

To investigate the impact of technological development on photographic art

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Abstract—The progress of era and development of science and technology will help nurture the art of photography, but also promote the diversification of forms of artistic expression. Range of contemporary art photography is extremely widespread, such as advertising, movies and 3D images, etc. This paper describes the modern technology to break the limitations of the art of photography, but also contribute to its development, thus forming a new diversified photography.

Keywords- modern technology; photographic art; impact

I. INTRODUCTION

Photography is the process of reflecting the true picture on the plane with the use of scientific principles. The art of photography is a form of plastic arts, mostly reflecting the social life through the use of camera to express inner thoughts and feelings. According to this art, artistic photos can be formed through the technology of darkroom. Making use of modern technology can constantly update the technology of images, automatic focus, exposure have laid the development of the art of photography.

II. MODERN TECHNOLOGY BREAKS THE LIMITATIONS OF THE ART OF PHOTOGRAPHY

Modern history of photographic art as a technological development history, has the common trend with improvement of society and productivity. China has stressed that science and technology are primary productive forces, the development of science and technology has promoted social progress at all levels. The art is the most representative aspect of social events, a small technological development will have a huge impact on the arts, and even involve in all aspects of art. The exhibition of art makes us be fully aware of the world, see the world but also to reflect and enlighten the changes happened in the world.

In the primitive society, people show the charm of art by recording the cave murals, as well as describing on the practical utensils, decorating pattern on the ritual. But media art occurred great change, and therefore it has developed. This art medium has changed from a fixed place to easy to carry and move, this change also makes the development and improvement of viewer, change their mindset from worship becomes appreciation. Modern technology is the cradle and nanny of modern photography, is the premise of the photographic art. The art of photography will fundamentally change our status and position, our vision and concept of time and space will rise to unprecedented heights. Our

original desire for watching also promotes human technology to increasing perfectly, until now, the concept of the main character had been higher than the difficulty of skills, and imprisonment of our mind to some extent sometimes has been the biggest hindrance of modern science and technology. On some level, the art of photography is the golden key to break the detention, is the driving force of human society to carry out much deeper.

The perfect reproduction capability of photography make the painting almost extinct, then have another opposite way different from photography: from Cézanne - Picasso - Mondrian, is the development vein of rational, abstract context; from Van Gogh - Matisse - Kandinsky, is the development track of sensitive and inductive performance. After the transformation of modern Western painting, there has been developed in parallel with the two clues: abstract rational and emotional performance. After abstract expressionism paintings, pop art, super-realism, to some extent, is a photographic duplication or retaliation. Klose is probably the most authentic super realist painter, his picture while converting information into the language of painting, fully exposed the weaknesses of photography. Despite camera lens are increasingly sophisticated, but in most cases is still not as sensitive to the human eye, the photographer's focal length, if aligned with the nose, eyes and mouth will be not clear, but the human eye when viewed through the scanning order, can continuously shift the focus, adjust the focus so that the focus is aligned in different places respectively. Klose unceremoniously reproduce these limitations of photography with the form of paintings, which can be a challenge of painting to photography, but also the last fight of painting. After the super-realism, painting was gone from the shelves, replaced by a conceptual art, performance art, installation art, land art. However, photography continues to absorb nutrients from other art forms, learn from experience, to explore the potential, combined with its high-tech advantages, and finally flourished: subjective photography, conceptual photography, self-shooting developed. On the other hand, the concept of photography as the process of recording and reproduction of an art, performance art, installation art, land art, in the unique way participated in the avant-garde art to become a part of the avant-garde art, which is far behind the painting.

III. RECONSTRUCTION OF THE CONTEXT OF PHOTOGRAPHIC ART

Before digital technology appeared, early in the creative process of art photography, photography creators need to shoot through their own technology to create their own art context. This includes the creation of photographic expression, the level of technical means, darkroom processing techniques and so on. Digital photography art through digital technology replaces the context of the creation of the plot above the art of photography in the composition of pure art, with pre-shooting, based on production for future upgrade, re-architecture photography art context, highlighting the artistic value of a deeper photography and ideological connotations. The magic and broad of digital technology made artistic language form of photography grow unprecedentedly, these art attacks like mixed montage, temporal dislocation, spatial displacement, reverse thinking, realistic fiction, and absurd, can be achieved with the support of digital technology. Variable and diverse digital images collapse the structure of the traditional context of the art of photography, so to reconstruct the context of the art of photography, photographic style also get continuous innovation and re-creation.

and Agriculture Agricultural photography has had a relatively comprehensive, vivid description on agricultural development and situations which have historical significance of agriculture, and the relationship between agriculture and the agricultural environment, so that the description of the object can get attention and correct understanding. Agricultural science photography as a category of photography, has a certain degree of particularity and representation. Under normal circumstances, agricultural photography has covered a wide range of scale including agricultural production, construction, agricultural technology, agricultural advanced collective model figures. Most of the agricultural production is in the wild open air, the photographer should be familiar with the whole process of agricultural production, and select the appropriate season and expressive scenes, characters. Agricultural photography makes services for agriculture, reflects the situation of growth, development, and other situations of crops or livestock, poultry, characterized by accurate, timely and complete record of the entire cycle. If you seek to show panoramic agricultural work, high-angle shooting mode can be taken; while shooting wide-angle lens can be used in indoor.

