

The Influence of Digital Media Art on Animation Design

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Abstract: It is necessary to have a deep understanding of digital media art for digital media art to better promote the development of animation design. And in-depth analysis of its functions and application effects, then applied to the animation design in an all-round and multi-angle, to comprehensively improve the level of animation design. Therefore, this study started with the concept of digital media and digital media art. After comparing the traditional animation design with the animation design under digital media art, this paper analyzed the characteristics of animation design under digital media art. It also discussed the influence of digital media technology on the role design in animation design, the impact of the field of change, the impact of application methods, and the impact of development and innovation. Hoping this article can provide some theoretical references value for the practitioners of animation design industry.

1. Introduction

With the rapid development of digital media, people realized that the integration of performance art and artistic concepts into digital media is more conducive to the development of digital media. Therefore, digital media art has emerged. The integration of digital media art into animation design has also brought certain influence to animation design, which has promoted the development of the animation industry. It can be said that the emergence of digital media has improved the traditional form of information dissemination in China and provided people with a more comprehensive channel of perception [1]. Digital media art is a form of cultural communication based on digital media. For example, stable TV shows can be categorized as digital media art, and various game software can also be called digital media art. Animation design links technology and art. Through better technologies, we are able to show better art and better display and promote culture develop. Therefore, digital media art has an important influence on animation design. However, digital media belongs to emerging media in China and it is also an effective combination of art and science. To a certain extent, it compensates for the lack of traditional animation creation methods, making the picture more exciting, but the problem also comes along [2]. The root of animation creation is solid painter, and the cutting-edge science and technology can't replace the delicate and emotional temperature brought by real brushstrokes. Therefore, study the influence of digital media art on animation design, and rationally use digital media to broaden the animation creation channel to make animation more diversified. At the same time, maintaining the spiritual realm, cultural elements and humanistic care in art works will become the trend of digital media in the future. All of the above are very important. Therefore, this study started with the concept of digital media and digital media art. After comparing the traditional animation design with the animation design under digital media art, this paper analyzed the characteristics of animation design under digital media art. It also discussed the influence of digital media technology on the role design in animation design, the impact of the field of change, the impact of application methods, and the impact of development and innovation. Hoping this article can provide some theoretical reference value for the practitioners of animation design industry.

2. Overviews of Digital Media

Digital media refers to an information carrier that implements processes such as recording,

propagation, acquisition, and processing by means of binary numbers. The carrier includes digital text, images, graphics, video images, sounds, animations, and so on. And a presentation medium (encoding) capable of expressing these sensory media (the above contents are collectively referred to as logical media), it also typically includes physical media that stores, transmits, and displays logical media. In the narrow sense, the media mainly refers to digital sounds, animations, images, and so on [3]. Its classification is shown in Figure 1.

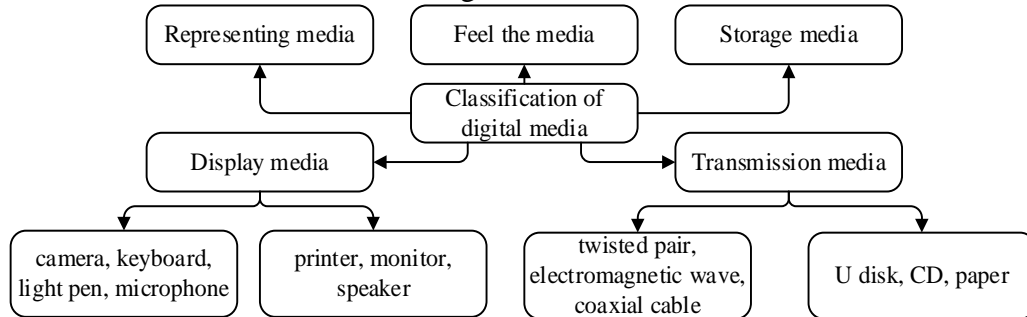


Fig 1. Classification of digital media

Digital media art is based on the service and entertainment of the public. In the new era, digital media has quickly gained a place in the cultural industry based on its diversified development forms and channels. It is also widely used in television, news, film, art design and tourism. Today's animation design is different from the past, people have developed a lot of intelligent software, these software is simple to operate and the picture is better. The characteristics of modern technology are innovation. Combining digital media technology with animation design, the content of creation is richer, the form of expression is more diverse, and the audience has a better experience. The current digital media art mainly has flat and stereoscopic images. Graphic animation was created using a web animation design software invented by MACROMEDIA. The stereo animation is made with 3D animation software. The Maya 3D animation design software launched by the US AUTODESK company is widely favored in the industry. A lot of well-received animations are made through this software, such as "Transformers" and "Kung Fu Panda" are all made with Maya software. The stunning visual effects made the audience hooked and won the box office for the film. Movie animations that use computer technology for visual design have also entered the field of vision. Nowadays, the application of digital media art in animation design is more and more, and the works produced by the combination of information technology and animation are more and more popular among the audience [4]. The use of computer technology for visual design is a major innovation in animation production, and is a strong evidence to prove that technology changes life. The application of digital media technology not only changes the development pattern of the animation industry, but also urges more producers to adapt to the development of the times. Only by continuous innovation and progress will they be eliminated by society. The main development of digital media art is shown in Figure 2.

