

# Image Manipulation Practices Through the History and Evolution of Photography

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### Abstract

Etymologically, photography can be understood as an image painted with light, but in a more complex view, its definition has evolved from the analog processes used since its early days to the digital practices we witness today. Industrialization and new technologies applied to visual arts have affected the way people see these practices, have changed its values and pushed its boundaries, forcing artists and amateur performers to reevaluate the limits and possibilities of their disciplines to approach new territories through innovation and exploration. This paper is intended to make a brief description of the evolutionary process of photography from a historical and technical view, and the transformation of this concept, from the early analog cameras and systems in the 19<sup>th</sup> century to the digital advances in the 21<sup>st</sup> century, analyzing the idea of visual manipulation, as an inherent activity to the different cameras and technologies, based on the definition of photography as a form of art. Supported by the case of the Bang Bang Club and the artwork of Kevin Carter, this reflection analyzes different forms of visual manipulation, not intended as an ethical judgment, but as recognition of a constant phenomenon through the history of this practice.

### Keywords

Photography, Analog Photography, Digital Photography, Photojournalism, Photo Editing, Graphic Design, Advertisement, Visual Arts, Visual Manipulation, Image Manipulation.

### Introduction

Since its origination in 1839 the concept and the idea of photography, as a social, artistic and academic practice, has evolved with every new invention or advance. Industrialization and new technologies, applied to different kind of arts, have affected the way people see these practices, have changed their values and have pushed their boundaries, forcing artists and amateur performers, to reevaluate the limits and possibilities of their disciplines, to approach new territories through innovation and exploration.

Every new invention appears to affect a previous

practice or discipline. Just to name a few examples, photography apparently displaced painting, cinema seemed to displace theater, compact discs displaced vinyl records and in the last two decades digital photography displaced and reduced analog photographic creation to an extreme; it was a common belief that this practice was taking its last breath and had just days left to die.

Same as theater, painting, vinyl records and analog illustration, to name a few antecedents, analog photography has fought for its existence, finding a new place in society, as an artistic practice for consolidated artists looking for a specific style, grain, textures ethics and aesthetics, or aficionados, with a nostalgic approach and feelings for an old practice that seemed to be forgotten.

According to Archundia (2012), from a physical point of view; there's a strong connection between the photographic camera (analog or digital) with the human eye, which focuses and captures different images from its surrounding space.

On a deeper analysis, Archundia (2012) affirms that a picture can tell a story, express feelings like joy or sadness, bring back some strong memories or basically mean nothing to the audience. Therefore, although the picture can be considered as a visual construction, only the perception process gives the image its real value and meaning; as stated by the traditional refrain, the beauty and significance is on the eye of the beholder.

As expressed by Archundia (2012), photography captures a moment through time and space, and its composition and framing are inherent qualities, regardless the analog or digital process, the image only get its real appreciation, meaning and value, while being observed and appreciated by the spectator.

Following a similar direction, Chaparro (2015) considers photography as "...an instrument for the reproduction of frozen realities..." from family stories

to politic and violent events, describing the wide-ranging nature and diversity of this practice, which can be associated with assorted areas like art, graphic design, advertising or journalism among others.

As a whole, this research's purpose is to describe and analyze the evolution and reevaluation of the notion of photography, from different perspectives, approaches and points of view: Academic, conceptual and practical. This paper focuses on this conceptual evolution, exploring the wide range of definitions around it, understanding at the same time the action of manipulation as a permanent practice, same as an inherent and evolving quality of the photographic discipline.

### Historical Referents

Photography cannot be understood as a single invention, but as a series of findings, advances and discoveries, evolving from the *camera obscura* or dark chamber, studied by different scientists between the 9<sup>th</sup> and 10<sup>th</sup> centuries, to the digital full frame digital cameras, available these days, including chemical, optical and electronic related studies, leading this practice to what we have today.

As explained by Wooters & Mulligan (2010), photography as we know it, is born in the 18<sup>th</sup> century, from previous light-based processes and scientists like Étienne de Silhouette, Gilles-Louis Chrétien and William Hyde Wollaston, looking for a simple, accurate and easy way to create and reproduce portraits, based on the process of drawing contours or silhouettes from shades and projections of the human shape. All these drawing techniques, as the previous dark chamber, used light projection as support to recreate different shapes efficiently, but requiring in every single case some advanced artistic or drawing skills to generate these pictures.

With the discovery of photosensitive silver compounds, added to the dark chamber and other light based practices, two photographic systems were born: Niepce and Daguerre's Daguerreotype in 1839 and Talbot's Calotype in 1841. These photographic systems were improved through time, making it easier, closer and more accessible for people to get a camera and portray reality, essentially what cameras were initially intended for.

