CG Technology under the Film Scene Art

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Abstract. Since the 21st century, the film had completely entered a digital world. Computer Graphics was involved in all of a filmmaking, give an infinite space to image and is bring more convenient that filmmaking efficient. Film scene is gradually into a virtual age when digital times developing, as an important role in film space. Computer Graphics break the limit of traditional scene-making, and create more complicated scenes design, it pour fresh blood into scene art , expansion the thought of filmmaking and nice process.

Keywords: Computer Graphics, Film Scene, Scene Art, Space, Scene Design

1. Development of CG Scene Production in the Film

With the improvement of living standards, the film has been deeply rooted in people's social life as a comprehensive art, the scene is the carrier of the development of the film plot, which not only provides an environmental space for a character, but also contains more in-depth content [1].

The world we live in is a diverse space with cultural deposits and spiritual coexistence, and it is the environmental space, the time space and the spiritual space that together create our life scene. In the movie, the scene refers to the life scene formed by certain tasks and actions in a certain time and space (mainly space) or the relationship between characters. The culture and spirit are integrated into every detail of the picture, and the movie scene is to reflect the life scene of the movie characters with straightforward pictures [2-4].

The scene design of the film originated from the scene design of the stage drama, and the master of the film Merrier was the pioneer of the scene design of the film by imitating the stage set of the drama. Traditional film scene design consists of two parts: scene taking and scene props and scenery. Special scene effects are made by lighting and physical and chemical devices. Model scenes replace scenes that are difficult to shoot in reality [5-7].

As digital technology gradually infiltrates people's life, we see that computer technology has been applied in every field everywhere. In 1982, Walt Disney's Tron is first with computer generated images and real combination of complete science fiction film, is considered to be "ushered in a new era CG production of film and television, computer technology in the film industry, it is in the film brought the huge development potential, laid it in the important position in the history of film development [8-10].

The application of CG technology in movie scenes is mainly reflected in two forms: one is the digital animation movie scenes completely produced by computer technology, such as Shrek and Finding Nemo, etc.; the other is the combination of digital scenes made by computer technology and
live-action shooting. People don't think of such films as cartoons, but think of them as close to reality and more shocking than the real scenes. Such films as Lord of the Rings and Star Wars are like this.

2. Three-dimensional Production

During the development of CG technology, the epoch-making movie Star Wars appeared. Shot in 1977, special effects director John DE Kostya used digital animation controls and 3-D imaging for the first time, giving viewers unprecedented access to cosmic warfare and winning him the Academy Award for best visual Effects that year.

3D virtual scene production not only provide the convenience for the designer's creation, more important is that it let the audience feel the picture is close to the real flaw but cannot find it, the impossible possible, intoxicated with the visual magic movies, through the scene elements lead to the audience to focus on the plot development and the subject itself, reached the scene narrative plot rendering role.

The powerful expression of CG technology and the creative ideas of film creators collide with each other, bringing the audience a fresh feeling and visual impact, which makes the film industry reflect an unprecedented vitality. CG technology over traditional complex live action production scene, huge sets of production engineering is more easy to control of the scene is a much more easily, more or less and put things in the scene, adjust the scene atmosphere, debugging frame structure is move the mouse can complete a simple operation, and CG technology makes the scene designer's focus on creative, intellectual, in a traditional movie set in the need to avoid the things is no longer limited.

3. The Artistry of Movie Scenes in CG Technology

In the use of modern digital technology to make the virtual scene at the same time, we can't be ignored is that the film is an art, a film scene, as one of the visual elements of film, film is one of the forms of visual art, joining technology scenario also needs to have art on the basis of support, can better express the content of the scene.

