

An Analysis of the Design Concept of Modern Urban History Museums from the Controversy Related to the Architectural Appearance of Ningbo Museum

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ABSTRACT

Wang Shu, China's first Pulitzer Prize winner, designed the Ningbo Museum, which has been controversial since the earliest stages of the project, mainly due to its 'neo-rustic' appearance, i.e. the fusion of traditional construction techniques with modernist forms, and the compatibility of the Ningbo Museum building with its surroundings. In this paper, through relevant materials (including the journal *Yinzhou Yearbook* 2019, 440 pages, the paper *The Expression of Native Architecture Under Critical Regionalism: A Comparative Study of Ahmedabad Cave Art Gallery and Ningbo Museum*, etc.) and some fieldwork, it will analyze the design concept of modern Chinese historical museum architecture from some controversies about the exterior design of Ningbo Museum.

Keywords: *history museum, ocalization, Ningbo useum, Suzhou museum*

1. INTRODUCTION

From the beginning of the Westernization Movement in the second half of the 19th century, insightful people continued to advocate modern museums of the Western type as an important measure to enlighten the people, but they were opposed by the Qing government. It was not until 1905, when Zhang Jian, a pioneer in Chinese museum building, founded China's first modern museum, the Nantong Museum, at his own expense, that a new era in the modern Chinese museum business began. The 1980s were a high point in the development of China's museum enterprise, and the pace of museum construction was accelerated under the new circumstances of reform and opening up. The government and private organizations attached great importance to the development of heritage conservation and history education, and museum workers across the country were working hard to create modern museums with Chinese characteristics. This raises a new question, how to create excellent museums with Chinese characteristics. The design of museum buildings is a very important part of this. In the present day, the world is becoming more and more integrated under the influence of economic globalization. Many architectural works seem to be appropriate to transplant to any other major cities, without highlighting the regional specificity and

incorporating local traditions and culture, which is especially fatal for museums.

2. THE DESIGN OF THE NINGBO MUSEUM

The Ningbo Museum is a comprehensive museum showcasing the humanities, history and art of Ningbo, located in the heart of the new city area, a veritable political, cultural and commercial center of the city. It is situated on a government square surrounded by river water. To the north of the square is the office building of the district government, and the Ningbo Museum is located in the south-western corner of the square, opposite the culture and art center in the south-east. To the east of the square are a large number of commercial buildings and high-rise blocks, to the west are new high-rise office buildings built in recent years, and to the south is a comprehensive park (partly under construction) covering an area of approximately 25.6 hectares. The museum is mainly colored in dark grey and dark brown, surrounded and interspersed with small pools at the base, resembling a 'mountain' enclosed by the modern city.



Fig. 1 Exterior view of Ningbo Museum 1

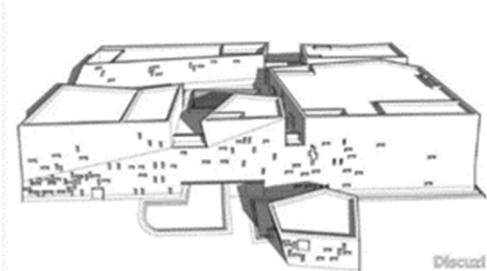


Fig. 2 Exterior view of Ningbo Museum 2 [1]

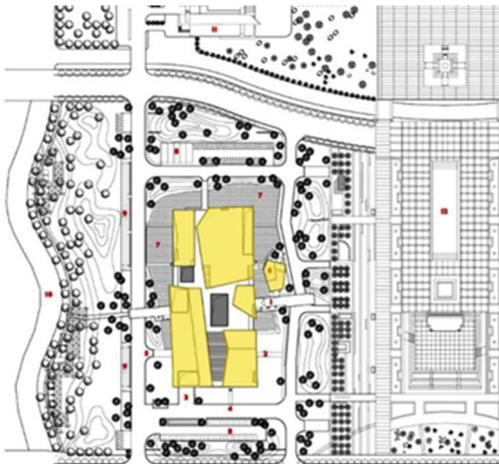


Fig. 3 Exterior view of Ningbo Museum 3 [2]

The main entrance to the Ningbo Museum is a 30m long hole in the centre of the basic cube. The whole building contains three large staircases in a fractured "canyon"(gap between bodies extending upwards), two indoors and one connected to the outside. Within the fractured roof of the building is an open terrace with views of the city and mountains in the distance through four different shaped fissures. The museum galleries are separated from each other by a series of glazed bamboo courtyards, creating an open and airy public space. The overall spatial form is fluid and differs from the deep and winding nature of traditional architecture, but instead has a sense of modern grandeur.

