The Research of Animation Art Drawing Design Paradigm from the Perspective of Aesthetics and Structural Thinking

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Abstract

Animation scene design is an important part of a successful animated cartoon, which plays an important role in setting the atmosphere and art style. We will decorate the scene design of painting techniques used in opera animation, is the traditional ethnic elements into an art form with modern aesthetic needs, in the opera animation scene design in multi angle use of painting language training, aims to expand the creator more space. On the one hand, on the one hand, on the other hand, it should be drawn by means of painting. From the birth of the animated film, art style and the film has a close relationship between the blood, the art style is the mother of the animated film, the different forms of art for the development of animation film provides the creation of nutrients. In addition to its story, image and music and many other factors, the scene design and art style settings are two important aspects.

Keywords: Animation, art style, scene design, computer art, paradigm.

Introduction

Animation scene design is the animation film in addition to the role of unexpected changes in the shape of all things. Excellent scene design, can foil the role of psychological changes and the inner emotional world, with lyrical and ideographic function. The designer through the design of color, light, structure and camera angle reasonable, the character's inner feelings and emotions by changing scenes, such as the role of reflecting the inner activities of the dreams, memories, picture, with the combination of the way of animation character of the mental and psychological description, the description of imagination and fantasy the visualization, give full play to the role of the rich inner world.

Scene design should not only have a high degree of creativity, but also have a strong artistic; classic scene design not only expresses the artistic pursuit of the film, but also fully embodies the artistic style of the film. With the rapid development of science and technology and the drastic changes of social life, the cultural activities have been more and more frequent since twenty-first Century. The wide field of view and cultural subjects tend to be integrated between complementary trend, so that the original relatively independent art form and kinds of creative ideas, style and profound changes happened in history, showing a more diverse scene appearance. The traditional opera animation creates the new relation and the new environment of the human and the traditional culture, the human and the opera art, and has brought the new creation way and the artistic language. It can be said that the animation is a new animation design, full of vitality and development prospects of the art form. For the performance of opera animation scene in the story, to create an atmosphere of changing, environment, foil characters in plays a very important role.

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The art of animation is a kind of art form of traditional 2D animation in the most appealing, high quality animation is still attractive has been widely welcomed. But the traditional art of animation is mainly based on key frame method, the process is very cumbersome and time-consuming, and requires the animator has rich practical life experience and superb painting skills. In order to speed up the design and production process of art animation, researchers have proposed and implemented a number of effective computer-aided methods.

In order to change this situation, researchers in recent years have been trying to develop and explore new art animation techniques, production methods and the way to make the traditional art. Their animation system in the two-dimensional plane expression faces the information shortage, put forward the integration of video (time dimension information), 2D or 3D geometric information for half to make art animation; at the same time, they also refer to the relevant fields (such as 3D animation, non-photorealistic rendering) of the new technology, to explore a new method of modeling animation and rendering.

![Animation design](image.png)

**Figure 1. Animation design.**

**The Proposed Methodology**

**The art of animation design and production process.** The comprehensive use of computer vision and image processing technology, based on the input information of video streaming model, to explore new, directly driven by the performing art animation process and method.

Based on the traditional two-dimensional animation production process, the integration of the two dimensional or three-dimensional geometric information of the object is described to improve the automation degree of the middle frame coloring process.

The art of animation material reuse based method. It tries to be accumulated in the cartoon motion content and painting techniques extracted, the system formed a variety of cartoon style and techniques of motion template, and is directly applied to the production of new cartoon animation in.

Drawing on the current three-dimensional animation production process and methods, combined with the non photorealistic rendering method, to improve the traditional
two-dimensional animation production methods and processes, the formation of a new art animation modeling and rendering techniques.

**Video based animation art.** People in the exploration of new method of making art of animation, it is natural to think of the video stream. It not only provides the color, texture and contour of visual information, but also provides the visual information changes with time, for art animation in various dimensions (including time d) to provide reference information. In the technical route, method of video stream information is generated based on the animation art is mainly a kind of copying or imitation based on the idea of making.

All the information of video stream is directly to cartoon painting way. Using non real image space rendering algorithm based on the simulation of a painting style, the video content is automatically converted to a sequence of pictures with cartoon style and visual effects.

Some useful reference information extracted video stream, for the production of animation art. For example, in a sequence of frames of video stream, the trajectory tracking technology in each frame in the automatic / semi-automatic extraction and draw the contour line; and further based on the contour line, through the automatic coloring to create art the corresponding animation sequence.

![Figure 2. Art animation based on video streaming.](image)

**Mental Health Education.** SnakeToonz system is proposed by Agarwala, using a method of partial contour extraction, to generate the cartoon animation sequence with sketching technology. The user first remove the first frame of video stream, and then draw the corresponding contour curve directly in the image, and the curve of the gap between the closed up. The first frame after painting, system estimation of copy of the first frame is drawn through movement, it spread to the rest of the frame.
Cartoon animation production process based on contour extraction. Decoration design animation scene, with strong rules of beauty, beauty, beauty of form and order, it will form a large number of natural color and complicated life prototype of art will be summarized, changeable and rich images by composition, complete the harmony unify, the rules of order processing to achieve the aesthetic form. Decorative design color also absorbed many folk color patterns, tend to be flat and simple, the order of harmony, balance, emptiness and density, the biggest feature is the plane and arbitrary color transform, and decorative beauty under the principle of exaggerated contrast with strong generality, so that the color becomes. Changes in temperature are different, distinct. However, in the specific scene design, the use of decorative color should be based on the scene and the main characters such as the shape of the order of the strength, and in accordance with the level of flatness, the number of simple design.

Opera animation rendering is the art of space, in the course of the development of decorative painting art, the artist is to explore the process of expression of space and form, each visual concept change, directly affect people with physical space and attitude.

At present, the teaching methods of basic training of animation scene, is to guide students to learn how to correctly observe and constructing the object skills through learning, students can understand the general composition of several elements of the scene design: shading, shape, structure, scale and perspective, and understand the lines, movement, balance, rhythm, density, and other than the primary and secondary abstract the law contains composition. We usually regard them as an important factor to define the dimensions of the picture, the picture is because no matter the establishment of three-dimensional space, or space, depends on our choice and use of these factors, in the performance of the opera animation scene design, to grasp the picture often depends on our knowledge, emotion and intuition.

In the design of the decorative painting opera animation scene, the space and the body are the main body of the animation scene drawing, and also a pair of complementary concepts. Space through shading, shape, structure, scale and perspective, texture, line of the several basic elements to reflect, but the body is an object in space share way, including size, location, shape. Therefore, through the analysis of the function and function of each factor, we can find the contact way between the factors.
Structural thinking. The volume and the interval is the visual elements in the space they occupy within the scope of its arrangement is an important condition for the composition, volume ratio, through its brightness, direction, position and weight of each other or contrast. In the creation of all the volume indicates two weight: physical weight, including the role of gravity in the entity; visual weight, i.e. a attract our sight and become the focus of visual objects, visual focus on the screen with other volume, plane or interval to form a stable, association or contrast relationship.

Conclusion

The diversification trend of artistic development, the animation education mode of thinking become more abundant, not just rely on a single subject, single level mode of education and teaching content, in order to adapt to the requirements of the development of art of today, we should continue to explore the art of animation professionals in the visual field, and to further strengthen the research on color knowledge, make the aesthetic breakthrough and leap, decorative opera animation scene design is extended scene design, the animation form, with distinct characteristics of the times, the traditional opera art is no longer limited to the stage, can spread more in the media, to now the high speed communication way, broke through the previous forms of opera that allows more people to contact and understanding Chinese opera art.

References