Exploration of Photography Aesthetics in the Age of Digital Media Art

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Abstract. After entering the digital media era, new digital media art works not only put forward new requirements for photography technology, but also had a great influence on photography aesthetics. In order to adapt to the new aesthetic trend in the digital media art era, in the process of creating digital media art works, we should accurately grasp the aesthetic characteristics of the new era, actively apply new technology and equipment, make composition and color matching according to the new aesthetic requirements, and constantly improve the photography level. So as to create photographic works that meet the aesthetic requirements of the times and are full of unique styles, so that photography can better meet the aesthetic requirements of the digital media art era.

Keywords: Digital Media · Art Age · Photography · Aesthetic Exploration

1 Introduction

In recent years, with the rapid development of network information technology in China, the wide application of wireless network technology and new digital media technology has greatly promoted the popularity of new network elements such as network video, and ushered in a brand-new era of digital media art. In the era of digital media art, the creators of digital media art works and their content forms have changed obviously. At the same time, a large number of new technologies and equipment have been applied in photography. These changes objectively affect the photography aesthetics in the era of digital media art, and pay more attention to the individualization and diversification of digital media art works in terms of aesthetic orientation. Under this background, in the production of artistic works in the digital media era, we should actively change the creative concept, fully understand the aesthetic characteristics of the digital media art era, boldly introduce new photographic technology and equipment, and adjust the composition and hue of traditional photographic images in combination with new aesthetic requirements. By applying digital image processing technology, photographic works can meet the aesthetic needs of the digital media art era, so as to obtain a brand-new artistic feeling for the public.

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2 Analysis of Photography in the Era of Digital Media Art

2.1 Summarize the Meaning of Photography
In the era of digital media art, photography mainly completes the shooting and processing of basic materials such as images and videos through digital photography technology, so that photographic works have strong artistic expression [3]. The application of digital photography technology has also improved photography aesthetics in an all-round way.

2.2 Analysis of New Photography Technology in Digital Media Art Era

2.2.1 Analysis of Digital Virtual Imaging Photography Technology
After entering the era of digital media art, virtual photography technology has been more and more widely used, which can effectively strengthen the effect of 3D interactive animation. Virtual photography technology is based on the principle of virtual reality technology, and through the application of 3D interactive animation software system, it can complete the photography of specified scenes, thus providing unique 3D photography works for the audience [8]. In the practical application of virtual photography technology, it is necessary to set the digital photography equipment in a continuous working state, and to be able to connect scenes in real time. Photographers should capture the scene changes and movements through monitors, and then use virtual photography system to make 3D animation effects. The application of virtual photography technology plays an important role in improving the artistic presentation effect of photographic works, so it objectively affects the photography aesthetics in the era of digital media art.

2.2.2 Analysis of Digital Motion Capture Photography Technology
In the era of digital media art, the requirements for dynamic and stereoscopic images are increased in photography aesthetics, while digital motion capture technology is an important technical means to accurately capture motion and improve the authenticity of photographic works. When shooting scenes, the motion capture devices should be set reasonably according to the photography theme and content requirements, so as to realize the real-time capture of the specified motion, so that the photographic works can present realistic motion effects, provide the audience with three-dimensional visual experience, and meet the aesthetic requirements of the audience.

2.2.3 Analysis of Digital Collaborative Photography Technology
After entering the era of digital media art, digital photography technology has developed rapidly. On the basis of 3D imaging and other technologies, collaborative photography technology has been developed, which can cooperate with digital virtual photography technology to comprehensively improve the artistic effect of photographic works and promote the change of photography aesthetics in the era of digital media art. In the practical application of collaborative photography technology, the shooting elements such as 3D scenes and characters should be set according to the shooting theme and content requirements. In the shooting process, the interaction of scene characters is mainly realized by computer technology, and after the actual shooting, the 3D photography works
are made and processed by synthetic processing technology. The video works shot by collaborative photography technology can be presented in a three-dimensional way, and the audience can intuitively feel the scene changes, so as to provide the audience with photography works with the characteristics of the digital media art era.

2.2.4 Analysis of Digital 3D Imaging Photography Technology

In the era of digital media art, photography technology has made rapid development, and new 3D imaging technology has been widely used, which also has a great influence on the traditional aesthetic concept. The so-called digital 3D imaging photography technology is a new photography technology that realizes 3D imaging through the application of 3D digital technology according to the theory of binocular convergence and parallax. In practical application, the 3D imaging photography technology mainly takes pictures by setting up two digital photography devices in parallel. The digital photography devices have a certain function of human visual angle, and can obtain 3D imaging effect according to the distance of binocular imaging. When playing 3D imaging works, it is also necessary to reasonably determine the setting position of the projector according to the convergence characteristics of human eyes to realize the simulation of human eyes, so that the audience can get a stereoscopic visual experience.

