

A Study on the Regeneration of Cultural Tourism Resources in Historic Districts from the Perspective of Experience Economy - A Case Study of Macao's Lai Chi Vun Historic District

Chi Fong Tang

School of Humanities and Social Sciences, Macao Polytechnic Institute, R. de Luís Gonzaga
Gomes, Macao

p1103445@ipm.edu.mo

Abstract. As a microcosm of the city's development, the historic district is a witness to the long years of a city. It is through the revitalization of the historic district that the district will not be eliminated in the process of rapid urbanization. The experience economy is an emerging economic model that emphasizes personalized design concepts and pays particular attention to consumer perceptions, and a historic district driven by the experience economy can be re-invigorated to bring its own connotations into line with modern perceptions and needs. This paper takes the Lai Chi Vun historic district in Macao as an example, and uses the concept of experience economy to revitalize it, with a view to saving the Lai Chi Vun shipbuilding industry from decline and exploring the development mode of industrial heritage in the wave of post-industrialization.

Keywords: Historic district, experience economy, urban tourism, regeneration, Lai Chi Vun.

1. Introduction

Cities are the fruit of the material and spiritual civilization of human society, and are also a unique cultural phenomenon. Many cities have neighborhoods that are characterized by a deep historical and cultural atmosphere, creating a unique sense of place and identity that is an important component of the city's charm and vitality. Roberta Brandes Gratz has pointed out that historic district preservation often obscures the fact that what is restored is often insignificant to the overall urban context, and that the area involved is too small to be the origin of the historic context of the city in the new era [2]. At present, many historic districts are often preserved as relics, and even when they are renovated, most of them are operated in a museum-like manner, losing their vitality. Therefore, when conserving historic districts, we should neither blindly demolish them nor completely sealed up. Instead, we should adopt an experiential and organic regeneration model, making full use of the cultural resources of the districts themselves, giving them more economic value-added, integrating them into the overall functions of the contemporary city, and making them a core part of the city to inherit and develop in innovation.

Macao, as an open micro-economy with gaming and tourism as its pillar industries, is highly dependent on the external economic environment. Since its reunification with the motherland in 1999, Macao's economy has grown steadily over the years. from 1999 to 2019, Macao's Gross Domestic Product (GDP) increased from MOP51.9 billion to MOP434.7 billion. In 2019, Macao's GDP per capita reached US\$92,500, ranking second in the world and first in Asia. After the COVID-19 outbreak, in 2020, Macao's GDP was MOP194.4 billion and per capita GDP was US\$35,700, representing a real economic contraction of 56.3%. Statistically speaking, the year-on-year decline in Macao's GDP in 2020 was the largest of any economy in the world. The main reason for this huge drop is Macao's high dependence on the gaming industry, which is reflected in the fact that it contributes nearly 60% of Macao's GDP and nearly 80% of its public revenue, thus reflecting the fragility of Macao's industrial structure and its relatively poor ability to withstand risks, which in turn causes a precipitous drop in Macao's economy. In the post-pandemic era, Macao should seek new impetus to support its economy by optimizing its industrial structure and seeking economic diversification. In particular, the integrated tourism industry should play a leading role as a pillar industry and revitalize the 400-year-old historical districts and cultural heritages for leisure tourism

development based on the perspective of experience economy, extending the tourism industry chain to different parts of the city, thereby driving the development of related industries such as hotels, restaurants, retail, cultural and creative industries and realizing a diversified economic structure and sustainable development of the city.

