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## Contemporary Stage Lighting Art: The Multi-Element Composition of Post-Drama Stage Space

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### ABSTRACT

This article discusses the importance of stage lighting design in theatrical stage performances and its ingenuity in combining with multiple elements of space. First, the literature analysis method is used to mention that lighting design can effectively enhance the sense of stage space, and through the adjustment of light and shadow and the coordination with elements such as sound and art, it can bring a better stage experience to the audience. Secondly, the article uses the case analysis method to further analyze the role of stage lighting design in the post-drama stage, including creating atmosphere, guiding the audience's attention, enhancing theatrical effects, etc., and emphasizes the basic principles and technical points of lighting design. At the same time, it proposes specific ways to integrate the design of stage lighting space elements into the post-drama stage, including the application of ambient light, accent light, dynamic light and projection art.

### INTRODUCTION

Stage lighting design is an important factor affecting the effect of stage performance. Whether the light and color of stage lighting design are used reasonably has a direct impact on the overall effect of stage performance, and is related to whether the artistic beauty of the stage and the inner emotions of the characters can be fully reflected. Therefore, in stage lighting design, the basic effects of light and color should be emphasized to ensure that the artistic level of stage lighting design can be better exerted. Effective integration of light and color into stage lighting design will better express the artistic beauty and more easily stimulate the audience's interest in watching and participating. As shown in Figure 1. Later, in theatrical stage performances, careful design of lighting can make the audience feel immersive and realistic, and it is more helpful for the audience to grasp the content and inner

feelings of the stage plot.

The multiple elements of stage space include the shaping of stage image, the transformation of stage space structure, the setting of stage atmosphere, etc. The stage effect can be further enhanced by the reasonable adjustment of the brightness of the stage lights. In the design, we must pay attention to the reasonable adjustment of brightness and darkness in combination with various elements such as sound effects and stage art modeling effects, and carry out the overall lighting design of the stage in a planned and purposeful manner, so as to give full play to the role of the brightness and darkness adjustment of the lights and highlight the sense of space of the stage environment and the sense of time of the story scenes, etc., further enhance the artistic appeal of the stage performance, and bring a better stage program experience to the audience.



**Figure 1:** Chongqing 1949 stage play

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## LITERATURE REVIEW

Stage lighting design is a method that combines creativity and technology. It uses light to interact with users, the environment or other elements to create a rich visual and emotional experience. With the advancement of science and technology, the equipment and technology used in stage lighting design are constantly updated and upgraded (Zhang Zuoming, 2023). By using more advanced sensors, controllers and programming software to design lighting effects, we can not only better capture the actions and emotions of the actors and transform them into lighting effects, but also enhance the appeal and expressiveness of the performance (). In addition to the design method, the concept of stage lighting design also needs to be constantly changed and developed. Incorporating the multi-element ingenuity of space into it will further optimize the stage lighting design. By studying the unique design style, exquisite craftsmanship and pursuit of details of the multi-element ingenuity of space, it is integrated into the stage lighting design to create a more vivid, real and fascinating visual effect. At the same time, we hope to explore ways to combine lighting with the actors' movements, music and other elements, so that the lighting can better reflect the emotions and themes of the performance, enhance the audience's sense of immersion and participation, and promote the inheritance and development of special casting technology and ingenuity. At present, the feasibility analysis of integrating the ingenuity of space multi-elements into stage lighting design is mainly divided into two aspects: domestic and foreign. However, the relevant research is still in its infancy and needs further in-depth discussion and practical verification. First, the current status of domestic research. In recent years, domestic researchers have been increasingly studying the combination of stage lighting design and space multi-elements. Some researchers have explored the feasibility and implementation methods of combining space multi-elements with lighting from a theoretical level. Some researchers have also explored how to integrate the ingenuity of space multi-elements into stage lighting design from a practical perspective. For

example, by emphasizing details and superb performance forms, the emotional and thematic expression of the performance can be enhanced. Secondly, the current status of foreign research. In foreign countries, researchers have studied the combination of stage lighting design and space multi-element ingenuity relatively early. From a technical perspective, some researchers in the United States have explored how to use modern scientific and technological means to better combine space multi-elements with lighting. For example, using computer graphics and virtual reality technology to create more vivid, realistic and fascinating visual effects. Some researchers in the UK, from a cultural perspective, conduct in-depth research and exploration into the cultural connotations and values of multiple elements of space, aiming to create more profound and infectious stage art performances.

