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The Influences of Digitalization Technology on the Essence of Photography

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Abstract: **Based on the theory and practice combination of methods, emphatically from the relationship of photography and technology, analyzes digital technology in the change of the photography invent the authenticity, rich photography creation technique of expression and fuzzy photography creation of professional limit and so on the impact of photography creation, from the main ideology and cognitive aspects steering Angle analysis photography formed social causes, this paper reveals the development of digital technology on the contemporary photography creation important significance to help better understanding the photographer photography art, understand the influence of digital technology on photography in constructing the important role of Chinese culture.**

Keywords: Photography; Digital technology; Influence

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1. Introduction

Throughout the world photography art history, photography has been passed 173 years of glorious experience, from strife-torn to record the real question, from the objective returned to a virtual formation, photography as a kind of art form of expression never stop development and innovation steps. Into the digital age, digital technology on photography creation has had a huge impact its far more than the photography in the history of any a breakthrough and innovation. Since 1990, in particular of the ten years, digital camera technology rapid development makes digital equipment permeate all aspects of the photography invent, caused the photography creation comprehensive and profound change [1-2].

The digital image technology is developing quickly as a flash of lightening. During the digital times, the field of such subjects as painting, photography, cartoon, video, graphic design, sculpture and performance art, conceptual art is becoming more and more unclear, and they can offer the source material for each other and arouse the inspiration from each other. Possibly in the near future, image art will incorporated digitally into a new comprehensive art field.

Photography, painting, design, cartoon and other image art and digital technology are all incorporated under the digitization. However, as a pioneer, photography is influenced greatly, to which the digitization brings great revolution, which updates the photography equipment and technology, improves its idea and concept, and even influences greatly its recognition by people. These years the topic of relations and influences between digital technology and photography has been focusing and discussing among the photographers, scholars and the public. This paper is aiming at stating and comparing these complex topics from a practical and significant view, managing to find out the new views of the influences between digital technology and photography, thus arousing peoples' interests and inspiration.

Figure 1. Comparisons of photos processed by digital technology.

Photography is a combination of art and science. Its artistic language style and features will be influenced by the progress of art and science. Cameras used by photographers are constantly updated, photography and the techniques of photographers are unceasingly enhanced, the aesthetic ideas of photography art creators and appreciators are constantly changing, the social fife and natural phenomena reflected in photography are also changing, not to mention the subtlety in the expression of thoughts and feelings, so, a delicate work of photography is a combined product of the subjective and objective sides of an artist, as well as the collision of art and science. This combination is produced at different time and space, thus of endless changes, and produces different temporal and regional characteristics. In the digital age of photography, digital

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images based on science and technology have become the mainstream and taken the place of previous silver film. As a result, the language of digital photography also demonstrates some new artistic features.

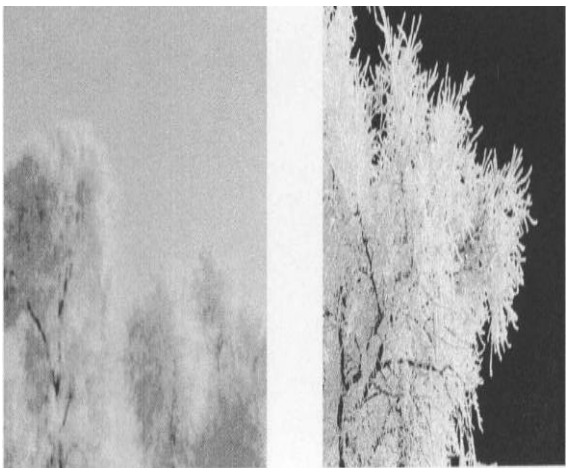

Figure 2. Partial screenshot.

2. Comparison on the Basic Aspects of Digital Photography And Traditional Photography

The contents cover the relation of working procedure between digital technology, esp. digital video technology and modern photography technology, the influence which the digital technology and digital culture bring to photography, the influence which the update of digital times and digital technology bring to the photographers' community and the spread, communication and the comment of photograph works, and the application of digital image technology in different communities. This paper will also compare the updates of technology procedures which the digital image technology brings to photography equipment and photography through reviews the traditional photography technology in 200 years. By hearing and seeking the materials and departing the levels of photography, e.g. the natural differentiation of photography filed (Humanities geography photography, portrait photography, news photography, and conceptual photography, etc.), this paper will research on how the digital image technology applies when photographing, what influences the digital image technology bring to the practice of photography, analyze how the photography is influenced by the digital times in different photograph activities of different photograph communities, how the photographers evaluate the digital image technology and how they develop their own photography value under the influence of digital technology, and reveal and research the influences which the update of the digital times and digital technology bring to photography communication and evaluation system by observing the application and feedback which different photography organization system (academicism, network photography, underground photography, technological photography, experiment photography, etc.) bring to the digital technology.