2. Literature review

2.1. Historic districts

The concept of “historic districts” can be traced back to the International Institute of Modern Architecture (IIMA), which met in Athens in August 1933 and adopted the *Athens Charter*, which stated that buildings and districts of historic value should be preserved and not destroyed [1], thus laying the foundation for the subsequent conservation of historic districts. In May 1964, UNESCO adopted the *International Charter for the Conservation and Restoration of Monuments and Sites*, which for the first time introduced the concept of the “historic site” [11]. In November 1976, UNESCO adopted the *Recommendation Concerning the Safeguarding and Contemporary Role of Historic Areas*, which expanded the scope of conservation to include identification, protection, preservation, restoration and regeneration, and clearly stated the role and value of conservation of historic and cultural areas [12]. In 1987, the International Council on Monuments and Sites adopted the *Charter for the Conservation of Historic Towns and Urban Areas*, which introduced the concept of “historic towns” and defined them as cities, towns, historic centers and settlements, large or small, as well as their natural and man-made environments, which not only serve as testimony to history but also embody the traditional cultural values of towns and cities [3]. In 1986, China formally introduced the concept of “historic districts” and pointed out that a city of historical and cultural significance should not only be judged by its history and its preserved cultural relics, but also by whether its current layout and appearance retain its historical characteristics and has a certain range of traditional districts [8]. Therefore, a historic district is a group of buildings and their surroundings that occupy an important place in the history and culture of an area, represent the historical development of the area and reflect the economic, social and cultural values of the area [8], preserve a certain number and scale of historical buildings and structures, and have a relatively intact appearance [4], and retains the local traditional way of life and social structure [7].

2.2. Experience economy

In 1970, Alvin Toffler proposed in the book *Future Shock* that after the development of the service industry, the experience industry will become the pillar of future economic development. We are now rapidly moving from a system of satisfying material needs to creating an economy linked to satisfying psychological needs, and ultimately we will move beyond the service economy and create the most transient yet durable product of all, the human experience [10]. In 1998, American scholars Joseph Pine and James Gilmore published “Welcome to the Experience Economy” in *Harvard Business Review*. In this article, the corresponding human economy is divided into: (1) The unprocessed era; (2) The commodity economy era; (3) The service economy era; (4) The experience economy era, which arouses people's attention to the “experience economy” [5]. *The Experience Economy*, believes that experience means that companies use services as the stage and commodities as props to create memorable activities around consumers [6]. Therefore, the “experience economy” is a form of economy that unites production and consumption, with the consumer at the heart of the entire creation of value, providing an unforgettable and memorable experience, creating a sense of self-fulfillment, emphasizing the importance of the consumer, and highlighting the care and satisfaction of human emotions.

2.3. Experiential tourism

Tourism is an aesthetic process and self-entertainment process for the purpose of obtaining psychological pleasure [13]. Travelers can realize their cultural perceptions and gain mental pleasure

from the experience of a process that is different from the culture and environment they are accustomed to, across geography and time, and the result of the experience is a spiritual enjoyment in a differentiated experience. According to *The Experience Economy*, the book divides experiences into four domains:

(1) Entertainment experience - consumers are passive in their perceptions, often based on a third person perspective, forming experiences through changes in their perceptions in the environment, without actually entering the experience; (2) Educational experience - consumers are actively engaged and absorb the events unfolding in front of them, thereby gaining valuable satisfaction; (3) Escapist experience - consumers are able to participate in a role that is different from their own reality and are able to avoid the unpleasantness of reality and gain a sense of escape; (4) Aesthetic experience - consumers immerse themselves in a natural or artificially created environmental experience with minimal impact on things or the environment, gaining a real aesthetic experience and a deep sense of joy in life [6]. The four domains often interact with each other in the course of an experience, and the richest experiences are those that encompass the “sweet spot” of the intersection of the four domains [6]. Therefore, in the period of experiential consumption, tourism brings people mainly psychological satisfaction characterized by spiritual pleasure, and the historical district as the core of urban tourism is undoubtedly one of the best places to fully demonstrate the charm of experiencing economy.

