the Brownie camera and 100 exposure film rolls which are reflective of the American value of “effortless abundance” -Nancy West, historian
Kodak producing a visual technology that reflects the values and episteme at the time.



iphonelife.com

What are examples of visual technologies that are developed based on our current episteme?



Pinterest

The Reproduced Image and the Copy

QUESTION: What do you think of when you think of copies? And how long ago do you think images were being reproduced?

The History of the Copy

- Copiare: To Transcribe
- Copia: To write an original many times.
- Egyptian New Kingdom period: Scrolls reserved for elite populations were copied and placed in scrolls of everyday people
 - H.W and Anthony Janson: Democratization of the afterlife (?)
 - Basically this endeavor requires copying

Copiare & Copia → Medieval Latin

See next slide for notes on the Book of the Dead

Last Judgement of Hunefer

page from Book of the Dead papyrus from
tomb of scribe Hunefer, 1275 BCE



- Book of the Dead has no true canonical copy or original from which others were adopted. Many were specific spells/texts for each person who passed on
- Scene shows the weighing of Hunefer's heart compared to a feather (Maat's Scale. Thoth writes the results). If the feather equaled the weight of the heart the soul could pass on to the afterlife.

History of Copies and Value

- Original holds own power as a valued form
- Before modernity copies were still prevalent
 - Renaissance → Sometimes copies made for replicas.
 - Sculpture → castings of molds. “Ephemeral” clay is the original.
- Status of reproductions → determined by monetary value.
 - Limited number of “originals”
 - Limited or diminishing value

- Copies also made to educate → Master copies were done in order to learn techniques from masters in academy style training
 - Still a practice some academy style schools use today → Lyme Academy did this
- The lower the number something is the more rare
- Hand of the artist still counts: Original of a photograph is still more important and valued than a copy made by another individual using the negative.

Technologies for Image Reproduction

- Photography, Printmaking (etching, wood cuts, engraving, lithography)
- Art Historian William Ivins
 - Printing press (type) by Johannes Gutenberg had great emphasis BUT Prior techniques held significance in influencing the modern emergence of copies.
 - Stresses importance of prints: *"We should have very few of our modern sciences, technologies, archaeologies, or ethnologies— for all of these are dependent, first or last, upon information conveyed by exactly repeatable visual or pictorial statements."*

The Photographic Image

- Camera Obscura used as seeing/drawing device
- 1820's → Joseph Nicephore Niepce: modified design for exposure of images
- With Louis Daguerre → Silver Compound that helps leave impression of image
 - Daguerreotypes
- Daguerreotypes: were originals, direct exposure and not a print

Right:
View of the Boulevard du Temple
Louis Daguerre, 1838
Earliest known photograph to show a living being



Photography's Acceptance

- Was NOT easy
 - Association with copies
 - Market that fetishizes the artist's hands
- It was not the first technique to introduce image reproduction
 - Issue of valuing as "original art" correlates to in concept of "original print"
- Plate or negative is the original form from which the "original print" is produced.

Acceptance in fine art market not easy

Art-Making with Machines

- Chapter 4 → controversy over using camera obscura to trace scenes
- Artwork associate with technical instruments → risk of being reduced to commercial work.
- Value = direct work and artist's hand
- Photography also was seen as rational
 - Modern era based on knowledge and science

Where have we talked about the rationality of Photography?

-Chapter1!

Photography long associated with objective seeing,

Positivism → verifiable scientific knowledge supersedes individual actions (seen as subjective)

machinery more accurate than the subjective individual's actions

---Empirical, lacking artist's hand (versus a pencil drawing)

Indexical Qualities of Photo/Video

- 1960's: Roland Barthes and Andre Bazin → photograph shares unique affinity with the real
- Barthes: *Camera Lucida* → Photo is result of camera being in the same time, space and lighting as subject
- Peirce → indexical quality
 - Persuasive as criminal evidence
 - “Epistemological” and “ontological”
- Photograph = Drastically changed concept of the copy and reproducible image

Barthes → “Camera Lucida” → analog photograph = something has been, “indexical”. Camera needs to be in the same time, space, and light with subject being photographed.

Charles Peirce → called it “**indexical** quality of the image.” Focuses on the empirical evidence of the real.

