

# Analysis of the Role of Science and Technology in Photography Art

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**Abstract:** The development of modern science and technology has played a huge influence and driving force on the art of photography. In fact, science and technology has had an impact change on all fields, and the same is true in the field of art. The progress of science and technology has brought unprecedented impetus to the development of photography art, and innovated the photography art form. Under the background of the continuous development of information technology, photography art is facing the development wave of integrating media and new media. It is necessary to strengthen the promotion and integration effect of science and technology on photography art, and promote the vigorous progress and development of the photography industry. This paper focuses on the role of science and technology in photography art, hoping to provide some reference and suggestions for relevant personnel.

## 1. Introduction

The art of photography is actually a combination of science and technology and art. Since photography was invented, photography itself is full of controversy and discussion, mainly related to the relationship between science and technology and art, many experts and scholars have pointed out that technology and photography art is separate and cannot use language to define, because although modern photography is through science and technology form capture of nature, but the main function of technology is only on tools, and photographer subject consciousness is the main carrier of art. Another part of scholars think that the above inference is the representative of idealism and metaphysical error, if leave the science and technology, photography art cannot use specific tools to operate and express with composition, this is a kind of discussion and refutation about photography technology and art, it is necessary to make the relationship clear and discussion, understand the specific effect of technology in the photography art.

## 2. The Relationship between Science and Technology and the Art of Photography

The relationship between the art of photography and photography can be described as the following: from the source and origin of art and the role of technology, It can be found that technology and art can not be truly divided into two people, And just combine closely linked together to use the good, Through the subjective creation of photographic art and the objective application of scientific and technological principles, You can produce a real photography industry, Because photography itself is formed based on science and technology, The focus of photography art is the objective prominence and subjective performance of artistic works, In the relationship between the two, The art of photography is the content, And photography is the form, Like the relationship between the human mind and the brain, The human mind is stored in the human brain, We must proceed from the perspective of materialist dialectics, In order to grasp the role of science and art in photography art, Grasp the dialectical relationship between the combination of the two well, Specifically, the following summary can be made: the first aspect, There is realism and noncertainty between photographic art and technology. Non-certainty refers to the instantaneous expression of most sensory photography, Objective authenticity refers to the art of photography will produce a certain visual illusion, But there is no denying that the outstanding features of photography are immediacy and authenticity, If the photography does not have the authenticity,

Then photography is no different from artistic painting, The state of photography cannot be preperformed, Everyone has the time to get the natural moments in the process of shooting, From this perspective, What happens in every minute, second, and moment is true; The second aspect should grasp the reality of art and the reality of science and technology, And the authenticity of art is mostly focused on the objective performance of artistic works, Shooting with this technical method can improve the human spirit, Thus to get a good emotion, This subjective elements obtain the real realm of the artistic level through objective expression, It's exactly what an artist has to capture with the camera. As for the knowledge of science and technology, points to the science under the principle of the real content, from this point of view, the Angle of transformation can turn controversial contradictions into a body, a combination is also the use of dialectical materialism philosophy, is beneficial to people grasp the essence of the art of photography<sup>[1]</sup>.

### **3. The Role of Science and Technology in the Photographic Art**

#### **3.1 Change the Artistic Concept and Self-Positioning of Photographers through Photography Technology**

Under the impetus of photography technology, the photographer can absorb nutrients in the traditional photography thought and photography history, the nutrients is common span, in addition to can absorb the nutrients of the traditional Chinese culture, can also from the western abstraction mining value of art, with a more unique perspective of works of art. In the era of traditional media, photographers are usually a third person independently outside of the work, capturing and making a concrete presentation of the outside world from an absolute and objective perspective. However, under the background of the continuous development of information technology and photography technology, the role of the photographer has been relocated, photography concept has also been great changes, photographers can usually serve as the first person and first perspective deeply combined with their own photography, so that it can make the subtle relationship between photography and photographer is changed, also can comprehensively improve the value and appeal of photography<sup>[2]</sup>.

#### **3.2 Using Photography Technology to Change the Photography Methods**

Under the background of traditional photography technology, it is also the key way to ensure the presentation and quality of the photography works, to express the connotation of the works. However, with the advent of multimedia technology and advanced photography technology, photo printing is too troublesome, and it is gradually replaced by digital printing and digital cameras, so photographers can devote more time and energy into the creation and shooting of new works. In addition, in the new development of photography technology can break through the traditional image simple capture way, in the specific external things camera, in the form of superposition presents a stronger visual impression and impact, the photographer's photography concept has changed, also refresh the traditional photography methods and technology, with a more clear lens record the objective world.

#### **3.3 Improve the Photography Technology to Make the Photography Art More Popular**

In the era of traditional photography technology, due to the expensive photography equipment, technical shooting is more complex, which makes the photography industry become one of the industries far away from the public. With the continuous development of modern new media technology, photography is no longer a mysterious and new thing, nor is it an art form within the ivory tower, as long as there is a smartphone with a camera, and enter the world with simpler methods and means. More and more high definition camera has walked into the families, no longer need professional Angle regulation and large shooting device as support, the progress of technology promoted more and more photography enthusiasts joined the industry, some areas even organized amateur photography competition, attracted a new generation of young people to join them, the young people will become the change of photography art and the further development of

photography technology<sup>[3]</sup>.

### **3.4 Develop Photography Technology and Reform Photography Education**

Under the background of the continuous development of photography technology, the new media period of colleges and universities to photography teaching also made important reform, increased the new shooting skills teaching, the teaching can break through the traditional photography and shooting Angle, from the perspective of new technology fusion under the regulation of science and technology change teaching obtained a higher level. Such as students can master the new techniques, adjust the shooting perspective and color structure, make the layout of the whole picture to adapt to contemporary artists aesthetic habits and views, it also fully reflects the modern shooting techniques of professional teaching change, the change not only floating form, a mere surface, is a kind of deep development and change.

### **3.5 Future Development of Photography Technology and Photography Art**

Under the influence of photography technology, the future photography art industry will certainly get diversified progress and development. First of all, the diversified development expression of photography works is improved. In the future, in addition to professional photographers, more hobby players gradually emerged, with the continuous influence of new media communication advantages and professional photography equipment, people capture outside information shooting means more and more clever, such as abandon the traditional system shooting equipment, smartphone can also do ideal works, diversified photography technology including 3 D photography, panoramic photography, audio and other new forms, the development of these technologies make modern photography and form more tension; at the same time, the development of photography technology can comprehensively improve the authenticity of art. On the one hand, this authenticity emphasizes the scene of the shooting, the real shooting, but also related to the post-processing problem after the shooting of the work. Generally speaking, photographers will connect and edit the previous shooting content in the process of post-processing, and improve the artistic appeal of the works in the way of reconception. With the continuous progress of photography technology, the post-processing technology is also constantly innovating. In addition to the common ps technology, the overall effect can also be eliminated and rearranged.

## **4. Conclusion**

To sum up, the development of science and technology is crucial to the development of photography art, and has played a good driving effect. Through photography technology, it can change the traditional artistic concept of photographers, change their self-positioning, change the method of photography, and make the photography art more popular and easy to be accepted by the public. At the same time, the development of photography technology is conducive to the reform of photography education.

## **References**

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