Analysis of Landscape Sculpture and Its Environment Based on Artificial Intelligence Era

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Abstract. With the continuous expansion of the application field of artificial intelligence, the exploration of the unknown world and the limit field has been deepened, and the life and production mode of people have also undergone tremendous changes. Based on this, this paper analyzes artificial intelligence and landscape design, and studies the influence of artificial intelligence era on landscape design, and through theoretical understanding and exposition of the current concept of landscape sculpture under the interaction of multiple cultures and the interaction between its environmental art forms. As a sculpture placed in a specific outdoor environment, it is relatively irreplaceable and should not only be limited to the performance and artistic treatment of the body itself, but also consider the coordination of various factors in the specific environmental space. Modern sculpture and landscape design can be better reflected in the natural environment, the humanistic environment, the public, the city, the inheritance of national culture and modernity.

1. Introduction
Artificial intelligence is one of the cutting-edge technologies in the 21st century. It has had a great impact on human production and life. When the technology of artificial intelligence starts to intervene in the field of art, the traditional art is confronted with challenges and changes. Landscape design is of great significance in the construction of city beautification. In the era of artificial intelligence, the design method and content of landscape design have undergone certain changes [1]. Urban landscape sculpture occupies an important place in environmental art and plays an important role in improving the level of environmental art and beautifying the environment. With its unique form of expression, profound connotation and three-dimensional space, it is easier to capture its shape and infect the audience [2]. At the same time, landscape sculpture also has economic, cultural and regulatory functions. It can not only express the cultural details of a region, but also bring social and economic benefits to the region. In the process of common development, modern sculpture and landscape have been affected by each other and have undergone similar changes in content and form of expression. Landscape art, like other arts, is finally presented through the integration of shape, color, materials and other elements.

Artificial intelligence is gradually replacing some tasks previously accomplished manually by intelligence. However, with the development of the times rolling forward, any technological change will always be accompanied by the decline of traditional technologies [3]. The same is true of artistic creation, but in pursuit of artistic progress, we should actively welcome this change. Therefore, it is necessary to clearly understand the concept of landscape sculpture and various design factors of
landscape sculpture, as well as the influence of multi-cultural interaction on the conceptual art form of landscape sculpture, so as to reveal the current situation of modern landscape sculpture in China and try to clarify the development direction of modern landscape sculpture in China under the interaction of modern multi-culture.

2. Artificial Intelligence and Landscape Design

With the development of the times, artificial intelligence has been applied in various fields of life. Artificial intelligence has high application value in practical application. At the same time, it uses advanced science and technology to get rid of artificial constraints and improve the accuracy of artificial intelligence decision-making and scientific innovation. The main body of artistic creation is the artist, and the accumulation of life, ideological tendency, character and temperament, artistic accomplishment of artists are the basis of artistic creation [4]. For an artist's creation, the cultural background has always been considered very important. Today, the amount of knowledge that human beings can master is far less than a fraction of a computer. Expert system is mainly used in decision-making. The system deduces the problems to be solved by simulating the thinking mode and thinking mode of experts, and finally obtains the corresponding decision. The technology can solve more complex problems and improve the accuracy of the final decision in the actual application process [5]. Master a lot of professional skills, and need a certain accumulation of life, in addition, also need inspiration of sudden generate. Because the algorithm can simulate human emotions and the joys and sorrows of ordinary people through gene technology, robots can have through software design and processing. In today's era of artificial intelligence, some artificial intelligence technology has been added to landscape design, which enhances the intelligence of landscape design, and at the same time integrates the intelligence and artistry of landscape design to create a new landscape design mode.

3. Influence of Artificial Intelligence Era on Landscape Design

3.1 The influence of artificial intelligence on landscape planning

In landscape design, architecture plays a vital role in the quality of landscape design. In the process of architectural design, artificial intelligence technology is added to it, which can effectively improve the design quality of landscape architecture. Various colors and symbols are combined with each other to finally achieve the purpose of improving the design quality of landscape architecture. In this creation, artificial intelligence and engineers are the main body of creative creation. Using science and technology, artistic creation will become simple. For a long time to come, the two life forms will exist in parallel, as will their respective arts. Show people more abundant landscape architecture [5]. In landscape design, architecture plays a vital role in the quality of landscape design. In the process of architectural design, artificial intelligence technology is added to it, which can effectively improve the design quality of landscape architecture. Various colors and symbols are combined with each other to finally achieve the purpose of improving the design quality of landscape architecture. In this creation, artificial intelligence and engineers are the main body of artistic creation. Using science and technology, artistic creation will become simple. For a long time to come, the two life forms will exist in parallel, as will their respective arts. Show people more abundant landscape architecture.

