HOW PHOTOGRAPHY HAS CHANGED THE IDEA OF VIEWING NATURE OBJECTIVELY

Name:

Course

Professor's name

University name

City, State

Date of submission

The Impact of Photography on Viewing Nature Objectively

Before the invention of photography in the mid-Nineteenth Century, images around the world were represented based on the thoughts about the truth about the world. Those who pictured the nature of the world used beliefs and instincts on what the world truly was. The selection of the best picture to represent the subject place or image depended on aesthetic judgments made by makers of such images (Daston & Galison 1992, 81). These methods were highly subjective as there was no exact image to portray the earth as it was even in the atlases that were used as mediums of describing nature. During these times; before the advent of photography, several factors undermined the objectivity of the images produced. Following the manual/human production of pictures and drawings, people represented thoughts on subjects, as well as ideas.

According to Daston & Galison (1992), photography improved the objectivity of nature following zero inclusion and consideration of ideologies, theoretical biases, feelings, emotions and personal equations in representing the world through photos. Photographic representations of nature are automatically, 'mechanically' reproduced and cannot be influenced by feelings or personal interests. In such a case the original photograph is maintained and stored unaltered. By comparing the originality of photos and images of art produced before the invention of photography, the photographs are very objective and real (Daston & Galison 1992, 84).Photography represents the world or rather natural science as truly it is and gives the scientific researcher absolute position, condition and nature of the world. Photography has the least biases if not wholly nonpartisan or non-subjective in its images and representation.

Most of the earlier methods of representing the earth through imaging, standardized the texts and image information captured to meet the expectations of the targeted audience. Concerning this, tools of describing the world and nature in it were standardized to realize the expectations of different interests groups. Standardization of images representing the world interferes and distorts the originality and true nature of the world. Standardization of these earlier images implied their subjectivity to reality as the objectivity of the world reduced. Photography solves this bias or incompetence of the artists by capturing information about a place as it is without changing it to suit certain criteria. Photography improved the objectivity of the world explicitly.

The subjective materials that represent the believed nature of the world had slight improvements and differences but rather similar more so when the produced by one person. The similarity in the pictures produced indicated that the production was based on memories of past experiences in the place. These productions primarily reflected on what the author or producer could remember about the place and its feature. The human constraints such as memories undermined originality and objectivity of nature. Photography, however, uses its mechanical capacity to capture and reproduce original nature of the place with reflecting on any memory. Photographs can be reproduced from the initial capture, and the same photo gets printed without any alteration. With photography, originality was ensured and achieved to improve the objectivity of the photographs produced mechanically (Daston & Galison 1992, 83).

Photography does not depend on human factors to reproduce a photo of certain standards or quality. The mechanics involved in the photography process do not rely on the weather, moods of the photographer and senses, among other factors, but rather automatically captures and reproduces the photo as an authentic replica of nature. There are not altering factors that

could change the photograph, and that improves its objectivity to the reality of nature in that particular place. These individual or human-based factors are subjective factors and photography do not contain or apply to any.

Photography captures information about different sets of images or objects as they are and not taking one image to stand in for the rest. In the atlases, which were the most recent ancient ways of picturing the world, a single image would be taken from a set of similar objects, to stand for the whole class (Daston & Galison 1992, 85). An individual object is used to represent the others of similarity. This comparison demeans accuracy and objectivity in portraying the reality on the ground. Photography takes pictures of different objects as they were regardless of the numbers without any difficulty. Therefore, photography improves the representation of real earth by improving the objectivity of the objects' reality.

The color of an object is a subject to its reality, and real portrait should consider. For instance, when trees are green in a natural environment, the color should not change in the image of that same tree. Giving a different color to an object in the picture gives a different and conflicting information to the original object on land. Consequently, this is one excellent reason as to why the images captured in the early atlases were regarded as illustrations but not real and objective. Photography reveals the color of an object it portrays. The objectivity of an object is measured by color consistency and image positioning among other factors (Tucker 2011, 38).

Photography, Mechanical Objectivity, and Truth to Nature

Science came into existence way after language. People used language to describe what they thought the world was, proving that language could not reveal the true picture of nature. Word description does not bring out the true picture of an object but through photography,

natural science has been improved. Photography has advanced and developed the new terms to describe an object (Paldam & Wamberg 2015, 17). Due to photography originated after science, photographs have developed the thoughts and viewpoints from a scientific standpoint. It is through photography that the actual nature of the world is represented and imaged. Photography has improved the objectivity of real world as it provided the language with better terms and positions to explain true nature.

Daston & Galison (1992) argues that he mechanics of photography did away with the temptations to alter the image in any original object or image. The production of photographs is automatic, and that which is captured in the photo is displayed in the reproduced picture (Daston & Galison 1992, 87). Several factors altered the image art produced following the easily influenced artistic work or the artist himself. Through mechanization, images can be produced from the original context they are captured, and that objectivity is enhanced. Photography, being an automatic process produces images that are not biased and free from any form of misinterpretation. The pictures that man reproduced to represent the world are regarded as illustrations that resulted from interpretations of a man following the inability of man to act like machines and automatically reproduce the real nature of the world (Tucker 2011, 28). The effectiveness of photography is based on this automation and the essence of trueness to the reality, thereby improves the objectivity of the natural science.