3. Connotations of the Lai Chi Vun historic district

Macao is a city with a history of over 400 years of cultural exchange between East and West, and a large amount of cultural heritage is scattered in different districts, forming a unique blend of East and West in the cityscape. However, the tourism and economic value of many of Macao's historic districts has not yet been fully utilized, and most visitors to Macao are concentrated in certain tourist hotspots, while the surrounding historic districts are not yet appreciated, failing to share the dividends of economic development. In the future, Macao needs to rediscover the cultural connotations of its historic districts, find a new balance between heritage conservation and social development, heritage use and economic benefits, and find a new path for the diversification of Macao's economic structure. In this paper, we take the Lai Chi Vun historic district as an example to explore how industrial heritage can manifest its contemporary value based on the form of experience economy.

According to *The Nizhny Tagil Charter for the Industrial Heritage*, industrial heritage refers to the remains of industrial civilizations that have historical, technological, social, architectural or scientific value. These include buildings, machinery, workshops, factories, mines and mining areas for ore processing and smelting, warehouses for cargo, places for the production, transport and use of energy, transport and infrastructure, and places for social activities related to industry, such as housing, religious and educational facilities [9]. The shipbuilding industry is an ancient industrial industry in Macao, with a documented history of over 100 years. During the heyday of the shipbuilding industry, shipbuilding activities were carried out along the coast of the Macao Peninsula, Taipa Island and Coloane Island. Later on, as a result of the reclamation of land on the Macao Peninsula and Taipa Island from the 1970s to the 1990s, the coastal area was gradually built as a road around the island, so the Macao shipbuilding industry moved to Lai Chi Vun to continue its operations. As a result, Lai Chi Vun officially became the largest shipbuilding base in southern China in the 1980s and 1990s, and formed the shipyard complex that we see today.

This paper, through a site visit and in-depth interviews, divides the development of the Lai Chi Vun into the following four sections.

3.1. Macao shipbuilding style

Macao's modern shipbuilding style is based on the Guangdong style of shipbuilding, while at the same time incorporating the Fujian style of shipbuilding and Western shipbuilding techniques. The majority of Macao's shipbuilders came from the Pearl River Delta region, so Macao's shipbuilding forms, from the original windjammer to the modern motorized ship, are all derived from the

Guangdong shipbuilding system. The Guangdong style boats were mainly fishing boats, with a sharp bow and a central plank through the bottom of the hull to stabilize the boat when it swayed. Some scholars believe that the Fujian-style boat technique was introduced to Macao in large numbers during the Ming Dynasty. The Fujian-style boats were mainly official boats and cargo boats, the most important feature of which was their large size, with a slightly flat and pointed bow. In the early 1960s, when motorized fishing boats were in their infancy, a group of Macao craftsmen went to Hong Kong to learn the techniques. Upon their return to Macao, they began to study the improvement of Western mechanized fishing boat technology. The introduction of motorized technology changed the shape and mode of operation of the original Guangdong style boats. As a result, Macao's shipbuilding industry has inherited the skills of traditional Guangdong-style boats while absorbing those of Fujian-style boats and Western motorized boats, making Macao a platform for the convergence of technologies from many places.

3.2. Lai Chi Vun shipyards

Most of the Lai Chi Vun shipyards that we see today were built on the site of the beach where ships were repaired and turned into tin-roofed shipyards. In the mid-twentieth century, shipyards were built in Lai Chi Vun, with about three or four shipyards being built in the central part of the beach. By the 1950s and 1960s, there were about seven shipyards operating in Lai Chi Vun. In the 1970s, the shipyards gradually adopted a tin roof. As the shipyards on the Macao Peninsula and Taipa Island gradually moved to the Lai Chi Vun on Coloane Island, the shipyard complex that we see today was formally established around the early 1990s. There are several shipyards with a particularly long history in Lai Chi Vun, including Shun Wing Shipyard, Sun Hoi Lei Shipyard and Sun Tai Seng Shipyard, which are the original shipyards of Lai Chi Vun, dating back to the 1930s and 1940s.