3.2 The influence of artificial intelligence on landscape waterscape design

Waterscape design is one of the important elements in landscape design. Waterscape design can not only enhance the richness of the whole landscape design, but also keep the ecological balance in the whole landscape design. From this, we can see the importance of waterscape design for landscape design. It is foreseeable that with the progress of science and technology, the price of these equipment will continue to decline in the future, and the productivity and product quality will continue to increase. In the future, it will be replaced by artificial intelligence, because robots can meet the needs of consumers better than human beings. For the government, artificial intelligence will be more effective and cheaper in conveying ideology. In the era of artificial intelligence, people can increase the variety and richness of
waterscape design by building fountains [6]. In addition, the combination of fountain changes and music rhythm can enhance the appreciation of waterscape design and the dynamic nature of waterscape design. Therefore, sculpture is not only a simple design phenomenon, but also a cultural phenomenon, a commercial phenomenon and a political phenomenon. At the same time, it also reflects people's spiritual needs and reflects fashion, literature and dramatic humanistic feelings. The improvement of the quality of the works will also improve the artistic level of the appreciators, and the creation of the works will reach a higher level under the high demands of the appreciators.

At the beginning of the creation of landscape sculpture, city decision makers and sculptors should explore the unique historical culture and regional humanistic spirit of the city. The harmonious and self-sufficient environmental order with regional characteristics is based on a long-term stability and determines the ecological environment and cultural foundation of a region's continuous circulation. With the development of cultural industry, it has gradually become a new driving force for China's economic development. The prosperity and development of cultural industry not only promotes the rapid transformation of China's economic development mode, but also further optimizes China's industrial structure while meeting people's growing cultural needs. The development of industrial clusters is the result of the joint action of environmental factors, demand conditions, production factors and supporting industries. The construction of industrial parks and high-tech zones not only improves the output per unit area, but also promotes the harmonious development of regional culture. Figure 1 shows the development model of urban agglomeration.

![Figure 1 Urban agglomeration development model](image)

### 3.3 Influence of artificial intelligence on landscape pavement design

Landscape paving mainly plays a role in optimizing landscape design, which can ensure the aesthetic and functional improvement of landscape society in the actual application process. Applying artificial intelligence technology to pavement design can perfectly integrate color and form, thus enhancing the richness and diversity of color application in landscape design. In other words, the art of serving the market and the art of serving the system will be accomplished by artificial intelligence. Sculpture exists as the theme element of landscape environment. It covers a wide range of areas, affects the landscape form of the environment, and solves a series of contradictions in landscape design, such as human and environment, two-dimensional and three-dimensional, local and overall. When judging information, corresponding screening rules can be established, and information can be judged and analyzed according to designers' personal inspiration and experience, and classified in an organized and purposeful way. For example, in pavement design, artificial intelligence technology is used to project images on the pavement. This design method can improve the flexibility and vividness of pavement. By watching the images, people can clearly understand the information that the designers want to express, and then play a role in promoting information transmission. In the future, the history of human art must
first pass the test of artificial intelligence. Only arts that artificial intelligence cannot do are more valuable to human beings.

4. Various Factors Involved in Landscape Sculpture Design

4.1 The theme, environment and form of landscape sculpture

City Square Sculpture, Memorial Sculpture, Public Green Space Sculpture, Garden Sculpture, etc. are collectively referred to as Landscape Sculpture. Its design and construction are attached to the public art and environmental art with the sky, street view, architecture and green space as the background and the general public as the appreciation subject. Due to the influence of the trend of modern art, on the one hand, the above-mentioned radical group of on-shelf sculptures entered the territory of landscape sculpture, making the members of landscape sculpture have the participation of other roles and appear particularly novel. On the other hand, since the earth art, installation art and other conceptual art can no longer perform the function of only embellishing the public environment, the contemporary cultural information it contains and the way it is expressed will be more free [7]. Architectural sculpture in modern sculpture borrows the expression of buildings and applies the constituent elements of buildings to sculpture. Due to the emergence of a considerable number of architectural sculptures, people have further expanded the concept of sculpture. As a landscape sculpture that occupies an important position in environmental art, it has mushroomed in squares, road nodes, greenbelts and tourist attractions in most cities, adding a brilliant color to the urban landscape. Sculpture works have gone from art exhibition halls to the streets of cities and to the eyes of citizens [8].

