

# Deep Integration of Chinese Modern Natural Painting Color and Film Ecological Art

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**Abstract:**

The influence of beautiful color and composition on the film is very important. The colorful and hearty pictures not only make people have an amazing visual impact, but also enrich people's emotions. The perfect and full composition not only contains a lot of information and meaning, but also is the necessary means of plot and thinking. This paper focuses on the color and composition of the film screen. This paper analyzes and summarizes the representative typical elements to explore the beauty of the film screen. This paper puts forward that a good film should be good at using the color and composition of art to express the atmosphere and artistic conception of the film and convey the ideological connotation of the creator. This paper expounds that it is one of the inherent laws of film to interpret film with the beauty of picture. Whether it is gorgeous beauty, traditional beauty, true beauty or unsophisticated beauty, they are all different artistic expressions of beauty. The pursuit of materialization and transmission of beauty with film pictures is the essence of film art full of vitality. The experimental study shows that the viewpoint put forward in this paper is consistent with "art aesthetics takes the aesthetic phenomena, activities, laws and values in art as the research objects".

**Keywords:** *Picture Color, Composition, Film Aesthetics, Aesthetic Activities.*

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## I. INTRODUCTION

Color not only enables us to perceive the objective things, but also enables us to express the subjective world and create a new visual scene [1]. Color is an important element in all visual arts, especially in film and television works [2]. The design of animation color can not simply copy the color of life, but requires the designer to carefully design the artistic color with revealing the theme and rendering the atmosphere according to the changes of the plot development [3-4]. Animation companies use two-dimensional combined with three-dimensional digital animation technology to achieve animation color: using color vision to express emotions, express emotions and render artistic conception. Use the language of color to express the connotation of content and the aesthetic feeling of form: use the symbol of color to publicize personal personality and arouse the resonance of the audience; use the modeling of color to give people physiological stimulation and psychological pleasure [5]. The maturity of software color control technology and software color correction technology in digital animation production is of decisive significance for the creative vision and artistic appreciation value of color.

At present, there are more and more books and magazines about the theoretical research of film and television animation color, and various software application technologies. But these articles are all about

studying the color of film and television animation from the theoretical or only technical aspects, which is one-sided for film and television production [6-9]. Therefore, the research focus of this topic is on the combination of animation color theory and software production and application technology, taking the specific two-dimensional experimental animation short film "journey of the foreign world" as an example [10]. This paper analyzes and studies the specific application of color in film and television animation, and combines the color creation and performance of digital animation stunt technology to seek new understanding and inspiration, and further improve the production level of traditional animation industry in China based on the original research.

## II. COLOR IN FILM AND TELEVISION ANIMATION

### 2.1 Scene and color

#### 1) Realistic style

Realistic style of scene design, the screen color is a true representation of the objective reality color, reflecting the nature of the natural society and the natural law of the objective reality. From the aspects of modeling structure, perspective relationship, color law, light and shadow relationship and texture, the object strictly follows the natural law, pursues the reality of things in the scene, and emphasizes the three-dimensional relationship of objects under light and shadow and the sense of visual space. The realistic style is different from other art forms in that it shows the objective changes of time and season, the colors of objects under specific light conditions, and the lifelike features of visual effects. In Hayao Miyazaki's animation "Totoro", the blue sky, green plants, bright flowers, clear river water and flying swallows are all true depictions of the countryside with strong flavor of nature (as shown in Figure 1).



Fig 1: The Country Scenery in My Neighbor Totoro

#### 2) Decorative style

The scene design of decoration style has strong beauty of rules, order, generalization and form. Color is a kind of unnatural, after a lot of generalization and exaggeration, tends to be flat and simple. Its color characteristics are planarization and subjective arbitrary change of color, which is not limited to the objective and real light color relationship and change of color. Instead, it focuses on the expression of pure color matching effect, and adopts high generalization and purification of objective color, even exaggeration and deformation, so as to achieve or highlight the pure visual effect and decorative interest of color, or express some emotional effect through unrealistic color.

The story of the American cartoon Hagrid is adapted from Greek mythology, which is a typical decorative

style. The use of its color is also a typical decorative color, with obvious and strong decorative sense. Domestic animated films such as "havoc in heaven" have strong and bright colors, which are summarized by plastic arts, and the colors are planed. This is a typical decorative color animated film (as shown in Figure 2).



