

# Research on the application and optimization of Chinese Mongolian ethnic elements in the landscape design of Inner Mongolia city square

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**Abstract:** In an era of cultural diversification, integrating modern urban development with traditional national culture has become increasingly crucial. In the landscape design of the city square, how to effectively incorporate Mongolian cultural elements into landscape design, make the city square more regional, and spread the national culture to the outside is the research focus of this paper. By understanding the basic composition of the Mongolian ethnic elements, combining with the actual situation of the landscape design of Inner Mongolia city square, the deficiencies of the existing design are summarized, and the strategy of optimization design is put forward, hoping to help relevant personnel to better grasp the Mongolian ethnic elements and combine it with the landscape design of the city square.

**Keywords:** Mongolian; ethnic elements; city square; landscape design; strategy

## 1. The application value of Chinese Mongolian elements in the landscape design of the city square

The Mongolian nationality is a nomadic people located in the northern grassland of China, with a long history and a unique cultural tradition. The Mongolian ethnic characteristics provide a rich source of inspiration for the design of the city square. Contemporary research has emphasized the significance of incorporating traditional elements into modern urban planning frameworks (Wang and Zhang, 2023). In urban square landscape design, effectively capturing and expressing the openness of Mongolian culture while maintaining global appeal, apply characteristic culture and national elements to the actual landscape, realize the combination of modern and traditional, refining need in-depth analysis of the Mongolian ethnic elements, deeply grasp its cultural connotation, and integrate it into the design concept of city square. As a window to display the city culture, the city square space should grasp the regional characteristics, local customs, landscape plant collocation and other means to create a personalized, characteristic and ethnic square space. However, it should be noted that, in the integration of Mongolian elements, the historical and cultural authenticity should be respected, and stereotypes and over-commercialization should be avoided. At the same time, it is necessary to understand the regional policies, to ensure that the design scheme is not only in line with the local policy guidance, but also can truly reflect the connotation of Mongolian culture, Contemporary research emphasizes the role of cultural spaces in sustainable urban development (Chen and Wu, 2023; Li, 2024), and promote the inheritance and development of national culture.

### **1.1. Inheriting and carrying forward the Mongolian national spirit on the grassland**

The Party Committee of Inner Mongolia Autonomous Region issued the Measures on Comprehensively Implementing the Main Line of the Community Consciousness of the Chinese nation, emphasizing the importance of the Mongolian national spirit, pointing out the need to deeply explore and carry forward the Mongolian history and culture, strengthen ethnic unity, and promote the common prosperity and development of all ethnic groups. Under the guidance of such policies, the landscape design of urban squares is not only a means to beautify the urban environment, but also an important platform to spread and carry forward the national spirit. As a vital repository of urban cultural identity, city square design should authentically reflect the essence of Mongolian cultural heritage (Chen and Wu, 2023). The application of Mongolian elements in the landscape design of urban squares can show the unique cultural charm and profound cultural heritage to the world. In the actual design, by integrating the traditional Mongolian patterns, colors and symbols into the city square landscape, it can not only enrich the cultural connotation of the city, but also further enhance the cultural identity and pride of the citizens, and add vitality and vitality to the development of Chinese culture. For example, special ethnic elements such as Mongolian totem, matouqin and yurts are applied, and sculptures, rock paintings and decorations with distinctive ethnic characteristics are designed, so that the city square can become a window to show the Mongolian culture to the outside world, so that more and more people can understand the grassland culture and the spiritual outlook of the Mongolian people.

### **1.2. Promoting the exchange and integration of ethnic cultures**

Applying the unique Mongolian elements to the city square landscape will not only inherit and develop the national culture, but also promote the cultural exchange and integration among various ethnic groups. City square is a place for citizens to daily leisure, play and gather, which has strong development and public characteristics. When designing the landscape of the city square, it can be reasonably planned and designed to attract Beijing citizens and tourists of different ethnic groups to visit and experience. This design approach not only showcases the city's distinctive character but also facilitates cultural understanding and appreciation, so that people can have more understanding of the Mongolian culture, and people can also feel the strong ethnic customs from such an atmosphere. At the same time, after the completion of the square, Mongolian singing and dancing performances, festivals and other activities can be held to further activate the atmosphere, so that visitors can intuitively feel the Mongolian music, dance and customs. Cultural exhibition areas or museums can also be set up to display the Mongolian history, art and handicrafts and promote cultural inheritance. The city squares integrated with Mongolian elements will attract tourists, promote tourism development, and drive local economic growth. Through communication and integration, we promote interaction among people from different cultural backgrounds, enhance understanding and respect for each other's cultures, which helps to eliminate cultural barriers and encourages deeper integration among peoples of all ethnic groups (Sun, 2024).

