

Hist of photography

by Prof Peterjohnson

Submission date: 11-Nov-2019 05:04PM (UTC+1000)

Submission ID: 1211354100

File name: History_of_Photography.docx (25.81K)

Word count: 2727

Character count: 14240

5
Student's Name

Professor's Name

Course Details

Date

History of Photography

Technology has played a massive role in history from the beginning of time. With time, new inventions have had a considerable impact on the contemporary world as well as impacting the future of the Western World. Most designs have unintentionally changed civilization and had a transformative effect on the livelihood of people living on earth in every era. With each subsequent invention, innovation has shaped the direction for the future generations, impacting and building on ideas to increase efficiency, effectiveness, and ease of use. It is concisely clear that each invention has had a revolutionary impact in their respective eras. However, there are subsequent results of technological innovation whose credit has a shared quotient between multiple inventors. Some inventions incorporate inventions throughout generations, not just a single one. The photograph is one such invention, whose history tracks through various eras under different innovators.

Joseph Nicephore Niepce was ¹the first to succeed in fixing an image from a camera ¹obscura permanently. He had been obsessed with the idea for a while, and his logic followed that support through a compound was the best strategy. The camera obscura before then was just an implement used as a drawing aid. Niepce initiated the heliograph technique in 1816 when he copied superimposed engravings onto light-sensitive surfaces once exposed to sunlight (Johnson, Rice, Williams, Mulligan, & Wooters, 2016). The strategy produced images that vanished in ¹broad daylight, and he called them retinas. He ¹made a varnish out of bitumen of Judaea oil,

which hardened when exposed to light. ¹ He coated a plate and placed it inside a camera obscura and exposed the plate for 8 hours. The venue was outside his cottage window, pointed towards the sun. At the time the bitumen coated bases, he used calcareous stones and glass plates. Before printing images on paper, the aqua fortis process was the means prevalent at the time etching images with acid. Niepce resorted to the technique for a while.

After succeeding in creating the first permanent photograph in 1826, Niepce called them heliographs. His brother was in England pursuing the invention of the engine and was at the brink of death. Niepce tried to garner the attention of the Royal Society towards his heliographs, but all was in vain. He then insisted on keeping the matter a secret, which hindered all forms of investigation. Making use of half-tones in 1828 led Niepce to another discovery that greatly improved the quality of the images. He would further etch the metal plates since they were unbreakable and more suitable to the process and use them to pull prints (Nwafor, 2015). The strategy involved a silver base with encourage interaction between the bitumen image with iodine vapors. That was his final contribution before making a partnership with Louis-Jacques-Mande Daguerre. That is after Niepce relinquished his notion of keeping the invention private.

⁴ After the death of Joseph Nicéphore Niepce, Louis-Jacques-Mande Daguerre revolutionized the photography process. As of 1822, he was highly involved in the field of photography when he set a diorama. The technique followed the lighting patterns to induce a variety of effects of his pictorial exhibition. Daguerre's interest in this field is what first drew Niepce to him, resulting in a partnership. Daguerre has already established success in business with his Diorama and Trompe l'oeil paintings. Their original contract partnership was set for ten years, directed at enhancing the technique developed by Niepce, hoping for commercial success. However, the latter's death in 1833 left Daguerre to pioneer the enhancement on his own (Stulik,

Kaplan, & Khanjian, 2013). He discovered that iodized silver plates had lasting effects for the latent image created, with significant influence from exposure of hot mercury fumes and hardening through cold water. The technique reduced the exposure time significantly to just less than thirty minutes but required common salt to stop the development process by permanently fixing the image on the silver plates. He termed the technique daguerreotype.

The influence of Daguerre resulted in images on the delicate silver plates, where each was one of a kind. He continued to fashion a technique for holding the images in the box, by fitting glass covers inside. Daguerre entrusted his procedure to Francois Arago, who was a physicist and eminent astronomer. Daguerre entrusted him to give a full description of his procedure ⁴ in a meeting of the Academy of Sciences, which earned the former an appointment as an officer of the Legion of Honor. The photographic processes were then accorded annuities in 1839. Daguerre received 6,000 francs while an heir of Niecpe received 4,000 francs.

Henry Fox Talbot's work on the fixing of images on treated paper was concurrent in timing to the work of Daguerre. It was in 1840 when he recognized the production of photographic negatives from the treatment of paper with silver nitrate and salt, then following through with exposure three minutes tops. His work also involved adopting the negative image onto another paper as a positive (Edwards, 2013). The technique also favored the production of multiple images from a single negative image made from a single exposure. Fox Talbot titled his contribution to the field of photography as calotypes and is credited for the invention of the negative-positive process. His invention, however, was not as commercially successful as the daguerreotype technique. His invention came just a few weeks after Daguerre's, which consequentially led to the recognition of the latter as the founder of photography as opposed to him.