Amid the 20<sup>th</sup> century industrialization, a new debate was born about the cons and pros of handcrafted and industrialized production. Bhaskaran (2005) & Eskilson

(2011) explain this process, describing this confrontation between the Arts & Crafts movement, promoting and defending the value, the beauty and the character of the artisan's artwork over the serial, minimalist and reductionist production of the *De Stijl* style, bringing to the table a never ending argument about art and technology, a debate that has evolved during the last centuries, from the effects of industrialization on artistic production to a debate between analog and digital technologies, which is not about photography exclusively, but music, design, illustration, etc.

From its early days, photography had a merely representative and figurative purpose, capturing and exposing a physical reality, from landscapes to human portraits, with a totally realistic and precise approach. Meanwhile this technique was growing, evolving and becoming more accessible, previous fine art expressions like drawing or paintings were displaced by these new technologies. A similar phenomenon could be witnessed years later with the invention of cinema, displacing theater and other performing arts, records displacing live performers, digital recording displacing analog recording processes or digital photography displacing the analog process throughout the last decades.

### An Evolving Concept

As explained by Fontcuberta & Costa (1988), etymologically speaking, the concept of photography comes from the key words *phos* (light) and *graphein* (trace). So basically, the authors remark the importance of light capturing in the process of making a picture, defining it as a "Graphic made with light" and assuming this last element, as the substance and "...physic action produced over conveniently prepared and light-sensitive surfaces".

The Royal Academy for the Spanish Language RAE (2015) used to define photography as the "Art of fixing and reproducing by chemical reactions, over conveniently prepared surfaces, the images captured in the back of a dark camera". This concept seemed to be outdated and not coherent with the new technologies and digital processes, dominating the discipline since the early 2000's. By 2016, this definition was reconsidered and adjusted, to keep up with this new form of graphic production and pointing reality as constitutive factor of the process, describing photography as a "Procedure or technique that allows to obtain steady images of reality through the action of light over a sensitive surface or

sensor” (RAE, 2016). Another traditional definition can be found on The American Heritage Dictionary (2013), describing photography as “The art or process of producing images of objects on photosensitive surfaces”, similar to the original previous concept proposed by the RAE. This concept was eventually and necessarily revalued on dictionaries and related sources, understanding that photography as a technical practice, had evolved and renewed, as new technologies were available.

New Webster’s Dictionary (2010) defines photography as “The art or process of capturing images, either on lightsensitive film or electronically in digital form, from which viewable pictures can be produced; activity of someone who uses a camera”. Definitions for this discipline have evolved from the traditional and outdated concept of photography as an exclusively chemical and optical process.

For Freeman (2005), digital photography throws away the idea of a “flawless honesty”, formerly attached to the analog process, thanks to its realism and accuracy, but allows an easier technical exercise and faster copying process, cutting down costs, reducing materials and democratizing the discipline.

Despite the fact that it was already possible to improve or enhance the quality of the pictures by analog and chemical laboratory processes, technological improvements like digital design software, photo-editing tools like Adobe Photoshop or Light Room, added to the mass production and technical rise on digital cameras, lead to a new wave of image manipulation, specially applied to advertising, product photography and fashion photography, controversial and habitually debated in recent years, partly due to the intentional alteration of reality, regarding the size and quality of food products and the almost unreachable stereotype of a perfect body, particularly on teenage women.

During the last decade, improvements in smartphones, mobile devices and photography apps, have helped popularize this practice, allowing users to edit, modify and manipulate pictures easily, with no need for any studies or intricate software.

Supported by a series of academic practices and learning activities, Chaparro (2015) remarks the importance of traditional or analog techniques to highlight the value of photography as an emotional experience and potentiate the digital production in different areas by a stronger comprehension of fundamental concepts associated with creativity, storytelling, color, form and light.

According to Freeman (2008), the quality of a picture goes beyond the technical advances and inventions, considering a strictly necessary equilibrium between technology and sensibility and supporting the idea of a teaching for the discipline, based on composition, framing, lighting and graphic design basics, instead of an education focused on digital tools and software like Photoshop or Light Room, just to name a few, leading to reinforce common conceptions like photography understood as a computer based exercise, an act of manipulation, and even an easy task, which takes no more than some editing skills, without theory or a formal education involved.

Fontcuberta & Costa (1988) propose the concept of *Fotografismo* (Photo-graphics) to characterize the interventional process to combine, manipulate and modify the photographic image, according to a free expressive finality and a specific message that it’s going to be communicated, mostly as a form of art. As explained by the author, it’s necessary to tear the term apart from the concept of *Foto-diseño* (Photo-design) in which the photographer and the graphic designer join forces and give birth to a new graphic project. These different applications have in common the use of photography with communicative purposes, but in the first case there’s an alteration of the picture, justified by its expressive finality.