According to Burge (2010), photography covers even the tiniest components of an object. The trueness of a pictorial representation only remains real if the whole content of the object is covered and nothing left out. The ancient and traditional ways of representing nature failed to include some of the tiniest parts of objects they represented (Burge 2010, 19). Some complications come along with artwork, which was the primary method of representation or

illustration of nature. These complexities both demoralized the artist from representing these parts and thus lack of trueness to nature. Photography, having no complexity in covering the little elements of an object, presents a true nature of the object. To this end, photography improves the accurate representation of natural science by being an objective approach.

For instance, the development and advent of photography helped in scientific development like in the case of X-ray or visible light. Before this time, nothing much was known about the cells in the human body, animals and plants. The development of arguments and scientific viewpoints on cell physiology (Daston & Galison 1992, 87). Photography covered every detail on cell structure and even identified that the cells were individually separated from each and not as earlier thought by most people who illustrated the biological composition of the body. Taking the perception of science towards reality and tackling scientific ideas based on the true nature of the world and human body precisely.

Through this form of photography, X-ray improved the reality of nature as it captured aspects of objects that are far beyond the visibility in human beings. This surpassed the ability of humans to craft ideas on objects and represent them in a more defined and true way. The impact of X-ray photography improved the ideologies of scientist and the view of nature. It portrayed the truth behind the tiniest objects in life as well as enhanced knowledge on the same. Photography through improved objectivity on the images central to scientific study enhances the understanding of nature and enhances scientific perceptions, ideologies, and understanding (Daston & Galison 1992, 96).

Photography advances scientific understanding by providing a platform through which natural science's understanding and interpretation progress. In cases that individual pictures or photos present difficulty in interpreting, then a number of similar photos taken at almost the

same time are taken together and compared based on the targeted facts (Tucker 2011, 33). Through this comparisons, ideologies develop thereby providing knowledge of the missing information on the object under study. To this course, photography improves the understanding of scientists by enhancing their understanding on the particular object of study. This also proves that photography enhances the image objectivity in the scientific study in the long run. It identifies and reveals the hidden parts of the object under study that could create a new set of information and knowledge about the object.

Photography as a process has produced images that have more resemblance to the original object than the pictures painted and art worked by humans. The inclusion of fine details of an object in photographs proves the ability of photography to describe the true natural science (Burge 2010, 27). By comparing different photos of the same object, scientists can identify and analyze the invisible aspects of the object leading to new scientific perception and research. The trueness of photography to nature is one aspect enriched by comparing photographs and addresses the clueless guesses of people on the object. With regards to this impact, photography has provided science on nature with new thoughts and reasoning over time.

With all these positive attributes and support of photography to objectivity, there are other problems with photography that could be subjective. The alterations and modifications of images contained in photos through mechanical processes can reduce the objectivity of photography. In several instances, the photographer modifies the picture to meet certain standards and consequently tampering with its trueness to nature. Any changes in the photographs alter the entire image coverage and reality of the images taken (Paldam & Wamberg 2015, 15). Modified photos often lose track in representing the true object covered originally. However, automatic reproduction of photographs from the mechanical devices or camera

represents the real object and has more resemblance to the subject matter that the images of art made by people.

In the case of photography, the photographer or the producer of the image decides to alter the picture produced intentionally. On the contrary, the inaccuracy of the artists that use manual representations of nature are made due to the inabilities to identify and associate the images with omitted parts. Due to the differences in methods of subjectivity, photography remains the most objective mode of representing nature and all contained in it. In photography, the original photo can always be traced and retrieved to regain the objectivity and trueness of the photo to the real world. On the contrary, these other artistic works to represent nature, once encoded with error cannot be rectified by retrieving originality and covering the truth about natural sciences (Daston & Galison 2007, 101).

The Impact of Camera on objectivity

Dinius (2012) reasons that cameras, through their mechanical eye or lenses, have improved objectivity so much that this media is one of the best media to represent nature. Cameras have enhanced the access of information about the places that people could not visit or reach physically in the past. The high ability of cameras to obtain and capture data and information on given objects, progresses the understanding of nature (Dinius 2012, 52). A lot of information about objects and scientific specimens that naked-eyed man cannot reach has basically improved the objectivity of the world. Through these cameras, images are captured and stored to later aid in carrying out of scientific research. Objectivity, entailing the accuracy of information contained in the photography to that of the object, improves following the increase of resemblance between the image captured and the real object (Burge 2010, 23).

According to Dinius (2012), cameras have helped in the study of other animals and plants diversely in the world. The use of cameras aids in capturing images of animals that could otherwise prove impossible. Cameras can capture the lifestyles of animals that humans cannot reach physically to do so and thus revealing the truth about their lives. With the accuracy of the cameras, very precise data is collected on the objects and analyzed by scientists studying the subject animals, thus providing a portrait of the actual nature of these animals under the given study (Dinius 2012, 57).