Before modifying his process and calling it calotype, Talbot had published an article in 1835 that detailed his documentary at the time. The product was generally photogenic drawings produced on light-sensitive paper through contact prints. His modification process targeted at refining the dark and spotty images. Upon his discovery in 1841, his conscious decision not to share led to lost information and friends. However, the following year, the British Royal Society granted him a medal as congratulatory remarks for his achievements and technique. Henry Fox Talbot then went ahead to publish his ¹first book in photographic illustrations in 1844, called 'The Pencil of Nature.' There were six installments of the publication. Later in 1851, Talbot set the bar for later discoveries of successful halftone plates. His discovery allowed for instantaneous photographs by making use of printable plates and muslin screens.

The article 'The Chemist' from March 1851 was by Scott Archer, who provided details about his contribution to the field of photography. He was originally a sculptor but discovered the wet collodion process. Before that, he had started dabbling in the works of Fox Talbot with experiments on the calotype process. Archer's technique required exposure to a wet plate, which had to have soaked into a solution of silver nitrate. The process only necessitated exposure to direct sunlight for three seconds, after which the image had to be developed while the plate was still wet. Since the ¹glass plate was a negative image, multiple versions of positives could be developed from a single one. Talbot, therefore, filed a lawsuit against Archer, claiming that his technique was just a mere variant of his own patented process, which was dismissed. The technique by Archer required the development of photographs from wet plates, and hence photographers required 120 pounds of photo pieces of equipment and a dark tent through wherever they intended to capture images (Linfield, 2011). Archer offered up his invention to the world free of charge, which grew in prominence. Consequentially, the process overtook the

daguerreotype as the most preferred process of photography. Archer is also credited with the invention of a cheap form of portraiture called ambrotype. He, however, died in poverty.

From the onset, Matthew Brady was a photographer. He initially used the daguerreotype technique and had a studio in New York. Brady reported to the wet glass technique and used the albumen print. His success leads him to open another shop in Washington, D.C. by 1853, Brady had switched out his techniques and adopted the wet plate procedure. Most of his works involved portraits which covered politicians, presidents, and members of Congress. Brady earned critical recognition in beautiful pictures after one of his famous works of Abraham Lincoln, still visible on the \$5 bill. After ¹the Civil War broke off in 1861, Brady felt compelled to document it in its entirety (McDonald, 2014). He was actively working on the battlefields, but capturing action shots proved a critical challenge emanating from the three-second delay of the technique available at the time. Through the entire expenditure, Brady regularly required his wagon, which had lots of photographic supplies and multiple negative images on glass surfaces, which needed urgent attention to the process. His attempts allowed him to cover every critical aspect of the Civil War, and he managed to include every significant event. By the time of his death, Brady was deep in debt, mostly from the team of photographers he hired to cover the Civil War. The expenditure cost him his fortune. To date, more than 6,000 plates survived his efforts, and the United States war department actively archives his work. The legacy left behind by Brady shaped the course of war photography and has significant influence to date. Through his work, Brady exposed the effects of war to the American public, consequently earning him praise as the father of photojournalism.

The objective of the path set upon by Eadweard Muybridge was to settle a bet, which led him to the discovery of motion pictures. The bet in question sought to answer whether 'while a

horse was running, did all its four hoofs leave the ground?’ in the year 1877, Leland Stanford the ex governor for the state of California, hired Muybridge to settle the bet out by photographing a horse running. To facilitate accomplishing his task, Muybridge configured 12 white plate cameras during a white sunny day on the track where the horses would be running. The set-up made use of wires which the horses triggered while it ran by. The third and fourth frame completed the project by capturing the horse running with all hoofs off the ground (McDonald, 2014). However, the concept of locomotion by human and animal still intrigued Muybridge who continued on his study and took more than 10,000 photographs. The study followed by various publications beginning with ‘Animal Locomotion’ in 1887. The era also witnessed a common tradition of cutting ¹ out the photos and fixing them inside a zoetrope such that the images appeared to capture movement.

The interest by George Eastman to rediscover simpler and easier means of taking photographs emanated from consideration that the 120 pound equipment was too heavy. He had planned to take a trip, and a friend tried to convince him to take photographs. He ended up not going for the trip, just so that he could find an easier means of the entire process. He set up a business in 1881 where he sold an improvement of the wet plate, which he had prepared from a gelatin dry plate. He still continued in his research and four years later discovered the ¹ flexible roll film. He marketed the same on the Kodak box camera in 1888, which he had already loaded with the capacity to capture 100 shots. The design only required the client to just press a single button to take a photograph (Edwards, 2013). Eastman had considerably reduced the capture time to below a second. After completion, he mailed the entire kit to Kodak Company, who replied by mail a newly loaded camera with the prints within. The invention was historical since it gave birth to the snapshot, and was a critical step in taking photography out of the confines of

professional studios to making it available to the general public. To date, Kodak still continue on the trend of re-envisioning the taking and sharing of pictures.