- Persuasive for the use of photos, film, and videotapes as criminal evidence.
- Epistemological: provides knowledge of what has been
- Ontological: Guarantees what has been

Walter Benjamin and Mechanical Reproduction

The Work of Art in the Age of Mechanical
Reproduction
Aura, authenticity, and commodification.



Walter Benjamin: German critic and philosopher. Wrote the essay "The Work of Art in the Age of Mechanical Reproduction" (1935). Died fleeing Nazi occupation.

“Images are still valued as original works with unique auras, even as their multiplicity undercuts that status”



What are your thoughts on the *aura* and the way we value reproduced copies as opposed to an original?

<https://ceasefiremagazine.co.uk/walter-benjamin-art-aura-authenticity/>

Walter Benjamin looks at and analyzes modernity and mass production of everything- from mass transit to reproducibility of images. Specifically, in art, he talks about the “Aura”: the specific time and place that is unique an artwork- it’s authenticity. No matter how many times you reproduce an image of the Mona Lisa, those reproductions will never have the aura that the original that is behind bulletproof glass in the Louvre has. The book frames this idea in a way that critiques the aura and value of the original for “reifying the artwork as a commodity in a capitalist system” and looks at reproduction as means of challenging “the capitalist system of the valued singular object” (192)

However, the idea of the *aura* still held strong. The value of the original is integral in the art market.

Frustrating:

Reproductions become the means of maintaining (and reinforcing) the value of the original.

“Images are still valued as original works with unique auras, even as their multiplicity undercuts that status” (195)



<https://veritasartappraisals.wordpress.com/category/art/>

Authentication of art affirms Benjamin's idea of the valued "aura" an original work holds. Art authentication has become a scientific practice.

Example: "Spectrophotometry- a laboratory process used to date pigment by analyzing its chemical composition" (192)

The Politics of Reproducibility

Context of Walter Benjamin's Essay

- Introduction → Benjamin's point that mechanical reproduction changed the way art functions with politics
- Context: Written in 1930's
 - Rise of Fascism
 - Nazi Party
 - Elaborate use of propaganda through imagery

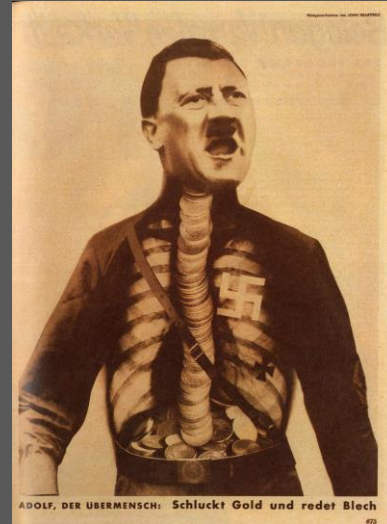
- "Instead of being based on ritual, [art] begins to be based on another practice— politics."

- Third Reich anticipated this use to shape reputations of politicians

- Monumentality and massive control are icons for both Fascism and the practice of creating propaganda

Manipulation of Reproducible Imagery

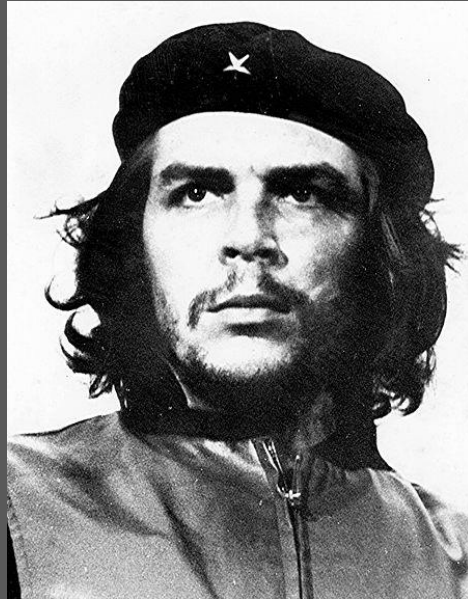
- John Heartfield created collages in 1930's → Critiquing Hitler's image to further Nazi political power.
- Example of how reproducible images can be manipulated/reworked
 - Ability to captivate & persuade



- Ads were edgy in that they were pretty politically scathing/blunt
- Heartfield *Adolf as Superman*: “He Swallows Gold and Spits out Tin-Plate” turns Nazis images against themselves.
- Reworks and combines familiar images to give new visceral quality.