### **1.3. Improve the image and attraction of the city**

As a public space, the city square can attract tourists and citizens to gather together, thus driving the development of the surrounding commerce. Through reasonable planning, the plaza can become a part of the commercial block, promoting the prosperity of retail, catering, entertainment and other industries. At the same time, a square with ethnic characteristics can become a symbol of the city and enhance the visibility and attraction of the city. By integrating the Mongolian architectural shapes, traditional patterns, colors and costumes and other elements, a square space with unique regional customs can be created, so as to attract more tourists and investment. It can be seen that the clever integration of Mongolian elements with the city square design can not only enhance the image of the city, but also enhance the attractiveness of the city. Building a square with distinctive Mongolian characteristics can be used as a landmark building of the city, attracting tourists from all over the world, and then driving the development of regional tourism (Lai, 2022). At the same time, the city square designed based on Mongolian elements has also become a name card to publicize the cultural characteristics of the city, and then conveys an open, inclusive and diversified cultural attitude to the outside world, and shows its profound cultural deposits and unique regional characteristics. Such a city image can not only enhance the sense of belonging and pride of the citizens, but also enhance the overall competitiveness of the city. On the basis of using unique national elements, is committed to beautify the city, build characteristic city, construction of culture, promote construction characteristic, culture, maximize the characteristics of national autonomous region, for the Mongolian culture development, and drive the development of prosperity, better implement the development under the background of Chinese modernization.

## **2. Analysis of the Mongolian ethnic elements in China**

### **2.1. Traditional patterns**

Mongolian traditional patterns, with their rich historical legacy, are evidenced across numerous archaeological sites such as Xiajiadian culture, Hongshan culture and Zhaobaogou culture. Traditional patterns can be categorized into several distinct types: Natural pattern (sun, stars, landscape lightning fire, etc.), animal design (horse, cattle, sheep, camels, etc.), plant patterns (flowers, fruit, etc.), geometric patterns (triangle, circle, water ripple, etc.), religious patterns, combination design, auspicious pattern (phoenix, lotus, eight, etc.), etc. At the same time, Yinshan rock paintings are also a form of Mongolian characteristic elements. By showing the production and living conditions of the ancestors, they express the religious beliefs and spiritual pursuits of the people at that time, such as hunting, sacrifice, war, dance, etc. It can be said that they are the historical epitome of the northern nomads. **Figure 1** shows the patterns in some of the rock paintings.



**Figure 1.** Yinshan rock painting.

Mongolian traditional patterns can intuitively show the situation of Mongolian folk art. These traditional figures and patterns reflect the survival concept and aesthetic taste of the Mongolian people, and also show the artistic treasures of the artistic value and cultural mechanism of the Mongolian to the outside, providing new design ideas for the landscape design of the city square (Liu, 2023). Therefore, in the landscape design of the city square, these patterns can be skillfully integrated into the design of public facilities such as ground pavement, wall relief, lighting facilities and seats. Similar successful applications of traditional patterns have been documented in other cultural contexts (Yang, 2023). For example, the traditional Mongolian patterns such as moire, back pattern, Babao pattern, etc., can be used to creatively transform through modern design techniques, so that it not only retains the traditional charm, but also conforms to the modern aesthetic. The Mongolian heroic epic and historical stories can also be displayed in the form of patterns, so that citizens and tourists can feel the unique charm of the Mongolian culture in their daily life.

