

Inheritance-Innovation-Continuity: The Evolutionary History of Hedong Salt Ponds in the Design of Cuo Sea Theme Parks

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Abstract

As one of the birthplaces of Chinese civilization, Yuncheng Yanchi boasts a profound history and a rich culture heritage. This study delves into the evolutionary trajectory and key cultural events of Yanchi by meticulously collating and analyzing historical data. The conceptual framework of the Cuo Sea Theme Park aims to offer visitors an immersive and insightful encounter with the history and culture of Yanchi, achieved through the portrayal of historical events, cultural traditions, and prominent figures. The design strategy emphasizes the harmonious integration of history and culture, the imperative of conservation and rejuvenation, and the pursuit of innovation and immersive experiences. By skillfully incorporating landscape vignettes and natural surroundings, the park thoughtfully weaves the evolutionary history and cultural significance of Salt Pond into its overall layout, providing visitors with enriching educational opportunities, recreational spaces, and captivating immersive experiences. This study holds tremendous importance in safeguarding the invaluable heritage of Yanchi, fostering tourism development, and perpetuating the profound history and cultural legacy of this remarkable region.

Keywords: salt pond culture, history of evolution, Cuo Sea, theme park design

1. Introduction

Yuncheng is known as “Hedong”, the ancient “City of Salt”, is one of the birthplaces of Chinese civilisation, has a long history. The Chinese ancestor of the Yellow Emperor, Emperor Yandi, Chi You, Yao, Shun, Yu, have left an indelible history on this piece of land, and there are myths and legends, such as the sacred cow pool, Chi You blood, Kirin pool and so on. Salt Pond is a special landmark of Yuncheng, anciently known as Cuo Sea, ancient sea, silver

lake, salt lake, etc., is also one of the four major salt lakes in China. Salt Pond is a naturally formed inland lake, divided into Tangli Beach, Nitrate Pond, Xiechi, Beimen Beach, Duck Pond and other parts, with a total area of about 130 square kilometres, shaped like a basin, and is also known as China’s “Dead Sea”. In ancient China, salt was regarded as one of the important commodities and currencies. In ancient times, Yuncheng was a city specialised in salt affairs, and it is the only city in China’s 5,000-year

history that was created to deal with salt affairs. Salt ponds have made great contributions to human development in the waves of history, and to this day continue to produce salt due to unique geological factors.

A historical and cultural theme park is a type of theme park with historical and cultural themes, aiming to provide visitors with an in-depth understanding and experience of a specific historical period or cultural background by displaying elements such as historical events, cultural traditions and important figures (Zou Yang, & Fu Qingwei, 2015; Zhang Zuqun, 2012). The creation, development and evolution of the salt pond carries a rich history and culture. The study analyses the evolutionary history of the salt pond from multiple angles and explores historical and cultural elements by collating, summarising and analysing the basic information on the development of the Yuncheng Salt Pond. It realises the integration of history and culture and theme park, and achieves the design effect of coexistence of experience, inheritance and excursion. Its purpose is to inherit the history and culture of Yanchi, protect the natural landscape, promote tourism, and provide a platform for education and cultural exchange. The construction of the park will help protect the heritage and environment of Yanchi, enhance people's understanding of the history and culture of Yanchi, promote economic development and social progress, and at the same time provide visitors with an unforgettable learning and entertainment experience. With the history of the evolution of Yuncheng Salt Pond as the main line, the history and culture of Yancheng Salt Pond is expressed through the design of the Cuo Sea Theme Park.

2. Cultural Heritage — Evolutionary History of Salt Pond

2.1 Zhuo Lu Culture Period

The earliest records about the salt pond are in the period of the Yellow Emperor, Emperor Yan and Chi You. In the ancient times salt promoted the evolution of human body and brain, in the era of backwardness of production tools and productivity, the salt pond as a natural salt production field has been a place of war since ancient times. At that time, the Yellow Emperor, the Yan Emperor and Chiyu fought for the natural resources of the salt pond and triggered the Zhuo Lu battle, as a result of which Chiyu

was defeated and killed (Liu Yuxia, 2020).

2.2 The Prosperous Period of the Salt Pond

The Tang Dynasty was an important point in the evolution of salt ponds. Before the Tang Dynasty, human beings relied on heaven, and the method of salt production was "natural printing without manpower", which was not only low in yield but also difficult to control. During the Tang Dynasty, the original method of salt production was replaced by the method of watering and sunning in the reclaimed border, which greatly increased the salt production and marked a major change in the way of salt production. As a result, salt ponds also reached a prosperous period in the Tang Dynasty (SUN Shimeng, WU Weijia, & YU Taofang, 2019).