Che Guevara

- Manipulation can also empower original political message
 - 1961 photo of Che Guevara
 - Change of art/authorship
 - Not just hero in Leftist Latin American Politics, Also revolutionary Martyr
- Even basic images of his form are recognizable



-Che Guevara – Latin American revolutionary figure → Participation in 1959 Cuban Revolution

---Photo of him with Beret with star

---Broader and cultural and political transformation of art/authorship as Cuba moved into a market economy.

-Revolutionary Martyr: Beret → Traditional Military gear, used to be associated with revolutionary politics. Another example of this is the Black Panthers in the 1960's. → Beret was meant to connect to Che's style.

---Star symbolizes his unique bravery and star power.

Copyright and Ownership

- Korda's ownership of image was limited
- Lawsuit with Smirnoff → Korda won
 - Cuba's Global economic status
 - Elite cultural producers → exercise claims over value of work in foreign markets
- Che's image brings up multiple controversies



2000 Lawsuit with Lowe Lintas for Smirnoff ad

-Korda won

-Hernandez-Reguant: Lawsuit signaled Cuba's emergence in the global economy & emergence of elite cultural producers

Political/Protest Images and Originality

- Political and Protest art often stands against the idea and values of “original art”
 - Example: AIDS activists → Produced massive amount of symbols and messages to spread the word
- “Silence=Death” image
 - Important in the aspect that it is reproduced many times and therefore is in many different places at once.
 - Freely circulated
 - The more the image is present and copied, the more power it holds in its message.

-Goes against them being unique, sacred, owned by one individual, valuable, or copyrightable.

Silence = Death:

- 1987: started showing up in many forms, even spray painted on the streets
- Value does not come from any original but basically was given because of how much was produced of that image and the Triangle
- Call on people to recognize how passive they were to the overabundance of advertisements on the streets.
- Pink triangle = symbol that homosexuals forced to wear during Nazi Germany → was recoded in the 1970s
- Call attention to the lack of attention to the AIDS crisis

-Confronted by historical background or interpreted with its new contemporary meaning.

-Also an example of how text may dramatically change the meaning of a graphic symbol

Silence = Death

- <https://www.youtube.com/watch?v=7tCN9YdMRiA> – Avram Finkelstein, Creator of Silence=Death, talking about Poster and campaign -- ~> 5 mins



Ownership and Copyright

Copyright: the right to copy. Includes the right to distribute, produce, copy, display, perform, create, and control derivative works based on the original." (198)

"Issues about the status of ownership and rights in relation to reproduction"

"Issues about the status of ownership and rights in relation to reproduction" (198)

Like in the case of the photographer suing a photo agency for using his portrait of Che Guevara, with mass reproduction comes copyright laws. Images are legally forms of intellectual property. Laws concerning copyright are not only about the copying/distribution of the images but also what is considered a *legitimate* use of a copy

“To whom does one’s own image or appearance belong?”



<https://www.celebpcandle.com/products/taylor-swift-celebrity-prayer-candle?srsltid=AfmBOop55305>



<https://twitter.com/jesscastellote/status/946436754185379840>



<https://www.artsy.net/article/artsy-editorial-jeff-koons-8-puppies-lawsuit-changed-artists-copy>

Needing to obtain permission from Taylor Swift to reproduce her image and name, permission to use the photograph itself from whoever owns it, as well as whatever product/object you want to put it on.

The book talks about copyright’s role in selling fine art- using a painting as an example.

When a painting is sold, the ownership of the *object* itself is transferred over but the copyright or right to reproduce is not (unless there is a separate contract).

The painter/artist owns the “expression of the idea”- any reproductions of the work sold are considered reproductions of that “expression” as opposed to reproductions of the *object* sold.

Raises the question: “To whom does one’s own image or appearance belong?”

Rogers v. Koons: Artist Jeff Koons took this image and reproduced a sculpture made of it. Koons claims it is a parody of the photo (which would be considered a fair copy under the US fair use doctrine), but the court ruled in Rogers favor, arguing the sculpture was not *transformed*, despite the transformation in media, but copied.

