# Urban Industrial Heritage Landscape Design Based on Site Memory in the Context of China-Chic

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**Abstract:** Since the 1960s, the country has focused on industrial development, and traditional industries have made significant contributions to China's modern economic development. With the advent of the information age and economic restructuring, some traditional industries have completed their historical missions and are gradually fading from urban life. The surrounding areas of these industrial sites have undergone tremendous changes, which not only affect the urban landscape but also waste land resources. Industrial heritage, as an abandoned industrial space in the city, contains material and spiritual elements related to industrial production and reflects the unforgettable history and cultural landscape diversity of its former glory. Therefore, this paper addresses the issues of lack of cultural features, standardized infrastructure models, and resource waste in current urban industrial heritage landscape design. Taking the Lianhua Mountain quarry industrial relics as an example and drawing inspiration from the Chinese unit "Li," this paper proposes optimization strategies to create healthy and livable spaces, stimulate the intrinsic vitality of the site, and enhance its economic value. The aim is to retain the industrial cultural elements on the original basis, reuse the available resources, and integrate the new with the old to achieve the ideal state of recycling and symbiosis, bringing new life and vitality to the heritage site.

**Keywords:** China-Chic Context; Site Memory; Industrial Heritage; Landscape Design

## 1 Introduction

In the past period, due to differences in people's understanding and economic structure, the treatment of industrial heritage often involved demolishing existing buildings and structures and then reassembling them. This approach resulted in many unsuitable and unnecessary functional areas in the reconstruction, wasting valuable urban resources, destroying industrial historical traces, and increasing the cost of site reuse, which conflicts with the concept of sustainable development in modern society. In Western countries, some developed countries have begun to preserve industrial cultural heritage as a new cultural asset and have achieved certain success. With the continuous development of society and the economy, the public's expectations for a better quality of life are rising, making the protection and development of China's industrial heritage a topic of widespread concern across society. Redefining abandoned industrial sites as new places to inherit industrial civilization, enhance urban cultural connections, meet citizens' leisure needs, and improve the quality of life is extremely important for the continuation of industrial heritage.

ADDT 2024, May 24-26, Luoyang, People's Republic of China

DOI 10.4108/eai.24-5-2024.2350167

## 2 Conceptualization of Urban Industrial Heritage Landscape Design Based on Site Memory

Industrial heritage landscape design differs from traditional landscape design; it symbolizes the historical context of a city's industrial development and carries the spiritual memories of that time. From an ecological perspective, the mountains, water, and plants of industrial heritage sites have formed a complete ecological chain. Therefore, the design of such sites should integrate industrial heritage with the natural environment, blend ecology with human emotions, and activate both natural landscapes and industries. The waterfront areas can better reflect water affinity, and the overall design should consider people of different ages and identities. Revitalize the desolate and abandoned sites, restoring the site's vitality. Replan the originally grey industrial spaces, creatively use the historical "facility waste" to give the abandoned sites aesthetic value.

## 3 Design Principles

### 3.1 Principle of Functional Transformation

In the process of urbanization, old industrial plants have become unmanaged industrial wastelands due to their inability to adapt to new demands. The public facilities in industrial heritage lack clear functional positioning, may be inadequate, and cannot well meet the needs of specific groups. During the renovation, functional replacement and integration methods are used to inject diversified functions and formats into public facilities, revitalizing them, inheriting their historical value, promoting the diversification of urban industrial structures, and enhancing the overall quality of the city. When performing functional transformation, ensure that public facilities can meet new usage needs while maintaining their basic public service attributes. New functional planning must fully consider residents' real needs and usage habits, ensuring the completeness and practicality of public facilities[1].

### 3.2 Principle of Symbiosis

Taking into account the local natural environment, climate, and terrain, adopt green building materials and energy-efficient technologies to reduce energy consumption and emissions during the renovation, mitigating negative environmental impacts. Reasonable greening and landscaping designs enhance the environmental quality of old factories. Old factories, bearing rich historical and cultural memories, are an important part of urban culture. Fully excavate the historical and cultural connotations of old factories, retain and inherit valuable cultural elements. The principle of symbiosis emphasizes the symbiosis of old factories with society, balancing economic, social, and environmental benefits, achieving sustainable development and maximizing value.

### 3.3 Principle of Innovative Design

According to the overall functional planning of landscape renovation, perform functional innovation and reorganization of old factories. Design specific areas to meet the needs of different age groups, making old industrial parks a multifunctional complex. Spatial reorganization is also an important part of functional reorganization. According to new

functional requirements, reasonably adjust and optimize the original spaces. Through methods such as breaking dead ends, forming ring passages, and adding corridors, streamline the flow and enhance the accessibility and convenience of the factory area. In the renovation design of old industrial buildings, functional replacement and improvement not only enable old factories to transition between new and old dynamics but also make the overall space functions more systematic.