3 Analysis of the Main Features of Photography Art Aesthetics in the Digital Media Era

3.1 Diversified Photography Aesthetic Subject

Photography aesthetics mainly includes three basic elements: aesthetic subject, aesthetic object and the relationship between aesthetic subject and object. After entering the era of digital media art, with the development of digital photography technology and the wide application of mobile wireless network technology, the aesthetic subject has changed greatly. The public can conveniently make use of new digital photographic equipment such as mobile phones to make photographs, and realize the dissemination of photographic works through the network. The number and scale of photographic aesthetic subjects have expanded rapidly, which has a great influence on traditional photographic aesthetics. Therefore, in the era of digital media art, the aesthetic rules of photography will be directly influenced by the aesthetic preferences of the public, and the aesthetic needs of the public should also be fully considered when creating photographic works [6]. At the same time, photography aesthetics should not only cater to the public aesthetics, but also guide the public aesthetics through the effective dissemination of high-quality photography works, thus promoting the overall improvement of the aesthetic level of the whole society.

3.2 Diversified Photography Aesthetic Object

In the era of digital media art, the aesthetic object of photography is also developing towards diversification, and at the same time, there is a trend that the aesthetic object
is gradually transformed into the aesthetic subject. Therefore, after entering the era of
digital media art, the creation of photographic works should not only be professional, but
also reasonably determine the type and content of photography from the perspective of
ordinary audiences, so that photographic works can accurately reflect the characteristics
of the times.

3.3 Digital Photography Aesthetic Expression Form

With the development and popularization of digital photography technology, photogra-
phy in the era of digital media art has also undergone great changes in aesthetic concepts
and expression techniques, with richer expression forms, and various digital devices have
been widely used. Therefore, it is required that photographers should have higher shoot-
ing skills, reasonably choose digital photography technology and equipment according
to the aesthetic characteristics of the times, and scientifically handle the color and light
of images to obtain better artistic effects.

3.4 The Aesthetic Composition of New Photography in the Era of Digital Media
Art

In the era of digital media art, the development of photography aesthetic concept puts
forward new requirements for the composition of video works. The composition must
have high integrity in order to comprehensively present all the photography fragments.
At the same time, with the wide application of digital image carriers and presentation
technology equipment, it is also necessary to fully consider the parameter requirements
of new technology equipment in composition, and the composition should be coherent
to meet the requirements of multi-group shooting.

4 Analysis on the Countermeasures of Photography Adapting
to the Aesthetic of Digital Media Art Era

In the era of digital media art, in order to make photographic works conform to aes-
thetic characteristics, it is necessary to adjust the form and content of photography,
actively apply new photographic technology and equipment, scientifically determine the
specifications of photographic parameters, and use digital technology to deal with the
composition and color of photographic works accordingly.

4.1 Adjust the Composition of Photography According to the Aesthetic
Characteristics of Digital Media Art Era

In the era of digital media art, in order to make photographic works have the aesthetic
characteristics of the times, it is necessary to actively apply digital photography tech-
nology to optimize the composition of photographic works. The composition of photo-
graphic works should be characterized by prominent subject and smooth lines, and the
coordination of pictures should be improved. When shooting digital photographic works,
the pictures should not only contain static shots, but also be matched with dynamic shots
reasonably. Only when the dynamic and static scenes are suitable for each other, can the theme and aesthetic effect of photographic works be fully reflected. When choosing the shooting point, the picture structure should have a strong hierarchy, and the obvious position of the picture should be the focus of shooting, so as to accurately express the content of the work. At the same time, when shooting, we should also handle the picture lines well to prevent the picture lines from being stiff and adversely affecting the aesthetic feeling of photographic works. In addition, when using digital photography technology to shoot, we should pay attention to the picture color matching to ensure that the picture color matching is reasonable and the overall color is harmonious and beautiful, so as to shoot more vivid and infectious art works and provide the audience with photographs with the characteristics of the times and personalized style.

4.2 Adjust the Color of Photography According to the Aesthetic Characteristics of Digital Media Art Era

Entering the era of digital media art has a great influence on photography aesthetics. Photographic works must be encouraged with the audience by means of color expression with the characteristics of the times, and the audience can have fantasy or synaesthesia by enjoying the photographic works. To achieve this goal, we must actively apply digital technology in photography, accurately control the brightness of color tone and the ratio of temperature to temperature of hue, and deal with the picture color saturation scientifically, so as to make use of the subjective emotion and intention displayed by the picture color to make photographic works meet the aesthetic requirements of the modern public [5]. Therefore, photographers must strengthen their understanding of new digital photography technologies such as naked-eye 3D technology, 4K technology and 8K technology, accurately grasp modern photography techniques and methods, and break through the shackles of traditional visual color language through innovative application of photographic color technology, so as to provide the audience with photographic works that better meet their aesthetic requirements and characteristics of the times, and create a brand-new visual experience for the audience.

