

Analysis of Dance Action Design based on Computer Aided Technology

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Abstract: The 21st century is the information age, the computer as a representative of the information has spread to every household, an important source of information to accept people; from its macro role, the computer technology in all sectors of society in various fields of operation and development Its powerful auxiliary function. Dance is a performance of history and the times of art, should be combined with the characteristics of the times, so that the art of dance to keep up with the trend of the times. The application of computer technology is to dance art, the dance art in the design of modern scientific and technological means to be innovative and development, reflecting the dance art and the characteristics of the times closely.

1. Introduction

In the era of information technology, digital application technology in the field of art has played a major role in the creation and performance of artistic aspects of digital operation, to the audience a wonderful art performance, the audience a taste of the digital age of artistic style, dance is also like this. In the field of dance to achieve digital, scientific research and development of the dance is great potential, whether it is dance itself, elements, forms of expression and dissemination of means, or dance creative ideas, creative means and creative methods and other aspects, are Can be cross-era development.

2. International Computer Technology to Support the Role of Dance

As early as the 1950s, Western countries on the modern dance of the law of human movement, and successfully developed a computerized human choreography and choreography to machine choreography software, which is a combination of computer technology and dance products.

In the 21st century, the computer has been popularized on a large scale all over the world. At the same time, the computer technology has made great progress and development compared with the 20th century. Internationally based on the computer technology based on the gradual spread of the development of information technology, culture and art areas as well, many foreign artists began to think about how to achieve the multimedia dance art creation and performance. In this case, the integration of science and technology and dance art trend gradually formed.

Traditional dance art performance to the human body as the most important basis for all dance movements are designed to the human body based on real performance. But now, the computer can be realized on the computer to reproduce the real action, through the analysis of the virtual screen in the computer can be drawn on the accurate assessment of the real dance action, and as a basis for the dance moves to improve, which profoundly reflects the Computer technology on the auxiliary role of dance art [1]. Dance art must follow the basic laws of human movement, the performance of dance movements must be based on the real human body; the same time, the real dance performance data, and its analysis, through modern computer technology to keep up with the trend of dance art Of the real needs. Dance workers should be in the future practice of exploring a reasonable set of ways to make computer technology and dance art to achieve a more in-depth blend.

3. The Unique Role of Multimedia Technology for Dance Action Creation

With the gradual decline of traditional media, the era of mass media gradually come, resulting in new media technology and development. In the new media technology, many areas of society are using this more in line with the trend of the new technology, dance is no exception. The traditional dance art in the new media technology development also produced a new change.

3.1 Technical and scientific dance choreography.

Traditional recording of dance movements is achieved through the description of words and the reproduction of pictures. This recording method needs a lot of manpower and time, which is far from meeting the development demand of dance art in today's times. In the introduction of new media technology, the choreography of choreography is more convenient; at the same time, the demand for the real human body is greatly reduced, which makes choreography independent of the real human body and reduces the workload of dancers. Using new media machines, choreographers can capture dance movements of real people or virtual characters, reproduce them in choreography, and then choreograph the choreography. This software can also be set by the data, the degree of difficulty of dance movements are assessed, and ultimately determine the degree of the action can be achieved, the dance moves more technical content and technical level. Through choreography software, choreographers can achieve dance action decomposition and arrangement, after technical processing, the software allows the staff to watch a more specific form of dance, so that dancers more three-dimensional observation of their performance, and find Out of which is not enough to deepen their understanding of the dance movements.

Today, this choreography software has emerged, and can achieve the choreography and choreography. The software can be introduced to the virtual reality and dance fusion action, and the birth of a number of modern dance creation concept, the true sense of the dance movement to achieve the technical and scientific.

3.2 Dance elements more substantial.

Traditional dance system because of the lack of dance elements, dance movements can not achieve the multi-directional development, so many dance movements also lack of expressive force. In the new media technology under the influence of the dance movement system, there are more elements, and the dance movement system on the dance element has no substantive requirements, reduce the dance elements of the threshold, before many have never tried elements began On the stage, light, space, shadow, modern music and other elements can be through the multimedia technology on the stage to get the perfect presentation. Using multimedia technology, the various elements in a series of combinations and clever arrangements, to reflect the choreographer wants to express ideas. The enrichment of dance elements expands the selection of dance content, enhances the performance of dance movements, and makes the realization of more difficult moves possible.

3.3 Dance creation and performance more time and space.

Dance is a special space within the scope of the action through the action and the stage environment to express the dancer's inner monologue, thus conveying the choreographer's dance ideas. Therefore, the stage environment is critical to the performance of the dancers. The stage is a small space-time, the elements of small space-time include landscape environment, space environment, color environment and light environment, these environments can create a dance on the stage to give full play to the dance atmosphere. The traditional dance performances are limited by the technology and can not create a stage atmosphere which fully conforms to the dance content. The solidification of the dance space greatly reduces the expressiveness of the dance and makes the movements of the dancers less easy to comprehend. Intention. Dance art and new media technology, through the light and shadow technology and high degree of simulation of the stage props, a dance can show a number of space and time, so that dance movements appear more possibilities, so that the story of the dance more substantial, Thought to be more specific expression.

4. Digital Dance Design to Promote the Role of Action

4.1 Digitalization of dance.

The digitization of dance is broad and narrow. In a broad sense, the digitization of dance refers to making dances into images and disseminating them digitally through network channels. It has important value in art communication, promotes people's appreciation and understanding of dance art, and reduces the difficulty of dance education. [2]. From a narrow sense, the digital dance is the use of modern high-tech means, relying on computer digital technology for dance video creation. In this process does not require dancers to play a role, choreographers only need to imagine the heart of a good dance action scenes designed on the computer, from dance movements, props to the stage environment, are created by the computer out.

4.2 The shortage of digital dance.

The generalized digital dance plays a very important role in the dance communication, which makes the art of dance better propaganda and is conducive to the inheritance and development of dance art. But in this process, the digital dance can not really convey the connotation of dance art, dance art concept of the update, dance aesthetic judgment and dance creation process does not play much role.

The digital dance in the narrow sense has realized the great breakthrough of the dance creation way through the developed digital computer technology, but the digital dance creation is still in the initial stage, the main form is too single, lacks the development multi-direction, does not have the market development ability. .

4.3 Digital Dance Creation Analysis - take dance games as an example.

To a certain extent, dance and the game has a great relationship. Therefore, there are many game programs with dance as the theme of the game. There is a domestic called "Super Dancer" dance game, game developers with professional equipment on the domestic top-level hip-hop dancers for action collection, through a variety of technologies with each other to enrich it in a game. When a player is playing a game, the computer system collects its actions and evaluates it. But also the use of the game program on the basis of action re-arranged to generate unique dance moves the player, which is also a great help to dance creation.

Dance game is a new dance presentation it gives people a profound dance experience and the ultimate game to enjoy. Dance games, after all, limited to the game in this area, although the players can bring a profound experience, but can not make players really understand the meaning of dance and its art as an art in today's significance.

5. Conclusion

Dance art creation in the context of computer-aided to achieve cross-era progress, but the dance workers to recognize the advantages and disadvantages of computer technology for dance creation, dance still maintain its artistic characteristics, to maintain development on the basis of Its existence value.

References

- [1] Liu Hao. Dance development of three-dimensional computer-aided system development and application of [J]. Architecture, 2011, 04: 106-108.
- [2] Liu Lian, Sun Huijia. Application of virtual reality technology in dance teaching status and design requirements [J] China Audio-Visual Education, 2014, 06: 85-88