

“Buy the casket without the jewels” or “Buy the casket with the jewels”? —On the comparative analysis of economic value produced by different development methods of industrial building remains

Jing Ha ^{1,*}, Yuanyuan Ding ², and Chenghao Xu ³

¹ Master tutor, Ph.D., Shenyang Jianzhu University, China

² Master of Shenyang Jianzhu University, China

³ Department of Architecture and Built Environment, University of Nottingham, Nottingham, UK, NG7 2RD

Abstract. With the continuous development and expansion of the city, the industrial center of the city has gradually shifted to the emerging industrial area or the outskirts. The industrial building remains that were originally located in the city center have been left behind. The development of the site often adopts the development method of "buy the casket without the jewels", while the development method of "buy the casket with the jewels" is few, and which development method is more valuable. Taking Laolongkou distillery as an example, this paper makes a comparative analysis in order to provide reference for the site development of industrial building remains.

1 Introduction

With the continuous development and expansion of the city and the readjustment of the industrial structure of the city, the industrial center of the city gradually shifts to the emerging industrial area or the outskirts. The original industrial building remains are left in the old urban area of the city. The surrounding traffic conditions of these areas are convenient and the environment is superior. With superior geographical location and complete supporting infrastructure, the land price of the site space (also known as the land) where the industrial building remains are located soars in a straight line. This land price refers to the economic value of the industrial building site space.

However, the economic value of the site space will have different development methods due to the different economic concepts held by the developers. The author roughly sums it up into two ways: "Buy the casket without the jewels" and "Buy the casket with the jewels". Different development methods will produce different economic values and other related value.

2 The explanation of different development methods of "Buy the casket without the jewels" and "Buy the casket with the jewels"

2.1 The meaning of "Buy the casket without the jewels" development mode

"Buy the casket without the jewels" is a Chinese idiom.

What it means is: buy the wooden box and return the Pearl, it is often used as a metaphor for lack of eyesight and improper choice. The development mode of "Buy the casket without the jewels" of industrial building remains is to see only the value of the space of the site, but ignore the value of the above ground objects (industrial plants, industrial facilities, etc.), which have become the enemy of economic benefits, so do everything possible to eliminate the enemies. That is, to basically dismantle the original industrial buildings and structures, so that the land can be released quickly and turned into the development land for new purposes. The method is often to build high-rise buildings to realize the economic benefits, but at the same time, it discards the greater and potential economic value. The development mode of "Buy the casket without the jewels" focuses on the space value of the site, emphasizing the economic value and material attribute of the land, while the immaterial value of the land and the value of its appurtenances are ignored.

2.2 The meaning of "Buy the casket with the jewels" development mode

The opposite of "without the jewels" is "with the jewels". The development mode of "Buy the casket with the jewels" is to reserve the industrial building remains with important value in the site space, and to develop the site space by using the commercial value and cultural value of the site space. For example, some new projects are added and expanded in the external space of industrial building remains, which are dependent on the old industrial building remains. With the help of the cultural and historical value of the surrounding buildings, the new

* Jing Ha: 24691177@163.com

projects produce more significant economic value. The cultural and historical value of the surrounding industrial building remains makes the new project produce more significant economic value. With the help of the temporary economic benefits of new projects, the long-term economic and social benefits of old buildings can be realized. Compared with the development mode of "Buy the casket without the jewels", the mode of "Buy the casket with the jewels" not only creates the economic value of the site space, but also protects the cultural and artistic value of the industrial building remains.

3 Take Laolongkou distillery as an example to compare the economic value of the two development modes

Taking the reconstruction project of Laolongkou distillery in Dadong District of Shenyang city as an example, the paper carried out the assumption of different development methods of "Buy the casket without the jewels" and "Buy the casket with the jewels" and the forecast analysis of economic value.

