

BEYOND HERITAGE, TOWARDS THE POSSIBILITY OF CREATIVE ECONOMY

The Case of the Reuse of the Industrial Heritage in Taiwan

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Abstract. Most of the industrial heritages in Taiwan were built either in Japanese Colonial Period (1895-1945) or by the monopoly state-operated corporations after the withdrawal of the Nationalist Government from Mainland China since 1949. Not until 1998 did the reuse of industrial heritages start to attract the attention of the public sectors. However, the reuse process only focused on the abandoned spaces in these industrial heritages, values associated with the cultural heritage conservation were ignored. Since 2002, the reuse plan of the industrial heritages in cities of Taiwan had been addressed. Five so-called Creative and Cultural Parks were planned in different industrial heritages. While it could be seen a “fashion” phenomenon, the core values within the physical part of the industrial heritages were not presented. The connection of the culture creative industry and the industrial heritage should be promoted in the reuse program, and the sustainable development of the creative industry in the creative parks should be also re-addressed. With the concept of the value of the industrial heritage of the Nizhny Tagil Charter, and the trend of the development of the creative industry, the possibility of the integration of the reuse of the industrial heritage and the creative industry in Taiwan would be argued.

1. Introduction

1.1. FROM TRADITIONAL TO MODERN SOCIETY

Before 1860, Taiwan was still the traditional farming society inherited from China. The most important export goods were sugar, tea, and the camphor; others are the processing industries goods also from the agricultural sectors, such as leather boxes, straw mat, silks and satins. (Lin, 1997). After 1860, due to the reduced restriction of the international trade, besides the original light industries, heavy industries were also established (Taiwan Governor General Office, 1920). Another important change was the first governor of Taiwan from Qing Dynasty, Liu Mingchuan (reign 1885-1891), who introduced lots of the important industrial development, and was seen as “pioneer of the capitalism of Taiwan” (Yanaihara, 2005). In that period, lots of investment and construction carried out on different aspects, such as the defense, finance, aborigine, transportation and the industry (Chen, 2004). This is the first time of the large scale modern industrialization for Taiwan. Some of the buildings and structures were still preserved today, such as Shih-Chiu Hill Tunnel for train, and the ruins of Industrial Bureau of Qing Dynasty*. In 1895, Taiwan became the colony of Japan.

* These structures, ruins and buildings, mostly had been designated as official monuments or registered as official historical buildings.

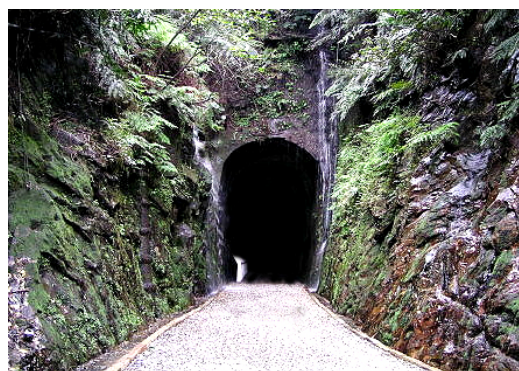


Figure 1. The train tunnel built by Liu Mingchuan.



Figure 2. The machine Bureau vestiges of Qing Dynasty.

1.2. THE INDUSTRIALIZATION OF TAIWAN AND THE CONSTRUCTION OF THE FACTORIES

Since the colonization, the colonial government started a series development for the economy. All the means of the planning, protections, encouragements, and/or interventions, were preceded by the government. Even the private capital industries were also permitted or forced supervised by the government (Huang, 1930). According to the investigation of 1918, there were 136 industrial factories in Taiwan during that time: 45 were heavy industries, and other 91 were light industries (Taiwan Governor General Office, 1920).

Besides, different policy in different time also influenced the industrial development of Taiwan. Before 1930s, it was influenced by the policy of “agricultural Taiwan, industrial Japan” that more emphasis on the sugar industry. After 1930s, the policy changed as “industrial Taiwan, agricultural southern east Asia”, and the further and integral industrial developments were planned and carried out (Yeh, 1995). Besides the infrastructure, such as the roads, railways, power plants, tap water supply systems, the colonial government also invested different industrial factories. The sugar factories, breweries, rice husking factories, cement factories, can factories, and etc. were built. These factories would be functioned as the tools which exploited the natural resources of the colony, and the process of the modernization and industrialization would further extract the maximum economic resources of the colony. Before the end of the World War II, Taiwan had become the most important industrial base within the colonies of Japan.



