A Preliminary Study on the Construction of Night Landscape Lighting in Rural Cold Region

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ABSTRACT

Over the past two years, the construction of a new socialist countryside has always been a top priority. While the city has gradually lit up, the rural landscape lighting has always been in a backward state. By researching the current environment of the cold rural areas, this paper analyzes the function and significance of night landscape lighting on the rural landscape in cold areas and how it should be created. It is concluded that landscape lighting is the most suitable and most effective way to improve the landscape in the rural landscape. Night lighting suggestions and countermeasures are being put forward.

INTRODUCTION

The village is rich in human history. Especially in the cold region of the country, snow-capped mountains in winter, thousands of miles frost, miles snow, although the outstanding landscape features, but if not properly created, the screen also makes people feel bleak. The essence of design is to improve people's lives, to serve people and to give people a positive impact. In landscape design, in order to influence the human mind to design purpose. Especially the rural landscape construction, it requires us to create a suitable character for the rural scene, this is the so-called cultural landscape. We need to create an environment where residents can interact and feel the collective warmth of the environment, so that they can feel the life, and let the landscape have a subtle impact on the residents.

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RESEARCH BACKGROUND AND SIGNIFICANCE

In the process of planning and construction of new rural areas, the public focus on rural landscape is relatively weak, and some village builders enter the landscape construction misunderstanding, appear aesthetic deviation. Academic research on how to develop the rural landscape of the new socialist countryside and show the characteristics of the new countryside is rare, and did not form a system.

Rural areas do not have the space to take a walk around the night view, most people choose to watch TV at night or early to bed, night life is very simple. In the rural areas of the cold regions, the winter time is longer than other regions, and its green period is short, the landscape color is monotonous, depression is depressed, the climate is cold and the snow covers the earth, inconvenient to travel and needs rich landscape lighting. In the past two years, with the city gradually lit up, rural landscape lighting has been in a backward state. Rural landscape is dying. Countless villages have changed a lot a decade ago, living standards have been improving, but the landscape resources exhausted. A good rural night scene can contribute to its economic growth and enrich the content of the night life of the village residents, and effectively reduce night crime.

WINTER RUAL LANDSCAPE NIGHT LIGHTING ENVIRONMENT TO CREATE

To Create the Principle

Meet the aesthetic night to create. The purpose of shaping the night landscape lies mainly in two sides, namely enriching the residents night life and then promoting the village tourism to bring economic development. Therefore, our service objects are both villager and tourists.

There are two different feeling on beauty. One is instinctively harmonious beauty originating from the biological sense, which is a natural response. Nevertheless, the other is imaginative beauty based on the aesthetic existing cognition of the appreciators, which is closely bound up with the people’s life experience. Thus, designers ought to focus on the daily life of rural residents, experience their lifestyle and then discover and understand the kind of beauty indigenous inhabitants love. To meet the perception of the night to create. Night is the visual environment to create, and the sense of smell, touch and hearing are elements that can be felt in the night. We know 83% of the information can be obtained through the visual, hearing the proportion of 11%, less sense of smell, only 3.5% and 1%.
Cold Region of Rural Landscape Lighting in Winter to Create Content

Focus on the expression of nodes. Through a number of important nodes, to create a safe and familiar to the residents of the mood, to increase people's sense of belonging to the night light environment. Orderly atmosphere of the mood of the night light environment, you can create the feelings of residents and the environment.

In the night landscape, the designer should fully demonstrate the different cultural characteristics of the village to show its development, context and history. It is the only way to avoid all the country looks the same. Human culture is extremely rich in the cold region, such as Manchu culture, two people culture, ice window grill culture. In the night, we should fully reflect its cultural symbols or content.

The most important thing is the shape of cold rural culture in the night landscape. Agricultural activities are the basic function of cold rural areas. Also rural culture includes ritual culture, farming culture and blood clan culture. Do not make the rural lighting as luxury as city is. Do not ignore the display of traditional rural characteristics and cultural connotations. The snow and ice cultural lighting in the cold area is the focus of the design. After the winter snowfall, the building and the earth are covered with thick ice and snow. There is also ice and snow world, ice carving, ice hotel, ice lamp, etc. Cold village houses have mostly sloping roof. After the snow the building has a snow-mushroom hat. The snow scene is like a fairy tale world. This scene coupled with night lighting, the effect must be beautiful. In the snow and ice landscape, due to the natural properties of ice and snow. In the light, the white crystal texture can send a brilliant flashing fluorescence.