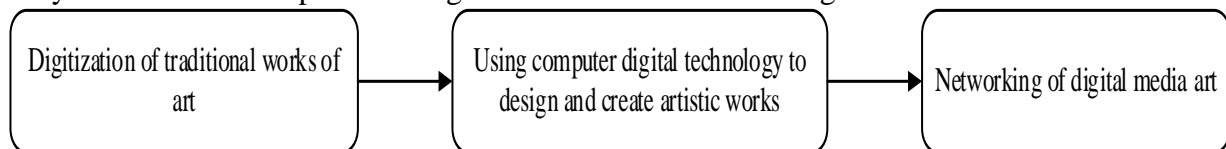


Fig 2. The development of digital media art

3. Analysis of the Characteristics of Animation Design under Digital Media Art

The animated design of digital media is an upgrade and innovation of traditional animation design, which perfectly combines artistic forms such as literature, painting, scriptwriting and photography. Rely on the phenomenon and principle of visual pauses, by switching screens quickly to create a coherent and smooth visual effect. The traditional animation design mainly uses the photographic equipment to transfer related pictures and images to the audio and video machine. The

cost of production is relatively high and the efficiency is low, which makes it difficult to meet the fast media needs of the new era. Digital media art can use computer digital technology to edit and edit pictures directly on the computer, and use software to complete animation creation and playback. Compared with the film based on the actual life scene, the animation works are based on the imaginative imagination of the creator. It can create a space that is overhead on the real world as needed, and the limitations of the form of creation are small. It is characterized by comprehensiveness, hypothesis, humor and exaggeration [5]. The animation design under the digital media art mainly has four characteristics: comprehensive, virtuality, hypothetical and exaggerated. The specific analysis is shown in Table 1.

Table 1 Features of animation design under digital media art

Characteristics	Concepts	Influences
Comprehensive	With the integration of computer digital technology, the perfect combination of technology and animation technology in the fields of literature, dance, drama, simulation and simulation has been realized.	Digital media animation is more visual and appealing, and viewers are more likely to resonate in the process of enjoying animation works.
Virtuality	The design is the creator to fully mobilize his imagination in the animation space, time, characters, plots, etc., is to use digital virtualization technology to complete.	While appreciating the work, the audience can play their second imagination, relieve stress and relax the mind and body.
Assumption	Animation design under digital media has fewer restrictions on the creator's mindset. Its virtuality and imagination can help creators to add some humorous and interesting plots in the design, to fully explore and cater to the spiritual needs of the audience.	Using different forms of humor to serve the public, it can also play a role in guiding social thinking and development.
Exaggeration	Expressed in the exaggeration of the plot and the exaggeration of the character	Enrich and highlight the character's characteristics through the exaggeration of characters in expressions, expressions and styling, making the work more appealing.

4. The Influence of Digital Media Art on Animation Design

4.1. The Influence of Digital Media Art on Character Design in Animation.

Compared with the original animation design technology, digital media art can improve the design accuracy by setting key frames in today's two-dimensional animation design. That is to say, in the actual production process, as long as the required number of key frames is set, the image sense of the animation in the key frame can be automatically generated by the corresponding device. In this way, the character own flexibility can be perfectly displayed. It is also possible to enhance the continuity between the actions on the basis of ensuring the clarity of the picture. At the same time, through the application of digital media art, you can also increase the overall quality of the animation. Different from the black and white colors in the past, the use and matching of colors in today's animation design is more distinct, and it can highlight the character characteristics of design characters. In addition, the use of this technology can also improve the speed and efficiency of coloring, and improve the processing speed of images under the premise of ensuring image quality.

The application of digital media technology in 3D animation is more realistic and stunning in visual effects. The design and production of light, background and design image have also risen to a higher level. At the same time, the design and production process of 3D animation is more complicated and complicated. Such as character image design, model construction, key frame setting and animation generation, etc., all reflect the advanced and scientific nature of digital media technology. Based on the application of digital media technology, the level of 3D animation

production is constantly improving. For example, the "Avatar" from the beginning of the "Oppen Empire" to "Avenida" is based on the application of three-dimensional technology, achieving an amazing improvement in the technical level [6]. Today's animation design and production are increasingly demanding their professional capabilities. Designers must not only be proficient in the theoretical basics of the profession, but also strengthen their own practical ability. Especially after the digital media art is widely used in animation design, the requirements for designers are more stringent.