Through some drawing software, we can use finger touch to guide the digital art program to draw, which is the convenience and innovation of art form brought to us by the intervention of artificial intelligence in the art field. Landscape sculpture can be used as a new driving force for society. It is also an expression of a new form. It constantly creates new landscape environments in urban spaces and evokes people's memories and reliance on history. Any kind of scientific research method is not exclusive but universal. Figure 2 shows the general law of regional cultural development.

4.2 Space composition of landscape sculpture

Modern consciousness has stimulated people's modern aesthetic feelings. People have changed from the spatial layout of a single object to the overall spatial layout of the environment, which is a great progress. These have prompted people to re-examine art, thus negating traditional artistic ideas and continuously exploring new artistic forms have become the main trend of modern art. So artists look for internal forms and rhythm rules from all forms of life, such as water, atmosphere, trees, stones, plants and animals, and find their life structures. This paper analyzes the visible elements such as the shape and structure of
landscape art form, and also simulates and deepens some invisible and invisible factors. The emergence of artificial intelligence has only lowered the threshold of creation, making the number of artistic works like bamboo shoots after a spring rain greatly increase, expanding the base number of works, and the number of classic works may also increase. The expression orientation of aesthetic artistic language has changed greatly. The connotation and extension of sculpture have been expanded, and the relationship between sculpture and landscape is closer. Specifically, on the premise of determining the target, the relationship between it and the local is considered from the overall space environment [9]. Starting from the whole, first of all, it is reflected in the determination of goals. Integrity has a certain connection with purpose, and purpose shows integrity.

4.3 The overall consciousness of landscape sculpture and landscape environment construction
The spatial location of landscape sculpture should be designed according to the total amount of environmental space in which the sculpture is located. Sentiment became one of the important characteristics of landscape sculpture at that time. Designers use exaggeration to enlarge the scale of the most common things in daily life. The super-large scale makes this kind of landscape sculpture arouse people's strong interest and curiosity. I feel a kind of eternal cohesion and permanence from a round body, a sharp speed from a sharp body, and delicacy and delicacy from a smooth surface. The emergence of artificial intelligence bridges the gap between technology and art, provides new technology for art, and enables art creators to continuously create new art in new ways, breaking traditional art forms and forming a new type of art. It is the foundation of modern art design and the product of the combination of rationality and sensibility. It uses logical reasoning to create images and studies the arrangement and combination between them [10]. This spatial relationship gives people a full, stable and upward feeling. According to the golden section law, we should take the width of the overall environment space where the sculpture is located as the horizontal coordinate, not the width of the base as the coordinate in the height positioning of the sculpture. It has an inseparable relationship with plane composition and three-dimensional composition. It is one of the basic theories of artistic design.

5. Cultural Interaction between Landscape Sculpture and Its Environment in Concept Art Form

5.1 Landscape sculpture is an important part of public space
Landscape sculpture in public space is an important component of public art, which is not only related to the surrounding material environment, but also more closely related to the humanistic environment, which refers to non-material factors such as social background, nationality and cultural quality. Different from the traditional landscape sculpture, most of the people and objects reflected in the landscape sculpture are ordinary and common in life, but we do not pay attention to them at ordinary times. Then such a sculpture will not allow the infiltration and invasion of virtual entities to destroy its integrity, and can only serve as a foil to the main body. It is formed in three-dimensional space. It studies the formation rules between the three-dimensional form of space and various elements, also known as space formation. With the help of artificial intelligence, a variety of arts are created to inject fresh blood into the arts and make them generate new vitality. Many artists advocate not only decorative objects with modeling, but also public arts that need to be closely combined with the functions of the landscape environment. The performance of public art in modern cities is that in the fast-paced urban environment, people can feel the elegant demeanour of art in dynamic time and space, the striking color of public art, and the large scale and volume of space occupy to form the unique style of contemporary urban environment.

Modern landscape sculptures need to adopt a positive approach in the process of reuse, so as to promote the rebirth of the building and obtain the required effects. Vigorous promotion of Tianjin's non-heritage culture will help attract more tourists from home and abroad and boost the local tourism economy. When the project starts to progress, a reasonable and scientific project construction plan is an extremely important link. In addition, some time processes are estimated based on similar construction
projects performed by construction companies in the past. The time estimation of the construction period is consistent with the artificial intelligence optimization probability function, as shown in Figure 3.

