

Localize the Modern: Two Experimental Designs in Shanghai

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The Critical Stance

Modern Architecture has two groups of components, the **fundamental** ones (e.g. its functionalism and use of newest technology) that are valid to all industrial societies and the **incidental** ones (e.g., its particular forms or styles) that have more to do with the specific conditions of its birth place, such as the 1920's Europe.

Therefore, to build in a non-Western society that is under industrialization, Modernism serves as a powerful instrument, but its incidental part has to be **localized**. The process also could uncover unique local spaces which may enrich the universal Modernism. Two of my recent design projects in Shanghai have aimed at such a direction.

Reception Center of Minhang Ecological Garden, Shanghai (2004)

The 4,400-square-meter project is located in an urban park, surrounded by dense built-up areas, in a satellite town of Shanghai. The facility consists of a park administration building and two courtyard buildings named as "Village of Reeds" and "Secluded Place," which are to be used separately for small-group conferences and retreats.

1. In contrast to the Western model of a consolidated building surrounded by expansive lawns, the design adopts the Chinese **courtyard concept** to create privacy for the users in a high-density environment (Fig. 1-8).

However, the design does not use tradition indiscriminately. To avoid the complete isolation associated with traditional courtyards, a canal penetrates all three parts of the Center to form a north-south **visual channel** (Fig. 1, 2, 4, 8). Additional east-west channels are created through slits on the layers of courtyard walls (Fig. 3). These channels expand the sense of space and link the facility with the public space outside.

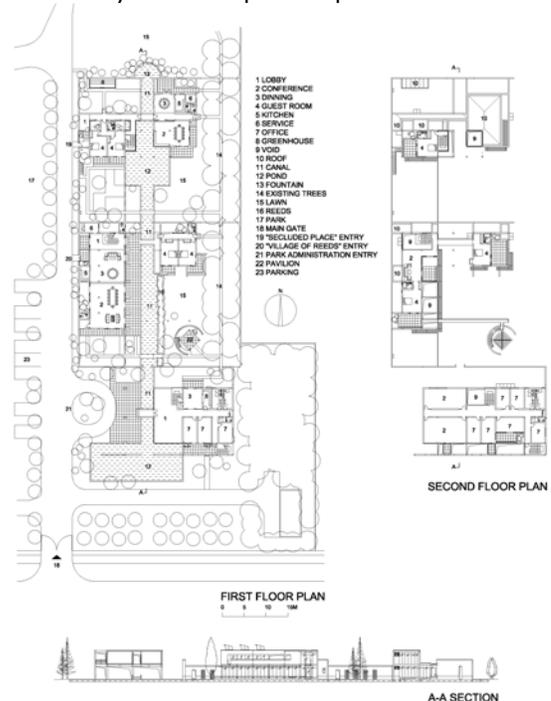


Fig. 1.



Fig. 2. (Above left) From the "Secluded Place" looking into the "Village of Reeds" along the canal

Fig. 3. (Above right) One east-west channel in the "Secluded Place"



Fig. 4. The relatively enclosed exterior: the double façades at the south elevation of the Park Administration



Fig. 5. Main courtyard of the "Secluded Place"2. Following the courtyard concept, each major room in the facility is **paired with an outdoor space** to create a mixed environment that is much loved by the Chinese people (Fig. 5-7).

3. The design of the outdoor spaces borrows typical patterns from the **local rural landscape**, such as the reed-bordered waterways and the fish ponds (Fig. 5, 6).



Fig. 6. Right: Main courtyard of the "Village of Reeds" Left: The mature state of the reeds

4. The design uses a **hybrid structural system** in which masonry bearing walls and a slender site-cast concrete frame work together (Fig. 5). Popular among low-rise, low-budget construction in China, the system has a good thermal value and can resist earthquakes up to intensity VII. The design also revives **indigenous techniques** such as the brick lattice wall (see the right side of Fig. 1.).