Figure 3. The hydraulic power plant in southern Taiwan

In 1945, these facilities were received by the Nationalist Government after the surrender of Japan. Most factories were continued and expanded. The development of the industrial sectors did not suspend due to the change of the rein of the government. The modernization and industrialization continued steadily.

2. The Predestination of the Abandon of the Factories

2.1. THE CHANGE OF THE INDUSTRIAL TYPE

The factories built during the Japanese Colonial Period were changed, suspended, stopped because of the change of the industrial type development. For instance, the sugar factories were once the important industry, 50 factories were built before 1945, and the sugar was one of the important export products before 1966 (Taiwan Sugar Company,). However, since the change of international economy, the sugar factories had been closed one after another. After 1991, the sugar was opened for import, and this had led the further decline of the sugar industry in Taiwan. Only 2 sugar factories remain functioning now.



Figure4. The first one modern sugar plant in Taiwan.

2.2. THE CHANGE OF THE SURROUNDINGS

The change of the surrounding also had led the change of the industries. The disappearing of the resources, the development of the urban areas, the pollution and the environmental conscious, all would influence the factories, which had to move or stop due to these reasons. The breweries were good examples to explain the process. 12 breweries were expropriated after the monopoly of the alcohol (Wang, 2001). After World War II, many breweries tried to extend and installed new facilities. However it could be limited by other factors. For instance, Taipei Brewery, a brewery located in the center of Taipei City today, had to be closed or moved due to many reason, such as the restriction of the new urban plan, and the water pollution during the manufacturing. Other breweries in Taiwan had also faced the similar problems.

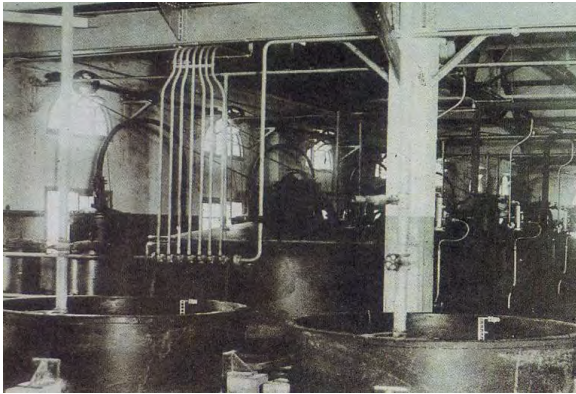


Figure 5. After Monopoly the new technology new workshop make a large number of liquor



Figure 6. The hydraulic power plant is a "living" industrial heritages.

3. The Reuse of the Industrial Heritage in Taiwan

3.1. MANAGEMENT MODELS

According to the proposal of reuse, operational body, and operational structure, the reuse of the industrial heritage could be defined as 4 different types: 1. remain the same function, 2. operation by public sectors, 3. operation by public sectors with outsourcing to private sectors, 4. operation by private sectors under the contract with the public sectors (Liu and Han, 2008).

3.1.1. Remain the Same Function

The cultural heritage will remain its function without change. Some train stations in Taiwan, such as Hsinchu, Taichung, Tainan, and Ciaoto, etc. has been designated as monuments of registered as historical buildings. These train stations remain its function and are protected under the Cultural Heritage Preservation Act. One specific case is a railway round house built in 1922 which still play an important role in the transportation and dispatch of the locomotives. Another example is the irrigation systems established also in Japanese Colonial Period, such as the irrigation waterways, water reservoir, and related hydraulic power plant. These industrial heritages work almost the same functions which they were original designed. In other words, these are "living" industrial heritages.

3.1.2. Operation by Public Sectors

This model could be seen as the reuse space with the social educational meaning under the control of the government. Some cultural creative parks, museums would be managed in this model. The feature of this model is using the resources and manpower directly from public sectors for the management of the reuse space. The advantage of this model is the rich resources from the public sectors, and the possibly nonprofit management. On the other hand, there are also some disadvantages, such as the lack of the flexibility of the management and reuse project, and the unsustainable management due to "nonprofit".

For example, the Sugar Industry Museum in Ciaoto, which was reused from the buildings of the first modernized sugar factory, were persecuted with the rigid organization and personnel management. Only the "shell" of the museum and the "objects" of the original production facilities were noticed, other matters, such as the contents of the presentation were almost ignored. Besides, without the monitoring system, the development of the museum and the cultural park remain stagnant.