2.3 Creation of the Salt City

During the Tang and Song dynasties, the salt industry in the Yanchi area gradually prospered and became the pillar of the local economy. In order to better manage the salt industry, a special administrative organisation for salt affairs began to appear in the area. During the Yuan Dynasty, the city of Phoenix was built to ensure the development of the salt industry, and the city was named "Yuncheng" because it was created for the transport of salt, and a forbidden wall was constructed at that time for the convenience of the administration, and the remnants of the wall still remain today. During the Ming and Qing Dynasties, the Salt Dedicated City in the Yanchi area was further developed. As the centre of the salt industry, the Salt City included not only administrative institutions, but also residential areas for officials and other related facilities. Salt merchants and salt dwellers gathered in the Salt Dedicated City, forming a unique social and economic system (Xian Zengqiang, 2018).

2.4 Creation of Salt Transportation Science

Due to the complicated and strict management of salt, the specialised salt school "Yunxue" came into being, giving the salt industry a professional mode of operation at that time. "The Hedong basin law review" recorded that "the world's transport department has five, but the Hedong has a special school", transport school was not created at the beginning of the school is not a specialised teaching salt, just for salt merchants and salt workers children enrolled in the general school. After the unified management by the government, transport education has been developed, became the salt

official school. The creation of “Yuncheng” not only had a great influence at that time, but also had a far-reaching impact on the development of Yuncheng’s cultural and educational undertakings (Zhang Xin, & Zhao Xiaoping, 2020).

2.5 Literary Achievements Spawned

Literary creation in the Yanchi region takes traditional poetry as its main form of expression. Many ancient literati left behind a large number of poems in the Yanchi area, reflecting the local customs, historical heritage and natural landscape. In addition, traditional operas, prose novels, and contemporary literature also glorify the great contributions of Yanchi to the improvement of people’s livelihoods, record the production of Yanchi and the hard work of the salt workers, and show the rich and colourful cultural heritage of the Yanchi area. Since the water of the salt pond appears red in the summer, local legend has it that the water is dyed red because of the inflow of Chi’s blood into the pond. And the ballad Shun Di’s “South Wind Song”, a phrase “the south wind rises, the salt begins to grow” expresses the creativity of nature. These literary works, with their unique local characteristics and rich humanistic connotations, have become an important part of the cultural heritage of the Yanchi area.

2.6 The Emergence of Salt By-Products

With the development of society, people have carried out more in-depth development of salt ponds, not only can produce salt but also produce and process a lot of production and daily necessities. For example, the black mud series products produced by Nanfeng Group not only have the effect of beautifying the skin, but also can replenish the trace elements of the human body. This also represents a change in the production method of Yanchi, which is also a worthy record in the history of Yanchi’s development.

3. Design Innovation – Cuo Sea Theme Park Design Analysis

3.1 Cuo Sea Theme Park Design Concept

The CUO Sea Theme Park, as a historical theme park, makes full use of the site’s natural conditions and rich historical and cultural resources, and puts forward the design concept of “precipitating memory, awakening history, preserving the past, and shaping the future”. It aims to make the CUO Sea Theme Park a

historical and cultural theme park in Yancheng City’s Salt Lake District that combines the inheritance of history and culture, the provision of leisure and entertainment, and the improvement of the ecological environment. The design of the park will show the evolution of the landscape of the salt pond through the division of plots and terrain design. Scenes of historical events are skillfully arranged throughout the park, enabling visitors to immerse themselves in the historical moments that took place in the salt pond. At the same time, through the installation of landscape vignettes, a unique atmosphere will be created, allowing visitors to immerse themselves in historical memories.

Such a design concept not only passes on history and culture, but also provides a place for visitors to relax and enjoy themselves. Visitors can appreciate the historical landscape, participate in interactive experience activities as well as enjoy the beauty of the natural environment in the park. At the same time, the construction of the park also focuses on the improvement of the ecological environment, adopting eco-friendly design and building materials to promote sustainable development and ecological protection.

3.2 Design Principles for Cuo Sea Theme Parks

3.2.1 Integration of Historical and Cultural Principles

The natural degree of integration of history and culture with the landscape directly affects the visitors’ interest in the park. On the basis of in-depth excavation and research on the history and culture of Yanchi, the Cuo Sea Theme Park takes the history of the evolution of Yanchi as its theme, and follows the order of the evolution of Yanchi to connect the nodes in the park, so that the history of the evolution of Yanchi is perfectly integrated into the park.