## MATERIALS AND METHODS

### Theoretical Analysis of the Role of Stage Lighting Design in Post-Drama Staging

#### The Role of Stage Lighting Design in Post-Drama Stage

Stage lighting design plays an important role in the stage design of music performances. Lighting design can create a stage atmosphere, guide the audience's attention, enhance the dramatic effect, and even affect the audience's emotions and psychological feelings by controlling the color, intensity, direction and movement of light (Cui Zhuo, 2023). In different situations, appropriate lighting design can change the atmosphere of the stage, from bright sunshine to dark making the stage more vivid and dramatic (Huang Lijin, 2023). This requires designers to have a deep understanding of the intentions of music, scripts or action, choose innovative light projection methods, and use modern lighting technology to enhance the visual impact of the performance. At the same time, stage lighting design needs to cooperate with elements such as stage scenery, props, and costumes to form a unified visual style and jointly create an overall performance atmosphere, thereby bringing an immersive experience to the audience (Lin Xiaolong, 2022).

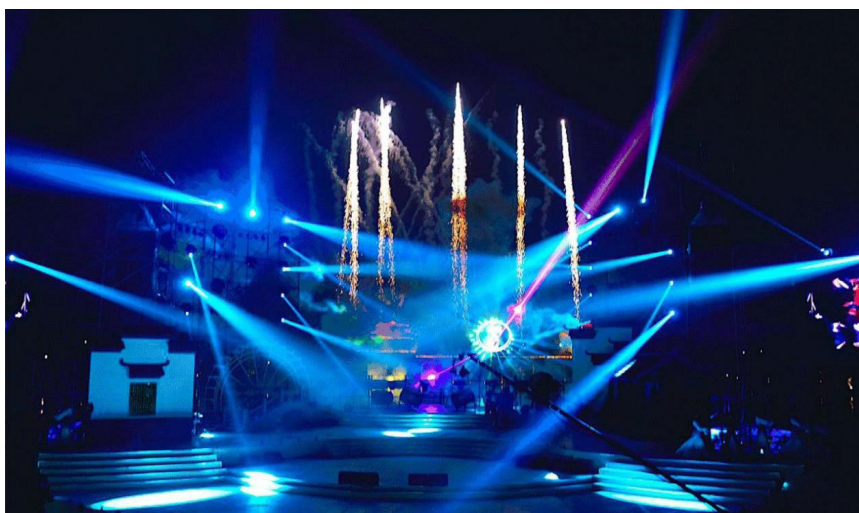


Figure 2: Stage Lighting

With the background of multimedia technology, stage lighting design has become a magician on the stage, creating countless visual miracles. Through the exquisite lighting arrangement, the stage can present a bright morning light from the deep dark night, or jump from the soft dusk to the fiery dawn in an instant. As shown in Figure 2.

The interweaving of different colors and lights makes the stage sometimes dreamlike and sometimes epic, and the audience seems to be in a colorful and intoxicating fantasy. More importantly, the flexible use of lighting makes the glow with a completely different atmosphere (Wu Siyu, 2023). When a character walks to the center of the stage, the light can focus on him, creating a mysterious feeling. When the scene switches, the timely change of light can instantly change the audience's visual focus so that they will not miss any important stage elements. This creative lighting design is not only for visual enjoyment, but also to guide the audience's emotions and make them invest in the stage story. Under the guidance of multimedia technology, lighting design has surpassed the traditional functional scope and become the highlight and bright spot of stage design. Its unique artistic charm not only brings visual shock to the audience, but also resonates emotionally, adding infinite vitality to stage art.

