

**Resource Architecture – XXI World Congress of Architecture
22 to 26 July 2002 in Berlin**

Workshop 10 Building in the Traditional Context

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**Tradition and Innovation The Evolution of Regional Architecture in
China**

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The built environment is generally believed to be the product of technological, political, economic and socio-cultural processes. After presenting the basic characters of Chinese traditional architecture and their evolution since 1950, the thesis focuses on five aspects cultural and living pattern, new exertion of traditional structural technology, historical and original, technological, and city style in the course of pursuing and retaining the traditional features of Chinese architecture, which include not only the new exploring conventional approaches of Chinese architectures, but also experimental attempts in new directions, as well as new ideas of how to treat traditional architecture. All of these make the Chinese contemporary architecture to evolve in multi-directions, in terms of forms, contents and theories of Chinese architecture, and will continue dictate on the future development of Chinese architecture.

Research background:

In countries of abundant traditional legacies, people feel strong crisis. On the one hand, such crises come from increasingly efficient technological equipments and the requirement of such; on the other hand, it is generated by sincerely longing for the traditional form endowed with rich glamour.

In future, our society is to witness lifestyle globalization and cultural localization. Although people's lifestyle get nearer, as a matter of fact, people hope to retain profound and distinguishing legacy, including language, history, culture and region, etc. Therefore, the nations which have been nourished by traditional culture for a long time, whose psychological quality, view of life and aesthetic sense would be inseparable from the tradition because of the changing of modern lives furthermore, the tradition combining with the modern culture will still retain their respective character during the developing phase.

Architectural tradition is a composite of multi-level and multi-direction, the definition of "**The Characters of Chinese Architecture**"¹ was summarized by Mr. Liang Sicheng in 1954 as followed:

1. Single architecture is composed of three parts: "down part" platform, "middle part" house, "up part" roof;
2. Grouped architecture form yard, which becomes "the outdoor living room";
3. It is wood frames not walls up to support pressure, and wood structure is a mainly structure;
4. The brackets are used to support overhanging and reduce the shearing forces situating in the intersecting points of columns and beams;

5. The bending roof is constituted by raising-and-depression (a method of defining the slope of pitched trusses in Song Dynasty) and raising-and-truss (a method of defining the slope of pitched trusses in Qing Dynasty);
6. The curved roofs help to outstand the architecture's exterior forms;
7. The colorful pigment and decorative paintings are bravely used in the ornamentation;
8. The intersecting points of components are mostly bald, and most of the projecting parts had been aesthetic treated;
9. The glazed tiles and sculptures made by brick, stone or wood are used in a large quantity.

The process of innovation

There are mainly three phases during the evolution of traditional architecture in China.

1. By the beginning of 1950's, Chinese architects had begun to show solicitude for the design of the regional architecture and drawn fully on the experiences of folk dwellings' designing methods that were mainly involved in traditional details.

The Cultural Palace of Nationalities² designed by Zhang Bo in 1959 is a good example. The designer strived to build high-rise architecture with national forms. Located at north of the Fuxingfu Street, it looks fresh and bright, elegant and cheerful in color. Its central tower is crowned with a traditional double pyramid roof echoed by similar roofs around it. Moreover, the traditional peacock blue glazed roofing contrasts sharply with the white flat finish wall, so it is renowned for its rich local flavor.

2. At the start of 1970's, architects focused on the exploring the traditional methods relating to topography, weather conditions and plan layout.

The Enlightenment of Fragrant Hill Hotel

Fragrant Hill Hotel designed by I.M. PEI adopts the traditional decorative elements and pursues the expressions of traditional spirit and artistic conceptions; in addition, it breaks through some rigid patterns existing in the minds of Chinese people.

The features of the hotel are as followed:

. Respecting the nature - the building preserves many valuable old trees and original old walls, which are harmony with the new building;

. Derived from Chinese courtyard layout and classical Chinese gardens, eleven courtyards in the hotel and eighteen elaborately designed landscapes reflect traditional gardening beauty.

. The hotel has not a traditional curved roof, and the elevations implicate the features of the folk houses of South China in the Tang and Song Dynasties. Moreover, it appears more charming when the sunshine casts the shadow of black diamond terrazzo window's frames on the white walls.

3. Since the early 1980's, some regional architecture had broken through the rigid forms of tradition and strived to widen the design ranges of regional buildings. There are five aspects to embody the trend:

a. **The thinking of "making famous into strange"**³ from cultural and living pattern's aspect

The architects emphasize not only the idea of the continuity of cultural structure,

but also its inheritance and development. In addition, they utilize the thinking of "making famous into strange", which means attaching importance to the existed things in the cultural structure and conceiving existing ones familiarized by people. Most of important, grafting or combining local architectural culture with external one forms new concepts, theories and design methods.

The Mausoleum of Prince Nanyue of the Western Han Dynasty⁴ stresses the blending the modern architectural approaches with classical principles. It consists of three parts: Displaying Hall, Coffin Chamber and Treasure Hall, the 3-story Displaying Hall is for ordinary exhibits. The Coffin Chamber is enclosed with veranda and covered with a metal glass roof in geometric shape that is the tomb style of the Qin and Han Dynasties, and the 2-story Treasure Hall exhibits all the funeral valuables in the tomb.