Adler’s argument-> next slide



<https://www.dailymail.co.uk/news/article-2375270/Dafen-Oil-Painting-Village-thousands-artists-recreate-paintings-sale-overseas.html>

If contemporary art “rejects the idea of ‘newness’” is it fair to measure a work’s “transformative meaning” as a means to prove its violation of copyright? How should that violation be determined?

(Law professor Amy) “Adler writes that the fair use argument is ultimately destructive in the context of art styles that copy, borrow, and appropriate all the time.” “Poses precisely the wrong questions about contemporary art. “It requires the courts to search for ‘meaning’ and ‘message’ when the goal of current art is to throw the idea of stable meaning into play””. (202)

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Art historian Winnie Won Yin Wong talks about *Gao* a Chinese market of fine art copies (205)

Wong highlights the different values held in China, for example, as compared to the Western art market. In Western and European countries we sell copies of famous artworks in the form of posters and tee shirts, whereas this market and set of values is about creating affordable “originals”. (Recreating/reproducing copies of the original work, but in the same medium as the original).

Wong points out that these works are the same as the art we refer to as “readymades” “The Chinese market, Wong argues, challenges the codes of valuing original art in the same way that the conceptual art we have discussed does, and these Dafen works are more appropriately viewed as readymades than as simple copies” - Art historian, Winnie Won Yin Wong (205)

Reproduction & the Digital Image

About the Digital Image

- Questions of reproduction and copyright = new levels of intensity
 - No “Negative”/Original storage medium
 - Not like Analog photograph
- Still used similarly to Analog photos

Not like Analog Photographs:

- Affects how they look
- Generation, storage, and distribution of the photos
- Kinds of devices that create/display them

Still used similarly to Analog:

- Personal expression
- Family portraiture
- Documentary Evidence

The Power of Analog

- Physical Correspondence to the materials used
 - Gains power in this idea of that the materials mean there is a real presence
- Defined by properties expressing value on continuous scale
 - “Knob Twisting” → Analog vs Digital clock
- Analog = composed of grain
- Digital = Electronic image sensor and storage microchip

Defined by properties expressing value on cont. scale

-Gradations of tone or changes in voltage in video

-“Knob Twisting” → explained in contrast of analog vs digital clock

---Analog = delivers time on a continuum circular motion,

---Digital = counts forward in number increments

Roll form in cinema = long history with cinema film and papyrus

Transition ends with the transition to a chip in which the data can be transferred, deleted, or replaced with minute code

Negative as “original”

- Not just valued for indexical quality
 - When negative is copied, the image degenerates
- Digital image not subject to degeneration
 - Built to eliminate dependence on a single original medium
 - Breaks away further from the idea of “original” work

The main idea: Reproducibility is embodied into the form of the digital image

-You can copy, transfer, and download the image data and it will be the same quality →
Only compressed image files that are edited and resaved a destruction of pixels

Polaroid Corporation

- 1940's → Polaroid introduced an SLR camera that would develop on own in minutes without a lab or printing
 - Unique original image
- 1972 → Polaroid comes out with SX-70, which developed the image directly on the exposed sheet.
 - Focused on idea of instant sharing, like Facebook/Instagram

Directly charts into digital imaging



Analog cameras produce images that need to go through processing, typically in a darkroom. The film negatives are developed and then the images are processed in a developer, stop bath, and photo fixer process.

1940's cont.

-The photo would pop out and press against a sheet of chemicals. After a while the sheet would be pulled off to reveal a fully exposed image. This was a unique original

1972:

Christopher Makos (taught Andy Warhol how to use it) , "The Polaroid was so cool at the time. We would all just take pictures of each other and pass them around, sort of the way that people pass around images on Facebook"

---Sharing on social media can be perceived as having context of only having value if the photo is "liked" or seen

Creative Geography

- Soviet Filmmaker Lev Kuleshov → 1922
- Photoshop = easy to place self in locations you have never visited/do not exist
 - Virtual tourism
 - Echoes the World Exposition → Peoples and wares of colonized faraway places
- Real of experience minimized → Imagined and fantasy relationships become the focus of substance

Digital Camera:

Also allows instant image viewing → positive, not negative

Evokes camera obscura's mirror effect

Image seen instantly projected onto chamber's surface

Altered conventional photo's "noeme" → "That has been" effect, Roland Barthes

"Creative Geography" → Intercut images of pedestrians in Moscow and Washington DC to give the viewer the idea that two people are walking toward each other and will meet up.