### **Basic Principles and Technical Points of Lighting Design**

The success of lighting design is based on several basic principles and technical points. First of all, stage lighting design needs to select lighting methods and lamps according to different performance contents to ensure the brightness and illumination of the stage. Secondly, when applying the color of stage lighting design, directors and lighting engineers can take the principle of coordination as the premise and the content of stage performance as the center to scientifically adjust the color of lighting, so that the color of lighting and the content of performance are perfectly integrated, highlighting the theme of performance, and presenting different stage effects to the audience (Li Yang, 2021). Finally, relevant staff need to flexibly formulate the content of dance performances according to the actual situation of the performers. Choose appropriate music fully consider the age of the performers, and pay attention to the performance content of mass cultural dance. It should not be too cumbersome and complicated. It must be in line with the learning ability of most people and make full use of various stage props, stage costumes and stage lighting.

### **Specific Ways to Integrate Stage Lighting Space Elements into the Post-Drama Stage Design**

#### **Specific Expressions of Post-Dramatic Stage**

Stage lighting plays a vital role in stage design. By flexibly applying light and shadow effects and colors, it creates a specific atmosphere and emotion for the performance. Specifically, creative lighting can be applied in many ways in stage design. First, the application of ambient light

can adjust the brightness and color of the performance space, thereby changing the audience's visual experience. Second, the application of accent light can highlight the key objects or scenes of the performance and enhance the visual impact of the audience. Third, the application of dynamic light can add to the performance.

The dynamic and rhythmic feeling makes the audience feel the passion and power of the performance. Fourthly, the application of projection art can enhance the visual effect of the performance through projection technology. Combining these application methods, creative lighting can create a richer, more vivid and realistic performance effect, enhancing the audience's visual experience and feelings.

### **Specific Methods of Designing Post-Drama Stage Space Elements**

Stage design is the core link and one of the important preparations for live performances. In the digital network and digital media environment, the specific methods and effects of stage design have begun to change. Stage design based on new media mainly enhances the connotation expression of the work from the perspective of visual communication and brings a more shocking new audio-visual feast to the audience.

In the early stage of digital media technology, the application of digital media technology in stage design was partial and small, but it was completely absent in post-drama stage design. The relevant content still needed to be completed manually by on-site staff under the direction of the director; with the development of digital media technology and the continuous advancement of computer network virtual simulation technology, the entire post-drama stage design can partially integrate digital media technology into the post-drama stage. The advantage of digital media technology is that it can realize the automatic matching of people, songs and stage styles, and present the overall stage effect through digital media and virtual simulation technology, and make flexible adjustments according to performance requirements. All can be presented in advance through digital media technology.

## **RESULTS AND DISCUSSION**

### **The Post-Drama Stage is Integrated into the Stage Lighting Space Design**

#### **Spatial Lighting Expressions of Post-Drama Stage**

In Chinese civilization, people often talk about zither, chess, calligraphy and painting, and zither is the first of the four arts. Modern philosopher Zong Baihua also said that all arts tend to be music. It can be seen that music cultivation occupies an important position in the art of drama. Lighting designers are a profession that requires more musical cells in the stage art industry. Their grasp of music sense and rhythm is even comparable to that of actors. This is reflected but also in the control of the atmosphere on the scene by lighting changes. In the performance, lighting not only serves the actors

and scenery and integrates with music after the music is in sync, giving the audience a stronger visual and auditory impact. The expression of emotions and artistic conception mainly reflects the secondary creation of scripts and actors in the creation of stage lighting, while the rhythm of music cannot be expressed in words and language. This depends not only on the author's literary skills, but also has a lot to do with the reader's literary literacy. However, stage lighting can cooperate with music to tell the audience the emotions of the performance in a language without thresholds and borders. Therefore, musical literacy can make stage lighting more vivid. In the performance, the coordination of music atmosphere and stage lighting, the special effects of beats and stage lighting, the volume and the brightness of stage lighting can all change the atmosphere of the scene. The performance experience brought by the exquisite lighting transition can be a good backdrop for the light show. In order to bring the audience to a climax, gorgeous stage lighting effects often change on the stage with background music with a prominent sense of rhythm and shocking drums. The two are closely related, and even the ninth art form, the light show, has been derived.