4.2. The Impact of Digital Media Art Design on the Revolution of Animation Design.

Digital media art has made the development of animation design more spacious, making the current animation world more realistic and more diverse. And animation has become a form of cultural expression in contemporary life, which has an impact on our moments of life. Therefore, digital media technology has an irreplaceable influence on the development of animation design. The specific performance is shown in Table 2.

Table 2 the impact of digital media art design on the revolution of animation design

Areas	Influences	Example analysis
Traditional art design	The use of digital media design to better display the animation and film design, express the feelings that you want to express, and more realistically present the animated picture.	Using digital media to create an image of a dangerous scene in a movie to bring a better visual experience
Advertising mode	The digital media art design can make the animation more vivid and more uniquely show the animation art, giving the audience a different visual impact.	Incorporating technology components into animation design, using various special effects to arouse consumer interest, and then transform their consumption concept.
Game screen	The use of animated virtual scenes for character design and scene arrangement can make the task more vivid and give players a more realistic experience.	The use of digital media technology to transform computer games can promote the further development of computer games, enrich the structure of its game scenes, and attract more attention from game lovers.
Animation technology	Animated design can bring a new development model to various industries, while at the same time making it diversified and constantly improving the animation scene.	The unique images and spectacular scenes in "Ice Age" are driven by modern media art, allowing people to watch cartoons with ease and pleasure.
Content of the work	The application in artistic creation greatly enriches the content of artistic creation, and makes the content of the work have more room for performance.	Through the digital media art, not only can the modern and ancient pictures be successfully displayed, but also the film and television content can be expressed from the microscopic and macroscopic perspectives.
Creative efficiency	The application of digital media art in the animation design process not only optimizes the animation production process, but also promotes the animation works.	The use of digital media art to design animation can improve the efficiency of animation creation.

4.3. The Influence of Digital Media Art on the Application Methods in Animation Design.

4.3.1. Enhance the portrayal of the details of the digital media art in animation design

The content of digital media art is extremely rich. The steps and content of animation design are also more complex, such as animated background, plane composition, sub-shot script, and 3D animation. Therefore, the application of digital media art in animation design should avoid the sense of violation, so that the final effect of the animation works is not good. Animation creators need to pay more attention to the fine-grained control of each nuance in the practice of using digital media

art to complete animation design. Only by completing each step and link with high quality can the quality of the entire animation work be guaranteed.

4.3.2. Improve the core software technology functions of digital media

In the process of using the digital media art to complete the animation design, some core software or advanced equipment will be used, such as the application of professional comic painting software in animation design. Maximize the advantages of these software and devices, and use effective and reasonable resources to meet the requirements of creating animated beauty.

4.4. The Influence of Digital Media Art on the Development and Innovation of Animation Design.

In the current TV media, it is obvious that a series of digital media art that has been formed has been visually represented by computer technology. Among them, the influence on the development and innovation of animation design is particularly prominent.

4.4.1. Digital media provides more video material and performance means for animation design

The development of animation has always been closely related to the development of images, and the emergence of digital media has brought more materials and expressions to animation design. For example, special effects and special effects scenes in the animation assisted in the processing and application of the creation of a new animated film mode - live animated film. Through CG means, the post-production animated characters are inserted into the live-action movie to interact, forming a dream spectacle beyond reality, making the animation a real "dream factory." Take clay animation as an example: it takes several months or even years for the stereotypes of clay characters to be shot by traditional methods. At the same time, the quality of the personnel involved in animation production is extremely high. However, after processing by digital media technology, the working time can be greatly reduced, and the visual effect of the animation is also better, thereby saving manpower, material resources and financial resources.

4.4.2. Digital media enriches the form of animation

Before the advent of digital media technology, the form of animation was relatively simple. The whole can be divided into two-dimensional animation and physical stop motion animation. The former is based on a large number of original paintings. The latter requires clay, puppets, shadows and other props to complete, which is time consuming and laborious. After the intervention of digital media, it gives the animation design a broader spatial perspective and a more sloppy editing method. This makes the animation a fine, complex and spectacular new style in visual performance.

4.4.3. Digital media technology broadens the scope of application of animation

When filming publicity announcements, project demonstrations, promotional short films and other TV content, the reasonably produced animated short films can get a good response from the audience and achieve the multiplier effect. Under the impetus of the digital media art concept, a large number of excellent animated feature films have appeared in recent years at home and abroad, and even been made into an animated film series, such as "God stealing dad" series.

5. Conclusion

Digital media art is the mainstream component of art in the new era. Its integration with animation design can highlight the unique charm of digital media art, and it can also promote the reform and innovation of traditional animation design. In recent years, with the popularization and development of network information technology and computer technology, the development of animation design of digital media art has a good prospect. The full exploration and flexible use of its animation features can further promote the development of digital media animation. Digital media art draws on outstanding elements from multiple fields and organically integrates these

elements to develop unique aesthetic art, which has formed a tremendous force to promote the development of the animation industry.

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