### **Manipulation Through Editing, Concept and Composition**

According to Fontcuberta & Costa (1988), photography has evidenced an evolving nature, opposed to the original idea of the discipline as a faithful portrayal of reality. This new determination attempts to modify reality, displaying new aspects beyond the evident and identical exposure of the environment. Alteration of reality by framing or decontextualizing can be considered wrong or inappropriate, according to disciplinary or ethical standards like the National Press Photographers Association, NPPA’s codes. Despite these varieties of regulations, photographers’ artwork and behavior are not restricted or censored.

The NPPA (2016) insists: “Be complete and provide context when photographing or recording subjects. Avoid stereotyping individuals and groups. Recognize and work to avoid presenting one’s own biases in the work”. This concept could be debated and could become subjective, assuming that the practice of photography,

specially as a way to register and capture reality and social subjects, inevitably implies a framing procedure where the artist or journalist, according to his personal decision and vision, reunites certain items or actors into one whole composition, possibly leaving other elements outside to create a visual concept, to express a feeling or an idea.

As a part of its Code of Ethics, this organization has pronounced related standards to be considered, such as:

- Be accurate and comprehensive in the representation of subjects.
- Resist being manipulated by staged photo opportunities.
- While photographing subjects do not intentionally contribute to, alter, or seek to alter or influence events.
- Editing should maintain the integrity of the photographic images' content and context. Do not manipulate images or add or alter sound in any way that can mislead viewers or misrepresent subjects.

Bacon, as cited in Panzer (2007) proposed: "The contemplation of things as they are without substitution or imposture without error or confusion is in itself a nobler thing than a whole harvest of invention" (p.9). Even though Bacon produced his writings centuries prior to the invention of the first photographic systems, this particular statement has become a consistent quotation through different texts and disciplinary approaches, almost as a credo, to remind us of the importance of honesty and ethics inside a discipline, where manipulation and alteration of reality becomes a debatable subject during its almost two centuries of history, regarding digital and analog editing or other forms of manipulation through framing, staging, composing, etc.

For Barthes (1986) photography and visual arts have a denotative aspect, regarding the image itself and the evident composition elements of the picture, and a connotative aspect concerning the meaning, ideas and feelings, perceived by the audience. According to this author, this concept only applies to "artistic" photography, excluding photojournalism from this specific category. This statement could be understood as a disciplinary separation, rejecting the idea of any artistic or subjective intervention in the practice of photography, as a social, reality-exposing tool, with no place for second messages or hidden concepts.

As expressed by Barthes (1986), the idea of

photography as a totally objective and denotative practice, could become "mythic", as this discipline is in risk of becoming subjective, considering press photography as a "chosen, composed, prepared and processed object, following professional, aesthetic or ideological rules, turning into connotative factors" (p.15). While photojournalism is expected to be totally accurate, denotative and objective, the human intervention and the idea of the picture as a message to be read by the spectator, make this expectation almost utopic.

As stated by Fontcuberta & Costa (1988), long before digital editing procedures, there were European artists like Futurist and Dadaists exploring different forms of manipulation like collage and montage, embraced by his concept of *Fotografismo* and the *Mec'art* or Mechanical Art, that spans across different photography and printing related practices.

Beyond the technical process, it has to be considered an intellectual operation that expands the possibilities of the device itself and seizes the human practice of abstraction; an exclusively human and mental process that uses the camera as a medium to elaborate a subjective and artistic approach to the material world around, a world that can be and must be explored, described and reconstructed by the vision of artists, journalists and photographers in general.

### **The Bang Bang Club**

From 1990 to 1994, Kevin Carter, Joan Silva, Greg Marinovich and Ken Oosterbroek, a group of photojournalists AKA the "Bang Bang Club" witnessed and captured the horror, the violence, the sadness and the humanitarian tragedy surrounding the civil war in South Africa, prior to Nelson Mandela's presidential election.

In 1991 and 1994 respectively, Marinovich and Carter were awarded with the Pulitzer Prize in recognition of his graphic work during that period. In the last case, his winner picture's main character was a little child chased by a vulture, causing a big controversy when the media and general public inquired about the child's fate and the actions taken by the author to help her, as described by Marinovich & Silva (2000). Debates, questions and criticism surrounded the award, judging Carter's behavior and questioning the journalist's role in the middle of tragic and violent events.