IV. SCIENCE AND TECHNOLOGY CAN PROMOTE THE DEVELOPMENT OF PHOTOGRAPHIC ART

After the birth of the art of photography in 1839, people have seen the most clear and objective entity of photography in human history. This objective new tricks got a great concern at that time. Since August, 1839, Daguerre photographic method has quickly spread throughout the world. This conveying speed and breadth of the art of photography is inseparable with the rapid development of optical, chemical, transportation, product manufacturing, and

other areas carried out by modern technology. The art of photography is the most fanatical in Europe, after Daguerre photography Law released a few weeks, Europe mustered the climax of study and application of Daguerre law.

Photography can be divided into two major categories: art photography and technology photography. The most complex content is technological photography, including medical photography, photography samples, metallurgical photography, infrared and ultraviolet photography, criminal photography, astrophotography, photomicrography, a remake of photography, zoom photography, and so on. Faced with such a complex shoot content, presenting a taxonomy can make things simple, easy to learn, it is more conducive to technological mastery and use of photography. Technology photographic often uses sophisticated equipment, such as bellows, then circle, microscopes, telescopes. Use of light are also many, such as natural light, light, infrared, ultraviolet depending on the size of the subject. From which aspect can we classify the technical characteristics and relationships with each other in technological photography? I think that taking the size of the object (ie, subject to its negative image on the ratio of the size) as a classification standard will better explain the technical characteristics and interrelation in technological photography. Because different subjects have different ratio of size, photographic equipment and imaging methods used will be completely different when shooting. According to the ratio of the size, technology photography includes ordinary photography, close-photography, zoom photography and photomicrography. Photomicrography can be divided into ordinary photomicrography, electron microscopic photography. More details of the differences can be seen in the Table below.

The important role of digital technology for creative photography

V. TO PROMOTE THE MODERN CONCEPT OF PHOTOGRAPHY

Traditional photography as an art form, expresses the objective truth of the creation of the object in the creative process, and appropriately integrates subjective thoughts and emotions of individual creators through the details of the optimization of photography. Digital photography is not rigidly adhere to the photographic equipment itself, the works convey the ideological early having no connection with photographic equipment. Since the creation of the field of digital technology, it has continued to intervene photography and creative ideas of photography began to constantly change, thus forming the characteristics of modern photography. First, modern photography respects photographer's psychological feeling more than before, focuses on the real psychological reconstruction process. Secondly, the photographers in the photography creative process, focus more on the formation of personal style and characteristics, eye-catching visual effects become the target of modern photography and photographic compositions are strived to meet the international standard, and presented international trend. Finally, modern photography put forward

higher quality requirements for photographers. To shoot good modern photography, the photographer should not only understand and master the traditional photography techniques, but also master the modern digital photography technology.

VI. HOW TECHNOLOGY PHOTOGRAPHY PLAYS A ROLE IN SCIENTIFIC RESEARCH

How to fully show figure style of technology and technological innovation by the art of photography, is an important topic studied by technology photography workers for many years. Objects reflected by technology photography have its unique meaning, if you can have a depth observation, you will find a high aesthetic value in a cold machine. Currently, technology photography in Science and Technology Research Institutes can be roughly divided into: close female shadow, microscopic photography, graphic objects and photography. In the close-up shots, the subject will be deformed, distorted with little attention, so you must do: ① When selecting camera angles, pay attention to the subject to be a straight vertical line, horizontal line should be flat; ② use the normal lens as far as possible, the logo is horizontal and parallel to the lateral edge of the frame, the frame vertical and parallel to the vertical edge; ③ due to close object distance, the depth of field is short, we must use a small aperture, slow speed. Macro photography's biggest problem is the short depth of field and to capture the moving body. Microscopic Photography can be divided into two categories: photomicrography and electron microscope photography. Microscopic photography is a technique by shooting microscope, microscopic photography is relatively difficult. Photomicrography consists of four parts: ① photography section; ② the main part of the microscope; ③ condenser section; ④ light source part. Early figures, landscape photography found inspiration from painting, photography is known pictorial photography; Pop Art, super realism transplanted prints, photographs to painting. Today, the overwhelming photographic images are changing

people's living environment and way of life, changing people's values and ideology. In front of the painting, photography was so ashamed, now, Yasumasa Morimura came to the field of painting with photography, openly provoked, profaned world famous paintings. World famous paintings have to get a new meaning, new glow vitality by the re-interpretation of photography. Incredible things are always emerging, how to write future art history, no one can predict.

VII. CONCLUSIONS

The development of society, is the development of technology. The development of technology photography will develop with the development of the times. This requires technological photographers to acquire more knowledge, not limited to photography, but to enrich the scientific knowledge in order to understand the art equipment. With the rapid development of computers, the extension of the Internet, there are digital pictures online, people can know information anywhere in the world simply by pressing the mouse, so that technology photography has a broader space for development.

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