Fig 2: The colorful sky in "The Heavenly Palace"

## 2.2 Story plot and color

In the same scene, the color relationship between the subject and the scene is basically unchanged, and the color of the same scene in animation can be simply understood as the relatively static use of color. However, in the process of animation screening, according to the changes in the content of the script, the scene is constantly changing, which is related to the setting of the plot, so the color of the whole animation always changes with the flow of time and the change of the plot. The color of the animation plot is a dynamic color that is constantly moving. It needs to be set with the plot to play a role in coordinating or promoting the development of the plot.

The scene color realizes the rendering of the beautiful, happy, sad, hope, fear and other situational atmosphere and the transmission of emotions needed in the plot by strengthening and contrast and other artistic techniques. In the cheerful scene, the color is clearer, and the heavy scene is relatively dull. When the drama is strong and the conflict is fierce, there will be strong contrast tone.

The underwater world of the cartoon "Nemo" is colorful and bright. When "Nemo" is "on the cliff", he swims close to the ship obstinately in order to prove his ability, the picture turns from bright and colorful to dark blue, just like the tone of shark in the prelude. This kind of scene color seems to indicate that there will be danger again. Sure enough, there was a human, and Nemo was arrested. In this part of the plot, the color design of the picture matches and promotes the evolution of the plot.

# III. REALIZATION OF COLOR SCHEME IN ANIMATION OF JOURNEY TO A FOREIGN LAND

## 3.1 The Creation Background of A Journey to a Foreign Land

Through the analysis and summary of a large number of literature, and the analysis of color examples of many film and television animation works, we have mastered the basic law of color design, and on this basis, we have made the experimental animation short film. The following is the analysis and setting of the theme and audience of "journey to a foreign land".

The main purpose of this experimental project is to elaborate the color application technology of film and television animation, such as color matching, harmonic correction, etc. in animation technology through the

production of experimental animation short film "journey to a foreign land". Through the analysis of the film color, animation character color and animation scene color characteristics, we can understand the basic rules of animation color design, and better design the color of animation scene, and also consider the color of the characters. Combined with the relevant application software required by computer animation production, the animation effect can be displayed in a more harmonious and excellent color configuration between the two, and the final visual effect of the film works can be displayed vividly and changeably.

### 3.2 Color style setting of journey to a foreign land

The color style should be consistent with the style of the whole animation. Journey to a foreign land is a fantasy animation, whose color style determines the color style of fantasy style. The color style of "journey to an alien land" belongs to fantasy style. In the design of scenes and characters, it adopts novel, bold, exaggerated and unique props and scene environment. It is beyond imagination and sense of form. The use of color style is novel and bold. It adopts flat, highly generalized and purified color. Exaggeration and deformation techniques highlight the visual effect and decoration of pure color. For example, the light purple sky, blue clouds, line cities, various colorful and weird little monsters and other unconventional things in the film are beyond people's conventional heart and appreciation habits, which makes the audience have a strong visual and psychological feeling. Show the audience a sense of fantasy. The short animated film "journey to a foreign land" is an artistic animation with certain personality characteristics.

### 3.3 Color Design of the Role of "Journey to a Foreign Land"

The main characters of the animated short film "Journey to a Foreign Land" are girls vv and rainbow worms.

#### 1) Color design of girl VV

The identity of girl VV is a middle school student who is busy in school all day. She is under heavy academic pressure every day and lacks the fun of life. Through the positioning of characters, when setting the VV shape of girls in real life, purple hair is tied up with lovely horsetail on top of her head, and wears a white printed skirt and white shoes to show a simple and quiet image of middle school girl. The style of illustration tends to be hand-painted, and its color use changes a lot, mainly in warm colors, mixed with some cold colors, emphasizing its own contradictory characteristics (as shown in Figure 3). In addition, the girl VV has been designed with q-version, mainly appearing in the illusion, which is a simplified version of the real life role, in order to unify with the image style of the auxiliary role in the illusion. The color application of the color is the same as other auxiliary characters, and the hair is treated by two colors (as shown in Figure 4).