Maybe what makes a great picture is one that asks a question, you know? It's not just a spectacle, it's more

than that. I think mine was like that, and Greg's too. You go out and you see bad things, evil things, and you want to do something about it so what you do is you take the picture that shows it. But not everybody is going to like what they see, you have to understand that they might want to shoot the messenger (Carter, as cited in Lang, 2014).

In 1994, when asked about what would he consider to be a good picture, Carter highlighted two polemical examples; Marinovich's and Carter's Pulitzer awarded pictures, exposing the horrors of the civil war and hunger crisis in South Africa by the early 90's. These photographs brought a controversial debate to the table, regarding the responsibility of the photographer and his role within tragedies, emergencies, violent conflicts, disasters or humanitarian crises.

The NPPA (2016) recommends: "While photographing subjects do not intentionally contribute to, alter, or seek to alter or influence events". Although, when Kevin Carter made its famous Pulitzer winner picture, he tried not to interfere or alter the scene itself, through framing and composition he created a particular and subjective representation of reality, grouping these specific characters into the same picture, isolating the whole situation from a bigger and affecting context.

Carter's picture, beyond his actions and responsibility, could be analyzed from a different angle, considering that the journalist frames and captures two separate and particular elements like the child and the vulture, extracting a subjective vision from a wider scene and from a specific reality, decontextualized in time and space. Apart from the photographer's actions, when Carter took its famous picture, he included some elements and left others aside, focusing on an apparently fatal event, ignoring the events and context surrounding, which could affect the whole story and the picture's connotation.

Archundia (2012) considers photography as an arbitrary practice, while the objective nature of photography seems to be affected by two factors: the technical elements and the artist's intervention. The visual range becomes unavoidably limited, contrary to the human eye and the graphic result is restricted and determined by the photographer's own vision, framing, angle, focus, emotions and interests; even the decision itself, to frame specific elements and making a picture, becomes a form of manipulation. Within the concepts exposed by the author, considering the human factor

as an inherent and primary aspect of the photographic production, the idea of an altered, processed or intervened image, turns out to be recurrent and unavoidable, almost normal, separate from the kind of process involved, whether it is analog or digital.

## Conclusions

Throughout its history, photography has been developed from its complicated black and white rudimentary origins, with low-quality results, to the modern high-definition production available these days. As an artistic and social practice, this discipline has evolved on a technical and quality level, making it easier to capture, improve, manipulate and print or even publish different sorts of products, thanks to social media advances, apps and mobile devices.

During almost two centuries of discoveries, advances and improvements, photography has hugely evolved technically and creatively from its analog bases to the digital process, which dominates the graphic production today. As a part of this evolutionary process, visual manipulation has been a fundamental practice, inherent to the discipline. It doesn't necessarily have to be interpreted as a wrong or unethical practice, but as an essential quality that must be considered as a parameter for self-regulation in the capturing and editing process, concerning reality, as a matter of respect for the truth, the objectivity, the audience and the journalism or advertisement profession.

As a form of expression, it has been popularized and democratized, allowing common people or amateurs to get a camera and create original high-resolution material, on a low budget in a short time.

Popularization and democratization processes, tend to devalue photography as a professional and artistic practice, while being so easy for more people to exercise, create and offer their services, without a theoretical foundation or basic knowledge about optical, chemical, compositional or formal concepts.

Understanding photography as an art form, subjectivity becomes an inherent quality within this discipline, therefore, this practice involves a human and expressive factor, which inevitably affects the visual result and becomes a personal interpretation of a surrounding reality, affected or interpreted by the author, who observes a series of elements, individuals and situations, as a part of an environment, but not necessarily including the context as a part of the final



product. The decision of shooting and the process of framing, necessarily involve a personal vision of the artist, photojournalist or general photographer.

Even though there was always an unquestionable honest quality attributed to the practice of photography, there has always been some kind or level of intervention or manipulation involved in any form.

From the individual and subjective decision of capturing certain scene or moment at some specific context, the act of framing or focusing selected characters, actions and elements, allows the photographer to reflect, comprehend and manipulate his surrounding visual environment and express his point of view, in relation to the world he sees.

Considering Kevin Carter's artwork as an example, there's got to be considered that, photographer's decisions, points of view and personal interests, are going to influence and affect the graphic result, not necessarily with a manipulative purpose but creating a restricted or framed portrait of reality, which in the worst scenario could easily be misleading to the observer and used as a scamming tool for dishonest ideals and agendas.

Different authors agree about the subjective or arbitrary nature of photography and its connotative dimension; it's up to the photographer to be responsible about his creative exercise and to the spectator to be critical and analytical concerning the images he observes through the mass media, art displays and different supports or formats.

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