#### Post-Drama Stage Lighting Design Integration

The comprehensive artistic effect of stage performances will be affected by many factors. Compared with film and television programs, stage performances cannot complete the portrayal of story content in different time and space environments in the same time. However, through the reasonable combination of stage lighting projection methods, illumination range, lighting color, lighting brightness and darkness, etc. with other stage elements, it is possible to quickly portray a time-space conversion drama performance art effect on the stage, which can vividly display the emotions and atmosphere of the stage story, thereby revealing the deep-level artistic conception of the story to the audience. However, in stage lighting design, lighting engineers need to pay attention to the reorganization of the lighting and darkness combination structure on the basis of respecting the audience's stage

performance art aesthetic characteristics, reasonably adjust the brightness of the stage lighting and the lighting and darkness effects of the stage space in combination with other stage elements, and combine and apply various stage lighting design methods to create a highly layered stage lighting effect. At the same time, they should strictly control the lighting range, lighting installation angle, and number of lighting fixtures to prevent deviations in lighting position and angle or mutual influence of lighting effects.

For example: the application of light brightness and shade has an important impact on the overall effect of stage performances, and is also an important way to express the emotions of actors and set off the stage atmosphere. However, when applying the light brightness, the lighting engineer must pay attention to the reasonable combination with the stage background music, the emotions of the actors, and the specific requirements of the director, so as to avoid the deviation between the light brightness and shade effect and the stage performance requirements. At the same time, in the lighting design, attention should be paid to the distinction and application of "main and auxiliary lights", that is, while highlighting the contrast between strong and weak colors, the brightness of the lights should be reasonably adjusted. For example, with the stage performance area as the center, the brightness and shade are adjusted synchronously according to the functional levels of main light, auxiliary light backlight, side light, and scene light, so that the main tone of the light color is clearer, and the theme of the stage performance content can be more profoundly set off. In addition, the lighting engineer should also pay attention to the reasonable application of the light brightness and shade contrast method, combine it with the cold and warm and color elements of the light in combination with the needs of the stage performance, and pay attention to the use of appropriate contrast methods in combination with different scenes in the stage performance, so as to avoid using the same light brightness contrast method to weaken the artistic effect of the stage performance. As shown in Figures 3 and 4.