![Figure 3 Estimated probability distribution of process duration](image)

Landscape sculpture should be placed in a broader field of vision, that is, landscape sculpture should be placed in a specific historical period or a specific cultural circle to study its specific value and significance in history. Many questions need to be considered and answered when making a project plan, which is one of the reasons why many people are unwilling to make a plan. The pain curve points out that making a project plan is indeed a painful thing, but it will reduce the pain during and after the implementation of the project. The pain curve of the project management life cycle is shown in Figure 4.

![Figure 4 Project management life cycle pain curve](image)

5.2 Characteristics and inclusiveness of landscape sculpture

Public art has obvious characteristics different from other arts. "publicity" as an attribute of art shows that this art is shared, not personal, and the public is the main body of art service and the prerequisite for the existence of public art. As a result, large and small cities went into battle together, not only with sculpture parks that collected large-scale world famous works, but also with medium-sized public art in front of remote small town stations. Therefore, modern sculpture pursues the perfection of space form, introducing time factor into three-dimensional space, making the sculpture space change from three-dimensional to four-dimensional, implying the existence of life and the movement of the universe in the endless movement. Artificial intelligence can draw, generate poems, essays, compose songs, write novels, etc. The threshold that ordinary people could not reach before becomes simple with the help of artificial intelligence. Adding artificial intelligence technology to it can effectively improve the design quality of landscape architecture, and finally achieve the goal of improving the design quality of
landscape architecture by combining various colors and symbols. With the economic development and the acceleration of urbanization process, Chinese landscape environment sculpture has entered a golden year of development, and the enthusiasm for landscape environment sculpture in all parts of the country is unprecedented. The buildings and monuments in the square are decorated with a large number of landscape sculpture arts. These arts reflect the theme of the monuments. People feel these arts while they are moving in the square. This landscape sculpture art, which exists in public space and serves some themes, is the prototype of modern public art.

5.3 The high coordination between landscape sculpture art and landscape environment
Sculpture phenomenon is not an isolated and simple phenomenon, in which the relationship between subject and object exists. It is closely related to the subject's observation and the angle of intervening in the environment. Compared with modern landscape sculpture, the traditional landscape sculpture creation follows a conservative and single guiding ideology, either to satisfy the ruling class to imprison people's thoughts in order to achieve the goal of stabilizing and consolidating its kingship, or to promote merit for its ruling power, or to pursue and believe in the mainstream religious beliefs at that time. Because the power of nature can strengthen the power of the work itself and make it more complete. In the era of artificial intelligence, people can increase the variety and richness of waterscape design by building fountains. In addition, the combination of fountain changes and music rhythm can enhance the appreciation of waterscape design and the dynamic nature of waterscape design. Many sculptures not only have specific practical functions, but also beautify the environment by improving the overall visual relationship. In other words, it is often not the creation of pure works of art, but the modeling problem in environmental design. Therefore, sculpture and environmental art design are inseparable. In the process of constructing landscape form, composition is the repeated application of three elements. It obtains satisfactory visual image and meets people's demand for beauty through analyzing the structure of landscape elements and organizing time and space.

6. Summary
In the process of urbanization, on the one hand, people have been created and enjoyed the material civilization of the city, which has continuously improved the quality of life. On the other hand, urban people are looking for spiritual enjoyment other than material life in their busy work and after meals. People advocate architectural sculpture and architectural sculpture. Sculpture is not only an aesthetic point but also a functional point. Sculpture is sometimes not only a physical point, sometimes it is a virtual space. Sculpture can not only be seen, but also be felt and felt in it. Through studying the influence of artificial intelligence era on landscape design, this paper finds that it can effectively improve the quality of landscape design and at the same time ensure the integration of landscape design and the development of the times. Classical works of art are not only the simple piling up of elements, but also the fusion of elements. Technology has made it easier for non-professionals to create works, giving classic works a chance to be born from their hands. With its unique form of expression, deep and wide connotation and three-dimensional space, it is easier to capture its shape and infect the audience. Designers should pay more attention to how to impress the audience with their design images, rather than how to impress the audience with straightforward narration.

Acknowledgements
1. "Research on the Development Countermeasures of Tourism Culture Industry in Western Fujian under the Guidance of" Digital Creative Industry "
   Youth Social Science Project of Fujian Education Department, ProjectNo.: JAS19350/A201919
2. Research on "Double Creation" Teaching Mode and Reform Practice of Product Design Specialty Based on Results-oriented-Taking sanming university as an Example "sanming university Institute of Higher Education, ProjectNo.: SHE1905
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