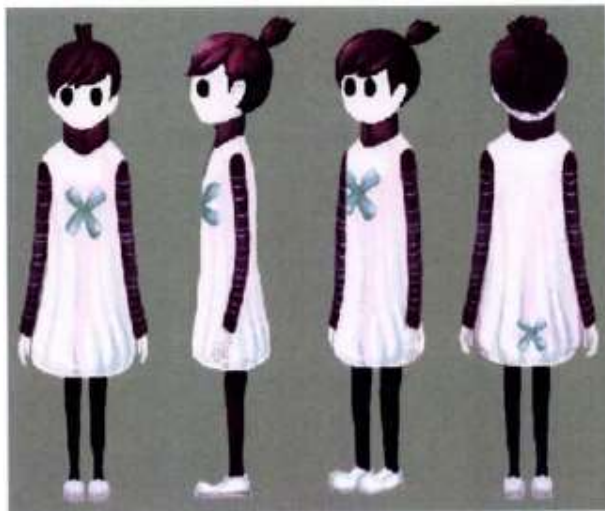


Fig 3: Girl's VV look



Fig 4: Q version of girl VV

2) Color design of rainbow bug

Rainbow bug is an image with strong fantasy color. It runs through the whole story and plays a clue role in the development of the plot. From the color at the beginning to the black self color at the end, it implies a colorful life. Therefore, in the color design of rainbow bug, a variety of gorgeous color matching methods are adopted to reflect its hope and vitality. Too many bright colors in the body parts are easy to cause visual confusion, so black is used in the head, feet, stripes and other places of the rainbow bug. The shape of rainbow bug is lovely. The round rainbow body, two black bean eyes and a flexible nose bring unique vitality to the whole work (as shown in Figure 4-5).



Fig 4: Rainbow bug in cartoon



Fig 5: Rainbow chong modeling

**IV. COLOR PROCESSING TECHNOLOGY OF ANIMATION "A JOURNEY TO A FOREIGN LAND"**

4.1 The Making of A Journey to a Foreign Land

To draw animated characters, we should make full use of software and hardware tools, grasp their advantages, and combine the performances of hand-painting, graphics tablet and photoshop software tools to create the best effect of character drawing. The steps of character drawing: (1) sketch drawing; (2) Import into the computer; (3) Sketch repair (4) Five senses drawing; (5) Role auxiliary color; (6) Color parts and details; (7) Effect treatment; (8) Correct the color of the whole character.

In the animation "journey to the outside", some simple scenes are drawn by Photoshop software, such as indoor scenes and night colors. Most of the main scenes are made by superposition of materials in the AR effects software. Here, we introduce the scenes made by AFIER effects. The scene is mainly composed of superposition of materials, color adjustment and special effects. (1) The material superposition; (2) adjust the color of the material components, coordinate the color tone of the scene; (3) make special effects to increase the flexibility of the scene.

#### 4.2 After effects color correction technology

Color correction is an important function in film and television animation production. Color correction is mainly used to calibrate the hue of the same film on the objective technical and subjective artistic level.

The objective technical level of color correction is mainly based on the calibration of the corresponding technical index parameters of film and television color restoration, to make up for the defects in the early shooting, such as color deviation, overexposure and so on, so as to maximize the color restoration of the early shooting picture, so as to meet the index requirements of film and television picture broadcasting.

The subjective art level is mainly based on the adjustment of visual color by the overall tone, style, emotion and other factors of the film. It can be used as a means of special effects to create a unique visual style to enhance the artistry of the picture, so as to create the overall visual effect and atmosphere of the film, arouse the visual attention and psychological induction of the audience, and achieve the artistic "performance" of image color. This is the charm of color correction. Animation is a kind of film type with strong subjective creativity, and its color correction is more from the subjective artistic level.

Pay attention to the use of indoor scenery, outdoor scenery and soft light to avoid the disharmony of contrast color.

Color matching of interior scenery. In general, the main light source is cool and the auxiliary light is warm, so the dark part is relatively warm. Sometimes these features can not be reflected in the video material, so we must adjust to this tendency artificially in the process of adjustment. Sometimes it's the same indoor scene, because the theme color is yellow or green, and the adjustment direction is different, it needs to get rid of all the disharmonious colors. Another example is that there are many people in the room, which are messy and have no theme. Then the picture must highlight the sense of light and create an atmosphere. The adjusted picture feels clear and clean. At this time, you can use the soft light effect. But soft light can not be used indiscriminately, it will make the picture blurred. Between the theme color and its complementary color, the more layers of color gradients, the more stable the picture is. However, all these neutral colors have to be very implicit and must not be highlighted by themselves.

Color matching of outdoor scenes. If the outdoor scenery is very straight, the lines and outlines of the scenery are rigid, and the colors are messy. The theme color is red, and there is a large area of pure white or orange in the picture, so you can adjust all other gray colors to any color system according to your needs, but blue is a common practice, and the effect is obvious.

## V. CONCLUSION

Through the production of "journey to an alien land" animation short film, we have a deeper understanding of the design and production technology of color in film and television animation. The specific application technology of color, color setting, color matching and color correction technology are of great significance for the production of film and television animation.

produce many artistic effects that can not be achieved by real shooting, and unprecedented expands the performance space and performance ability of film and television works. Deeply realize the importance of digital animation color technology for animation film.

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