3.1 Land use status of Laolongkou distillery

Laolongkou (as shown in Figure 1) is a loud and shining business card of Shenyang City, which contains profound and brilliant cultural heritage. Laolongkou, which originated in the first year of Kangxi (1662 A.D.), has a history of more than 300 years. It is a typical representative of Manchu liquor culture and history, a famous brand of national industry in Northeast China, an outstanding representative of traditional Chinese liquor making technology, and the source industry of Shenyang industry (more than 200 years earlier than Shengjing Machinery Bureau, the earliest modern factory in Shenyang in 1895). As early as in Kangxi, Qianlong, Jiaqing and Daoguang years of the Qing Dynasty, when

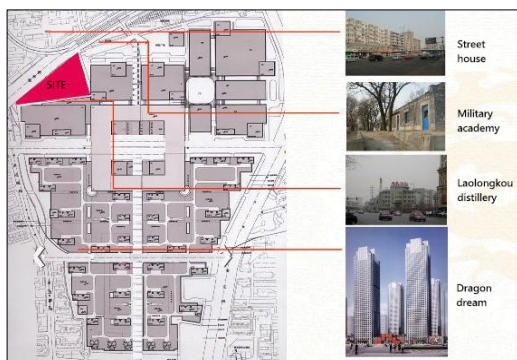


Fig.1. Location analysis of Laolongkou distillery
Source: Architecture Research Institute of Shenyang Jianzhu University

emperors of the Qing Dynasty visited the mausoleum in the East, the wine produced by the old Longkou distillery was honored as the imperial wine, and was listed as Shengjing tribute wine for the Palace Banquet. Up to now, it has a good reputation at home and abroad. The most rare thing is that for more than three hundred years,

Laolongkou has been adhering to the legendary old factory site and facilities, and has been using the traditional brewing techniques. Therefore, it is rated as a national intangible cultural heritage, and Laolongkou distillery is also rated as a national tourist attraction and a national industrial tourism demonstration site. Laolongkou distillery itself is a precious historical relic in modern Shenyang City.

Laolongkou distillery is located in a superior location. It has convenient transportation and is close to the main roads of the city. As shown in Figure 1, the surrounding environment of the plant area is special. In the north is a multi-storey residential building, and in the south is the super high-rise building complex of "dream of the dragon" Times Square to be built, in Figure 1, the red plot is the location of the old Longkou distillery, and the gray areas below are all "dream of the dragon" high-rise buildings. There are three important buildings and facilities in the distillery, as shown in the blue part of Figure 2: Two "old wells" - they are the most

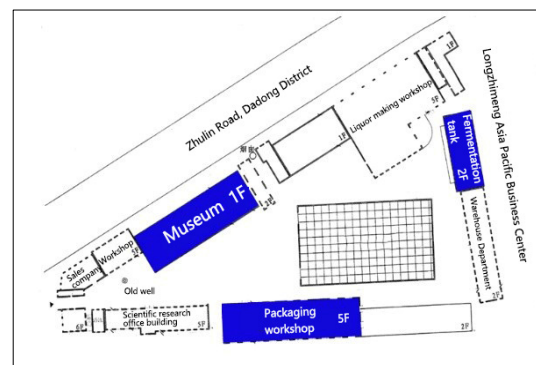


Fig.2. The blue part of the topographic map of Laolongkou distillery is an important historical building
Source: self drawn by the author

precious historical relics in Laolongkou. The well water has been used for brewing wine for more than 300 years since the establishment of the factory. They are the most qualified spokesmen of Laolongkou; Museum --1-Story building, occupying an important position, well structured, showing the wine culture and history of Laolongkou distillery; The old cellar -- with a history of more than 300 years, 2-story building, well preserved; packaging workshop and office building - although not a historical building, but the structure is very good, 5-story. In addition, there are also some buildings in the distillery, such as liquor making workshop, boiler room, warehouse, etc. these facilities and buildings are of poor quality, and the architectural form is not attractive.

3.2 Economic value generated by the development mode of "Buy the casket without the jewels" in Laolongkou distillery

It is assumed that the old Longkou distillery will adopt the development mode of "Buy the casket without the jewels", demolish all the original buildings in the site space, release the site for reconstruction, and in order to generate the maximum economic benefits, it is assumed to build

high-rise apartments or residences. The author analyzes the land and surrounding environment of Laolongkou distillery. Because the south of the distillery is a piece of longzhimeng high-rise residential complex, while the north of the land is the original multi-storey residential building, the longzhimeng high-rise residential complex has its own shelter to the North multi-storey residential building. In order to meet the sunshine hours of the North

residential building, the construction of the buildings in Laolongkou distillery must be greatly limited, so as to meet the requirements. On the basis of the regulations of Shenyang on the management of residential building spacing and residential sunshine, the paper also analyzes the occlusion of the original residential buildings in the north of longzhimeng and old Longkou winery by using the sunshine analysis software (as shown in Figure 3).

