

The use of light art in film and television shooting

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Keywords: Film and television shooting; light art; use of paths

Abstract: Light plays a crucial role in enhancing the effectiveness and quality of composition in film and television works. It serves as a significant reference for setting up the camera orientation and determining the visual tone of the picture. The use of light art is characterized by its complexity and diversity, which, when scientifically employed, strengthens the overall three-dimensional sense and texture of film and television works. Therefore, it is imperative for photographers to possess a deep understanding and comprehensive mastery of the common types of lighting techniques, as the scientific and standardized use of light art significantly enhances the audience's appreciation of its charm. This article aims to underscore the importance of light art in film and television shooting, briefly explain the common types of lighting, and delve into an in-depth discussion of the utilization of light art in film and television shooting for reference.

1. Introduction

During film and television shooting, light is an essential factor that significantly influences the quality and effectiveness of the resulting images. The presence of good and appropriate lighting conditions is crucial to effectively preserve the overall quality of the images. Therefore, the importance of lighting during the shooting cannot be overstated. In addition, it is worth noting that light is not merely a technical element, but also a form of art. The illumination and effect of light are vital for fully displaying the form and color of any given subject. Furthermore, the overall richness and sense of hierarchy in a shot can be significantly enhanced through the effective use of light. Therefore, the reasonable and scientific use of light is paramount in ensuring that characters in the film are well portrayed and that the texture of the characters receives necessary enhancement. In essence, the strategic management of light is pivotal in achieving the desired visual impact in image shooting.

2. The importance of light art in film and television shooting

2.1. Characterisation

Through the reasonable use of light, the character's personality can be perfectly presented, but also allows the audience to more deeply appreciate the inner world of the character and conflict. This plays a vital role in promoting the development of the film story [1]. Through well-designed lighting, the film is able to better show the characters' character, and at the same time, it is also able to better express the character's personality through the cooperation of the storyline. No matter what

type of characterisation, it can be presented through reasonable adjustment and control.

2.2. Shaping and accentuating the environmental atmosphere

The design and layout of the film and television space is crucial to the performance of the film, and the lighting, scenes, colours, background music, music, stage effects and so on will have a profound impact on the atmosphere of the whole picture. These factors can not only help the audience better appreciate the film, but also help them better understand the aesthetic value and psychological significance of the work. As a core component of indoor lighting, it can not only effectively display the appearance of the space, but also greatly improve the atmosphere of the room. Film and television space with the help of light, so that its own overall three-dimensional visual effect has been further enhanced at the same time, the object to be photographed with a variety of material mechanism refractive unique style.

3. Common types of light in film and television shooting

From an overall perspective, film and television shooting scenes can be divided into two kinds of interior and exterior, in the process of exterior shooting, the vast majority of cases with the help of natural light to complete the relevant filming work, while the interior shooting work is carried out with the help of artificial forms of light, in addition, there are some films and television in the filming process will be used in a more special light so that the theme can be displayed prominently. If during the filming of location shooting, the final shooting results are difficult to meet the expected results and standards, can rely on the reasonable use of artificial light to achieve the theme of highlighting. In this regard, Zhejiang film and television shooting during the light is divided into two categories of natural light and artificial light.

In terms of the actual shooting work, there is a certain difference in the intensity of light, the direction of light and the role of light is not the same. Therefore, light can be divided into the following types. According to the different properties of light [2], we can categorise them into two types: solar radiation that shines directly, or shadows obtained through the use of artificial light sources such as flickering fluorescent lamps or lightning. The former is often called hard light because it has higher brightness and better visual effects. It is not only suitable for clear images, but also for capturing details, and more importantly, it helps us capture the complex emotions within the characters. Most of the light in the sky will be consumed by the sun's irradiation, but a small portion will still be absorbed or refracted by the surrounding environment.

4. The Path of Light Art in Film and Television Shooting

Light plays an important role in film and television shooting, which can not only improve the exposure level, but also improve the composition. Specifically, the scientific use of light can help the filmmaker better control the brightness and contrast of the picture. In addition, by using a variety of light illumination methods, the shape, colour and other characteristics of the photographed objects can be changed, thus enhancing their three-dimensional sense. The details of the image can be better captured through a reasonable light layout and by combining light and dark contrast. By converting two-dimensional space into three-dimensional space, the three-dimensional sense of the subject can be greatly enhanced; in addition, the change of light and the construction of the shooting scene are also the key factors for the success and quality of the film, and there is a close connection between them. Therefore, the photographer should have an in-depth understanding of the art of light skills and skilled use, and to shoot the work of the needs and requirements as a basis and reference, the light and shooting angle for reasonable adjustment, so that the image of the

character image and the connotation of a comprehensive display at the same time, but also to make the picture of the three-dimensional sense of the significant enhancement.

4.1. Planning the source of light

The scientific and reasonable use of light is a key prerequisite for effectively guaranteeing the effectiveness and quality of image shooting. During the actual shooting work, the photographer should be based on the shooting needs and requirements, reasonable selection of shooting location, and scientific setting of the shooting angle, so that the impact and interference caused by ineffective light can be effectively controlled, and let the effective light in the shooting to be reasonably used. For image photographers, before shooting, they should carry out in-depth research and comprehensive analysis of the works to be photographed, and then take the actual conditions and shooting needs as the basis and reference to make scientific arrangements and timely adjustments to the light needed for shooting, coupled with auxiliary light to cooperate with and support, so that the possibility of light problems occurring during the actual shooting period can be greatly reduced. In the image shooting period, the photographer should improve and perfect the use of light techniques, so that the advantages and role of the main light to be fully developed and give full play to the auxiliary light, so that the main body of the work of the image to be fully demonstrated, and to shape a more favourable environmental environment, which for the film and television picture of the overall quality and effectiveness of the provision of a strong guarantee.

