

Application and Intelligent Integration of Digital Animation in Display Under the Background of "Internet +"

Yuxuan Liu ^{1,2}

¹ Academy of Fine Arts, Nanjing Xiaozhuang University, Jiangsu, 210000, China

² School of Art, Southeast University, Jiangsu, 210000, China

Abstract: With the continuous development of digital technology, digital media has gradually become an indispensable part of people's daily lives. The integration of "Internet +" technology and digital animation creation will not only help expand the development space of animation, but also help enrich the ways of animation creation. This article explores the impact of digital technology and digital media on animation creation under the background of "Internet +", and proposes the application of digital technology and digital media in animation display. The results show that it helps to increase the level of animation creation by 7.6%.

Keywords: Intelligent integration, digital animation, Animation display, Internet +

1. INTRODUCTION

With the vigorous development of Internet information technology, the traditional animation industry has been greatly affected. The animation industry is no longer limited to film and television, but cross-border development in the fields of games, teaching, and technology. Cross-border integration has become a new way of innovation and transformation in the animation industry, which has also brought unprecedented opportunities and challenges to the animation industry. The combination of virtual reality technology and animation has made virtual animation widely used in scientific research, teaching, military, medical and other fields. Its diversified use has made the animation industry no longer underestimated, and the simulation characteristics of animation will also be more Large room for play. Apply virtual animation to modern university campus design, fully integrate it with Internet platforms, digital media technology and other fields, and enhance user experience from campus tours, scientific research projects, academic exchanges, and course teaching. Through flexible interactivity and reality is the sense of immersion and convenient operability meet the needs of users in various aspects of the virtual campus [1-6].

The traditional campus tour is mainly to show campus buildings, set up fixed shots to generate scene roaming animation. This traditional way of traveling around the campus has many disadvantages. Users cannot visit the campus as they please, and lack of interactivity. The virtual campus does not have such limitations. It uses sandbox technology to create a more diverse virtual space. Users can create unique characters in the virtual campus, operate the characters to run freely in the virtual campus, and enjoy the virtual space. The characters in the virtual campus can perform actions such as running, jumping, and climbing buildings according to the needs of users. They are highly interactive and have a higher degree of freedom and flexibility. In the 20th century, Canadian original media theorist Marshall McLuhan once said: "The media is information." Therefore, changes in the media promote the arrival of the information age. Today, computers can gather multi-disciplinary knowledge in one program, capture visual, auditory, tactile, and other scanning data and actions, and collaborate to complete different forms of animation production. Animation works also show more interactivity

and immateriality than the screen, which can break time and space to be appreciated and experienced by audiences located in different locations. The function of animation is more powerful, invisible and tolerant in the era of information interaction. Animation is based on the dynamic performance of sequence frames, which crosses the boundaries of traditional art such as film, painting, and photography. The role of its virtual influence is an early representative of the immateriality of the information age. With the help of computer technology, it has perfected its own digital transformation process. Among them, three-dimensional animation and computer programming animation are considered to be an innovation in the history of animation development. Nowadays, as a technical means of dynamic expression, animation is more used in art forms in related fields and has become a highly effective tool for expression [7-14].

With the continuous development of digital technology, the impact on animation creation is becoming more and more profound. In traditional animation creation, animation creators usually create by hand, mainly including designing animation manuscripts and drawing animation original paintings. The drawing process includes multiple links such as background, line drawing, and coloring. It can be seen that the traditional animation creation process is very complicated, which not only consumes material resources, but also consumes energy. Traditional animation creation is to draw lines on a transparent plastic film, color the plastic film on the reverse side, dry it naturally, and finally film it to make it into an animation. The traditional animation creation method takes a long time and the production efficiency is low. The emergence of digital technology has changed the traditional way of animation creation with its own unique advantages. Animation creators can use digital technology to draw animation background and color, which not only greatly saves the cost of animation creation, but also helps to achieve the efficiency of animation production has been improved. Compared with traditional animation creation methods, the same difficulty of animation creation, creation through digital technology is 10 times the efficiency of traditional animation creation. The application of digital technology in animation creation has greatly reduced the difficulty of animation creation, prompting more people to have more opportunities to get in touch with animation creation. Painting creators can

better control the creation of animation and fully express their emotions [15-21].

2. THE PROPOSED METHODOLOGY

2.1 The Digital Animation in the Context of "Internet +"

Digital animation refers to visual design and production with computers as the main tool. It can make virtual things appear in the virtual space in all directions, and at the same time give people a realistic feeling. It includes technology and art, and covers all visual art creation activities in the computer age, such as illustration design, web design, three-dimensional animation, film and television special effects, multimedia technology, virtual interactive technology, etc. It has become a necessity for the development of today's society and leads the audience. Enter an era of digital and surrealism [22-24].