Figure 3. Continuous movement of the fixed position continuous shooting.

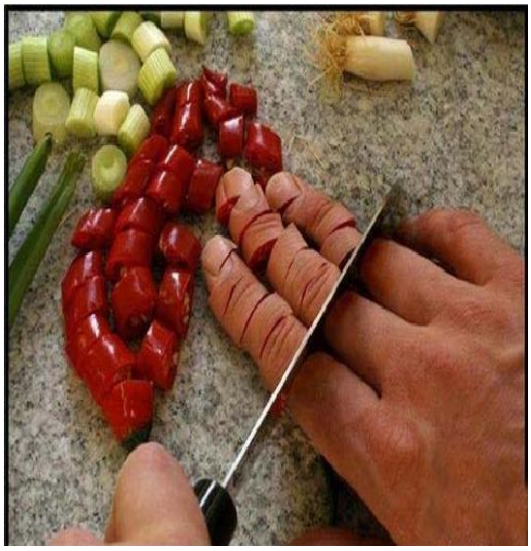

Figure 4. On the traditional photography technology reform.

The full text is divided into six parts. The first part is the introduction, and sees the topics proposing, expatiates the background, the domestic and international research current situation and level, research purpose and meaning, the research methods and research content and framework. The second part is photography and technology of theoretical analysis of the relation between, the paper introduces the process of creation and photography in the process of the development of technology and the mutual relationship, and the effect of technology on photography development. The third part is elaborate digital technology to photography creation concrete influence of three aspects, namely change the authenticity of the photography invent, rich photography creation technique of expression and fuzzy photography creation of professional limit, the comprehensive mining digital technology to photography creation influence depth. The fourth part is based on the above detailed narration, from the main ideology and cognitive aspects analyzes

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the digital technology under the influence of the photography invent social causes. The fifth part is to explore the development of digital technology to photography creation important meaning, and the concrete from digital technology to the important rode of photography creation and digital technology to the influence of photography in constructing the Chinese culture important role on two levels analysis. The sixth part is the conclusion.

3. Macro Perspective Influences of Photography by Digital Times

3.1. Influence of Basic Procedures Of Photography Brought By Digital Times

Artistically speaking, photography is mainly elucidated by light, lines, color and etc, with graphic arts modeling language expression of feeling, stereo feeling, simple sense, form to the creation of sense to borrow image, so as to express the thought of creators and theme of photography. On the one hand, digitalized image in the new era improves the scientific and strictness of photography, makes digital photography more quick, scientific and strict. On the other hand, digital photography, though more simplified, is more scientific and strict, therefore we must have a full understanding of and be ready for the learning and development of photography.

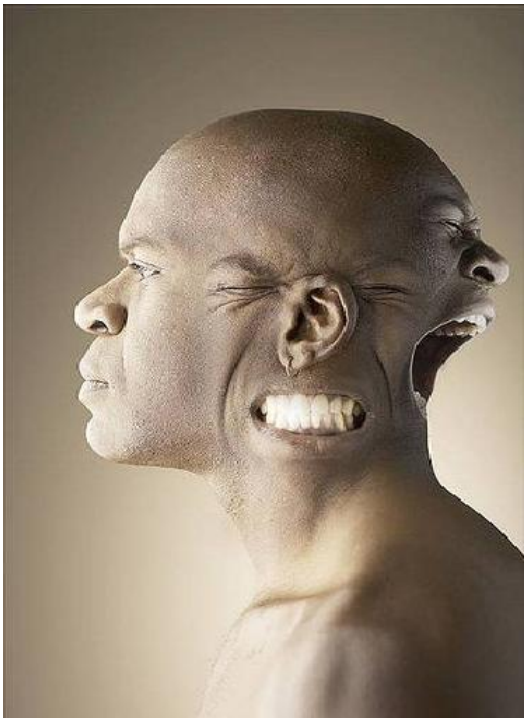

Figure 5. Graphic Editing and Machining.