The Ningbo Museum is a three-story building with some areas having five floors. The main body of the building is a regular cube at its base, but from the third floor onwards the frame 'cracks' upwards and the façade extends outwards into five small blocks of different shapes (i.e. 4-5 floors in some parts), which are twisted

and tilted accordingly, gradually evolving into abstract mountains with a sculptural feel. When standing on the rooftop and looking out through the cracked wall, it is interesting to see that the wall slopes slightly outwards in an irregular manner, giving the impression of being in a ravine or an old village[3]. Hundreds of small rectangular windows are irregularly distributed on the façade and are highly decorative, giving the building the form of a weathered, bullet-riddled bunker.

The most noteworthy aspect of the museum's design is the material used for its façade. Using the traditional local 'tile valve wall' method, the exterior wall of Ningbo Museum is built up with over six million old bricks and tiles. The old bricks and tiles were collected from ruined sites in the surrounding areas of Ningbo, mostly from the old city's renovation, and include mainly green bricks, keel bricks, tiles and even broken pieces of jars. In addition to the extensive use of old bricks and tiles, the museum's exterior design also makes use of bamboo, a characteristic feature of the south of the Yangtze River, to create a special formwork concrete wall, with the neatly arranged patterns of the bamboo 'topped' into the concrete, giving the concrete wall a vibrant appearance and reflecting the local quiet and tranquil atmosphere of Ningbo's waterfront.

With its simple, bold architectural lines and classically elegant façade, the Ningbo Museum has a visually striking appearance that will make you think: "This is a strange house" at first glance. And this first impression has put the Ningbo Museum under a lot of scrutiny.

3. CASE RELATED CONTROVERSIES

During the initial planning stage of the project, representatives of the client strongly questioned the appropriateness of the materials used, saying that it was inappropriate to use such old materials for a museum in a modern 'Little Manhattan New Centre'. The architect Wang Shu recalls that the 'tile valve wall' was the focus of debate at the time, and he was later convinced by two reasons: firstly, the materials were old bricks and tiles from the Ningbo area, and the design was equivalent to putting Ningbo's history into a Ningbo museum; secondly, although the museum was only completed in 2008, the bricks and tiles carried a history of 100 years, or even 200 years. Visitors who see these bricks and tiles, which are rich in historical information, can instantly draw them closer to history. After the main construction of the museum was completed, the construction was halted once again because the architect thought that it looked too strange and would scare the residents in the neighborhood. Some people even thought it was an 'anti-modern' building, out of keeping with the overall style of the modern city around it, with a strange shape and an old-fashioned look.

However, when the museum was officially opened, amidst the skepticism, the first few days saw tens of thousands of visitors, and even on the first working day after the opening, a large number of visitors "came all the way here to see the museum". Many local residents in particular said, "Looking at these bricks and tiles, it's as if I can recall the good old days in the old houses and yards"[2].

4. REFLECTIONS ON THE CONTROVERSY

In the case of the Ningbo Museum, the controversy centers on its bold architectural appearance and the use of unusual materials, in other words, a museum that does not conform to the usual perception that museums should be simple and regular, but this 'usual perception' needs to be changed. Ningbo Museum, a museum of history, with exhibitions covering most of the historical events from the founding of the city to the present day, including the emergence of the old city from scratch, several difficult battles and a long period of China's humiliating diplomacy. For the Ningbo Museum, its building is a special exhibit in its own right. Although old building materials are used, old represents history and maturity, not decay. It would also be significant if the old materials could be made to shine in a new light in a new era. The mottled walls throughout the pavilion give a sense of the weight and vicissitudes of history, which fits in well with the character of the museum. With the compositional window openings, classical and modern are interspersed with a strong poetic sense, in line with the architect's design concept of 'neo-rusticism'. The old and mottled traditional brickwork tells the story of the old town, and the silhouette of the mountain and the fortress is an epic of resistance. A building that incorporates so many local elements can unwittingly bring visitors closer to history, and visually reveal its charm to them at first glance. On a broader scale, the exterior of a history museum needs to have a certain 'regional' character, reflecting the content and connotations of a particular museum, such as the Ningbo Museum discussed earlier in this paper, which is beyond the reach of a model, uniformly beautiful, modern museum.