Different from the traditional photography technology, photography technology in the digital media art era has applied digital processing technology in hue processing, which can not only directly complete the artistic processing of photographic works, but also carry out the whole-process processing of photographic works, exaggerating a certain basic color element in the picture, thus making photographic works present a more unique style to meet the aesthetic requirements of photography in the digital media art era. When applying digital photography technology to control the hue of works, it is required that the creator must have painting foundation, and take full account of the factors such as shooting fiber, scene prop hue and the color characteristics of the photographed template. In photography, the creator should make a purposeful scientific choice of other color elements with a certain hue as neutral [9]. In the process of shooting, we should try our best to avoid discordant color elements to ensure the harmony and unity of the picture tones. Take the shooting of an advertisement centered on burgundy as an example. When shooting, we should reasonably choose the colors that enter the picture. Only black, white, gray and burgundy can be sampled in the picture (as shown in
Fig. 1. Schematic diagram of hue composition in photography aesthetics in digital media art era (Photo credit: https://image.baidu.com/)

Fig. 1), thus showing the artistic effect of low-key luxury and making the picture better meet the aesthetic needs of the times.

In photographic works, brightness, hue and saturation are the three basic elements of image color. Among them, brightness is an important factor to form the color contrast of the picture. In the visual language expression of photographic works, the change of brightness and the proportional relationship among the three colors of black, white and gray constitute the tone of the picture, and the tone of photographic works will have a great influence on the aesthetic effect [1]. In the era of digital media art, in order to meet the aesthetic requirements of the times, digital photography technology should be actively applied in photography. Photographers can express the style of photographic works through creative application of various digital information technologies, and unify all kinds of scenery color elements of image pictures into an organic whole, so as to achieve the purpose of sublimating the taste of photographic works. In photography practice, the corresponding tone should be required according to the aesthetic needs of the times, the shooting theme and content. For example, when the captured content is a high-profile advertisement picture, and the color system is mainly light green, the corresponding gray level should be selected according to the color system characteristics of the picture to ensure that the high-profile light green can be fully displayed. At the same time, in the process of shooting, other props and scene colors should be reasonably selected based on light green, and the selection range of scene colors should be controlled within the light green color system, and the area of other colors should be reduced as much as possible. In addition, there should be a large area of white and light green with brightness above neutral gray in the picture, so that the photographic picture can be more
harmonious and unified, and reflect the aesthetic characteristics of the times of high-end atmosphere [10].

Saturation control is an important link in photography, and in the era of digital media art, we should actively apply digital technologies such as achromatic color to reasonably control saturation according to aesthetic requirements. After entering the era of digital media art, there are new requirements for the taste and style of photography, and the traditional colorful colors have been difficult to meet the aesthetic needs of the new era. Therefore, the color of photographic works should be desaturated appropriately when digital decoloration is carried out, and the decoloration degree should be controlled between 20% and 80% [7]. At the same time, when applying digital achromatic technology, we should fully consider its harmony with the tone of photographic works. In order to meet the aesthetic preference in the era of digital media art, photographic works can be treated as warm shades of golden yellow or cold shades of bluish gray [4]. Through the application of digital achromatic technology, we can intuitively grasp the saturation control effect of photographic works and obtain photographic works with low saturation and small color contrast. Therefore, compared with traditional images, the color of photographic images after digital achromatic processing is more elegant and light, and the contrast is not strong (as shown in Fig. 2), but it can better show the taste of works, which is more in line with the aesthetic requirements of photography in the era of digital media art.

4.3 Actively Apply Digital Photography Processing Technology According to the Aesthetic Characteristics of Digital Media Art Era

After entering the era of digital media art, the application of new digital information technology makes photography creation more controllable, so that it can better meet the
aesthetic requirements of the era of digital media art [2]. Photographers can refine the hue, contrast and tone of images by using 3DMax and Photoshop image processing software, and can make photographic works appear in a three-dimensional way. The application of digital photography technology and digital images also laid a good foundation for later photography processing, which enabled creators to finish controllable processing more conveniently, and made photographic works have aesthetic characteristics in the new period, thus providing better experience for the public.

5 Conclusions

After entering the era of digital media art, the extensive application of network information technology and digital photography technology makes the expression and content, aesthetic subject and aesthetic object of digital media art works have changed obviously, which makes photography aesthetics in the era of digital media art have distinct characteristics of the times. Therefore, when creating photographic art works in the digital media era, we should accurately grasp the aesthetic orientation and development trend of the new era, and actively apply digital photographic technology and equipment according to the new aesthetic requirements. By adjusting the composition and color of traditional photography, photography works can meet the aesthetic needs of the digital media art era, thus promoting the development of photography in China in the digital media art era.

References

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