



THE ROLE OF DIGITAL SCULPTURE IN CONTEMPORARY ART

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Abstract: This article describes in detail the role of digital sculpture in modern art, an auxiliary component in three-dimensional modeling, the current free direction of digital sculpture in the field of three-dimensional computer graphics, the unique characteristics of traditional sculpture.

Keywords: contemporary art, digital sculpture, computer graphics, traditional sculpture.

Introduction:

Today, modern sculpture is not only a trend towards interdisciplinary improvement, but also increases its tolerance. He effectively uses the achievements in digital sculpture, installation, architecture and conceptual art. He tries to integrate fine art and other visual techniques into the form of modern sculpture, which conveys the meaning of the representation of time and process. The origin of the art of creating three-dimensional forms from various materials undoubtedly dates back to ancient times, to the period of the development of human cultural development.

Literature analysis and methodology:

The divine faith of man was important for the creation of sculpture, and it manifested itself in the creation of amulets, idols and figurines depicting the forces of nature, animals and man himself. Over time, the form, materials and ideological symbol changed, turning from sacred art into a symbol of the sculptor's own creative thought. Against the background of traditional sculpture, digital sculpture is a relatively young trend.

Today, digital sculpture works as a free direction in the field of three-dimensional computer graphics or is considered an auxiliary component in three-dimensional modeling. Digital sculpture is increasingly being used in various spheres of human life, gradually ceasing to be an exception in three-dimensional modeling, and attracting the attention of not only professional three-dimensional models, computer graphics enthusiasts, but also teachers of additional education.

In today's world, digital sculpture and the entertainment industry go hand in hand, and this alliance is at the forefront of digital sculpture. Therefore, modeling of complex objects makes it possible to create various biological creatures, opens up new opportunities for cinematography, animation and computer games. At the same time, digital sculpture has found its application in other fields besides the entertainment industry, as well as in pedagogy.

The results obtained:

Sculptris is a cross—platform application that provides the same interface everywhere, simple and intuitive. Workspace provides a toolbar with basic functions for digital sculpture. The menu consists of icons and is understandable even to non-English speakers. The

intuitiveness of the toolbar allows high school students to quickly explain and understand the principle of using certain brushes.

Digital sculpture is gradually ceasing to be a niche phenomenon and is increasingly being used in various spheres of human life. Of course, this has become possible thanks to the rapid development of technology, the growth of computer technology indicators and its availability to a wide range of users. If earlier a simple sculptor working with his hands in clay, stone or synthetic materials used a scalpel to sculpt both for artistic and technical purposes, then a 3D artist processes a 3D model. in a similar way, but his tool is a powerful computer, a graphics tablet and, most importantly, a "digital sculpting program" that allows him to process highly polygonal 3D models with millions of polygons and vertices.

Discussion:

With the advent of technologies that make it possible to transfer the work of a digital 3D model from the world of numbers to the real world, the boundaries between his profession and that of an ordinary sculptor working with living material are increasingly blurred. Based on the definition of digital sculpture, it can be noted that, unlike the definition of traditional sculpture, digital occupies a special intermediate position. A distinctive feature of traditional sculpture is the presence of volume, three-dimensional shape, as a result of which the sculpture can be observed from all sides.

Moreover, with the rapid improvement of computer technology, it is becoming increasingly obvious that the limit of creativity is the creative abilities of the individual. The peculiarity of digital sculpture is that it allows you to create high-level models, which is not yet possible with traditional 3D modeling methods. This is the preferred method for shooting photorealistic scenes and models. First of all, digital sculpture is used for rendering highly polygonal organic 3D models with bright surfaces with very large and small details.

Conclusion:

In conclusion, it should be said that digital sculpture is gradually ceasing to be an unusual phenomenon and is increasingly being used in various spheres of human life, attracting not only fans of unusual, fantastic creatures and practicing designers, but also researchers. Therefore, modeling of complex objects allows you to create various biological objects, opens up new opportunities for cinematography, animation, computer games and advertising. Meanwhile, digital sculpture has found its application in other areas as well.

References:

1. Fine art. State educational standard and curriculum of general secondary education.- Tashkent: Shark, 2003.
2. Ishmukhamedov R.J. Ways to improve the effectiveness of education with the help of innovative technologies. T: TDFJ on behalf of Nizami, 2004.
3. Baymetov B., Abdurasulov S. Chizmatasvir. T.: G. Gulam - press-creative house. 2004.
4. Abdullaev S.S., Azimov S.S., Avezov S.N. "Methods of teaching fine arts and engineering graphics" - "Durdona"-2020.
5. Abdurasilov S.N.Tolipov "Methods of teaching fine arts" Tashkent-2007.