Method for Creating Landscape Illumination of Winter Countryside

THE APPLICATION OF LIGHT COLOR IN NIGHT SCENE

Cold winter snow capped. If no snow, the color is more monotonous. All the scenes are dark. This single color environment is suitable for the use of color light. So we must focus on creating its color to increase night effects and create a warm night atmosphere. In the cold regions, snow white and the black night is also more conducive to the color display. Different colors have different character traits. Red can represent life, danger, etc. While blue is the opposite, it represents quiet, ethereal, lonely and other characters. In order to create a harmonious and comfortable environment, we need to match the color of light reasonably, and consider the difference between the light color in the sun and the night atmosphere. For example blue in the night may show more gloomy personality characteristics, especially in the cold regions it is even more chilling. So Use colors with caution which make the feeling uncomfortable, in order to create a comfortable environment. In the cold environment, people prefer warm colors. So in the process of creating the night warm colors such as light red and light yellow should be more used.
THE RHYTHM OF THE LIGHT IN THE NIGHT SCENE

Winter roads and fields in cold regions are covered with snow most of the time, and there are few other landscapes. This road environment has a poor sense of orientation and the boundaries are not clear. There are few other landscapes and there is a lack of reference in the fields. Such an environment is prone to visual fatigue.

Use the brightness of light to produce the contrast and change between bright and dark to form a rhythm. Most of the night landscape designers are careful with color light. They prefer white or light yellow to shape the night. In the application of monochromatic light, use changes and contrast between bright and dark, to build rhythm or harmony. In addition, many cases of landscape lighting is only the pursuit of light-based. This is not the performance of beauty. Bright should be purposeful.

SHAPING THE SPATIAL LEVEL OF NIGHT LIGHTING

Winter rural landscape elements are few. When looking at the landscape it is monotonous. Although this snow is also a beautiful mood, this monotonous level cannot grasp the human eyes for a long time. In the landscape, people prefer the hazy half-cover of the mood. Shape this level of landscape space in order to make people enjoy it tirelessly. In shaping the space, only the space with level can make people enjoy it and let people associate it with the life. Blocking is the most commonly used in the way of creating level, so that the second layer of space is half-hidden under the occluded cases of the first layer. Use a similar way to block the light source or use the dim light to achieve this purpose in the night lighting. Use a strong contrast to focus on the visual center, and then change the brightness or color of the light to form a hierarchy to avoid a single level. For example, in the process of shaping, pay attention to the use of blank and use it to form a layer.

CONCERNS ABOUT SPECIFIC GROUPS IN THE DESIGN

Winter cold areas are affected by heavy snow and traffic is inconvenience, the square has become a major gathering place for the village residents. Through the detail, show our concern for specific groups of people, to create an environment in line with their psychological. Designers should pay special attention to the use of safety at night, such as collision, electricity safety and other issues.

In the design of children's activity area, improve its overall brightness to facilitate the safety of children's snow activities. Also, from the psychological characteristics of children, we should set up more soft color light to create a gentle atmosphere. And then in some places, set up the colorful lights to meet the children's lively and moving characteristics. Also, set up many fun and interesting lights of theme patterns or moving and changing lights for children. The lights on elderly activities area should be soft and light-colored ones. Use moving lights less, so as
not to make the elderly dizzy. The lights should be the deep color mainly. The contrast of the brightness should be soft.

TO AVOID LIGHT POLLUTION

The light source of the cold areas is not easy to hide. The hidden light is easily covered with snow and loses lighting effects. So most of the light should shine down or downwards. But in this way it is easy to produce glare. So the designer should hide the light source or avoid the projection direction to the crowd as much as possible. The designer should adjust the appropriate angle and brightness. Strong contrast between light and shade, as well as the movement of light, etc. will produce eye discomfort. The impact of light on plants and animals cannot be ignored, and some plants and animals do not adapt to the night lighting, should avoid them in lighting designing.

LAMPS AND THE APPLICATION OF SCIENCE AND TECHNOLOGY

Lighting settings. Lamps can be hidden or cannot be hidden. Unhidden lamps can be made into the image of the landscape. In the installation of lamps, we must first consider the plastic art of the lamps.

Any night lighting is inseparable from the support of science and technology. There are many technologies of landscape lighting, such as fiber-optic technology, laser technology, light-emitting diode technology, light projection technology, color change neon technology and so on. In the night design, lighting electrical safety, post-maintenance operation and other factors should be considered.

CONCLUSIONS

In the cold winter, the rural landscape is single and the residents' nightlife is monotonous. Night lighting is significant and feasible to environment construction on the cold rural areas in winter. Night construction in cold areas is mainly based on ice and snow, it will shape the richer and more valuable snow landscape, provide a better life experience for the rural residents and promote the development of tourism economy.

REFERENCES