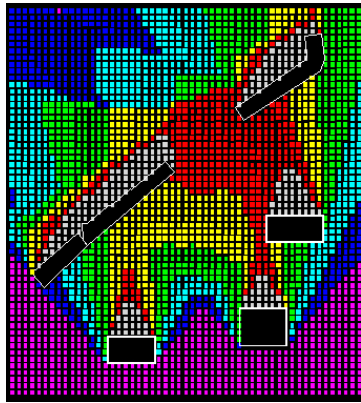


Fig.3a. Three high-rise buildings are set, but the location is not suitable and does not meet the sunshine requirements

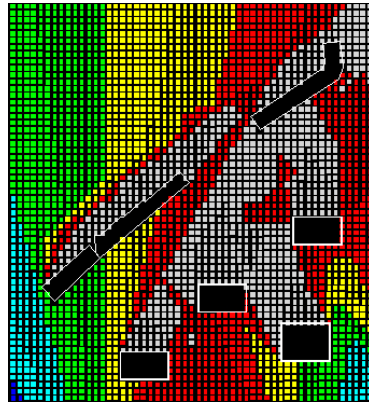


Fig.3b. Four high-rise buildings are set, but the location does not meet the sunshine requirements

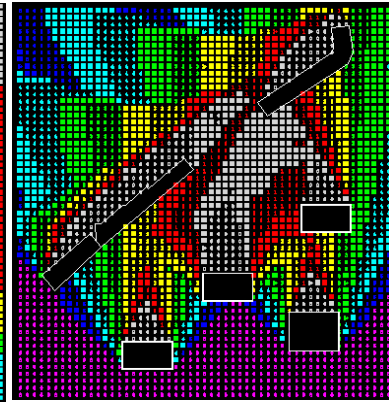


Fig.3c. Setting four high-rise buildings (considering the influence of the original high-rise buildings in the North) does not meet the sunshine requirements

Photo caption: with the method of "buy back the Pearl", it can be seen from the analysis that there are at most three high-rise buildings in the factory area, and they need to be arranged in a suitable position

Source: self drawn by the author

On the basis of meeting the above conditions, it is found that only three high-rise buildings and four multi-storey buildings can be built in the site at most; the general layout of the determined site space is as follows Figure 4.

It can be seen that the construction area of the site is about 43488m² for high-rise buildings and 17395m² for multi-storey buildings. The economic value generated is shown in Table 1.



Fig.4. Adopt the development mode of "Buy the casket with the jewels", Up to three high-rise buildings and four multi-storey buildings can be built in the site

Source: self drawn by the author

Table1. Calculation of the economic value of the site space generated by the development mode of " Buy the casket without the jewels " in Laolongkou distillery

Sub item	Part	Calculation method	Combined	Total
Investment	High-rise part (three buildings)	43488 m ² × 1600 yuan/m ² (Cost estimation of single project)	6958 Ten Thousand Yuan	9741 Ten Thousand Yuan
	Multi-storey building (four buildings)	17395 m ² × 1600 yuan /m ² (Cost estimation of single project)	2783 Ten Thousand Yuan	
Produce	Apartment for sale	20088 m ² × 6000 yuan /m ² (Calculated according to the average price of surrounding environment apartment buildings)	12052.8 Ten Thousand Yuan	34669.8 Ten Thousand Yuan
	Office for sale	17480 m ² × 7000 yuan /m ² (Calculated according to the average price of surrounding environment apartment buildings)	12180 Ten Thousand Yuan	
	Multilayer for sale	17395 m ² × 6000 yuan /m ² (Calculated according to the average price of surrounding environment apartment buildings)	10437 Ten Thousand Yuan	
Surplus	—	34669.8 Ten Thousand Yuan -9741 Ten Thousand Yuan	24928.8 Ten Thousand Yuan	24928.8 Ten Thousand Yuan

Source: self drawn by the author

3.3 Economic value generated by the development mode of " Buy the casket with the jewels " in Laolongkou distillery

The design tenet of Laolongkou distillery adopting the development mode of " Buy the casket with the jewels" is to realize the coordinated development of cultural relics protection and city modernization construction, to obtain the double harvest of cultural and economic benefits, and to achieve the double goals of improving land use rate and urban environment. By fully tapping the potential of space,

combining with development and construction and means, we try to achieve the goal of zero investment in the whole project and strive to obtain the maximum economic benefits.