## **2.2. Architectural shape and system**

Mongolian architectural elements of yurts, Aobao yurt is a house for herdsmen, usually composed of wooden frame, felt, rope, etc. The “Hana” with specially made wooden frame as the support structure. The outside is tightly wrapped by two to three layers of wool felt and fixed by ropes woven from horses mane or camel hair. The top has “Uai” as a support and covered with “Bures” to form a structure similar to the sky. There is also a skylight “pottery brain”, which is covered with square wool felt “He” to facilitate ventilation and lighting. At the same time, piles of stones can be seen everywhere in the Mongolian grassland, with branches, ribbons and Sanskrit banners, which is Aobao, also known as “pile”. Aobao is a place for the Mongolian people to offer sacrifices to the mountain gods and road gods, and to pray for good weather, happiness and well-being. Based on the architectural shape elements with strong local color, its application to the landscape of the city square can enrich the ethnic customs of the modern city. For example, imitating the structure of yurts, pavilions with

Mongolian characteristics are set up in the city square. Pavilions and pavilions not only provide citizens to have a rest, but also provide a window to show the Mongolian architectural art. Aobao elements can also be cleverly integrated into the sculpture of the square. Or in the decoration, through the artistic treatment, let Aobao become a bright spot in the square, to attract tourists to stop and watch. In the integration of Mongolian ethnic elements, attention should be paid to retain the essence of Mongolian architecture, but also to conform to the modern examination.

### **2.3. Color and clothing**

The Mongolian costume style is also an important window to show the national style. According to the costume, people can understand the local geography, climate and cultural conditions. Northern areas grazing for a long time, the climate is relatively cold, therefore, people dressed in Mongolian robes, belts, horse boots and snow hats, forming a specific dress. The traditional Mongolian costume is mainly centered on the robe, which is easy for horse riding and saddle. In pastoral area, the winter clothing uses light edition leather coat more, also have the design of fabric with silk or cotton fabric at the same time. Summer clothes are mostly made of cloth. The robe is characterized by its fat body and long sleeves, and the color is mainly red, yellow and dark blue. Whether male or female robes, its hem is not set with slit. Belts are often made of red and green satin. The characteristic costume and color collocation of the Mongolian people reflect the aesthetic implication and aesthetic ideal of the Mongolian people (Gao, 2024; Zhang, 2022; Zhao, 2022). When designing the city square, these elements can be skillfully incorporated into the decoration and facilities of the square. For example, for public facilities such as seats and street lights in city squares, the colors and patterns of Mongolian costumes can be combined, so that the daily facilities can also become a carrier reflecting national characteristics. You can also lay the pattern with Mongolian headdress elements on the square ground, and add the shape of Mongolian boots. For the use of color, we can draw lessons from the red, yellow, blue and other colors common in Mongolian costumes, and take them as the main colors or decorative colors of the square design. Through the collocation and use of colors, not only can create a warm and cheerful atmosphere, but also can make the city square more vivid and attractive.

### **2.4. National spirit**

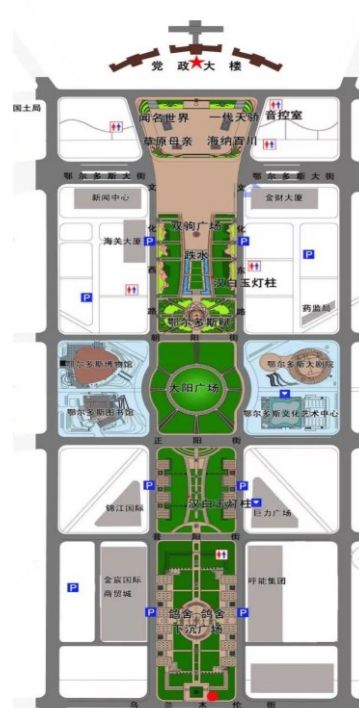
The spiritual connotation of the Mongolian nation, such as the nomadic spirit and nature worship, is the core of the Mongolian culture. The nomadic spirit reflects the Mongolian people's pursuit of freedom, courage and perseverance, while nature worship reflects their awe and dependence on nature. In the landscape design of urban squares, these spiritual connotations can be transformed into specific design concepts, so that the design is not only visually attractive, but also rich in emotional depth and cultural significance. For example, some sculptures or installation arts with the theme of nomadic life can be designed to show the harmonious coexistence lifestyle of the Mongolian people and nature in the form of art. The sculpture can be a scene of herdsmen riding horses and grazing, or a moment of Mongolian interaction with the natural environment, such as the intimate relationship between herdsmen and horses,

cattle, sheep and other animals. Such a design can not only attract the attention of citizens and tourists, but also stimulate their interest and curiosity in Mongolian culture. Furthermore, the spirit of nature worship can be reflected through the plant configuration and waterscape design of the square. For example, some water features themed with natural elements in Mongolian fairy tales, such as pools or fountains inspired by the sacred mountains and sacred lakes in Mongolian legends. In the selection of plants, plants traditionally considered by Mongolian as auspicious can be used, such as pine and cypress trees, these plants can not only beautify the environment, but also convey the Mongolian respect for nature.

