

# Study on the Application of New Media Interaction Design on Public Art

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**Abstract:** With the continuous development of new media technology, the combination of art and technology has become more and more closely. Both are integrated into people's lives with new media through new forms of expression. Since the 21st century, due to the shortage of resources and environmental pollution, people need to solve the problem of existence through humanized design. Artists need to enlighten people's environmental awareness through artistic creation, especially public art. From the perspective of user experience and demand, this paper studies the application of interactive design in public art through researching the specification of interactive design, and analyzes it with examples.

## 1. Introduction

The advent of the new media era, people began to pay close attention to the ways and means of information dissemination, and hope to be able to receive information in a more humane manner. Under the guidance of this demand, interactive design began to attract the attention of designers and new media artists. Interaction Design's English name is "Interaction Design." "Interaction" is translated as an interaction, an activity, a cooperation and a mutual influence. The word "action" is translated into the word. In other words, interactive design can be understood as the design and specification of the interaction between the two objects to optimize the design behavior. Interaction design is generally considered to have originated in 1990 as Bill Mogilev, but it was born as early as Indians and other tribesmen were using flue-cured tobacco for long-distance communications, although it was obviously not one Formal discipline. Until the advent of the commercial and public Internet changed the world until the 1990s, it also changed the relationship between people and computing devices and information. The World Wide Web makes it easy for people to publish hypertexts, make it easier for others to access, email is also rapidly gaining popularity, and people demand more for user experience and interactive design. As a result, web computing and interaction design has become a formal discipline.

## 2. Public Art Development

Public art English terminology "Public Art", translated into public, public art. Public art has the characteristics of openness and openness. In a public open space, artists freely create or design a specific area where the public is immersed and freely engaged. This form of art is called public art because it first exists in an open public space that is in line with people's daily lives. Even a sculpture used by sculptors to display in public places, it was placed in a closed, private space just before its creation, and it was a mere personal artwork, not a public art. There are many forms of public art, such as urban sculpture, installation art, performance art, environment and landscape design. In general, works of art that are placed in public spaces can all be called public art. The rapid development of public art began in the 1960s. With the rise of postmodernist culture, people began to pay attention to the artworks around them and bring more artistic creation into their own life. The relationship between life and art has changed. Art has become more and more popular. Many artistic creations, once inaccessible to the temple, have gradually become integrated into popular life. The way of the artist's discourse has changed. Individualism and elitism in the modernist art have been replaced by the popular and populist discourse. The mode of action of art is also transformed from past sacredness, palace feeling and classic style to the pursuit of effective

expression and exchange. The relationship between art and the public has become an interactive and two-way communication. In addition, social issues are heating up, such as racial problems, gender issues, ecological issues and green issues, and have become the focus of the public and artists. Contemporary art has begun to transform from aesthetic to cultural.

### **3. Interactive Design in Public Art Applications**

Interaction design is the process of optimizing the exchange of information between two objects, dealing with the design. Interaction designers need to use constructions of language and formal expressions to construct attractive "points of view" and engage viewers in the "conversation" process of "point of view," so interaction design is "user-centered design" and the entire interaction Design work are done around the needs of users. If users never understand and feel the design, then the design will not have any availability, this work is also a failure. Today's public art is guided by the needs of the general public and carries out artistic creation on the focus of attention and reflects the social reality. Therefore, interaction design and public art form the intersection of user demand. For example, the Dutch haze tower, designed by Dutch designer Roskilde and its partners, is 7 meters tall and consists of lightweight materials and LED devices that purify the air with a small amount of green energy through the newly developed ion purification technology. The working procedure is to first inhale the surrounding air and then filter the fine haze particles contained in the air for recycling, finally compressing the particles to an extremely dense black solid with an internal high temperature. The innovation of the haze tower is that the process of air purification is not from the simple collection to dumping, but the final particles are reprocessed. Each black solid has been redesigned into a "black gem" and made into a ring, Earrings and other jewelry sold to consumers, the second creation of value. Due to the over-exploitation of environmental resources by urban construction, there are many serious smog problems in the world. People are eager to improve their ecological environment so as to breathe fresh air. It was at the urgent demand of users that Rose Gard designed the haze tower and first "checked in" to Beijing in November 2016. The haze tower itself is a device works of art, modeling simple, tough, the tower was white, the outer wall is designed as a folding shutter structure, the top three triangular cone cover, the whole shape with a postmodernist color. Designers not only consider the main functions of the haze tower, but also perform secondary processing on the filtered materials, which is another innovation aimed at the needs of mass culture. The "black gem" program stems from the carbon, the main component of haze particles, which is compressed by the haze particles at high temperatures to form artificial "black gems," which are then processed into ornaments for sale, creating additional value throughout the process.