3.3.1 Evaluation and suggestions on industrial building remains

First, evaluate the quality and value of the original buildings and facilities in the site of Laolongkou distillery, as shown in Table2:

Table 2. Evaluation of original buildings and facilities of Laolongkou distillery

The project name	building area	Layer number	The status quo	The value of	Advice
Scientific research office building	5774 m ²	1 layer	Structure in good condition	It has certain use value	Retain
Packaging workshop	6161 m ²	5 layer	Better quality	It has certain use value	Retain
Brewing workshop, boiler room and power generation room	14869 m ²	5 layer	Poor quality	Not obvious	Dismantle
Museum	950 m ²	1 layer	Better preservation	Occupy an important position	Retain
Fermentation tank	930 m ²	2 layer	Better preservation	With a history of more than 300 years, it is an important relic	Retain
Warehouse of storage department		2 layer	Poor quality	Not obvious	Dismantle
Old well		—	Better preservation	With a history of more than 300 years, it is an important relic	Retain

Source: Architecture Research Institute of Shenyang Jianzhu University

The development mode of "Buy the casket with the jewels" is not to keep all the building remains in the site, it is to protect some valuable buildings, landscapes and facilities. Some buildings have been preserved, such as two "old wells" - the most precious historical relics in Laolongkou, which have been used for brewing wine for more than 300 years since the establishment of the factory. They are the most qualified spokesmen of Laolongkou. It is suggested to keep them. Museum building – 1-story building, occupying an important position, with intact structure, it is recommended to keep it. Old cellar - three hundred years of history, 2-story building, well preserved. It is suggested that the first and second floors of the new car room adjacent to the south side of the original building should continue the image of the traditional veranda of the original building while retaining the original cover. It not only retains its original shape, but also extends its external scale, which effectively promotes its status as an old cellar for more than 300 years. However, some buildings with poor quality or some part of the building shall be demolished, such as some workshops, power transformation rooms and warehouses. Finally, the

comparison between the building and demolition shall be kept (as shown in Figure 5). Some buildings shall be partially demolished and partially added, as shown in Table 3:

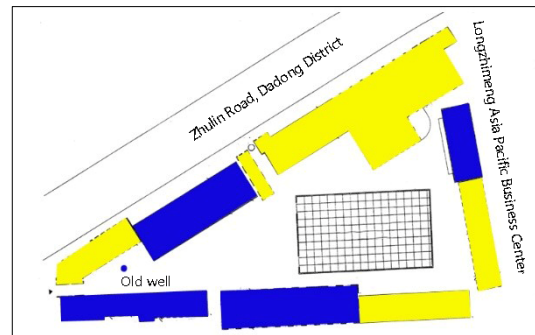


Fig.5 Architectural drawing of preservation and demolition of Laolongkou distillery
Photo caption: blue is the preserved historical building, and yellow is the demolished building
Source: self drawn by the author

Table 3. Original building reconstruction area of Laolongkou distillery

The project name	The original area	Demolition area	The new area	Total area after construction	Net area
Workshop and equipment room	21030 m ²	14869 m ²	17525 m ²	23686 m ²	2656 m ²
Office building	5774 m ²	5774 m ²	6000 m ²	6000 m ²	226 m ²
The underground garage	0	0	10768 m ²	10768 m ²	10768 m ²
There is a top surface on the ground	0	0	2738 m ²	2738 m ²	2738 m ²
The museum	950 m ²	0	0	950 m ²	0
Total	27754 m ²	20643 m ²	37031 m ²	44142 m ²	16388 m ²

Source: Architecture Research Institute of Shenyang Jianzhu University

3.3.2 Development of site space

After confirming the demolition and retention of the original buildings, the development of the site space should be carried out in the way of "Buy the casket with the jewels". Otherwise, in the current situation of our country, it is not appropriate and realistic to talk about the protection of the historical buildings without economic benefits.