The Lai Chi Vun Shipyard complex, they are all terroir architecture witnessing the industrial changes in Macao. Terroir architecture refers to buildings built with local materials, with little reference to major architectural styles or theories, and which meet specific local needs. When we look at the shipyard complex today, we may wonder why the wooden pillars are all crooked. In fact, the craftsmen who built these tin-roofed shipyards were mainly engaged in the direction of carpentry and shipbuilding. They built the shipyards according to the same general principle as that of shipbuilding, that is, safety was the primary consideration and the topography of the shipyard site was taken into account. The interior of the shipyard was divided into three areas: (1) Pattern room: before the ship was built, the craftsmen would draw a pattern for future reference; (2) Cutting area: after the pattern was drawn, the craftsmen would take the timber needed for the ship to the master for cutting; (3) Shipbuilding area: each shipyard had a row of racks facing the sea, and this was the core area of the shipbuilding.

3.3. Production of Lai Chi Vun

In the early days of the Lai Chi Vun, more shipyards were engaged in the repair and manufacture of windjammers. In the 1970s and 1980s, motorized fishing boats gradually replaced windjammers, leading to a major change in the shape of the boats and the industry as a whole. In the 1980s, the peak of Macao's shipbuilding industry, most of the shipyards in Lai Chi Vun made wooden fishing boats such as shrimp boats and fishing tugboats, as well as traditional wooden dragon boats. At present, Chow Ka Shipyard still maintains dragon boats for use in the annual Macao International Dragon Boat Races.

Over a century of shipbuilding history, there are numerous boats produced by the Lai Chi Vun. Some of the most iconic boats include: the Chinese three-sail fishing boat "Ap Ling", the motorized sailing boats "A Ma" and "Hoi On", an exhibit at the Lisbon World Expo "Lorcha Macao", and a cruise ship the "Heung Kong No. 1". Among them, the "Lorcha Macao" is a representative of the Lai Chi Vun's productions. The "Lorcha Macao" is a classic example of Macao's shipbuilding skills, designed by the government dockyard owner in 1987 and built at the Luk Hap Shipyard. After assembly, the "Lorcha Macao" first sailed to Japan to participate in the Iron Cannon Festival. From

1990 to 1997, the ship visited South Korea, Singapore, Sri Lanka, India, Thailand and Malaysia, in addition to maritime training. In 1998, the “Lorcha Macao” represented Macao at the World Expo in Lisbon, Portugal.

3.4. Decline of the Lai Chi Vun

From the late 1970s to the 1980s, the golden age of Macao's shipbuilding industry, the Lai Chi Vun shipyard was booming, producing several hundred ships a year. In the 1990s, the Mainland China had a decade of reform and opening up and the coastal economy took off, with ship repair and shipbuilding factories opening all over the country. Moreover, the cost of shipbuilding in the Mainland China was somewhat different from that in Macao, so many Macao fishermen went to the Mainland China directly to buy boats. In the late 1990s, a fishing moratorium was implemented in the Mainland China, which reduced fish catches and hence the number of fishermen, and some of them started to sell their boats. In addition, the Persian Gulf War and the implementation of the “Tropical Rainforest Ordinance” led to a sharp rise in the cost of raw materials, and the extensive reclamation of land along the coast of Macao led to the shrinking of the local shipbuilding industry. After the turn of the millennium, domestic and international factors directly led to a precipitous decline in the Macao shipbuilding industry.

4. Strategies for the regeneration of the Lai Chi Vun under the experience economy

In the age of experience economy, people are increasingly eager for experiential and emotional travel experiences. By using the Lai Chi Vun as a breakthrough point, the experiential tour is introduced into the activation of the shipyard complex, so that the audience can actively participate in the tour process, including their own body, thoughts, feelings and actions, so as to let them can truly understand the connotation of the place and enhance the added value of tourism. Therefore, the Lai Chi Vun can be transformed into a shipbuilding park with the theme of “boat”, “people”, “water” and “village”, so that the public can experience the story of the century-old boat village of Lai Chi Vun (see Figure 1).