### 3. Analysis of Chinese Mongolian elements in landscape design of Inner Mongolia city square

#### 3.1. Current status of Inner Mongolia city square construction

Inner Mongolia Square is located in Kangbashi District, Ordos City. Starting from the city government building, it extends along the north to south direction, with a total length of 2.7 km and a width of about 200 m. Commercial, office and cultural land are mainly distributed on both sides. With carpet as the core concept of landscape design, the square presents three themes of unity, hometown and nature from north to south, which is in line with the overall design concept of “the rising sun never sets on the grassland”. On the square, the white marble lamp posts stand tall, the granite benches are in an orderly manner, and the central falling pool is sparkling, which not only highlights the broad and heroic nature of the grassland nation, but also fully highlights the distinctive characteristics of the Mongolian nation. For example **Figure 2** shows the basic structure of Inner Mongolia Square.



**Figure 2.** Composition diagram of Inner Mongolia Square.

To highlight the ethnic characteristics, in the design of Inner Mongolia Square, based on the concept of carpet design, three major themes were integrated to showcase the distinct features of the Mongolian people under the theme of “The Sun Rising Over the Grassland That Never Sets.” Firstly, under the theme of “Nature,” the decorative design features ancient bronze ware patterns from the Ordos region, with these patterns reinterpreted as bronze animal sculptures placed in the undergrowth and on the lawns of the square, guiding people’s attention to the modern sculptures within the square; secondly, under the theme of “Homeland,” an oval-shaped sunken theater was designed to display the Mongolian people’s passion for dance, with four corners of the sunken theater featuring sites for “sheep, coal, earth, and gas,” providing spaces for citizens to sing and dance and host large gatherings; thirdly, under the theme of “Unity,” the decorations on the marble lamp posts feature the shape of galloping horses, with two rows of lamp posts solemnly guarding the twin steed sculpture at the center of the square’s lawn, showcasing the bold and unrestrained spirit of the horse-riding nation.

### 3.2. Specific application of Mongolian ethnic elements in the landscape design of Inner Mongolia city square

First, the ten major Mongolian characteristic elements “Genghis Khan” have been initially applied in the landscape design of Inner Mongolia city square. On the sculpture square, with the Kangbashi landscape as the central axis, there are four groups of sculptures representing “Genghis Khan” standing on the square respectively. The sculpture group is “sea to all rivers”, “generation of Tianjiao”, “world famous” and “grassland mother” as the theme, the whole sculpture is 16 m high, all made of bronze material carefully poured, forming the iconic sculpture group in Kangbashi District. A partial example is shown in **Figure 3**. (Hao Jiawei, Li Yu, 2022, Liu Jia,2022) This group of sculptures vividly reproduces genghis Khans military career and his great achievements, deeply embodies the great spiritual connotation of the Chinese nations unremitting self-improvement and courage, and injects profound and rich cultural implication into the rise of Kangbashi District. The application of the characteristic elements of “Genghis Khan” enriches the cultural heritage and connotation of the sculpture square, and also reflects the designers deep understanding and respect for the Mongolian history and culture (Gao Hongyuan, 2024).



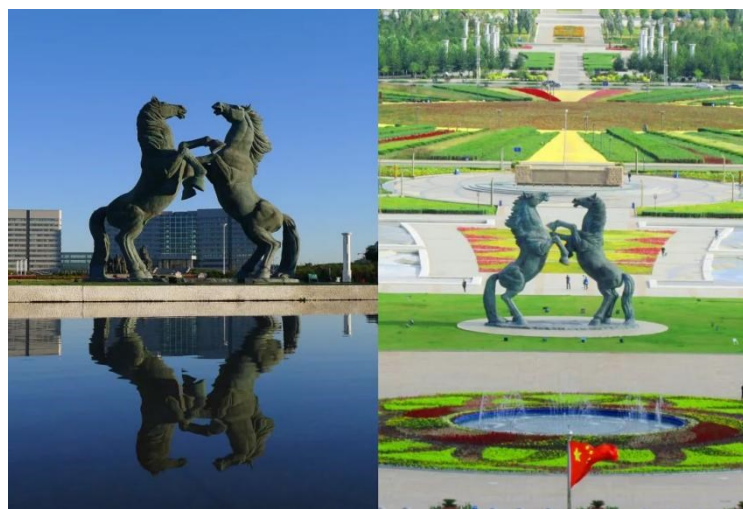
(a) World famous.