However, the site space of Laolongkou distillery is very limited, and some buildings should be preserved. Therefore, the key to realize the development concept and economic benefits lies in the full use of the limited space of the existing factory, in the demand for space and benefits to the sky and underground. The high-rise

building is an effective way. On the basis of preserving the original historical buildings, we should consider building apartments and office buildings in the remaining space. However, the construction of high-rise buildings is bound to be limited by limited sites and surrounding residences. The determination of the location and number of high-rise buildings should consider many factors, and the guarantee of the spacing is a big problem. Through the design and debugging of professional software, the scheme fully meets the requirements of "Shenyang residential building spacing and residential sunshine management regulations" and sunshine analysis (as shown in Figure 6), and meets the day of surrounding residences. According to the demand, three high-rise buildings are designed within the land area of the old Longkou distillery, as shown in Figure 7.

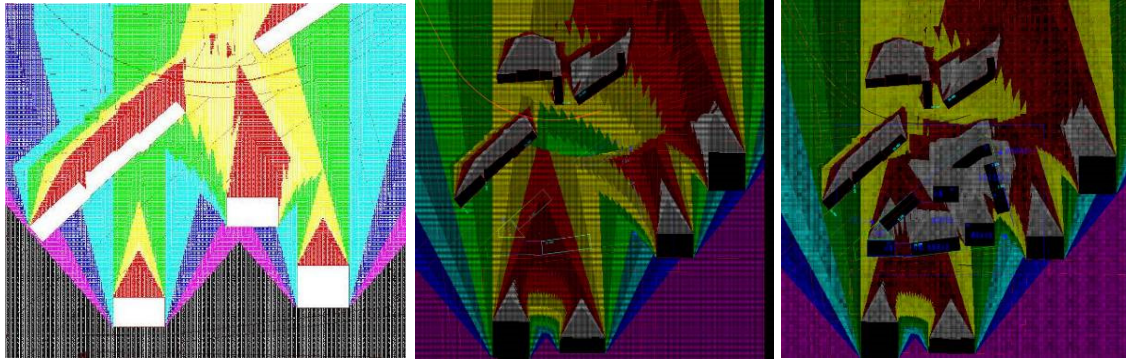


Fig.6a. Sunshine analysis of three high-rise buildings to the North residence

Fig.6b. Sunshine analysis of the northern residence by the dream of the Dragon

Fig.6c. The sunshine analysis of the North residence by Laolongkou and longzhimeng



Fig.6. Sunshine analysis of the northern residential buildings in Laolongkou distillery with the development mode of "Buy the casket with the jewels"

Note: according to the software analysis, it can be concluded that the development mode of "Buy the casket with the jewels" is to set up three high-rise buildings at most in the plant area

Source: Architecture Research Institute of Shenyang Jianzhu University

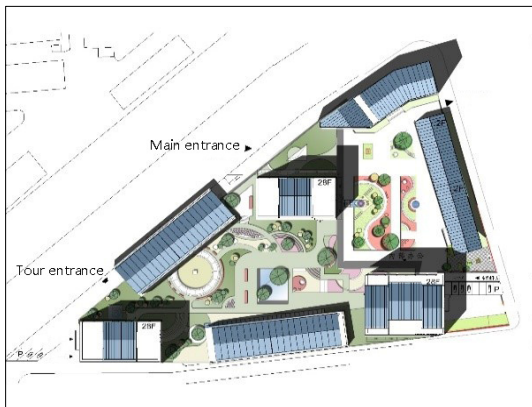


Fig.7a. Three new high-rise buildings in Laolongkou distillery



Fig.7b. Aerial view of the transformation of Laolongkou distillery

Fig.7. Plan and Aerial view of Laolongkou distillery adopting the development mode of "Buy the casket with the jewels"

Source: Architecture Research Institute of Shenyang Jianzhu University

The three high-rise buildings are arranged in a triangle in the site, and they are integrated with the original buildings. The height of the buildings is staggered, and the style of the new buildings and the old buildings are coordinated, which will not appear abrupt.