3.2. Influence of Cognition and Category of Photography Brought By Digital Times

Through an analysis of the design language of digital photography, this thesis tries to explore the culture meanings and thought behind the language. It makes a comparison and contrast of the art language of traditional and digital photography so as to gain a better understanding of the art language and skills of digital photography, especially digital image processing computer skills, and thereby better highlight the theme of photography.

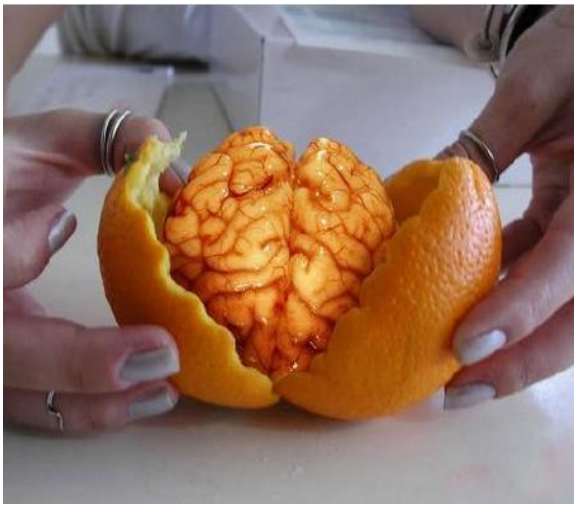

Figure 6. Digital graphics processing.

4. The Typical Application of Digital Technology in Photography Practice and Technology

Figure 7. Natural beauty into artistic beauty.

In history, photographic art can be traced back to six million years ago when the first human footprint

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appeared in Africa. Primitive art came into being with the development of men's activities. However, painting took up the major part of photography since then due to the underdeveloped productivity. Although it achieved its new height during the Renaissance, the concept and practice remained almost the same as before. The technique of expression is especially the case, which lacked any leap in its development. Since the dawn of the Industrial Revolution, modern technology marched forward which in turn boosted social productivity. New technologies like physics, chemistry, mechanics and electronics brought a huge impact on the art of photography and changed this art form dramatically.

Figure 7. Improve the degree of automation.

With regard to the technique of expression, modern technology created the new form of art called photography. People have obtained one more vivid and specific way to observe and record our world apart from painting. What's more, with the rapid growth of science, tools and equipments used for photographing become more and more mature and the barriers which used to hinder the development of this art have been swept away. People now have an unprecedented power to see the world with greater depth and width. “Nothing couldn’t be seen unless you don't want to." Our suspicion rose about watching itself after we had the gift of watching. Which directly led to the change in people's views on the world, values and artistic ideas, some even reversed. In photographic art, these transformations brought about many individuals and organizations with different standpoints. Their existence promote the diversity of photography, by providing us specific, touching, imaginative and inconceivable works which makes us observe this world with higher altitude exceeding our time and dimension. At the end of the 20th century when we have entered the electronic era, photography is beyond our imagination. Many “impossible” have become possible. The boundary between reality and virtual has become obscure. So it is with photography. In this time with endless possibilities, it's worthwhile to study the future of image.

This paper tries to study the influence of modern technology on photographic art with empirical research. First, study the role of technology in offering help to the birth and growth of modern photography by analyzing historical facts. In the meantime, demonstrate that the technology ensure the possibility and diversity of studio art. Lastly, by studying the latest techniques in processing image we can draw a conclusion that technology makes photography a reality and ideology after appreciating photographic works in turn affects the direction of the development of technology.

5. Conclusion

The author believes that in the digital age brought about by the photography technology revolution ago, photography creation will break through the photography nature language expression, the new photography context will continue to construct and promote photography art as the future society visual culture main force, and continuously for the visual culture heritage and communication to make more contribution, further consolidate photography art in Chinese culture in the construction of the special social status and artistic value. At the same time, we should realize soberly, due to the concept, cognitive and the quality of their own the photographer many reasons, digital technology and photography creation of evolution will be a long-term gradual process, so to do well the long-term development preparation.

Acknowledgments

Philosophy & social science research project of Jiangsu university project 2016SJD760010.

References

[1] http://www.ionly:com.cnlnbo/zhanlan/pic24542.
[2] http://www. miaoxiaochun. coxn/zhuye.htm
[3] http://fotomen. cn/2011/10/sencuntai chang/
[4] Lawrence Rainey. Futurist Photodynamism by Anton Giulio Bragaglia. The Johns Hopkins University Press, April (2008) 363-379.

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