An act of Congress granted the National Child Committee a charter in 1907 which prescribed authority and rights to the committee. In 1908, the committee hired Lewis Hine so that he could research and document the context of child labor in the American industry. The character served as a teacher and a trained sociologist, who advocated that photography could be used as a platform for education. Over the course of ten year, Hine travelled across the country and captured how children were exploited as workforce in industry. Hine stated his only desire was providing vivid proof that established the need to change the current structure. The design and publication of such photos pulled the nation's heartstrings, and shocked the United States. Consequentially, the photographs led to the establishment of Child Labor Laws from a number of regulations supporting the National Child Labor Committee.

The Midwest was experiencing an extensive drought period and severe depression when the Farm Security Administration was established in 1935. The intention by Franklin D. Roosevelt was to help in the resettlement of farmers left destitute by their situations. The appointed director of the administration was Roy Stryker and sought to determine the extent and document the plight of the farmers. He hired several photographers towards the same initiative. One notable photographer was Dorothea Lange, whose work capturing the migrant mother in 1936 is canonical (Johnson, Rice, Williams, Mulligan, & Wooters, 2016). The entire expedition captured more than 200,000 photographs for the F.S.A., which t date are stored within the Library of Congress. The photographs were more effective than the newspapers in capturing, documenting and sharing the suffering endured by the poor to the nation.

Ansel Easton Adams had a passion and interest for natural beauty. The application of such devotion led to his creation of impressive pieces of the Yosemite National Park. In capturing such scenes, he ended up developing the zone system which proved and still is crucial in capturing the entire expanse, context and dynamic range of the subject. To obtain maximum resolution, Adam used a 8" x10" size negative film, and a format camera. While taking the shots, he adopted the highest f-stop f64 to his camera, which facilitated the capturing of great depth of the object. The efforts by Adams also involved the preservation of the environment, just as much as he was interested in capturing it. Adam was also influential in his company with the Sierra Club. They lobbied Congress in the 1930' for what at the time was the priority issue for the club, ² Kings Canyon National Park. Adams went ahead to create a stunning book which was in ² limited edition titled 'Sierra Nevada: The John Muir Trail.' The book was so influential to the President Franklin D. Roosevelt and Interior Secretary Harold Ickes, such that it led to the establishment of the park in 1940.

Harold Edgerton was highly intent in making visible what was invisible. By the year 1927, he started to serve as a professor at MIT. The interest to capture something the ¹ eye could not see, Edgerton invented the electronic flash. His interest also manifested in capturing what went too fast, which led him to be ¹ a pioneer in high-speed photography. Edgerton was later hired to take photographs of an atomic bomb test. The camera he used has a 10 foot lens, and the shutter speed within the gadget was higher than one millionth of a single second. He also captured a photograph of the splash of a milk drop, which highlights his input in exposing the majestic beauty hidden in nature to the naked eye. The contributions by Edgerton led to his recognition by ¹ the Royal Photographic Society, where he earned a bronze medal in 1934. Three years down the line, he was the recipient of the National Medal Science.

Works Cited

- Edwards, Steve. "'Beard Patentee': Daguerreotype Property and Authorship." *Oxford Art Journal* 36.3 (2013): 369-394.
- Johnson, William, et al. *A History of photography: from 1839 to the present: the George Eastman House Collection*. Taschen, 2016.
- Linfield, Susie. *The cruel radiance: photography and political violence*. University of Chicago Press, 2011.
- McDonald, Jessica S. "A Sensational Story: Helmut Gernsheim and 'the world's first photograph.'" *Photography and Its Origins* (2014): 15-28.
- Nwafor, Okechukwu C. "Photography: daguerreotype and the African experience." *Mgbakoigba: Journal of African Studies* 4 (2015): 1-11.
- Stulik, D., A. Kaplan, and H. Khanjian. "The first scientific investigation of Niépce's images from UK and US collections: image layer and image formation." *The Imaging Science Journal* 61.8 (2013): 602-628.

Hist of photography

ORIGINALITY REPORT

7%

SIMILARITY INDEX

1%

INTERNET SOURCES

0%

PUBLICATIONS

7%

STUDENT PAPERS

PRIMARY SOURCES

1

Submitted to Mountlake Terrace High School

Student Paper

5%

2

Submitted to Mississippi State University

Student Paper

1%

3

www.mathsisfun.net

Internet Source

1%

4

Submitted to Staffordshire University

Student Paper

1%

5

www.coursehero.com

Internet Source

<1%

Exclude quotes

Off

Exclude matches

Off

Exclude bibliography

On