3.3.3 The economic value of the development mode of "Buy the casket with the jewels" in Laolongkou distillery

The design of the three high-rise buildings fully

guarantees the needs of production and capital operation, effectively protects the original museum, old cellar, production workshop and old well, and creates the maximum economic benefits. According to the investment estimation based on the local market price, the civil engineering investment (calculated according to the highest input price) is 109.729 million yuan, the sales revenue (calculated according to the lowest selling price) is 242.328 million yuan, and the minimum surplus is 242.328 million yuan - 109.729 million yuan \approx 132.6 million yuan (as shown in Table 4).

Table 4. Table of economic value generated by the development mode of " Buy the casket with the jewels " in Laolongkou distillery

Itemized	Part	Calculation	Combined	Total
input	High rise (3 blocks)	43488 m ² × 1600 yuan / m ² (unilateral cost estimation of the project)	69.58 million yuan	109.729 million yuan
	Workshop, garage (above ground)	11259 m ² × 1100 yuan / m ² (unilateral cost estimation of the project)	12.385 million yuan	
	Workshop, garage (underground part)	12046 × 2100 yuan / m ² (unilateral cost estimation of the project)	25.3 million yuan	
	Outdoor roof surface	2738 m ² × 900 yuan / m ² (unilateral cost estimation of the project)	2.464 million yuan	
output	Apartment for sale	20088 m ² × 6000 yuan / m ² (based on the average price of surrounding apartment buildings)	120.528 million yuan	242.328 million yuan
	Office for sale	17480 m ² × 7000 yuan / m ² (calculated according to the average price of surrounding office buildings)	121.8 million yuan	
surplus	-	242.328 million yuan to 109.729 million yuan	132.6 million yuan	132.6 million yuan

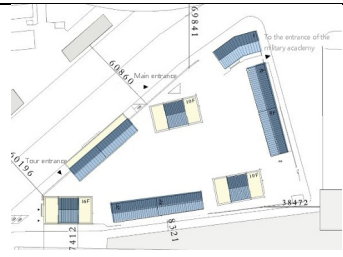

Source: Architecture Research Institute of Shenyang Jianzhu University

4 Comparative analysis of economic value generated by the development mode of " Buy the casket without the jewels " and " Buy the casket with the jewels "

adopts the different development methods of "Buy the casket without the jewels" and " Buy the casket with the jewels ", the economic value produced is compared and analyzed, as shown in Table 5. The results show that only considering the space value of the industrial building remains, the development mode of "Buy the casket without the jewels" may not create greater economic benefits than that of "Buy the casket without the jewels".

Based on the assumption that Laolongkou distillery

Table 5. Comparative analysis of economic value of site space redevelopment by demolition and protection of original buildings

Ways to take	Sampling methods	Direct physical value	Other economic values	The general layout
"Buy the casket without the jewels" Development mode	Demolition of all buildings in the site space	249.288 million yuan	Achieved temporary economic benefits and lost traditional industrial culture	
"Buy the casket with the jewels" Development mode	Protect the original buildings, and build the same apartments and office buildings in the original site space	132.6 million yuan	Service Value: economic benefits can be created through industrial heritage tourism Heritage Value: through the protection of Laolongkou distillery, its original old cellar is listed as intangible cultural heritage. At present, the developer has invested 100 million yuan to purchase	

Source: self drawn by the author

The latter method can not only achieve temporary economic benefits, but also produce huge social benefits due to the full protection of historical sites, which can be converted into greater economic benefits in the long term; it realizes the historical value, cultural value, social value and brand value of winery, which are long-term and priceless. It can be seen that protection and development are not opposites, but can be achieved through reasonable design techniques.

Of course, each industrial building remains has different site space characteristics and different situations. An old Longkou distillery does not represent all the industrial remains. This paper just takes this distillery as an example to illustrate that the important industrial relics in the space of industrial building remains can be protected and developed organically through reasonable design, so as to retain the industrial remains Valuable remains, but also to achieve the reasonable development of the site, which is more than a simple rough demolition way to achieve the multiple values of industrial building sites, so that the city's history and culture are further inherited.

Project source

The National Natural Science Foundation of China (51978419) ; Natural Science Foundation of Liaoning Province (20180551226)

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