3.1 Scene Design and Emotion

"Since ancient times, people have stressed the importance of feeling in artistic creation." As the expression of emotion, art plays an extremely important role in artistic works, no matter from the perspective of the subject's spirit and psychology or from the perspective of the content of artistic works. It can be said that there would be no art without emotion. Only by understanding the emotions in the film can the audience have an inner communication with the film. Every element of the film scene should promote the plot development and render the emotions of the characters, so the design of the scene is particularly important. Different lenses have different mood, the scene is to use the function of space emotions to set off the main body, space design is the designer of different scenarios for the sublimation of the scene in real life, the mood of scene space expression is to use the audience is put to the objects in the scene on the physical and psychological changes, lighting, special effects such as images of tiny details of perception to hint. The design of the scene under the CG technology can be created within the scope of the technical control audience unprecedented picture, but even with such a wide developing platform, movie scene design always conform to the audience's aesthetic, the connotation of the movie, not too much exaggeration, the essence of art design is to bring the audience visual enjoyment, emotional adaptation, not blindly pursue the creation of powerful and unconstrained style, with the help of technology, also should as far as possible close to the real scene design, let the audience produce emotional exchange on the image, understanding of the content, in this way, the scene to render the role of emotion.

James Cameron in 2010 to guide film "avatar" jack with the most advanced technology for the film Sally creates a fantasy trip to another planet, also for the audience to build a magic dream Pandora, jagged lush tongtian giant tree, rock dotted with floating in the air, colorful is full of strange creatures, dense forests, torrents straight up waterfalls, softness and mother the same tree, night elf dancing was glowing creatures to rotate the jungle, like a dream of fantasy garden. Sometimes magnificent,
sometimes dreamlike and fresh, eerily romantic, the scenes of the film always keep people tightly locked in the wonderful scenery, with the fantastic plot, visually and psychologically impact the inner world of the audience. The director uses CG technology to create this dreamlike world, which is unreal but real, presenting a visual feast for the audience with his artistic inspiration and rich imagination. The success of Avatar is not only the director's creative and artistic success, but also the bold use of technology and the idea of combining art has pushed the film to a new stage. Almost all of the scenes in the film are made virtually, and the director really proves that "nothing is impossible to the imagination". The film has been a hit since its release, and the Internet is brimming with praise for the style and artistic value of the entire film. Moviegoers say the film puts them in a situation where they can't help but feel like they're on Pandora and don't want to wake up. Make new technology gives the scene, but in technology and the whole of movie plot is unified, unified design and emotional art, only feelings into the art, the audience will be able to accept the understanding of the film from psychological and, blindly will scenes make exaggerated dazzling and ignore the plot and the audience acceptance will lose the value of the film. In the movie, the scene serves to foil the feelings of the characters, while for the whole movie, the scene serves the emotional resonance of the audience.

3.2 Atmosphere Construction of the Scene

After the general scene modeling and style design are finalized, special effects such as explosions, particles, fluids and color light and shadow design can be used to create an overall atmosphere for the scene and promote the development of plot space emotions.

Surreal themes such as fantasy, horror, fairy tales and futurity are the best examples of the superiority of CG technology in setting production. CG technology can provide special effects with better control of emotional points. The ancients have "tree lost its", "lianshan Miao smoke" and so on with ink art show is difficult to see the beauty of the style, if you want to present such a beautiful scenery in the movie, I passed for a long time, season plan, filming may also exist in a variety of unknown natural factors, it is difficult to control in person, and CG technology can make use of particles, smoke and other special effects production, the daylighting of the simulated reality, integration of color has the smoke-filled, fallen petal sky for visual arts vulture act the role ofing, let dream through the eyes of the audience to the inner world, and in the screen for a long time.

The Lord of the Rings trilogy is a three-part fantasy adventure film series directed by Peter Jackson. The film style is varied, set adventure, gorgeous, magical, romantic, war, terror in one, CG technology produced scenes everywhere. Pure and fresh and rural villages in the shire, dream magnificent castle, evil evil isengard tower, on the middle different ethnic turf has its unique style, stylist elaborate scrutiny of the original text scene description, into their understanding text art scenes, using the CG technology perfect honed in the scene from the vision every detail, from the vision to build a gluttonous feast. We begin with special effects to build atmosphere come up to watch the film scene design, in the elves live in wonderland, pour down the mountains everywhere waterfall, waterfall splash around the lush trees will fairy wonderland shrouded in a hazy ethereal space, this is the picture of the elves lived on inside people, fairy impression in people's minds are fantastic, mysterious, forest around, hazy virtual lovers, is sacred to keep the world fairyland, and elves are mysterious and conform to the fairyland fantasy, designers, by controlling the fluid particle effects of physical parameters, such as adjust the waterfalls and smoke form, scope and material, The reflection of water droplets in the light is also delicate and realistic. Surrounded by waterfalls and smoke, The Jingling Mountain is almost invisible. In the same scene, the foreground is clear and the background is unreal, while the real and the unreal reflect each other. The scene is brilliant and exquisite under the creation of special effects.