Figure 1. Conceptual image of Lai Chi Vun Shipbuilding Park

4.1. Lai Chi Lake water recreation center

Lai Chi Vun, a natural bay with a bowl-like topography, is said to have been planted with lychee trees in the past, hence the ancient name of “Lai Chi Wan”. At present, the area along the coast of Lai Chi Vun has naturally formed a mangrove landscape, which has the congenial conditions for the development of eco-tourism. On the premise of preserving the landscape of ships, mountains, and water, the lake-enclosing project can be implemented in Lai Chi Vun, so that there is a green and pleasant waterfront area along the shipyard. By constructing a mangrove plank road in the outer ring of the coast and installing filtering equipment under the plank road, it can block the sea garbage in the Shizimen waterway from washing to the shore with the waves, and it can also make the Lai Chi Vun become a quiet ecological water storage lake along the coast.

“Lai Chi Lake” is the core landmark of the entire water recreation center. In the middle of the lake, various water activities with local characteristics can be provided, and aquatic plants are planted around the lake, allowing visitors to enjoy the natural and beautiful scenery of Shizimen Waterway. The water projects of “Lai Chi Lake” mainly include: (1) Water performance show - a water performance show that uses fountains, projections, lighting and sound effects to create a rustic village show, depicting an inspirational and positive story of a boat village and taking visitors on an emotional journey; (2) Wooden water bikes - The Lai Chi Vun’s shipbuilders can produce a number of rustic wooden pedal sampans for visitors to paddle around the lake and enjoy the beautiful scenery along the coast of Coloane; (3) Floating food market - The community center can organize the elderly to take turns to paddle on the “Lai Chi Lake” to sell their favorite dishes, so that residents and visitors can taste and experience the locally produced fishermen's dishes in Coloane.

4.2. Shipyards cultural park

At present, the shipyards in Lai Chi Vun are subject to varying degrees of safety risks. Therefore, under the premise of ensuring public safety, maintaining the spatial context of the community and respecting the architectural style, the exterior of the existing shipyards in the whole area can be covered with a glass canopy to stabilize and protect the structure of the shipyard complex. At the same time, the main beams of the shipyard can be replaced and supported by additional stainless-steel columns, and the shipyard roof frame and scaffolding can be reinforced. The interior and exterior of the shipyard buildings can be added or altered to accommodate new functional requirements and to continue the overall atmosphere and structure of the shipyard.

The Lai Chi Vun shipyard complex can be revitalized into a shipyards cultural park after conservation and restoration. The internal projects include: (1) Shipbuilding craft experience workshop - Participants can learn about the knowledge, history and culture of traditional shipbuilding crafts in the workshop under the guidance of heirs, and experience the making of a wooden sailing model. After completing the experience, participants can take the models home with them, leaving a special memory of their trip; (2) Museum of shipbuilding techniques - The museum emphasizes the preservation of “people” and collects the memories, culture and skills of a group of shipbuilding veterans, drawing more attention to the preservation and transmission of the craftsmanship and spirit of the traditional industry; (3) “Lorcha Macao” interactive experience center – The “Lorcha Macao” was assembled during the most glorious period of Macao's shipbuilding industry and is a classic of Macao's shipbuilding craftsmanship. Through the use of virtual reality technology, a three-dimensional virtual world with integrated visual and auditory information is simulated, allowing participants to travel through time and space in the virtual reality space inside the “Lorcha Macao”. At the same time, through the development of an augmented reality mobile app, various computer-generated images and information are added to the real-life scenes of the “Lorcha Macao”, allowing people to interact with the ship's space in real time while visiting the ship, enhancing the visual experience and engagement of visitors; (4) Shipbuilding market - A weekly market can be held under the core theme of “boats”, bringing together local culture and creativity to showcase their creative products and share their creative ideas with the public, thus reawakening consumers' appreciation of craftsmanship and creativity; (5) Self-painting space - On the one hand, visitors can create their own

artworks in different media at the studio on the shores of “Lai Chi Lake”, freely painting their favorite scenery of Coloane, turning painting into a leisure and entertainment experience and stimulating the potential of urban people and releasing their stress. On the other hand, some of the shipyard walls can be designated as graffiti creation space, where graffiti groups can paint freely and creatively, giving the old buildings a new look and reshaping the village with a strong visual experience.