Industrial heritage as same as other types of heritages need to be maintained and managed well to get the sustainability (Fu, 2009). It is argued that compared with the experiences of the management of the cultural heritage in the United States or United Kingdom, lacking the fair external monitoring and/or advisory authorities for the management and conservation of cultural heritage would be a serious problem for management work of the public sectors in Taiwan (Jung, 2008). In the cases of "operation by public sectors", there had been no positive, active, and creative sense until now.

3.1.3. Operation by Public Sectors with Outsourcing to Private Sectors

This model would be most difficult to operate, and would be easy to induce the dispute (Liu & Han, 2008). The nature of this model would still rely on the sponsor from the government, and the public issue should be also considered due to some or all of the resources of the projects still come from the government and the public sectors. The Railway Art Villages*, which were originally storehouses of the railway station and transformed as the renting workshops for the individual artists, are one of the representative examples. These villages originally planned as the workshop which could be an interactive space between the artists and people, and designed the exhibition function also in the villages. However, the planning was poor to the exhibition, and the artists somewhat disliked the disturbance from visitors. All these matters were unexpected in the original plans. It is argued that this model would face the problem of the unclear line between the public and the private sides (such as the private space of the artists and the accessibility of the public). Moreover, what should be provided by the public sectors, and what could be decided and managed by the private sectors, were always the difficult problems.

3.1.4. Operation by Private Sectors under the Contract with the Public Sectors

This model is now the most popular model in Taiwan. It will be benefit to the government, especially on the aspect of the financial income, and the possible manpower requirement. "A former sugar factory, which was operated now by private sectors, would save 66 million NT dollars (approx. 2.2 million US dollars) per year. Besides, it could be seen as a triple-win strategy between the government, private sectors, and people" (Information Bureau of Tainan County, 2008). From the government point of view, it was only considered that the easier management and saving more money. It could be also questioned that if this model is really a "triple-win" strategy?



Figure 7. The Sugar Industry Museum in Ciaoto

There were 5 old breweries in Taiwan planned as the "cultural creative industrial parks" in the "Challenge 2008 Six-Year National Development Plan" (Cheng, 2010a). These 5 "cultural creative industrial parks" were successively contracted with private sectors. Huashan Creative Park in Taipei is one of the earliest and the most representative case. Although it was defined as the flagship space of the cultural creative industry in Taiwan, the cultural heritage value of this important industrial heritage had been concealed by the 25-year contract of the operation and building renovation rights with private sector which only the huge commercial profit and royalty were focused.

3.2. THE TOP-DOWN ORIENTED POLICY

Although it could be divided as 3 different periods** that the conservation of the industrial heritages in Taiwan (Shih, 2009), the public sectors still played the most important role in the conservation policies. The "top-down" policy would be easy to be operated from the government, but the dilemma would be also obvious. In contrast, some cases conserved directly from private sectors would be also spectacular. Formosa Tea Industry and Culture Gallery, which originally founded in 1937, was one good example on the exhibition, space planning and design.

3.3. THE "SHELL" OF THE INDUSTRIAL HERITAGE

Before the amendment of the Cultural Heritage Preservation Act in 2005, the buildings with heritage values would be only preserved by designation of the "monuments" or registration as the "historical buildings". The industrial heritages were not included as the main category. After the amendment, the industrial facilities, industrial landscapes, transportation landscapes, and irrigation facilities were finally included.

* There are 6 different Railway Art Villages in Taiwan.

** The first period was the "Plan of the Reuse of the Abandoned Spaces" since 1998, which focused on many industrial heritages. The Railway Art Villages and the Cultural Creative Parks were established in this period. The second period was "the Potential World Heritage Sites in Taiwan" since 2002. Some important industrial heritages, such as the Jinquashi Gold Mining Community, Alishan Forest Railway were included. The third period was "the Industrial Heritage Conservation Plan" since 2002, which included 5 sugar factories, 2 salt industries and 1 brewery, focused on the cooperation between the original industrial departments, local government, professional teams, and the communities.

More and more breweries, sugar factories, tobacco factories, railway facilities were designated as monuments under the law. However, the preservation concepts in Taiwan had been used to preserve a heritage as an “object”, which the appearance of the “object” would lead to a fossilized preservation and mostly only the physical structure were preserved. However, the preservation and conservation of an industrial heritage would not only focus on the buildings, but also the facilities and the setting which would be the testimony of the development process of the industry. Furthermore, the technique of the human should be also considered (Fu, 2009).