3.2.2 Principles of Conservation, Utilisation and Regeneration

The protection, utilisation and regeneration of the history and culture of the salt pond is the core of the planning and design of the Cuo Sea Pond Park as well as the purpose of the park’s construction. On the basis of protecting the salt pond, the historical relics around the salt pond are utilised to make the salt pond culture shine again. In the process of planning and designing, in-depth excavation of Yanchi culture, rational development and use of natural resources of Yanchi, and better reproduction of the evolution

of the history of Yanchi.

3.2.3 The Principle of Innovativeness

The principle of innovation is very important in the planning and design of the historical and cultural Cuo Sea park. The history of the evolution of the salt pond is unique, and the combination of the evolution of the landforms of the salt pond, the historical events, the historical value, and the literary achievements is used to find out the innovative points. In the park, large buildings, landscape nodes and small landscape sketches, landscape lights, road paving methods, etc. are all planned around the history of the evolution of salt ponds, to create a new idea of Cuo Sea park. The park from the perspective of sustainable development through the use of natural landscape plus plant landscaping design techniques to create a four-season changes in the park landscape, so that visitors to the park always keep a sense of freshness, increase the attractiveness of the park, improve the park's re-visit rate, increase the park's profitability.

3.2.4 Principles of Immersive Experience

Yanchi has made great contributions to the prosperity of the Chinese nation. The Cuo Sea Theme Park, with its theme of the evolution of the Salt Pond, is tasked with promoting the history and culture of the Salt Pond. By increasing the sense of experience and authenticity, the park is designed to immerse visitors in the themed environment set up in the park. Through the combination of scene simulation, interactive experience and popular science explanation, the authenticity of the experience is improved and the interest of the visitors is increased, so that the culture of Yanchi can be better inherited and carried forward.

3.2.5 Ecological Principle

The Cuo Sea Theme Park pays great attention to the protection of the ecosystem of the Salt Pond while building the cultural landscape. Inherit and promote history and culture on the basis of sustainable development. In the Cuo Sea Theme Park, the land salinisation caused by the salt pond has been improved, the original plants on the site have been preserved, and a rainwater diversion system has been designed to protect the ecosystem of the salt pond.

3.2.6 Integral Principle

The Cuo Sea Park is planned as a whole, taking into account the site's regional characteristics, humanistic landscape, natural landscape and

topography. From the overall layout to the detailed design should be coordinated and unified, so that the historical and cultural landscape, natural landscape organic combination, coordinated development and mutual promotion.

4. Spiritual Continuity — Design Strategies for the Evolutionary History of Salt Ponds in Cuo Sea Park

After researching the history, culture and natural landscape of Yanchi, the history of the evolution of Yanchi was studied in terms of the evolution of the landforms of Yanchi, the historical events that took place here, the historical influences that were produced, and the literary achievements that were bred, and it was integrated into the overall layout, landscape vignettes, and natural landscapes of the Cuo Sea Park, showing the unique charm of the evolution of the history of Yanchi.

4.1 Presentation Strategies for the Overall Layout

The overall layout of the Cuo Sea Park expresses the evolutionary history of the salt ponds from two aspects: design form and design layout. Firstly, according to local records, people divided the salt ponds into irregular plots in order to increase the rate of salt production, and there are also many stepped crystalline forms in the salt ponds formed by the impact of the lake water, as well as round-like puddles formed by the natural impact, which together make up the unique geomorphology of the salt ponds. The design form of the site incorporates the land mechanism of the salt ponds and uses it as the basis for site delineation. The block forms, road features, and stepped water-friendly platforms of the Cuo Sea Park all shape the geomorphological features of the salt pond. Secondly, the design layout is planned in the chronological order of the evolution of the salt ponds, and the tour routes are organised so that the historical events that took place in the salt ponds, the historical influences on the various stages of the society, and the literary achievements that were nurtured are integrated into the various zones of the Cuo Sea Park.