For example, when encountering adverse weather conditions, most photographers like to use a dark environment. This kind of environment can make the photos show a dark colour, thus creating a sad atmosphere. At the same time, this kind of environment can also make the psychological state of the characters better expressed, so as to better capture the scene when the accident occurred. For this reason, most photographers prefer to use dark environments to create a more realistic atmosphere through a variety of different supplemental light sources to better capture the scene at the time of the accident. By using side backlighting and frontal low angle photographic techniques, we can not only improve the appearance of the actors, but also match their character to the background of the story. Using these techniques is great if we want to show gentle characters. In this way, we can effectively suppress the shadows caused by side backlighting, making the character's cheeks as well as contours and other features look more and more pronounced. This approach, on the one hand, can let the side backlight on the face of the character shadow effect can be effectively controlled, so that the character's face gradually become brighter. On the other hand, it also makes the whole picture brighter and softer, thus providing the audience with a stronger sense of intimacy.

4.2. Scientific design of lighting ratio

During film and television shooting operations, there is a big difference in the picture effect presented by different light ratios. Therefore, during the shooting period, the photographer should further enhance the light ratio control and adjustment of attention and control, which can provide a strong guarantee for the lighting effect and colour quality of the finished product. Lighting ratio refers to the proportion of light received by the dark side and the light side of the subject under the lighting environment, for example, the 4:1 lighting ratio means that the dark side receives light twice as much as the light side. Photographers can make use of the lighting ratio to further improve the overall effectiveness and quality of film and television images, thus providing people with more vivid images of film and television works.

As a parameter that cannot be ignored in film and television shooting, during the film and television shooting, a variety of scene styles as well as the subject's emotion and expression can be

displayed through the reasonable adjustment of the lighting ratio. The main role of the light ratio is to be able to show the image of the picture of the difference between light and dark, the larger the light ratio, the more obvious contrast between light and dark, so that the overall visual tension of the film and television picture is more prominent [3]. However, if the ratio of light control is too large, it will cause the film and television images difficult to maintain the original colour, so that the overall aesthetic sense of film and television is difficult to be effectively protected; and if the ratio of light control is too small, the contrast between light and dark is less obvious, and the visual effect of the screen is more inclined to be softer and more natural. In most cases, photographers use the following means to adjust the light control ratio: first, increase or decrease the exposure of a beam of light; second, adjust the light exposure distance; third, change the shooting angle.

4.3. Understand and be familiar with the lighting techniques of interior scenes

Film and television works are often predominantly shot in indoor scenes, as this approach can greatly reduce the influence and interference brought by weather and seasonal factors. Moreover, shooting indoors lowers the overall difficulty and pressure of the filming process and allows for a more diverse range of lighting techniques to be used. The best stage of shooting in indoor scenes is during the indoor light peak, which does not require fill light assistance, thus enabling effective control of work time. Additionally, outdoor light can be utilized reasonably by reflecting it into the room through the standard use of reflectors. However, it is important for photographers to be mindful of the impact and interference caused by the direction of natural light and color temperature on the indoor light effect, and to avoid strong light as much as possible. Furthermore, the photographer should take into account the needs and requirements of film and television shooting when scientifically and reasonably arranging the position of artificial lights in indoor settings.

Given favorable conditions, the photographer can also make use of the main light, auxiliary light, and background light, and arrange them scientifically to fully develop their roles and enhance the beauty of film and television images. For film and television shooting operations, the main light intensity allows for filming work to be carried out behind the camera at an angle of 30 to 45 degrees, which helps to create vivid shadows in the picture. The auxiliary light, on the other hand, should be softer in intensity and is used to fill in the shadow parts produced by the main light, typically completed at a 90-degree angle related to the work and controlled at about 65% of the main light brightness. The background light primarily illuminates the surrounding environment of the subject object, thereby fully displaying the subject image and shaping a favorable scene atmosphere.[4] Therefore, the photographer should prioritize the scientific setting and clarification of the main light's irradiation angle, followed by the strategic selection of the auxiliary light, and ultimately, the use of background light to shape the atmosphere and environment of the shooting scene.

4.4. Skilled use of location lighting techniques

Compared with the interior shooting, the process of film and television shooting on location is mostly natural light as the main light. Outdoor light is more intense, so during location shooting, the photographer should adjust the aperture at the right time. For example, during the shooting operation around the character, the photographer should first focus the camera lens on the character's face, and with the help of the automatic aperture function, to complete the accurate detection of light, after completing the relevant work, and then converted to manual aperture function. During the focusing period, the low-light position should be actively selected, because after focusing in a place with strong light, the picture taken is darker and greatly increases the possibility of black screen problems, in this regard, the cameraman should be strictly corporate precision control of the aperture adjustment range.

5. Conclusion

In the modern era, light has emerged as the most infectious means of expression in film and television art, carrying significant creative value and development significance within its field. As the development of film and television continues to progress under the influence of the new era, light art has evolved into a vital medium for conveying the emotion and depth of the work. In current film and television dynamic shooting operations, the core lies in the visual image display, and light processing no longer takes precedence. Therefore, it is imperative for us to carry out in-depth exploration and active examination of our own humanistic aesthetics during future filming creation and learning endeavors. This will help guide the public to gain a genuine understanding of "truth, goodness, and beauty," thus providing essential support for the sustainable and efficient development of the film and television shooting industry.

References

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