The haze tower interaction design is also excellent, which reflects the interaction between things in the process of processing air and gem processing. First, the haze tower blows the filtered air from the side of the tower, and the blown wind creates a high-pressure "zero haze zone" where the user greatly reduces the total amount of respirable particulate matter in the area. The device itself does not require the user to manually open the user in virtually the product of this experience. Secondly, "black gemstones" do not require additional equipment for auxiliary production, preventing the possibility of secondary pollution. Finally, the "black gemstone" worn by the user has the added meaning of representing the promise of people to work for a better environment, which invisibly conveys the concept of protecting the environment.

### **4. Public Art Interactivity "New Development"**

Nowadays, with the rapid development of new media, the public art is changing with each passing day. Public art may exist in every corner of the public space where we live. It reflects the culture of the times, and stops at the threshold of new media. Public art Will move toward the fusion of technology and art. Under the threshold of new media, public aesthetic awareness and aesthetic appreciation in the process of continuous improvement of the public art aesthetic and interactive requirements are also rising, which provides a broad development of the application of new media

art and public art creation space. On the one hand, the continuous development of science and technology will also provide strong technical support for public interactive media art in hardware facilities. First, the work's tolerance is better. Most of the public art is outdoor and takes a long time to resist the erosion of natural conditions. With the progress of science and technology, the constant innovation of materials and the updating of creative techniques, the works themselves are more durable and resistant to the enhancement of interaction with the public Caused by man-made damage phenomenon. Second, there is a great improvement in the public art form and a more extensive form of beauty. Public works of art based on new media will be presented with more colorful categories and forms. At the same time, through the loading of technology, the sensory impact brought by public works of art will be more shaken. Third, the operability of new media public works of art will continue to increase. The progress of science and technology and the application of new media will make the work itself more complicated. However, in the interaction with the public, the interaction between the public and public works of art will be more simple and more fluid and frequent. And when people participate in the interaction of public works of art, can be more cordial and natural, even through the interaction to achieve inner satisfaction. Fourthly, the integration of art and science will be closer and more complete, and cross-border cooperation will be more frequent. Under the new media perspective, the interactive study of multimedia public art will surely develop in a deeper and broader direction. On the other hand, the public's acceptance and participation in the interactive nature of multimedia public art will continue to deepen. With the gradual improvement and perfection of democratic law, the implementation of interactive public art will be more open and transparent, and public participation in activities will become more mature and feasible. At the same time, the public's awareness of public affairs is constantly improving, and the public art interaction is more and more accepted and accepted. The public interactive art of various scales, levels and forms will make the public participate extensively.

Public art emerged in the United States in the 1960s as a cultural concept of contemporary art and has a close connection with the development of the city. As the name suggests, public art can be understood as an art form with a common meaning. Among them, "public" means to participate in the public art with the public's own will, serve the public directly, and be open, democratic and free. Interaction is a very broad concept. The interaction between people, people, objects and things can be called "interaction". In the interaction of public art, more emphasis is placed on the aesthetic object, that is, through the public The participation of public art to complete. With the application and promotion of new media, the public has created higher requirements and standards for the interaction of public art. As a result, new art forms are increasingly being applied to the creation of contemporary public art, Under the media's perspective, the interactive nature of public art has created new and higher demands. First, to broaden the time horizon of art presentation in the interaction with the public. With the help of new media technology, the traditional ways of expressing public works of art can not be realized. In the interaction between interactive media art and people, the public can intuitively intervene and reconstruct the time through their actions Brand new and mesmerizing. Second, broaden the space possibilities created by public space art. The mutual infiltration, overlay and reconstruction of space bring a brand new artistic experience to the public interaction. Third, show invisible information. People in many senses, the dominant visual, but visual perception is limited, many of the information is insensible to human eyes, the new media space art can transform many invisible information into visual information, rich Public interaction language and form.

## **5. Conclusion**

With the continuous development of new media technologies and interactive theories, the content of science and technology in public art will become higher and higher. Artists hope to convey their ideas and ideas in a more innovative way, and the interactive experience in artistic creation will become more and more Richness and interactivity will inevitably become a part that artists have to consider in their future public art creation. In addition, the constant pursuit of science and technology by the general public hoping to have more experience form to experience the charm

of art, demand-oriented, from the user experience point of view, using reasonable technical means to reflect the artist's point of view, will become the future of public art The new trend of development.

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