The architects designed the building in compliance with the features of the low hill at its back after taking into account of the environment. Furthermore, the three parts of the Mausoleum are also harmoniously linked to create an ambiance of pleasing wholeness.

b. The emergence of criticizing region from new exertion of traditional structural technology's aspect

By means of studying the constructive forms, character and materials of local buildings, the architects intend to give people a good feeling of traditional character harmonizing with the modern technology. Meantime, combining with the local climate and specific terrain are main points of departure in design.

The Contemporary Art Gallery of Quanzhou⁵ designed by Mr. Zhang Yonghe is an appropriate example. It used the old building material and "brick out and stone in", which is a constructional way existing for a long period in Quanzhou. Moreover, different roof frames of old buildings were renewed in order to reduce the cost of construction, which is also a conservation of vernacular dwellings in the demolition period. Specifically, changing the dimensions and directions of roof frames weaken the traditional rigid form.

c. The regeneration of new original patterns⁶ from historical and original aspect
The architects mainly stress on utilizing the ceremony character and ancient-style of the primitive buildings in order to be in harmony with the nature. Meantime, they think that the typological elements endowed with historical and original character should be reappeared, transformed, transplanted and regenerated to form a countryside scene.

Since 1994, Mr. Liu Jiakun had designed a series of "Artist Working Studios"⁴, he tried to create higher artistic quality with low cost and low technology and explored an architectural way which can be applied in the countries of short of funds and having a long history.

Concretely, **Luo Zhongli Working Studio** originates from the gray cave dwellings in flatlands, and **Dan Hong Working Studio** and **He Duocen Working Studio** adopt the traditional elements - courtyard. The architects think that the basic constructional elements - wall, curved surface, ramp, and gallery have great effect on the form and the lasting sense of the architecture can result from the simple, unadorned and succinct ways such as coarse stucco, cobblestone, tilted roof decorated by gray shale and black iron window frame. In a word, they select originated way to

manifest the mind of site, but sometimes the application ranges of the buildings are limited to some degree.

d. The thought of technological worship from technological aspect

The regional buildings stress the distinguishing feature and consistency; especially rational technological core becomes a starting point of design. Gradually architects import the simple ecological thought into the design and advocate that architects should analyze the regional forms which are effected greatly by local climate and geography environment, which actually be the main basis for designing. Furthermore, Chinese architects learn much from the western buildings.

e. The emergence of city renew from city style aspect

The architects advocate that drawing on the experience of single house's form, retaining the identity of environment and regarding the city as an entity.

Ju'er Alley Residential Quarters explores the ways of solving some important problems in reconstructing the old city of Beijing. First, the new courtyard housing system not only affords high floor area ratio, but also suits well to the traditional city style, thus the protection of the famous historical city goes down to residential quarters — the grass roots of a city. Secondly, the project is perhaps the best way available at present to renew the old city of Beijing. Thirdly, the project puts forth a fresh, simple outlook, which combines the tradition with modern function and technology. Lastly, it explores the way of creating a condominium form with funds pooled by the inhabitants.

Vanke Wonderland⁷ helps to widen the fringe dwelling district theory of contemporary cities in China. Especially, the new dwelling conduct model has a great significance during the urbanizing and suburbanizing.

There are four aspects to manifest it:

. The vernacular architectures in KeJia and neighborhood blocks — they both share the character of “the floating space is enclosing not sealing”. Every neighborhood block is consisted of two or three dwelling buildings. According to building orientation and climate, the architect adopted the plan layout of enclosing not sealing to strengthen the fluidity of space and ventilation in summer.

. Memorial archway with balcony — traditional buildings in China always use the arcades to embody the transitional space between interiors and outdoors space. The traditional elements largely are used in the blocks and entrances to pedestrian paths, and the balcony can be led to main bedrooms, so it is named as “the memorial gateway with balcony”.

. Commercial space under the sotto portico with big depth — an architectural language of vernacular dwellings in LingNan. The architect paid attention to the function of sotto portico, moreover, he widened the depth from 2 to 3.3m in order to intense its traditional sense.

. The confliction and amalgamation between the modern style and tradition one — there are two facts to expound it. Firstly, there is strong comparison between the Community Center with modern style and the residential buildings whose white-pitched roof and dormer are signs of classic style. Secondly, the dwelling buildings with modern constructivism have a good harmony with those with white walls, gray tiles and two-tilt roofs.

Conclusion:

While monotonous architecture without cultural connotation and the loss of historic locales and contexts to similarity and oversimplification are equally undesirable, quite a few developing nations that oscillating between modernity and tradition have successfully revived traditional culture with the help of their growing economic wealth, even though modern architecture seems to be an obvious choice for fast constructions at first glance.

Chinese architecture since 1980 features richer traditional elements and cultural connotation compared to those in previous decades. Although in the above cases, our analysis only concentrates on five aspects, it should be pointed out here that any successful architecture is not limited to such and should entail creative architectural conception, sound structural design, good plan composition, exiting modeling, and elaborated detailing. A major development since 1980 is a criticism of simple-minded imitation and reproduction of the external appearance of the traditional architecture and a concern for the overall environment and the underpinning cultural ideals. This development reflects a deeper understanding of the true content of Chinese traditional architecture and opens new ways in sustaining and developing this tradition.

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