Media culture produced by and virtual reality technologies all belong to the category, and they have formed a considerable economic industry. Animation creators can use WeChat public accounts, Weibo, blogs and other self-media to spread their animation works, so as to continuously expand their reputation. It can be seen that digital media and the Internet provide certain development opportunities for some independent animation creators, which will greatly promote the development of the overall animation industry. In the past, people could not imagine the rapid progress of science and technology nowadays, whether it is information content or a certain technology can be spread rapidly through digital media and the Internet, which provides great convenience for the creation of animation creators. Some independent animations are driven by digital smart TV media technology, from wired to wireless, from 2D to 3D, from ball screen to direct screen, 360-degree surround screen, naked eye 3D, virtual reality, human-computer interaction, etc. may appear in the future A new, multi-dimensional performance experience. These new technologies continue to promote the technological innovation of digital smart TV, and also put forward new challenges and requirements for the creation of animation content products. The creation and production of animation content products should actively adapt to the technological innovation of digital smart TV.

Mainly used in three areas: art design. Including two-dimensional, three-dimensional, illustration, animation, involving fields from clothing design, industrial design, TV advertising to web design and so on. In Japan, Miyazaki Ken's "Spirited Away" is the first Japanese animation designed with a computer background and digital technology.

2.2 The Application of "Internet+" in Digital Animation

The art style of digital animation can also be reflected in its classification. Cartoon animation has simple lines, generalizations, and more direct communication; the brushwork, charm, structure of ink animation traditional ink painting, the intensity of ink, the artistic conception of virtual reality and the light and elegant picture make a major breakthrough in the artistic style of animation; shadow puppet animation A flat and abstract character scene design, with strong decorative effects of patterns, concise use of colors, strong color contrast, and unique visual effects; realistic animation—the true reproduction of visual elements such as characters and scene modeling, and higher requirements for digital technology.

With the rapid development of science and technology, the full coverage of the Internet, and the rapid increase in the number of animation content products, the roles of the media and the audience have begun to transform each other, from a passive "receiver" to an active "remote control". It can be boldly assumed that in the future, viewers may become plot participants or plot controllers including animation and story programs. To this end, smart TV media should actively adapt to the audience's role transition, catch the audience's consumption needs in time, integrate and subdivide animation resources, and innovate column formats to enhance the competitiveness of animation programs and other programs. Wasu TV, which provides platform and operating services for important digital smart TV manufacturers such as Sony, Changhong, Hisense, etc., uses its own audience and platform advantages and audience base and other advantages to actively build in-depth cooperation between hardware manufacturers and animation companies. In view of the characteristics of animation programs, combined with its own media development positioning and development direction, a special children's column has been opened. Among them, the live broadcast theater continues and improves the traditional TV live broadcast method to maintain the viewing habits of old audiences; in order to implement its public social education responsibilities, it has specially opened up intelligent interactive columns such as singing nursery rhymes, listening to stories, and learning knowledge, free of charge Enhance the viewing experience, and finally establish a good image of digital smart TV media in the eyes of the public, and actively complete the role transition of the audience.

As a very inclusive term in the information age, "interaction" has helped more art forms to narrow the distance between the audience and even make the interaction between the work and the audience a part of the work. Appreciators can change from passive to active through programming and physical hardware, with the help of sensing devices and engineering mechanical devices. According to the commands and simple actions of the viewer, the presentation state of the work is changed.

2.3 The Digital Animation Display and Intelligent Integration

In the production process of 3D animation media products, there should first be a clear definition of animation project to carry out the subsequent animation production work. The determination of the project is a prerequisite in the entire production process of media works. The structure of the project should first be clarified in the project management requirements. There are a series of specific steps in the process of 3D animation media production. After each specific step is completed, corresponding resource files will be generated. These phased animation media resources need to be stored in a specific path to facilitate subsequent work. We use the project structure definition function to establish the relationship between the various stages of the 3D animation and the storage path.

Although there are a series of specific working stages in 3D animation media resources and these specific ones can meet most of the needs in the animation production process, there are still special situations that are outside these specific processes, so a set of Flexible process that allows users to customize. The requirements are fulfilled through the process definition function. The animation project management use case diagram shows that the project management module includes three parts: basic project operations, project structure

operations, and process definitions. Among them, the path of resources generated in each process stage is completed through the project structure, and the process definition is to formulate the process work required by the project according to your own project situation. Generally, the processes required in the 3D animation production process include models, textures, bindings, and animations. Lighting and compositing and other related stages. In the basic operations of the project, there are the functions of creating a project, freezing a project, and project archiving. The frozen project is performed for the currently unfinished project, and the frozen project cannot be followed by related operations. The project archive is carried out on the completed projects.

When virtual reality animation participates in the aesthetic process, it naturally forms an aesthetic taste. In the process of virtual reality animation experience and its aesthetic formation, audiences often form their own imagination through sensory experience.

3. CONCLUSIONS

As a dissemination "Internet +", digital animation continues to extend the original concept, and uses "Internet +" as the carrier to realize the cross-border transformation of the multiple expression and dissemination of digital animation. In the era of interactive information, digital animation presents the concept of composite pan-digital animation with a fuzzy trend. It is no longer a carrier of storytelling, but is given new positioning and functions by the times: more service, communication, the demonstrative and interactive functions demonstrate its rich expressive power. Changes in technology and ideology have prompted the continuous advancement of digital animation to meet the diverse dynamic expression demands of mobile platforms, interactive needs, and virtual immersion derived in the information age.

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