Virtual Tourism: What previous art endeavor in Chapter 1 was an example of this distortion of reality?

"Oh, God Zilla"

Real of experience:

-Images' materiality loses significance. Can be preserved in code and shared, manipulated, emailed, shared online

-Ephemerality of a photograph fades away due to the lack of an eroding photograph.

Fading Away

- Henry Peach Robinson, 1858
- Albumen silver print → 5 glass negatives
- Photo of young girl with tuberculosis
- This photo was a composite of 5 images → used to convey what this scene might look like
- Practice restricted to art and commercial photographers



- Example of it being always possible to manipulate the photos to show “fake” realism
- Professional photographers often airbrushes and reframed images to “clean them up”
- It’s common today to have photographers edited or to remove unfavorable relatives,
---relatively harmless
- All historical images are really up for grabs for manipulation though,

what changed with the intro of digital photography → the wide accessibility of techniques to the consumer → everyday aspect of consumer experience

Simulacra and Simulation

- 1981 text → French philosopher Jean Baudrillard
- Digital Era → simulation = paradigm of our condition of being
 - Not reproduction
- Disneyland used as example
- Simulation generates a new real without an original

Paradigm = model

Baudrillard uses Disneyland as an example. He argues that Disneyland is full of false worlds and characters. These ensure the success of the operation. But the microcosm of Disneyland being this miniaturized version of “America” (all of its ideals) which replace the real America. So what seems to be real is Disney, and the real America becomes full of lies.

Digital Image and Memory

- NOT just changing relationship to the real → also personal and cultural memory
- Family photo album moved online
 - Before: Negative with prints (sometimes duplicate, but only two sets)
 - Now: Online family Albums → Family photos all are equal and reproducible
- Control over archiving, access and reuse is beyond the user control



flickr

- Flickr also changed relationship between personal image, commercial photography, and public space
- Our photos available for public consumption and security searches
- We become image connoisseurs/curators when we link images to places like Pinterest and Tumblr
- Those sites archive those choices for research on taste

Pubic Domain

- Selling of stock photos online is still a thriving business model
- Increasing number of open access digital archives
 - Library of Congress in 2008 → Historical photos on Flickr
 - Creative Commons in 2001 → shared archive of images licensed for free public use
 - Wikipedia → hub for Creative Commons images → come with citation and credit
- Implications for cultural memory, “Found” footage, images, and rights/politics of using them → role of personal digital image in public sphere

Sharing of images → relationships of archives and image institutions to vast range of online visual resources.

My side note: A lot of this coincides with the current rising political right's topic of user- owned data and whether or not companies deserve to be able to profit from your own data, images, content etc.

3D Reproduction and Simulation

'Losing sight of "the real" in a postmodern era characterized by media and technologies of simulation' (212)

This section uses 3D printing as an example of our decline in trusting referents and originals, while we substitute "signs of the real for the real". (212)



"Fountain" 3D lamination print (built up in layers)

<https://leblox.tumblr.com/page/8>

Considering the economic and social implications of a technology that allows us to move past mass-production of industrialization.

3D printing is revolutionary in its potential to bring "home to the consumer and artist the ability to manufacture goods and products" (213)

Consumers becoming producers.

Considering the economic and social implications of a technology that allows us to move past mass-production of industrialization.

[Theorist of technology, Mark Poster: "mode of information" 15th century printing press made possible for mass production of books in Europe, bringing in the modern era of mass communication. This becomes associated with a 2D culture of identical flat copies. This becomes escalated in the 19th century by the industrial printer, then the digital printer with advances in computers in the 1950s (fed data compressed into code and then read to generate output) (mid 213).]

3D printing as means of replacing the work done in sculpting by hand, machine, or tool.



Anya Gallaccio uses a 3D printer to create a sculpture out of water based clay- capturing the process of how the material reacts to this tool and action.

In the case of 3D printing, similar to what was referenced in the case of selling a painting when discussing copyright, the object that is printed here isn't the "expression of the idea", it is the "patent or blueprint" (214)

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"Thus, the technology of the 3D printer is something of a Trojan horse that brought the commodity form back into the mode of information from inside the computer, a machine long held to have dematerialized the information and the art object" (top 214)

The code or blueprint, within the computer, is the *original* from which copies can be printed/made.