### 3.4 Principle of Regional Culture

Ecological landscapes are places where people can relax and unwind in their busy lives. As society develops, landscapes gradually become symbols and highlights of a region. A unique garden landscape with local characteristics is particularly important. China's vast territory and different regions have different local cultures under specific geographical environments. The cultural development of a region is related to the region's values, living environment, climate, and habits. Integrating historical culture into landscape design allows landscape design to take on the responsibility of inheriting and promoting historical culture, maintaining cultural continuity, and reflecting regional individuality.

## 4 Existing Problems in Urban Industrial Heritage Landscape Design

### 4.1 Pursuit of Cost Efficiency Leads to Homogenization of Design Content

Against the backdrop of rapid economic development, the urbanization process is accelerating. To meet market demands, architectural design often pursues the principles of efficiency, economy, and practicality, to some extent limiting design individuality and innovation. This results in architectural designs with similar appearances and functions, further driving design style homogenization. This trend not only weakens the regional characteristics and cultural connotations of buildings but also reduces the artistic value and humanistic care of architecture. Therefore, we delve into regional characteristics, especially the practical application of regional culture in architectural landscapes, seeking a method that inherits and reflects unique regional characteristics, skillfully integrating them into architectural forms, façade designs, and spatial layouts[2]. Emphasize the integration with modern design concepts to create buildings that blend traditional charm with modern sensibilities. To ensure the overall design represents local characteristics, designers should thoroughly explore local ecology, culture, customs, and other aspects, extracting regional cultural elements to interact and merge with modern landscapes, creating unique buildings that integrate regional culture with modern construction.

### 4.2 Ignoring Regional Differences, Leading to Homogenization of Space Planning

With the acceleration of globalization, driven by economic interests, to pursue short-term economic benefits, regional culture and natural condition differences are ignored, leading to the gradual homogenization of landscape space planning through mutual imitation. Landscape spaces exhibit similar plant configurations, landscape elements, and structure designs, lacking visual differences and characteristics. Planning follows similar functional zoning and spatial division principles, a common issue in current landscape design. Severe homogenization lacks originality, diversity, and flexibility. China’s comprehensive management of industrial

heritage research started late, with relatively lagging theoretical knowledge and technology. There are few proposals for the reuse of industrial heritage, with single reuse methods and a lack of multidisciplinary integrated development. Primarily, old factory wastelands are transformed into agricultural land, but the development speed is fast, and certain applicable results have been achieved in recent years. By exploring regional characteristics, promoting innovative design, enhancing interdisciplinary cooperation, emphasizing public participation, and balancing economic benefits with cultural values, break the phenomenon of homogenization to create diverse and personalized landscape spaces[3].

### 4.3 Ignoring Human Needs, Leading to Homogenization of Public Facilities

Public facilities are bridges connecting people with nature, playing the role of harmonizing human-environment relations. They not only enrich citizens' daily lives but are also indispensable elements for improving urban service functions and enhancing urban quality. However, there are homogenization issues in craftsmanship and design forms, lacking regional cultural elements and embodying cold, indifferent facilities that do not meet psychological needs and sensory experiences. In the construction of public facilities, always place "human factors" at the core, comprehensively considering physiological and psychological needs. Focus on public facilities' performance in safety, convenience, comfort, and aesthetics, starting from and ending with meeting human needs. As a cultural ancient capital, Xi'an is the origin of many traditional cultures. In public facility construction, cleverly integrate regional cultural elements, deeply excavate the city's historical context, endow public facilities with educational functions, and provide the public with a rich and profound visual experience. Fully utilize open spaces to meticulously create public facilities with cultural charm, convenience, safety, interaction, and promotional value, inheriting and promoting the city's cultural heritage, playing a key role in pursuing harmonious coexistence between environment, people, and items, thereby achieving harmony among the three.

## 5 Industrial Heritage Landscape Design Strategies—Taking Quarry Wasteland Landscape Design as an Example

### 5.1 Reinterpreting Heritage: The Chinese Unit "Li"

Firstly, the Chinese character "Li" as a noun means a place of residence, a neighborhood, etc. In terms of glyphs, it has "soil" and "field," indicating a demarcated area. Secondly, in ancient times, "Li" was a residential organization, with 25 families forming one "Li" before the Qin Dynasty. Lastly, in Tao Qian's "Return to the Garden and Fields," "Li" means hometown or home. In ancient times, "Li" was also a unit of area measurement. From ancient to present, our living methods have always been one module per family, independently but connected by an invisible net (as shown in Figure 1). The design for the Lianhua Mountain quarry wasteland adopts a similar concept, interspersing countless "Li" modules to form interconnected internal spaces of varying sizes and functions, flexible like building blocks, with room for expansion or contraction for future development, ensuring the overall layout adapts better to changes. As modern neighborhood relationships diminish, I hope people can rediscover traditional neighborhood relationships of frequent interactions, mutual help, and harmonious atmosphere in this design[4].