(b) Prairie mother.

**Figure 3.** “Genghis Khan” sculpture square, (a) world famous; (b) prairie mother.

Second, the characteristic elements used in the design of Shuangyu Square are “Genghis Khan”, two gods. Genghis Khans deeds have been passed down from generation to generation, and they have also influenced the Mongolian people living on the grassland for generations, and become the spiritual idols of the Mongolian people. Based on the culture of double foal, the two divine horses of Genghis Khan are vividly displayed in the shape of the bronze horse soaring and winning in the square. The sculpture of these two horses not only symbolizes the spirit of the Mongolian people going forward bravely and overcoming difficulties, but also symbolizes the vitality and vitality of Shuangyu Square. A partial example is shown in **Figure 4**. The sculpture adopts modern artistic techniques and combines the traditional Mongolian cultural elements, so that the whole square has both strong national characteristics and modern sense (Lai, 2022).



**Figure 4.** Shuangju square.

Third, the design of the Sun Square uses the color elements of the Mongolian nationality to cater to the “sun that rises on the grassland”. With the shape of the sun as an epitome, eight radial corridors are designed, combining red, green, gold and other colors, to match the sun's light reflecting the earth. The Mongolian people think that fire is like shining on the earth, that red is a symbol of warmth; green symbolizes the vitality and hope of the grassland; gold is the favorite decorative color of nomads. The design of the Sun Square is integrated with color elements, which not only reflects the Mongolian peoples awe and worship of nature, but also shows their yearning and pursuit for a better life. A partial example is shown in **Figure 5**. The corridors in the square are not only practical, but also artistic. They are like the light of the sun, guiding people to the light and hope.

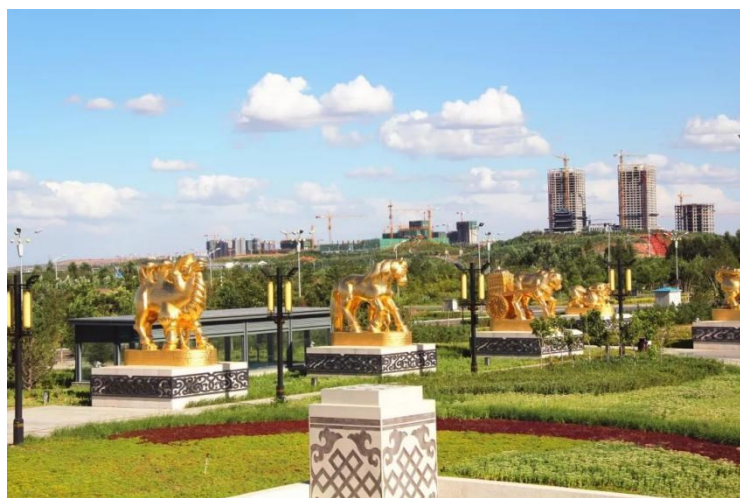




**Figure 5.** Sun-square.

Fourth, the leisure square is based on the design concept of “city in the garden, garden in the city of the city”, to build a garden-style garden city for the people in the region. The design of the leisure square fully reflects the Mongolian love and respect for nature. The square has not only tree-lined walking paths, but also fountains with flowing water, and elaborate arrangements of various flowers and vegetation. Together, these elements create a quiet and harmonious environment, allowing citizens to find a quiet oasis in the busy urban life.

Fifth, the Mongolian Chess Square. This design is derived from the Mongolian chess game. On the basis of meeting the functional needs of civil air defense in the square, based on the creative association of Mongolian chess, 32 Mongolian chess sculptures were placed in the square respectively. All of these sculptures were cast in bronze, and the surfaces were gold and silver plated respectively. At the same time, the central sharing hall area is set up in the viewing point platform (Li, 2024). Through the rational layout of the green area, terrain design and the elements at the entrance and exit of pedestrian and car buildings, the enclosed space is effectively organized and integrated with the chess sculpture landscape to jointly build a cultural square implying the unity and struggle of the horseback nation. **Figure 6.** Mongolian Chess Square