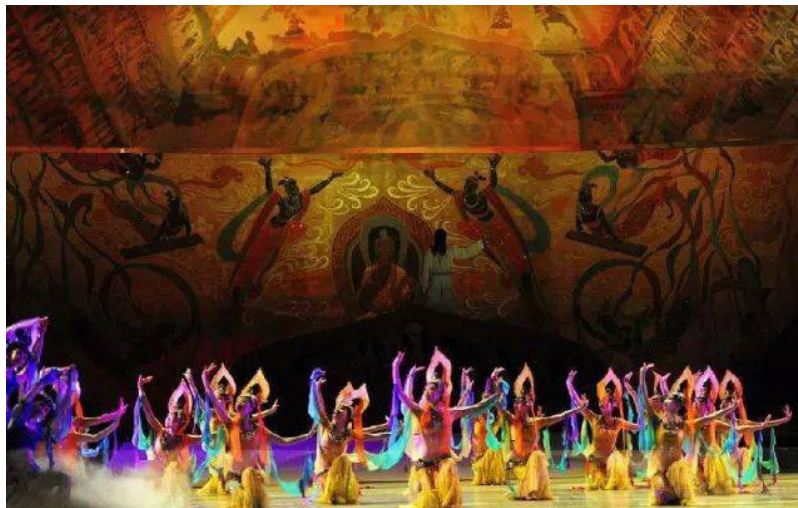


Figure 3: Multi-light rendering of a stage play



Figure 4: Single-light stage play

### Post-Drama Stage Integrates Stage Art, Lighting and Stage Design into Visual Expression

#### Analysis of the Case of Art Lighting in the Post-Drama Stage

Compared with film and television dramas, the psychological and personality shaping of actors in dramas may be relatively monotonous, which requires lighting to render and set off, so as to ensure that the emotions of the characters are more clearly displayed. It is necessary to control the color and warm and cold tones of the lights well, so that they change with the changes of characters and plots. The audience in the audience will also create a harmonious scene that suits their own psychology because of the changes in lighting. Through the use and design of lighting, the psychological feelings such as depression, tension, stimulation, and excitement are more deeply displayed in the hearts of the people. For example, in the Ninghai Pingdiao boutique excerpts “Li Hui Niang. Jianpan” and “Jinlian Zhan Jiao”, the light source appears in a soft and coordinated way. The lighting is very soft, as if it is integrated with the actors, and the visual effect is very amazing. In the performance of the drama, all emotional displays and plots are basically realized by the performers’ performances, and then the audience understands the feelings of the characters through the pictures depicted by the actors. Stage lighting uses color matching, light and dark tones, and lighting placement to better combine the plot and the inner world of the characters, and strengthen the audience’s understanding of the entire performance. For example, at the opening ceremony of the festival, actors performed the experimental drama “Dream Chaser”, which was adapted from the work “Linchuan Four Dreams” by the drama master Tang Xianzu. The tone of this plot is warm, the lighting is soft, the expressions and movements of the characters are gentle, and the lighting and scenes echo each other, which plays a role in strengthening the plot. Like TV series and movies, some of the plots to be shown on the stage are completed in different time and

space. If it is simply performed by actors, it is difficult for the audience to feel this change visually. And because of the functions of stage lighting itself, some changes in full-length close-ups and special effects, or other changes in color and brightness, will enrich the entire picture, and a more three-dimensional plot with various time periods will be presented to the audience. For example, when bright lights are on the stage, the plot during the day is very clear, while dim lights can make the audience enter the night all of a sudden. This step can be said to be reflected in every drama performance. The change of stage lighting over time can also be reflected in the seasons, which is mainly reflected by cold and warm tones. Cold tones are like winter, and warm tones are like summer. These lighting designs require us to have a good grasp of lighting (Ye Zekun, 2023). Stage lighting plays an increasingly important role in drama performances, music shows, and light shows. Stage lighting complements the plot, and through the effective operation of lighting equipment and software, it meets the public’s increasingly improved aesthetics.

#### Practical Strategies for Visual Expression of Stage Design in Post-Drama Stage

First, in-depth research and understanding of the process, elements and spiritual connotation of special casting. Special casting is a traditional craft with a unique design style and exquisite craftsmanship. Its ingenuity is the core value and spiritual wealth of the craft. Therefore, before incorporating the ingenuity of special casting into the stage interactive lighting design, it is necessary to deeply study and understand the process, elements and spiritual connotation of special casting. First of all, it is necessary to understand the process flow and characteristics of the smelting, pouring, cleaning and other links of special casting in order to better use and express them in lighting design. Secondly, it is necessary to master the elements and symbols such as texture, shape, color, etc. of special casting in order to create a unique visual effect

and emotional atmosphere in lighting design. Finally, it is necessary to deeply understand and study the spiritual connotation and values of special casting, such as excellence, pursuit of perfection, attention to details, etc., so as to better express and convey them in lighting design. Second, combine factors such as plot, scene and character. The purpose of stage interactive lighting design is to better express and convey the plot, scene and character. Therefore, it is necessary to combine the plot, scene and character when integrating, and actively carry out design practice. On the one hand, it is necessary to deeply analyze and understand the theme, plot and emotion of the stage plot, and respect the practical principles to carry out the design, so as to better express and convey the stage theme in the lighting design. On the other hand, it is necessary to master the characteristics and atmosphere of the stage, and insist on starting from the perspective of ingenuity, so as to better create a visual effect that conforms to the atmosphere of the scene in the “attention to details and meticulous craftsmanship” of lighting design. Finally, it is necessary to correctly recognize the personality characteristics and changes of the main characters in stage art, so as to better express and shape the character image in lighting design, so as to reflect the important value of stage lighting design.