For example, five “cultural creative industrial parks” were reused as the places for meeting the fashion trend. However, it seemed that only the “shells” of the original brewery buildings were preserved, and the facilities in the breweries were moved because those didn’t meet the function of the cultural creative industrial park. Conservation of the industrial heritage depends on preserving functional integrity, and interventions to an industrial site should therefore aim to maintain this as far as possible.

The values and authenticity of an industrial site may be greatly reduced if machinery or components are removed, or if subsidiary elements which form part of a whole site are destroyed (The Nizhny Tagil Charter for the Industrial Heritage, 2003).



Figure 8. Present situation of Huasan cultural & creative park

4. The Possibility of the Sustainable Conservation of the Industrial Heritages in Taiwan

4.1. THE SEARCH OF THE FEATURES OF THE INDUSTRIAL HERITAGES

Every industrial heritage would be distinctive in the built forms, process of the producing, industrial type, and the facilities in the factories. All these would be the

distinguishing features of the industrial heritage. Besides, the characteristic of each industrial heritage would be identified from each other. Thus, the sugar factories could be identified with the different plan of the factory and the different composition of the facilities, not the same management scheme with almost the same products in different factories. The five “cultural creative industrial parks” could be identified as different brewery spaces, not the almost the same program of the similar cultural creative industries in the buildings.

4.2. RETHINKING THE CREATIVE DEVELOPMENT OF THE REUSE FROM THE CONTEXT OF THE PAST

The industrial heritage is of the historic, social, intrinsic and rare value (The Nizhny Tagil Charter for the Industrial Heritage, 2003). These values will further inspire the focus of the conservation and management in the industrial heritages. In Taiwan, it is almost ignored in the preservation of the industrial heritages that the technology history, life of the workers, facilities in the factories, and so on. However, this disregard would lead to a “living dead” preservation. In the planning process of the reuse program, it should be adequately considered that the context of the setting, raw material, products of the factories, the spirits within the industry, producing process, etc. These would also become the origins of the idea of the reuse program, which would combine the context of the original industries and the new functions much tighter, and the spirits with in the old space would be revealed through the added new functions and spaces. This would be a more creative way for the conservation of the industrial heritages.

4.3. THE TOURISM FOR THE INDUSTRIAL HERITAGE

The program of the “heritage tourism” for the industrial heritages in Taiwan should be planned as soon as possible. A good industrial heritage cases should be promoted through the good tourism programs. The concepts of “factory tours” had become a successful tourism type. For example, the car assemble factory of CITROËN was opened to visitors, which would not only enhance the image of the consumers, but also promote the corporate image. Another example was the Industrial Heritage Trail (*Route der Industriekultur*) in Ruhr Region, Germany, which consisted of 19 main sites and 3 information centers. In this trail, the main industrial heritage sites were connected, and the successful redevelopment experience of the industrial heritage tourism was also displayed (Chang, 2009).

For Taiwan, the sugar factories would be possible to plan the industrial heritage tourism which combined with the different elements, facilities and environments in and around the factories. The mining sites in northern Taiwan could be also plan the program of tourism, in which the pits and the trails would be the interesting experience of mining heritages for visitors.

5. Conclusion

With the time changed, the abandoned industrial facilities would be no more the disadvantage of the environment; it could also become the new possibility for the economy development and cultural and historical preservation. The concept of the conservation of the industrial heritage in Taiwan began in less than 20 years, and many implement ways should be probably improved. The abandoned factories were only “reused”, while the heritage value of the industrial heritage were still ignored; the 5 “cultural creative industrial parks” still could not achieve their purposes even with large amount of budget from the government, and the industrial heritage value would be still neglected.

To preserve the industrial heritages, there are some important ideas should be considered. Firstly, the features and the context of every industrial heritage should be revealed, while the concept of reuse would be further participated in.

Secondly, the sustainability would be important for any business model. The subsidy from the public sectors or other similar means should not become the common method in the management programs. The industrial heritage should be beyond the role of “heritage”, and the concealed value should further become the origin of the creativity. Besides, the importance of the industrial heritage tourism would be also stressed. With these ways, the creative economy within the industrial heritages in Taiwan would be possibly implemented.

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