Paldam & Wamberg (2015) postulates that cameras never get tired or fatigued in representing or capturing data repetitively over a long or medium period as human assisted methods do. Cameras proved to be very effective means of capturing and representing data that are very microscopic in nature. For instance, the cameras will effectively read readings on thermometers and related instruments that humans find otherwise to read repetitively (Paldam & Wamberg 2015, 11). Humans often get fatigued representing such data and are therefore falsifying at the end. Therefore, cameras have enhanced the objectivity of describing the world. Through photographic cameras, scientists have been able to acquire, interpret and understand scientific data (Daston & Galison 1992, 105). Cameras improve the accurate representation of nature without altering any information neither getting fatigued nor manipulated by humans.

All the other methods of representing reality; art work or painting have the aspect of the human hand that cast doubt on the markings and drawings they make. Human mind dictates what the artist represents and probably manipulates the outcomes depending on the interests and desires of the person (Daston & Galison 1992, 95). The impact of human spirit corrupts the whole process of representing or illustrating trueness of the world. Photography, however, is an automatic process that implies no intervention of human hands that interrupts the outcome of

camera work. The cameras act independently from human intervention and automatically to produce images that are more real and objective to the original object than all these other forms of art of representing nature (Tucker 2011, 36). To this end, photography proved to be the most objective means of representing nature and science.

Ways through Which Photograph is Imperfect in Portraying Reality

In photography, images are at times produced in an enlarged condition thereby giving a vague picture of the original object. Photographers may decide to enlarge or zoom out the picture already covered or while capturing of the image to meet certain standards. In such cases, some of the object parts and aspects do not get proper focus and thus, may appear to be vague or blur (Daston & Galison 2007, 99). The characterization of the object often bases on what the viewers can see and effortlessly interpret. Blur images are often unclear or may project a different feature in that part of the object. When a blurred imaged is identified to have an extra trait or component due to the blur, then the photography is extremely misleading and lacks trueness to the reality of the object. The interpretation of such pictures or photographs mislead the people from the reality and at this point photography becomes subjective.

In many incidences, photographs are altered to ensemble a certain criterion that the photographer understands best. The photograph may have an original content and that which subsequently gets altered linking to personal reasons. In the case that researchers and analysts access the modified version of this photograph then, there are possibilities of misinterpretations of the object covered primarily (Dinius 2012, 76). Modified photos have a subjective viewpoint of the original object and thus misleads in portraying the reality on that particular object, its lifestyle, movement, and features. In this view, photography affects and demeans true nature by reducing its objectivity to natural science.

With reference to Daston & Galison (2007), photographs were real until the invention of Photoshop techniques in the industry. Photoshop involved the manipulation of parts of a photo, or whole images captured different together merging and creating a new realistic outlook. Through Photoshop, the reality of photograph representation got manipulated and undermined over time. In this context, photography became subjective following the unrealistic representations in the photos (Daston & Galison 2007, 98). Photoshop deceive and are never real to entrust on as any image can be lifted into a new photo with other characters to make it look like its real while it's not the case. The representation of the real world, objects or people derailed through this artwork of manipulating photos and making them subjective and not real.

In certain incidences, photographers capture image rays at different scales and giving an almost falsifying portrait of the original object. Actually, in this cases the information created due to lack of consistent size of capturing image rays is false. Some parts of the picture tend to look bigger than others implying that the original image had the same features as a result. The portrait also represents that other parts of the object are smaller in size, yet that is not the case. This often leads to misjudgment and misperceptions about the real object captured. The images produced to create a different set of knowledge that may be farer from the truth or close but difficult to understand. Through this disproportional representation, photography has evolved to a subjective medium of representation and often considered to be weak in being objective to nature.

Photography has several picture styles used primarily before the photo work happens that alter the outlook of the original object and the background upon which the subject object stands. Some of the digital pictorial styles contained in cameras involve; monochrome, portrait, landscape, standard, neutral and faithful, among others (Daston & Galison 2007, 105). When the

photographer applies either of the techniques in the process of photography, then the image produced will tell it differently depending on the style used. Some of these styles create images that are close to reality while others are further away from the truth about the subject. A false representation of an object leads to a false interpretation and, therefore, a false scientific thought and knowledge about the given object.

Bibliography

Burge, T. (2010). *Origins of objectivity*. Oxford, Oxford University Press.

Daston, L., & Galison, P. (1992). *The Image of Objectivity. Representations*.

Daston, L., & Galison, P. (2007). *Objectivity*. New York, Zone Books.

Dinius, M. J. (2012). *The camera and the press American visual and print culture in the age of the daguerreotype*. Philadelphia, Pa, University of Pennsylvania Press.

Paldam, C. S., & Wamberg, J. (2015). *Art, technology and nature: Renaissance to postmodernity*.

Tucker, J. (2011). *Nature exposed: photography as eyewitness in Victorian science*. Baltimore, Johns Hopkins University Press. Second Edition.