Third, skillfully use the techniques and skills of lighting. The techniques and skills of lighting are an indispensable and important part of stage interactive lighting design. Therefore, when incorporating the ingenuity of special casting into stage interactive lighting design, it needs to be skillfully used. On the one hand, it is necessary to understand and master the techniques and characteristics of various common lights. For example, fixed-point lighting, mobile lighting, color lighting, etc., and actively match and select them, and do a good job of technical evaluation, so as to better use and express them in lighting design. On the other hand, it is necessary to combine the elements and symbols of special casting, use the techniques and characteristics of lighting, and create a unique visual effect and emotional atmosphere. For example, the texture and shape of the cast object can be highlighted through the technique of fixed-point lighting; the fluidity and flexibility of the casting process can be used to express it through the technique of mobile lighting; the emotions and themes of the stage can be expressed through the technique of color lighting.

Fourth, create a unique visual effect and emotional atmosphere. When integrating the ingenuity of special casting into the interactive stage lighting design, it is necessary to create a unique visual effect and emotional atmosphere. First of all, it is necessary to combine factors such as plot, scene and character, and use the techniques and characteristics of lighting to create visual effects and emotional atmosphere that conform to the stage plot effect. For example, soft lighting can create a romantic atmosphere, and strong colors and light and shadow effects can express tense and intense emotions, thereby enhancing the audience's resonance and feelings about the plot and characters. Secondly, it is necessary to use

special casting elements and symbols to create a unique visual effect and emotional atmosphere. For example, the characteristics of fine craftsmanship and unique shape can be shown through elements such as casting texture and shape; the emotions and themes of the stage plot can be expressed through the special colors of the casting process.

Fifth, practical feedback and improvement. Practice is the only criterion for testing truth. Therefore, when integrating the ingenuity of special casting into the interactive stage lighting design, practical feedback and improvement are needed. First of all, it is necessary to constantly summarize experience and lessons in practice, and make timely improvements when deficiencies are found; secondly, it is necessary to continuously optimize and innovate according to the results of practical feedback; finally, relevant art activities can be carried out to display the integration results, actively display and promote them, and attract more people's attention. In summary, integrating the ingenuity of special casting into the interactive stage lighting design can make the stage lighting more changeable and innovative. The ingenuity represents people's deep understanding and ultimate pursuit of craftsmanship, which is the profound connotation required for stage lighting design. Through careful design and flexible application, lighting design can create a unique atmosphere and visual effects, bringing a new sensory experience to the audience. Therefore, the integration of special casting ingenuity into the interactive stage lighting design can not only enhance the artistry and technicality of the performance, but also provide a strong driving force for the innovation and development of stage art.

## CONCLUSION

This article not only shows the role of stage lighting design in theatrical performances in terms of emotional expression, time changes and seasonal changes, but also emphasizes the indispensability of stage lighting design in theatrical stage performances, as well as its complementary relationship with the plot. And through continuous technological innovation and changes in design concepts, stage lighting design will continue to meet the audience's increasing aesthetic needs. In short, the application of stage lighting brightness and shade is an important part of stage lighting design, and it is also an important way to portray characters, render story emotions and enhance the artistic effects of stage performances in stage performances. The knowledge involved in the adjustment and application of stage lighting brightness and shade and the elements that need to be considered are relatively complex. Therefore, lighting engineers must fully understand the requirements of all aspects of stage performances, reasonably match them with other stage elements, ensure the reasonable and exquisite application of lighting brightness and shade, and effectively bring out the application advantages of lighting brightness and shade design, so as to bring more exciting stage performances to the audience.

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