Zhuo Deer Square, as the main entrance to the park, is both the beginning of the Cuo Sea Park and the beginning of the history of Yanchi, and creates the historical scene of the Battle of Zhuo Deer through the stone pillar sculpture and ground pavement. After passing through Zhuo Deer Square, you will come to Tang Salt Garden,

in which the Reclamation Pagoda and the Salt Production Experience Field reproduce the production methods of that time. The Salt City in the north-east corner of the park records the situation of the salt ponds at that time. The shape of the salt ponds is expressed through paving, and the salt ponds of the Salt City period are created by restoring the city walls and tools for producing and transporting salt. Located in the northwestern corner of the park, the Xuehai Park restores the scene of the academy as much as possible, and the scrolls of the period of shipping schools are placed in the academy to create the scene of the academy at that time. Visitors can not only learn the history of the school, but also experience the style of the school during the period. The Poetry Garden on the west side of the Cuo Sea Park reproduces many classic poems and songs through text sculptures and ground text landscapes, so that people can read poems praising the salt ponds during their visit. The Salt Garden in the centre of the park displays many of these products, and visitors can experience the simple process and take home handmade items, which are both memorable and of practical value. The cultural performance stage located next to the Salt Garden uses modern technology to show historical and cultural scenes, enabling visitors to experience the history and culture of Yanchi in a multi-sensory way. The summer and winter silver platforms and the terrace-type waterfront platform on the south side of the park are the viewing platforms for touring the landscape of the salt ponds, using ecological design techniques, which not only have an excellent viewing angle but also do not affect the ecological environment of the salt ponds.

4.2 Expressive Strategies for Landscape Vignettes

Through the design of sculptures, landscape walls, corridors and pavilions in each area to express the history of the evolution of the salt ponds is an important means of creating a historical atmosphere in the Cuo Sea Park.

4.2.1 Sculptural

The sculpture can express the history of the evolution of the salt pond more vividly, and also has more intuitive educational significance. The sculpture of the Cuo Sea Park in Zhuo Deer Square integrates the water patterns and stone elements of the salt pond to show the changes of the natural landscape of the salt pond, and the towering stone pillars tell the scenes and textual

records of the Battle of Zhuo Deer, which was triggered by the salt pond. The magnesium flower sculpture in the Tang Salt Garden reflects the natural landscape of the salt pond when it was crystallised. The sculpture of production tools in the Salt Garden increases the interaction between visitors and landscape facilities and enhances the experience of the tour process. It makes visitors feel the production process of salt production in the salt pond, and understand the culture of the salt pond more deeply, such as the production of grinding discs, stone whisks, carts, salt piers and so on. The word sculpture in the Poetry Garden shows the poetry culture that praises Yanchi and inherits the literary achievements of Yanchi. Showing the history and culture through the sculpture not only makes the landscape in the garden more vivid but also enriches the expression of history and culture.

4.2.2 Retaining Wall

Scenic wall is both functional and artistic aesthetics of the landscape sketches, through the scenic wall shows the salt pond culture, not only has a good cultural and educational significance but also enhance the overall image of the park. In terms of space division, the scene wall of the Cuo Sea Park has different shapes, which will naturally bring visitors to another space. The natural scenery wall in the centre of the park extracts the water pattern of the salt pond, the south wind, and the outline of Zhongtiao Mountain as the elements to form a virtual partitioned scenery wall, carrying the natural elements that witness the evolution of the salt pond.

The wall on the Xiazhidong Silver Terrace uses stones from the salt pond to create a stone wall and combines the wooden grill with the texture of the salt pond as the framework of the wall, expressing the deep cultural heritage of the salt pond and the evolving times. The wall not only expresses the natural scenery of Yanchi, but also carves a treasure bowl, which is derived from the picture of the salt ponds in Hedong, into the wall in relief, and carves the scene of the picture in text next to it. In the middle, the text representing the culture of Yanchi is carved on the wall using the technique of concave and convex changes, recording the vicissitudes of Yanchi's history.

4.2.3 Gallery Frame

The corridors in the Cuo Sea Park play the role

of connecting traffic and linking history. The timeline corridor frame in Zhuo Lu Square takes the landform of the salt pond as its background pattern, and vividly expresses the important nodes of the evolution of the salt pond in the form of axes. The display gallery frame of the Salt Production Park is beautifully shaped, and the whole top combines the form of the landform of Yanchi, showing the production scene and natural landscape of Yanchi in the side. Visually and psychologically, it can stimulate the interest of visitors. When resting in the shade, it can also feel the richness of the evolution of the salt pond, enriching the connotation of the landscape and increasing the sense of hierarchy of the landscape.

4.2.4 Scenery Pavilion

The scenic pavilions in the Salt City and the Poetry Garden in the Cuo Sea Park integrate the geomorphological features of the salt ponds and the cooling umbrellas used by the salt workers when they are resting, creating a better display of the culture of the salt ponds by creating a link between the labour of the salt workers. The viewing pavilion of Xiachi Dongyintai combines the modelling of salt-making tools in the Yuan Dynasty, vividly demonstrating the wisdom of people in production.