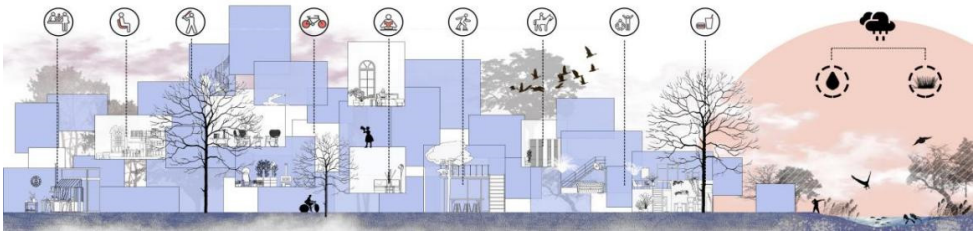

**Fig. 1.** Design Concept Expression (Author's Drawing)

### 5.2 Space Reconstruction—Diverse Functional Spaces

Divide the overall building into four main areas: commercial market area, communication and reception area, living and leisure area, and ecological area, each with certain privacy but connected through various public spaces and one-way glass(as shown in Figure 2). The commercial market area, concentrated at the entrance on the first floor, primarily features a composite format of "market + dining + shopping," incorporating creative design and stall culture to meet daily needs. This area blends large outdoor activity spaces and public spaces with indoor spaces to form a "commercial + leisure + entertainment" complex. The communication and reception area, dominated by "leisure + social," provides social activity spaces meeting daily needs and quiet study and workspaces. Here, various gatherings, dances, and small meetings and training sessions can occur. The living and leisure area connects functional spaces through courtyards and leisure corridors. To create a good visual effect, the interior features extensive glass curtain walls and vertical greenery, integrating space with the natural environment for a transparent feel. Leisure corridors connect different spaces, allowing transitions between spaces and enhancing comfort.

**Fig. 2.** Analysis of Diverse Space Design(Author's Drawing)

### 5.3 Functional Reinterpretation—Public Facility Design

#### 5.3.1 Mobile Memory Seats

The design of mobile memory seats in public spaces is inspired by the water ripple of the lake in the site, using a streamlined form(as shown in Figure 3). The striking red color aims to remind people of the history of the Lianhua Mountain quarry, commemorating the mining that contributed to today's life. These seats are constructed from industrial waste left in the wasteland, reducing construction costs and retaining the environmental characteristics of the industrial landscape, providing a unique visual experience and enriching the exploration of different landscape types.

**Fig. 3.** Mobile Memory Seats Effect Diagram (Author's Drawing)

### 5.3.2 "Fusion of Past and Present" Intelligent Induction Lamps

The design of landscape lamps draws inspiration from shadow puppetry in regional culture. By extracting the characteristic shapes and colors of shadow puppetry figures, traditional cultural elements are combined with lighting technology, showcasing the unique charm of regional culture and adding cultural atmosphere to urban spaces. Equipped with intelligent induction systems, these lamps sense human proximity, automatically lighting up to provide illumination and facilitate nighttime outings for citizens and tourists. Uniquely, the lamps also feature projection functions, projecting a segment of classic shadow puppetry on the ground when lit. This way, citizens and tourists can experience traditional culture while walking, enhancing the fun of touring.

### 5.3.3 "Passing the Torch" Art Installation

The once-busy industrial factory, having withstood the test of time, witnessed the vicissitudes of history(as shown in Figure 4). Now, the remaining equipment is cleverly reused, with bright paint covering the wear and tear of years, transforming into contemporary art installations, yet with historical connotations still faintly visible. Unlike the usual "restore as before," this is a recreation of "new and old fusion," allowing people to feel the history of the past momentarily[5].

**Fig. 4.** Effect Diagram of the "Passing the Torch" Art Installation (Author's Drawing)

## 6. Conclusion

With the accelerating pace of urbanization and the optimization and upgrading of industrial structures, the renovation and reuse of industrial heritage have become important issues in current urban development. This design aims to update it into a multifunctional site integrating leisure, culture, and sports. Through principles like functional transformation and symbiosis, achieve harmonious coexistence with the environment, preserve industrial historical culture, enhance urban space utilization, and provide citizens with diverse activity options. Adhering to the principles of symbiosis, innovation, and regional culture, integrate the essence of regional culture, retain historical characteristics, and emphasize ecology and sustainable development. Avoid design homogenization, conduct in-depth research on regional culture, and create unique, culturally rich new spaces. By restating, reconstructing, and healing, showcase the site's characteristics. Reconstruct idle spaces into multifunctional sites, innovatively design public facilities, and highlight the charm of regional culture. Integrate regional culture with modern technology to create unique and engaging landscape spaces, providing more scientific, reasonable, and feasible solutions for industrial heritage landscape renovation and promoting urban sustainable development and cultural inheritance and innovation.

**Acknowledgments.** This work was supported by the fund project: 2023 Tianjin Education Commission Research Program Project: “Research on the Activation Strategy of Time honored Brand in the Context of China-Chic” (No. 2023SK002).

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