The processing of color and light is also very important to create the atmosphere of the film, which can not only show the aesthetic feeling of the picture but also control the mood of the scene. In the Lord of the Rings, there is a scene in which the Ringspirit pursues Frodo. The light is cold and dim, and the background is dim. Only a beam of cold light at the back is dense in the outline of the Ringspirit and Frodo. In contrast, when Frodo lived a quiet and peaceful life in the Shire, the scene
was bright and soft, with rich layers of colors, yellow and green grass, warm sunshine, and yellow wooden doors for The Shire people. The whole scene was filled with warmth and harmony, reflecting Frodo's peaceful pastoral life. Under the combined effect of extreme color collocation and meticulous light and shadow design, the environment and psychological state of the main character are reflected, which also shapes the emotional content of the scene.

When the elements are unified and the priorities are distinct, the perfect atmosphere construction of the scene will lead the audience into the plot and understand the plot, so that the scene can truly reflect its charm.

3.3 Spatial Extension of the Scene
The scene design of the film is mainly derived from the real scene, which is the spatial representation of the main character. In art design, the dimensional feeling of often say this is the size of the deep transverse around before and after, computer drawing before and after the scene with size, the actual situation to performance space, 3d scene is planned according to the proportion of scale production scene of each object, is a microcosm of the real scene, combined with the use of virtual camera, can make the virtual scene like a live action with movement of the lens. The scenes produced by CG technology interplay between the real and the virtual, with a depth of depth that is close to the real. Moreover, each element of the scene can be dynamically adjusted to guide the development of the plot, and the connotation can be metaphorized into the space to achieve a deeper expression of the film's main idea.

CG technology can depict every element of the scene in a delicate way, so it can present real details in any scene, which expands enough space for the performance tension of the lens. Even if the scene is enlarged, there will be no false focus or rough possibility. The motion space of the lens in the scene has been extended to a certain extent, which is no longer limited to the shooting space and cost space created by the real environment. It can pass over the majestic mountain top, or enjoy the smooth penetration of the house into every corner of the house from a distance, so as to remove the obstacles between the internal space and external space in the real shooting. By using CG technology to extend the moving space of the lens, some long shots with ups and downs, far-reaching and rhythm also get more performance opportunities.

In addition to the extension of physical space, CG technology also breaks the time and space of movie scenes. With CG technology, it is possible to return to the primeval forest and travel into the future. Filmmakers and designers endowed the past history with life on the screen, presented the history vividly before the eyes of the audience, and presented the knowledge in a more acceptable way. Filmmakers and designers have brought the unknown future to the screen by taking the thread out of the thread of life progress, revealing people's yearning for technology and aspiration for a better tomorrow.

3.4 Scene Literature and Art
The literature and art of the article lies in its clear and orderly logical relationship, which can construct the words and phrases of the reader's imagination space, and is the combination of literature and art of thought. From literary works to scripts to film scenes, the film is the visual integration of literature and art. The gorgeous rhetoric and implied rhetoric are removed from the fragrance of ink and ink, and put on the picture which is directly conveyed to the soul to complete a perfect transformation from text to audiovisual art. Movie scene can be consciousness, aesthetic, history and culture in the process of building into the scene, the values of good interaction with the audience, although CG technologies expand the scene production, design, and space, but as a service to the society of the existence of public art, movie will still have the right to value, aesthetic, firm real just culture localization.

4. Prospects of CG Technology in Movie Scenes
CG film scenes make up for the gap of many traditional scenes. In terms of emotional interaction with the audience and creative space for film artists, progress has been made, which promotes the gradual
strength of the film industry. More and more viewers don't meet at home watching movies on the small screen and come out to enjoy the cinema bring visual storm, improve the simple housebound people psychology, the film's income is considerable also has brought the development opportunity, more talent aimed at the emerging market, promote the whole film and technology advance, CG technology believe that the future will bring us more surprise.

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