4.3 Expressive Strategies for Natural Landscapes

4.3.1 Water Design

There is a naturally occurring water area in Tang Salt Park, where a salt experience field of reclaimed border pouring and sunning method is planned, documenting the change of salt production method in Salt Pond. The summer and red winter silver platform and the terrace-type water-friendly platform on the south side of the park formally integrates the evolution of the landform of the salt pond, and expresses the history of the natural resources of the salt pond. The design of the water feature takes into account the change of the water level of the salt pond and the landscape effect during the dry period in winter. In summer, the temperature rises and the water in the salt pond turns red, while in winter, the nitrous flowers and magnesium flowers crystallise and appear in the beautiful nitrous song landscape. The salt pond seasonal landscape changes and barge viewing platform combined to make the dry season also have a view to view also has obvious seasonal changes.

4.3.2 Terrain Design

In the Cuo Sea Theme Park, natural and terrace micro-terrain landscapes are created by combining the evolution of the salt pond's geomorphology. Due to the salinity of the soil in the salt pond, the creation of micro-terrain can alleviate the salinity of the soil to a certain extent and improve the survival rate of plants. In the park's vegetation green area with artificial methods to imitate the natural creation of micro-terrain, and then with plants, stone landscape and other elements combined. The terraces are widely used, such as the sunken plaza in the park and the terrace-type waterfront platform on the south side. In the improvement of soil quality at the same time to increase the level of the landscape and interesting.

4.3.3 Plant Design

The plant design of the Cuo Sea Park was carried out in conjunction with the types of plants suitable for growth during the evolution of the salt ponds. Due to the site's proximity to the salt ponds, tree species selection is based on saline-tolerant species that are suitable for the environment. Try to choose adaptable native tree species, which can achieve the landscape effect and also reduce the cost. In the form of planting follow the growth characteristics of plants, using a variety of planting methods to create a patchwork of colourful plants landscape. Plant configuration on the appropriate choice of seasonal and saline-resistant plants such as peach trees, prickly pear, apricot trees and other spring flowering species and yew, acacia, magnolia and other summer flowering species and autumn foliage species of five-horned maple, torch tree, ginkgo, etc. and the winter evergreen species of white pine, cypress, cypress, etc. The combination of plant landscaping, natural landscape, hard landscape to increase the variability of the park's landscape, to create a four-seasonal scenery, the scenery is different Cuo Sea theme parks.

5. Concluding

This study focuses on Yuncheng Yanchi in China as a case to propose a design strategy for the Cuo Sea Theme Park. Through an in-depth exploration of Yanchi's history and culture, the park aims to create an engaging and immersive experience for visitors by artfully integrating the principles of history and culture, conservation and regeneration, as well as innovation. The outcomes of this research hold paramount importance in safeguarding the cultural heritage

of Yanchi, stimulating tourism development, and ensuring the transmission of its rich history and culture to future generations. Moreover, the insights gained from this study provide valuable design experiences and serve as a reference point for other regions with comparable historical and cultural backgrounds. Moving forward, it is imperative to continue prioritizing the sustainable conservation and development of Yanchi, to enhance the visitor experience while preserving and perpetuating the distinctive history and cultural legacy of this remarkable region.

References

- Liu Yuxia. (2020). The sparse theory of salt history information in Shuijingji. *Salt Industry History Research*, No.132(03), 69-76.
- SUN Shimeng, WU Weijia, YU Taofang. (2019). Thousand-year Salt Yuncheng: A study on the history of Yuncheng area camping and the value of famous city. *Urban Development Studies*, 26(08), 53-61.
- Xian Zengqiang. (2018). City of Salt Administration: Historical Writing and Functional Positioning of Ancient Yuncheng. *Salt Industry History Research*, No.125(04), 61-68.
- Zhang Xin, Zhao Xiaoping. (2020). Salt resources and regional development: Centred on the historical evolution of salt in Hedong. *Thinking*, 46(03), 117-126.
- Zhang Zuqun. (2012). Modern Value of Antique Theme Park Based on National Historical and Cultural Elements — Taking the Cultural Space Interpretation of Xi'an Datang Hibiscus Garden as an Example. *Ethnic Art Studies*, 25(06), 109-114.
- Zou Yang, Fu Qingwei. (2015). Excavation, transformation and continuation — the use of prototype optimisation method in the architectural design of Meishan cultural theme park. *ZHUANGSHI*, No.272(12), 85-87.