4.3. Shipbuilder's creative village

At present, most of the buildings attached to the Lai Chi Vun shipyards are built on the hillside, and there are many unused factory buildings and vacant lots. Therefore, by establishing a creative village in these unused spaces, cultural creators can live in the Lai Chi Vun and plant the seeds for its sustainable development as an urban practice colony for arts and culture, innovation and technology. The main projects of the village include: (1) Shipbuilder's hotel - stone houses and tin houses on the hillside of the Lai Chi Vun can be turned into a hotel with the theme of “shipbuilder”, which will be operated by university students majoring in tourism management. The students will be able to develop their creative business through a variety of marketing techniques, nurturing young talents for the hotel industry in Macao. The hotel's spatial design retains a strong industrial atmosphere and allows visitors to experience the small living space of the villagers in the Lai Chi Vun by recreating the living scenes of the past; (2) Public exhibition space - The exhibition space can be used for a variety of low-threshold exhibitions and performing arts activities, such as black box theatre, mini-concerts, art and photography exhibitions and micro-films, etc., providing a platform for the public to experiment with contemporary art creation; (3) Period-limited exhibition hall - A short exhibition space for local and international artists to display creative and interesting cultural and creative achievements, space art, etc., so that visitors can keep an eye on the latest developments at Lai Chi Vun and promote the sustainable development of the community.

5. Conclusion

"Experience economy" is a new economic model, which is closely related to the development of tourism. The regeneration of the Lai Chi Vun historic district, in addition to effective maintenance of the physical buildings, is more important to discover the historical heritage and humanistic emotions of the district. In this process, through the organic integration of abandoned shipyards with post-modern shipbuilding cultural and creative industries, it is hoped to provide a broader and sustainable new path for the protection and reuse of the industrial heritage of the Lai Chi Vun, and at the same time contribute to the diversification of Macao's economic structure in the post-pandemic era.

References

- [1] CIAM. (1933). The Athens Charter.
- [2] Gratz, R. (1994). The living city: How America's cities are being revitalized by thinking small in a big way. Washington, D.C.: Preservation Press.
- [3] ICOMOS. (1987). Charter for the Conservation of Historic Town and Urban Areas.
- [4] Li, D. (2001). Principles of Urban Planning. Beijing: China Construction Industry Press. (in Chinese)
- [5] Pine, B., & Gilmore, J. (1998). Welcome to the experience economy. *Harvard Business Review*, 76(4), 97-105.
- [6] Pine, B., & Gilmore, J. (2011). The experience economy. Boston, Mass.: Harvard Business Review Press.
- [7] Ruan, Y. (2000). Conservation and Planning of Historic Districts. *Urban Planning Compendium*, (2), 46-47. (in Chinese)
- [8] State Council. (1986). Report on the Announcement of the Second Batch of National Historical and Cultural Cities. (in Chinese)
- [9] TICCIH. (2003). The Nizhny Tagil Charter for the Industrial Heritage.
- [10] Toffler, A. (1970). Future shock. New York: Bantam.

- [11] UNESCO. (1964). International Charter for the Conservation and Restoration of Monuments and Sites.
- [12] UNESCO. (1976). Recommendation Concerning the Safeguarding and Contemporary Role of Historic Areas.
- [13] Xie, Y. (1999). Basic Tourism Studies. Beijing: China Tourism Press. (in Chinese)