Differences and Similarities in Residential Ecological Landscape Design between China and Singapore

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Abstract: China and Singapore, two countries with vastly different cultures, exhibit unique styles in residential ecological landscape design. This article aims to enhance mutual understanding and integration of design concepts between the two countries by delving into cultural differences and similarities in residential ecological landscape design. The article analyzes the cultural differences in design between China and Singapore from three aspects: cultural background, design style, and material application. Subsequently, it explores the common pursuit of ecological protection, humanized design, and local cultural integration between the two countries.

Keywords: Residential ecological landscape design; Cultural differences; Similarity; China; Singapore

1. Introduction

With the advancement of globalization, cultural exchanges between different countries are becoming increasingly frequent. Residential ecological landscape design, as an intuitive manifestation of culture, is also developing through continuous communication and integration. China and Singapore, located in East Asia and Southeast Asia respectively, have significant differences and commonalities in their design concepts. This article attempts to reveal the cultural differences and similarities in residential ecological landscape design between the two countries through comparative analysis.

2. Cultural Differences in Residential Ecological Landscape Design between China and Singapore

2.1 Differences in cultural background

The cultural differences between China and Singapore in residential ecological landscape design fundamentally stem from the fundamental cultural differences between the two countries. Chinese civilization is deeply influenced by Confucian ethics and Taoist wisdom, pursuing harmony, balance, and coexistence with the natural world. When creating ecological landscapes in residential areas, this design concept deeply rooted in cultural heritage is fully demonstrated. Chinese designers often draw on the philosophical idea of "harmony between heaven and man" in their design work, striving for the coordination and consistency between artificial landscapes and the natural world, as well as the close connection between humans and nature[1].

Singapore is a melting pot that integrates diverse cultures from both the East and the West. Its unique design style is deeply influenced by various cultures. Singapore's residential ecological landscape design incorporates modern concepts of ecological and environmental protection, while cleverly combining the simplicity and practicality of Western design with the respect for nature in Eastern culture. The interweaving of various cultures presents Singapore's design with both avant-garde and ecological characteristics. Traditional Chinese residential landscape design often includes elements such as mountains and rivers, flowers and trees, as well as courtyard layout, which are imitations and admiration of nature. These are closely related to the Confucian philosophy of "harmony and respect" and the Taoist philosophy of "following nature". In Singapore, designers fully leverage their unique geographical location and cultural heritage to pursue green and environmental protection while also keeping in mind the fashion and practicality of their designs. Cleverly integrating multiculturalism into design not only showcases Singapore's international characteristics, but also conveys a philosophy of inclusiveness and openness in design. This design concept makes Singapore's residential ecological landscape both in line with modern aesthetics and reflects a profound cultural heritage, creating a comfortable and distinctive living environment for residents.
2.2 Differences in design styles

In China, the integration design of home environment and natural landscape is deeply inspired by traditional classical garden art. Its core lies in creating a poetic living space, pursuing the harmonious integration of nature and architecture. Designers are skilled in using elements such as mountains, rivers, and plants to create a stepped landscape. Walking through it, each step can encounter new scenes. Traditional Chinese aesthetics emphasizes the harmonious unity of patterns and space, which is perfectly demonstrated in many ancient gardens and courtyard layouts. This design style not only looks comfortable, but also allows visitors to experience the taste and connotation of traditional Chinese culture during their travels[2].

In Singapore, the ecological environment and landscape planning of residential areas tend to pursue modernity and practicality. The planning style is mainly simple and bright, with smooth lines and contrasting colors, leaving a profound visual impact. Designers from Singapore are skilled in using popular materials and high-end technology to create distinctive green scenes. Singapore also values ecological protection and sustainable development in planning, advocating for the complementarity of natural resources and cultural landscapes. Chinese design tends to create classical and artistic conception, while Singapore places more emphasis on modern aesthetics and practical applications. This distinct style not only reflects the cultural heritage and aesthetic choices of the two countries, but also exposes the unique concepts and differentiation trends exhibited by the two countries in residential ecological landscape design. The design styles of the two countries, although each has its own strengths, both exude charming charm and contain immeasurable value. It is worth savoring and in-depth research. Through mutual learning and reference, people can better understand and appreciate the unique styles of the two countries in the field of design. This not only promotes innovation in residential ecological landscapes, but also promotes their development.

2.3 Differences in material application

In terms of ecological beautification of home environments, there is a sharp contrast in the use of materials between China and Singapore. This contrast is mainly reflected in the selection and application preferences of materials, as well as the specific practices of implementing green environmental protection concepts. In China's design practice, traditional materials with rich historical heritage, such as wood and stone, are preferred to be used. These natural elements can be seen everywhere in the landscape construction of national brands. These materials are not only green and pollution-free, but also perfectly coordinated with the natural landscape, showcasing the essence of Chinese garden art. Chinese designers are good at using traditional building materials such as green bricks and tiles to create an atmosphere that creates an antique and fragrant atmosphere[3].

Singapore tends to combine practicality and modernity in the use of materials, thanks to its unique tropical climate and geographical conditions. In the selection of materials, it prefers more weather resistant types, such as stainless steel and weather resistant wood, which can withstand extreme weather challenges and ensure the durability and stability of construction. Singapore actively adopts modern synthetic materials in the field of design, pursuing a combination of innovation and diversity. In the implementation of green living, these two countries have adopted different methods. In recent years, China has increasingly emphasized the use of green and environmentally friendly materials in the process of creating landscapes, actively striving to reduce intervention in nature. Singapore particularly emphasizes the recycling and utilization of waste to reduce resource waste and waste emissions[4].

