

## Research on Public Art in Smart Community Management

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**Abstract:** With the rapid growth of urbanization, high-density buildings and compact pace of life make life communication between people more and more difficult, so open space has become a place for people to gather and move. Smart communities take full advantage of information platforms such as the Internet and the Internet of Things, involving intelligent buildings, smart homes, telemedicine services, road network monitoring, personal health and digital life, and give full play to the advantages of developed information and communication industry, telecommunications services and excellent information infrastructure. Public art is the dialogue and echo of the humanities, environmental art and social themes in the community. The involvement of public art in urban smart communities has a positive guiding role in the spiritual civilization construction of smart communities and can realize the effective growth of urban smart community construction. Starting from the involvement of public art in the construction of smart cities, this article analyzes the correlation between public art and the creation of spatial environment in smart communities, and discusses the spatial environment setting form of public art in smart communities, which provides a new perspective for the creation of harmonious communities.

### 1. Introduction

As the living space of urban residents, community has a very close relationship with people's daily life. The quality of community environment directly affects the quality and state of residents' life. District is different from commercial district, industrial district and other social functional divisions, and it needs to meet people's needs of survival, cooperation and awareness exchange [1]. The community population needs to establish a close relationship of going in and out, caring for each other and helping each other, and form social relations and social groups full of human feelings. From the early concentrated villages to today's cities, the community has gradually evolved into an important place integrating entertainment, life, activities, education, business and other functions [2]. However, the construction of some communities is almost unchanged, and the gradual homogenization environment makes it difficult for people who are in a hurry to feel a sense of belonging. It is of great significance for urban construction, development and long-term stability of the country to study and promote more standardized, scientific and efficient community management, so that residents can live in a harmonious, comfortable, safe and beautiful environment [3]. Appropriate public art can assist the open space to achieve the above functions, become the lubricant of space, and act as a bridge between people and between people and the environment [4]. Community building lies in shaping local identity and community collective consciousness from historical, cultural, environmental and geographical factors, focusing on the cohesion of local communities and the transformation of community public environment [5].

With the rapid growth of "smart city", community, as the smallest management and service unit of the city, undertakes a lot of people's livelihood services and urban management functions. Smart communities take full advantage of information platforms such as the Internet and the Internet of Things, involving intelligent buildings, smart homes, telemedicine services, road network monitoring, personal health and digital life, and give full play to the advantages of developed information and communication industries, telecommunications services and excellent information

infrastructure [6]. The construction of urban communities includes the construction of material homes and spiritual homes where residents live together. With the internal connection between publicity and artistry, public art brings interaction and artistic edification to the people in the region. The practice of public art in smart communities can make community residents effectively participate in community construction, which is of positive significance to the spiritual civilization construction of communities and can realize the effective growth of urban smart community construction [7]. Public art is an effective channel for the integration of people and art, people and society, and art and society. With public participation as a link, public art and the construction of smart communities can form a coordinated and interactive relationship [8]. Starting from the involvement of public art in the construction of smart cities, this article analyzes the correlation between public art and the creation of spatial environment in smart communities, and discusses the spatial environment setting form of public art in smart communities, which provides a new perspective for the creation of harmonious communities.

## **2. Present situation of community public art**

Many urban villages and towns are rich in historical and cultural remains. In the process of transformation and renewal, how to effectively protect and fully tap their cultural values involves urban planning, landscape design, architectural planning and other fields. Public art works are dotted in urban public spaces, just like jumping notes and beautiful scenery in cities [9]. On the one hand, many cities are actively building urban public spaces, such as building squares, beautifying communities, building new parks, widening traffic arteries, and developing and utilizing underground spaces. At present, many old communities in China are short of land and lack of green space, and few public works of art exist. Although there are some public works of art in new communities, many of them are similar or identical. The more diversified the creativity and activities of a city, the more vigorous the vitality of the city will be and the more helpful it will be to the growth of the city.

Public art can bring characteristics and activities to urban areas. The external value of such creative behaviors and activities will help improve the quality of living environment around the area and enhance the overall economic benefits and competitiveness of the city. With the improvement of people's requirements for the quality of urban life and cultural quality, the focus of public art is gradually shifting to the community where we live, and a number of high-quality community public art works have begun to appear. In particular, some new and old communities can combine the regional historical and cultural background to create works that arouse the interaction and resonance of local residents and better meet the needs of urban residents' lives. As a part of the cultural construction of smart cities, public art emphasizes the equal participation consciousness of all the public, which plays an important role in the inheritance and growth of regional culture, shaping the image of the city, improving the quality of public environment and public cultural literacy.

## **3. The significance of public art participation in smart community management**

### **3.1. Improving the overall community environment**

Smart community is not only the innovation of management concept, but also a new model and path of community governance explored in the current era of modern information technology [10]. Use the power of science and technology such as information and communication technology system to help improve the management level and service efficiency of the community and improve the relationship between residents, the government and the community. Public art, as the most direct art form bearing culture, records and inherits the community context and historical features through the research and artistic expression of the traditional customs of the community in the process of smart community management. A city with special cultural spirit and regional features can fully present a city's personality mainly through humanities and arts, history and culture, natural environment with time dimension, and styled settlements connected by streets, squares and

communities. Through the intervention of various public art forms, the artistry and appreciation of the overall environment of smart communities can be improved, high-quality community space can be created, and favorable places can be provided for the exchanges and activities of community residents. Figure 1 shows Community Sculpture "Leading the Way" in Liangjiang New Area, Chongqing.