Fig. 4 The appearance of most modern museums does not reflect specific regional characteristics [5].

This raises a second problem. If museums were to be positioned as close to history as possible, the overall architectural style would inevitably be dark, depressing or even shabby. In today's modernized cities, many historical museums, as carriers of human history and culture, are willing to locate in the more developed city centers or sub-centers in order to better promote local culture, so it is particularly worth considering how to keep the museum architecture close to both history and reality. In the case of the Ningbo Museum, the designers have cleverly integrated the main building with the surrounding parkland, so that visitors and residents passing by can only see a corner of the museum in the greenery, making the above-mentioned 'strange shape of the building will scare the neighborhood' a superfluous concern. The museum's prominence in the urban area is tempered by a similarly low cultural and arts center, which is symmetrically distributed with the museum along a central axis in the government square. And, like the Ningbo Museum, making good use of its surroundings is only one way to do this. When the environment is not readily available, a little more work can be done on the building itself, for example by weakening the old forms and retaining only certain traditional elements that harmonies with the surrounding buildings. In addition to traditional elements, the localization of museum buildings can also be achieved by adding some local elements, again in the case of the Ningbo Museum. As Ningbo is China's largest port city, the design of the Ningbo Museum incorporates a range of slightly more modern local elements such as the sea, harbor and boats, alongside the classical waterfront architecture, so that the museum building incorporates not only Ningbo's ancient history, but also its thriving future. Simplifying the exterior and strengthening the interior (something behind the architecture of course, like the history or the spirits), which is not a bad choice. The acclaimed Suzhou Museum is another good example. The designer simplified the traditional whitewashed walls and distinctive horse-head walls of south-eastern China, retaining only the style, so that visitors would exclaim "that's what it feels like" at first glance, but discarding all the cumbersome brickwork and carved beams in addition to the style. The fusion of tradition and modernity is astonishing.

5. ANALYSIS OF SIMILAR CASES

Besides the Ningbo Museum, the Suzhou Museum designed by I.M. Pei, which is also a case that reflects the regional character very well.



Fig. 5 Exterior view of Suzhou Museum 1 [6].

Figure 4 shows that the theme of the museum is in line with the traditional garden architecture of Suzhou. The traditional rockery is used in the garden to create a landscape that echoes the water surface of the landscape, giving it a sense of grandeur and beauty. Starting from this one small point, the smallness of the landscape highlights the designer's understanding of the landscape elements in the traditional gardens of the Suzhou region, while being extremely ornamental.

In terms of architectural form, I.M. Pei's Suzhou Museum inherits the elegant white walls and black tiles of traditional Suzhou gardens, but removes the overly traditional brick structure and decorative details, while simplifying the lines of the house and incorporating more modern geometric structures, so that the overall architecture of the Suzhou Museum is more in line with modern aesthetics and fits in with the modern city of Suzhou, but also allows visitors to recognize at first glance that this is "Suzhou-like". The museum is a "house with the flavor of Suzhou".



Fig.6 part of Suzhou classical garden [7]



Fig. 7 Exterior view of Suzhou Museum 2 [8].

By the way, Unlike the Ningbo Museum, the Suzhou Museum has been well received since it was built, both for its subtle use of traditional elements and for the designers' new "flowering" on top of tradition. This is the

charm of combining tradition and modernity.

6. CONCLUSION

In these days of increasingly intense globalization, museums need to progress as windows for the dissemination of culture, with a firm commitment to the mission of promoting local culture. The museum building should also find its place after many years of development, shouldering the responsibility of a special exhibit that is relevant to the modern city while expressing something somewhat traditional or indigenous. The Ningbo Museum is certainly a very good attempt to do this, using very traditional wall decoration techniques on a modernist, simple architectural form, while taking advantage of the other buildings around it and the corresponding greenery measures, so that this strange-looking house blends in perfectly with the city, presenting a form that is in line with contemporary aesthetic trends while at the same time incorporating local traditions and culture. The combination of tradition and modernity gives the museum a soul.

Since this paper is only an analysis and reflection on the controversy, the case used as a comparison is only one case and also from China, and therefore has strong limitations. If further research is to be conducted in this area, it may be necessary for the researcher to consider expanding the scope of the study (Asia, or globally) and introducing more case studies, so that more general conclusions can be drawn and directions can be given for future museum construction.

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