3. The similarity of residential ecological landscape design between China and Singapore

3.1 Emphasis on ecological and environmental protection

Both China and Singapore attach great importance to ecological and environmental protection in residential ecological landscape design. The two countries spare no effort in promoting the concept of green building design, striving to achieve harmonious coexistence between buildings and the natural environment. In creative construction, they emphasize the use of plant greening, sunlight introduction, and air circulation methods to minimize reliance on artificial energy and materials, in order to achieve the goal of energy conservation and environmental protection. Designers from China and Singapore tend to prioritize sustainability and environmental friendliness when choosing materials, such as using...
sustainable materials and building materials with lower emissions, with the aim of reducing potential harm to nature. Making such a decision is not only a sign of reverence for nature, but also a thoughtful consideration for ensuring sustainable prosperity in the future\(^5\).

In terms of residential environment layout, both countries attach great importance to the collection and application of rainwater, using rainwater collection systems to filter and preserve precipitation for plant nourishment or non drinking purposes, thereby significantly reducing the demand for clean water sources. China and Singapore both prioritize the construction of green spaces, such as implementing planning strategies for roof greening and ground level elevated greening. These creative works not only enhance the greenery of the city, but also give residents the opportunity to have close contact with nature, effectively reducing the urban heat island phenomenon. Against the backdrop of deepening global awareness of environmental protection, both countries have increased their efforts to promote and cultivate the concept of green living. This is not only reflected in the guidance of government policies, but also in the recognition of environmental protection by designers and the public. More and more people are joining the ranks of environmental protection, thereby promoting the trend of green development of residential ecological landscapes\(^6\).

### 3.2 The pursuit of humanized design

In terms of residential ecological landscape design, both China and Singapore embody the common pursuit of people-oriented philosophy. The goal of this philosophy is to create a comfortable and livable living environment that meets the actual needs of residents. Designers from both countries attach importance to the rationality of spatial layout to ensure that residents can quickly and conveniently reach various functional areas. They create a convenient walking network in residential areas, with reasonable layout of green spaces and activity areas, allowing residents to easily and happily use public resources and get close to nature.

In terms of residential landscape design, both China and Singapore focus on the humanized layout of various facilities, equipped with pleasant seating, diverse children's entertainment projects, fitness equipment, etc., to meet the requirements of residents of all ages. Design experts from both countries attach great importance to the reliability and ease of operation of public facilities, ensuring that the public can enjoy a comfortable and convenient service experience during use. When creating an ecological environment for residential areas, selecting appropriate green vegetation is a key aspect of humanized design. Both China and Singapore prefer to use local or adaptable plant species in greening, with the aim of reducing maintenance costs and enhancing the sustainability of greening. Designers will simultaneously consider the color, form, and seasonal changes of vegetation to create a comfortable and pleasant living environment. In response to the spiritual pursuit of urban residents, professionals from both countries have cleverly integrated local charm into the design of the external landscape of their homes. In our country, designers often draw inspiration from the design elements of classical gardens to create an atmosphere full of ancient charm and elegance; In Singapore, designers are well aware that cultural diversity and inclusivity are the unique charm of the country. Therefore, in residential landscape design, multicultural characteristics are cleverly integrated into it. Whether it is the fusion of modern and traditional elements, or the collision of Eastern and Western design, all reflect the unique charm of Singapore's design. This innovative design approach not only showcases Singapore's cultural heritage, but also brings unique visual enjoyment to residents and tourists\(^7\).

### 3.3 Attempts to integrate local culture

In terms of ecological environment layout in residential areas, both China and Singapore have attempted to combine local cultural elements with modern design. The exploration goal is to organically integrate the essence of classical culture with modern creative design concepts, creating new products that not only carry profound historical connotations but also cater to contemporary aesthetic and practical needs. Chinese designers frequently refer to traditional garden art, such as using elements such as rockeries, water pools, and pavilions to create places full of Chinese classical atmosphere (as shown in Figure 1). These items not only attract people's appearance, but also contain rich cultural significance. They cleverly integrate elements with Chinese characteristics, such as auspicious characters and Chinese knots, into the design. These elements symbolize good luck and can awaken people's deep memory and strong recognition of traditional culture.
Singapore, a country with a melting pot of culture, is dedicated to the ingenious combination of various cultural elements in its residential landscape design industry, forging a unique design picture. This integration is not only reflected in the architectural style, but also includes multiple fields such as vegetation distribution and water system planning (as shown in Figure 2). Singapore, located near the equator, has a tropical atmosphere that is vastly different from China's natural scenery. With a wide variety of vegetation, the designers cleverly utilize rich natural resources to create residential landscapes full of tropical charm. In the field of residential ecological landscape design, both China and Singapore have explored ways to integrate local culture. These explorations not only enrich the cultural heritage of the design, but also make the works more in line with the aesthetic and lifestyle of the local people. The designers combine local elements and, through their joint efforts, create high-end creative works that not only inherit profound history but also conform to modern aesthetics[8].

Figure 1: Chinese style garden

Figure 2: Singapore Ecological Landscape Style
4. Conclusion

China and Singapore have shown unique cultural differences and similarities in residential ecological landscape design. The differences in cultural backgrounds have led to differences in design styles and material choices, but both countries attach great importance to ecological and environmental protection, are committed to humanized design, and attempt to integrate local culture into it. China's residential ecological landscape design is deeply influenced by traditional culture, emphasizing the relationship between harmony and nature, while Singapore places more emphasis on modern aesthetics and practicality, while not forgetting its multicultural characteristics. Despite these differences, the efforts of the two countries in pursuing environmental protection, humanization, and localization are similar. This cross-cultural exchange and integration not only enriches the diversity of residential ecological landscape design, but also brings new thinking and inspiration to global residential design.

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