Figure 1 Community Sculpture "Leading the Way" in Liangjiang New Area, Chongqing

### **3.2. Promote the harmonious growth of the community**

Public art's involvement in the process of smart community management and construction should be synchronous, integrated and interactive with the ideal goal of building a new socialist community and improving the cultural life of urban residents, rather than a short-term behavior that goes its own way and is isolated in one direction. Public art participating in the transformation and renewal of the community can change the old and backward appearance of the community, promote the prosperity of the surrounding commercial activities, and even bring tourism income and cultural entrepreneurial industry income, which will bring certain economic benefits to the community. As an important environment for citizens' production and life, mutual help, mutual love and mutual encouragement among residents are one of its main ideas. The successful introduction of public art can stimulate residents' awareness of community ideas, and the public participation characteristics of their works can also promote mutual cooperation and dialogue among residents. The intervention of public art in smart city space reflects the result of urbanization development and improves the relationship between people and the overall environment, which also provides a new way for the growth of public art. Smart community integrates property management, security, communication and other systems with the help of Internet of Things, sensor network and other network communication technologies, and connects the property management office through the communication network to provide a safe, comfortable and convenient modern living environment for residents in the community.

### **4. Strategies of public art participation in smart community management**

The design and setting of public art can play a role in coordinating the growth of community economy, culture and education. Through the setting of public art which bears the residents' cultural background and aesthetic preferences, it can promote and integrate the construction of community environment and material civilization, and promote the cultivation and improvement of residents'

cultural accomplishment, which is conducive to the establishment and improvement of community independent construction, independent management institutions and corresponding mechanisms. The intervention of new public art in the construction of new smart community aims to form a harmonious and friendly symbiotic state between people, people and nature, and people and society. The ideal community public art works are widely accepted by the public, and at the same time, they should be coordinated with the natural environment of the community, so that residents can understand art from their lives and integrate art into their lives. Public art's participation in the renewal and reconstruction of smart communities is of great significance to the construction of material civilization and the formation of spiritual culture in communities. The construction quality of community basic environment and the improvement of residents' moral culture are complementary to the successful introduction of public art and its benign survival and development.

The construction of smart community environment includes the construction of material environment and spiritual and cultural environment. The introduction and completion of public art must conform to the construction and growth of new smart communities and meet the needs of residents' lives. As one of the public places, the community is set up for the public, which belongs to the public's society, culture and history, and is also a part of life. When dealing with the relationship between public art and community material environment, we must pay attention to its morphological aesthetics and material services to meet the needs of residents. The introduction of public art facilities should also follow the principle of adapting to local conditions, combined with the unique geographical conditions such as topography, landforms and water resources in the community. Each community has its own unique natural environment and humanistic environment. Exploring the local spirit and connotation will help the public living here find a sense of self-belonging, identity and collective consciousness. Figure 2 shows Smart Community Environmental Construction in Shapingba District, Chongqing.



Figure 2 Smart Community Environmental Construction in Shapingba District, Chongqing

Public art in smart community is the environmental characteristics and cultural spirit displayed by designers' thinking and residents' participation. Putting public art works in the community can promote the growth of the community. Designers can organize community residents to participate in traditional festivals and artistic activities unique to the area where the community is located, and at the same time promote the emotional exchange of community residents and give them space and time to keep fit. The involvement of public art in community building is a manifestation of artistic activities in community life, and it is an understanding and discrimination of the surrounding living environment and things, an experience of space and places, and an infection between people. Designers of public works of art should convey ideas, culture and values through art, so that the concept and culture of the community are deeply rooted in people's hearts and highlight the unique humanistic characteristics of the community. In the overall environmental space form, public art

setting must be closely combined with the daily life of the community public, which can be analyzed from point space, line space and area space.

## 5. Conclusion

Whether public art exists as an artistic symbol or to commemorate historical and cultural events, it often carries the spiritual connotation and cultural attributes of the community. Promoting the construction of smart community is the only way to promote urbanization, and it is a necessary and sufficient condition for establishing intelligent and personalized communities. Rich and mature public art in urban smart communities will help to show the humanistic atmosphere and cultural heritage of the city and establish a good image of a modern city. Public art not only makes the public perceive the surrounding environmental life through its artistic expressions in public facilities, buildings and public spaces, but also conveys regional cultural values and enhances local identity. It is the goal that designers, residents and society need to work together to promote the growth of Zhihu community with the power of art. Applying the idea of smart community based on public art to traditional community management will gradually build an artistic and intelligent happy community. Starting from the ecological benefits of the environment and the principle of humanization and persistence of community construction, we can achieve the development goal of coordinated symbiosis between public art works and community environment.

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