**Figure 6.** Mongolian Chess Square.

### **3.3. Problems existing in the design of the square**

According to the design of Inner Mongolia city square, While the square's design incorporates elements of ethnic culture, regional characteristics, and grassland traditions, the overall design effect shows that the symbiosis between nationality and modernization is insufficient, and the application of Mongolian characteristic elements is relatively single and lack of innovation. To be specific, the Mongolian elements in the square mostly appear in the form of sculpture and decorative patterns, but the application of these elements is often too direct and superficial, lacking the integration of deep cultural connotation and modern design concepts. Recent research has demonstrated successful methods for balancing traditional and modern elements in public spaces (Sun, 2023; Wu, 2024). As a result, the unique regional culture of the city is difficult to become the carrier of outward inheritance and development of national characteristic culture under the single design. Therefore, for the landscape design of the city square, the regional characteristics, cultural characteristics and folk characteristics of the Mongolian nationality should be fully considered, to create a natural landscape rich in regional customs, and to provide a place for the people to carry out folk activities (Liu, 2023).

## **4. Chinese Mongolian ethnic elements are applied in the landscape design of Inner Mongolia city square**

### **4.1. Reflect the local local characteristics, highlight the Mongolian regionality**

The formation of urban square landscape is closely related to regional culture. In order to reflect and express the characteristics of Mongolian in a deeper level, the cultural connotation of Mongolian should be deeply explored, and combine it with modern design concept to create a landscape space with unique charm (Liu, 2022). Based on the discovery and research of the Mongolian culture and combined with the analysis of the Mongolian ethnic elements in the second part, the Mongolian totem and symbols can be paved along the corridor of the square when optimizing the existing landscape. In this process, we should avoid simple copying and piling up the modern landscape, and make these elements glow with new vitality in the modern landscape through innovative methods. For example, in Genghis Khan Square, a visual "horse road" can be formed along the paved corridor with the characteristic pattern of "horse", which not only symbolizes the Mongolian horseback culture, but also adds a unique visual focus to the square. It can also reflect each other with Shuangju Square, thus achieving the purpose of complementing each other, and then further reflect the national spirit and cultural connotation of the Mongolian nationality. At the same time, when using cultural elements, Mongolian culture can also be interpreted through interaction and multimedia technology. For example, use enhanced (AR) technology to add interactive Mongolian culture display to the square. Visitors can scan for totems, sculptures, etc. Use mobile phone to understand the historical and cultural stories behind; introduce more modern artists or designers, use contemporary art to interpret the traditional Mongolian cultural symbols, make the design more artistic and modern. In addition, under the guidance of local policies, cultural activities related to the square

can be carried out Festival activities, such as the Nadam Fair and the Grassland Music Festival, can not only attract tourists, increase the frequency of the use of the square, but also further promote the Mongolian culture and tradition. Through policy guidance, designers can integrate the traditional Mongolian patterns and architectural shapes into the design of the ground pavement, sculpture and rest pavilions in the square. At the same time, the colors and clothing elements can also be reflected through plant configuration and landscape sketches. Policy support can also help designers integrate modern technologies, such as intelligent lighting systems and interactive landscape installations, to enhance the appeal and function of the square.

#### **4.2. Grasp the personality and characteristics, optimize and adjust the infrastructure modeling**

Urban square landscape design must prioritize both functionality and interactive elements while maintaining cultural authenticity. On the basis of fully grasping the Mongolian personality creation characteristics, Inner Mongolia city square should have significant characteristics different from other urban squares, and then create a unique square landscape on the basis of urban context and cultural characteristics. Taking Sun Square as an example, at present, it only combines color elements and green plants for design. In the subsequent improvement process, with the rock painting shape as the design element, the animal images, hunters, knights and symbols in **Figure 1** are integrated into the design of seats and lamps in the square. Among them, the white marble lamp post can be combined with the rock paintings. Under the expression technique of realism, people can feel the beauty of the painting, so as to show the life of the Mongolian people and explore the cultural heritage behind it through these cultural symbols. For the lighting design of the square, you can also use the shape of yurts, using modern materials and technology, which can not only meet the lighting, but also create a unique cultural atmosphere. Recent innovations in smart technology have shown promising results in enhancing cultural experiences (Liu and Zhang, 2024). In the process of construction, the materials used in the design are modern environmental friendly materials, which not only meets the conditions of sustainable development, but also reduces the construction cost. Specifically, materials such as recycled steel, bamboo, recycled plastic and ecological concrete can be used. The yclsteel is made by recycling old steel Product re refining reduces dependence on native resources, while reducing energy consumption and carbon emissions. As a fast growing plant, bamboo has a strength comparable to wood, but a short growth cycle and little impact on the environment. Recycled plastics can be processed into a variety of building materials, such as plastic bricks or composite plates, which reduce both plastic waste and material costs. At the same time, when improving the landscape of the city square, we should follow the principle of people-oriented design, fully consider the feelings of people in the space, grasp the cultural connotation and the charm of landscape beauty, and improve the infrastructure. In view of the unspecified infrastructure such as dustbins and billboards, the traditional Mongolian pattern as the design inspiration for innovative design. Modern ecological materials have demonstrated superior sustainability characteristics in urban construction (Ma Jing,2023). For example, the dustbin can be decorated with traditional Mongolian