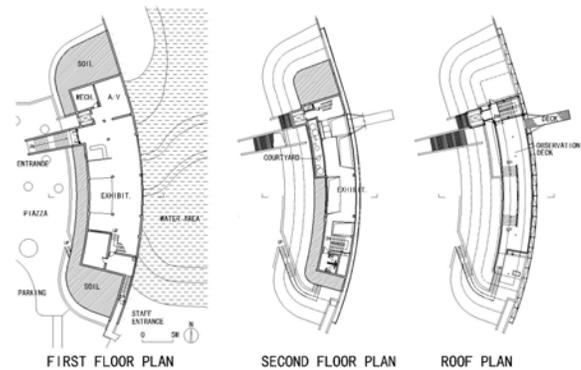
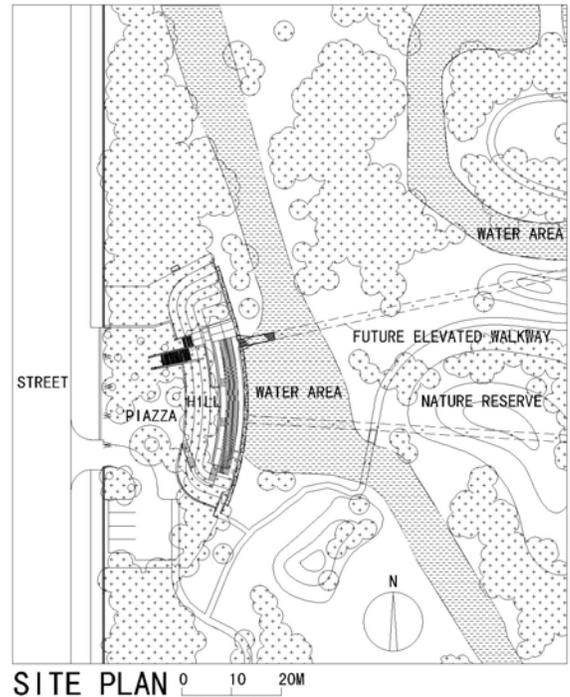
Fig. 7. (Left) Courtyard on the second floor, interior of the conference room in the "Village of Reeds"

Fig. 8. (Right) The fountain at the northern end of the canal

New Jiangwan Ecological Exhibition Center, Shanghai (2005)

Next to a wetland of 10 hectares, the 405-square-meter facility sits in a nature reserve on the northern edge of Shanghai. It serves as a small museum and the only place where the

public can observe the wetland. The long-term plan includes two elevated walkways that will radiate from the Center into the reserve for the public to use.



1. The design of the spatial sequence borrows the idea of **"gradual revelation"** from the Chinese garden to create a sense of mystery, so that visitors will treasure the reserve even more (Fig. 1-6).



Fig. 1. (Above) The street side of the building looks like a small hill, blocking views further into the reserve.

Fig. 2. (Below right) The building entrance: Shaded and downward entrance suggests entering "another world"

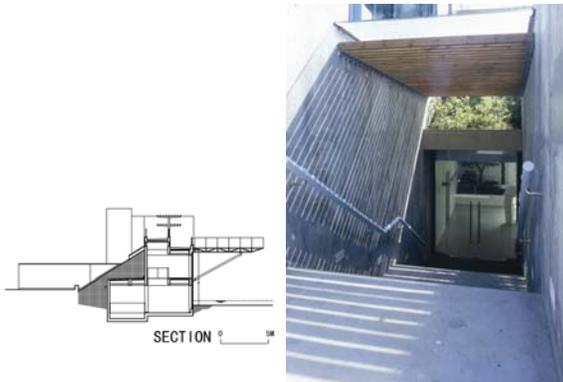


Fig. 3. On the first floor the underwater windows dominate the view



Fig. 4. (Above left) The exhibition space on the second floor.

Fig. 5. (Above right) The maps and bird specimens on the curtain wall, and the metal mesh (to grow ivy) outside of the glass obscure the outward view



Fig. 6. Only on the roof observation deck is the wetland finally revealed to visitors

2. The design also **breaks away from the "black box"** stereotype of modern museums, making the outdoor natural environment and live species the main exhibits. The building resembles a "submarine" with various "windows" opening into the nature (Fig. 7-10). In addition, by pointing on a model under two large monitors, visitors can select real-time video transmitted from one of the six cameras installed in the reserve.

Findings from the above design research projects and other similar experiments have proven to be useful in teaching studios that prepare US students for global practice.



Fig. 7. Windows showing live plant specimens in a sunken courtyard on the second floor



Fig. 8. (Above left) The underwater windows showing an entire section of the wetland

Fig. 9. (Above right) The "informational" curtain wall of the wetland-side elevation



Fig. 10. The wetland side of the building