patterns, combined with modern materials, both practical and with national characteristics. The design of the billboard can also be integrated into the Mongolian totems and symbols. Through the modern visual communication technology, these elements can present a unique visual effect on the billboard, and convey the Mongolian cultural letter.

### **4.3. Optimize the plant configuration and landscape sketch to shape the natural landscape rich in Mongolian regional customs**

One of the core of the square landscape design lies in the greening design, so that residents can feel the nature in the square, implement the development concept of protecting the ecological environment, and create a pleasant environmental space. We should pay attention to the hard man-made landscape should not be too much, to do the main green (Hao and Li, 2022). For the optimization of Inner Mongolia city square, the drought-resistant plant sand cypress replaces the traditional grassland, and planting plants with local characteristics can also convey the local conditions. As a kind of water-saving greening plant, it can not only meet the needs of ecological construction in the square, but also bring significant ecological environment benefits to the construction and promotion of urban non-irrigated green space. To this end, you can choose to grow sand cypress around the Sun Square or the Mongolian chess Square. Due to the large temperature difference in the region, in order to adjust the climate, it is also necessary to plant broad-leaved wood appropriately to relieve the heat, and lay turf for the bare ground, so as to rationally allocate plants. At the same time, a variety of prefabricated blocks, strip stones, cylinder bricks and other materials with specific sizes, shapes and colors are used to lay the pedestrian space, and the laying of this space can choose the ecological ring coagulation soil. Ecological concrete is a kind of porous concrete, which can promote the growth of plants, and has good water permeability and sound absorption performance, which is suitable for urban infrastructure construction. These materials not only provide rugged and durable surfaces, but also create flat effects with a unique texture and pattern through clever stitching and combination. Through careful design and construction, these materials can be combined into a variety of beautiful and practical ground decoration, thus enhancing the beauty and functionality of the overall environment. At the same time, green roofs and vertical garden technology can be used. The green roof not only provides additional insulation and reduces temperature fluctuations inside the building, but also absorbs rainwater and reduces the pressure on the urban drainage system. Vertical gardens help improve air quality, provide biodiversity habitats and add beauty to the urban landscape. Finally, the design should fully consider the convenience of future maintenance and operation. Choosing materials that are durable and easy to clean up can reduce long-term maintenance costs. At the same time, enough space should be reserved in the design for the maintenance and replacement of the equipment to ensure the long-term sustainable operation of the building.

## **5. Conclusion**

In summary, with the need for the construction of sustainable development and environmental protection concepts, how to create distinctive spaces with regional

characteristics on the basis of protecting and continuing the urban regional characteristics is an important measure to continue the urban cultural context. Therefore, designers should avoid the disappearance of local characteristics and the blurring of spatial characteristics, but rather deeply grasp the urban characteristic culture in design, start from the needs of people, and integrate local characteristic elements into the design to meet the needs of modern urban development. Through reasonable planning and careful design, tradition can be combined with modernity to create urban squares that are both historically grounded and meet modern aesthetic and functional requirements. In this process, designers need to deeply study the local historical culture, folk customs, and natural environment, so as to reflect unique regional characteristics and cultural connotations in the design. At the same time, by combining various ethnic elements with different spatial construction needs, it is ensured that urban square spaces have both modern and traditional styles, with values that are both in line with modern aesthetics and that inherit and develop national culture. This can effectively protect and pass on the cultural heritage of the city, thereby creating a unique urban square with charm, and also establishing a new “business card” for local tourism development.

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