### Modernity and National Character of Shanghai Municipal Hospital Building An Urban Anthropology Perspective in Architectural Study

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### **Abstract**

The paper studies on Shanghai Municipal Hospital Building built-in 1937 through an urban anthropology perspective to discuss the intricate influence from social ideology and medical cultural transformations on the form, space even spatial implications of the hospital architecture within a certain historical era.

The paper first expounds the Western Medicine Worship as the social mainstream medical consciousness in the Republic of China period and the modern characteristics of Shanghai hospital architecture in order to understand the social and architectural response under the transformation of medical culture and the development of hospital architecture design strategy.

Then, the paper analyzes the hidden contradictions between the modified Chinese Renaissance Style appearance and modern functional interior space through the construction background, plan, and facade forms of the Municipal Hospital building.

Finally, the study believes that under the influences of multiple factors including the Greater Shanghai Plan, the modernization of medical science, the trend of modern hospital architecture as well as the aspiration of national rejuvenation in China, the contradictory modernity and national character of the Municipal Hospital building are eventually unified in the goal of national identity, became an architectural answer of political ideals.

As Setha Low pointed out that the urban anthropology method emphasizes 'anthropology of the city' rather than 'anthropology in the city' in Theorizing the City[1], urban anthropology is one of the interdisciplinary branches of anthropology which pays close attention to society, culture and daily life for researching complicated agencies of urban space and its representations. After the opening of Shanghai port in 1843, western medicine technology and treatments were introduced into Shanghai by medical missionaries and became a heterogeneous culture. Under the impact of the cultural consciousness of western medicine and spontaneous longing for modernity, the hospital architecture had gradually evolved from simple residential houses to professional spaces that met the requirements of modern medical functions during the Republic of China. As a component of the subtle texture of urban space, hospital architecture in Shanghai was influenced by social ideology and cultural identity, it was also constrained by the diversified urban planning and construction codes, becomes the product of competition and compromise of multicultural forces.

## Western medicine worship: social medical consciousness in Shanghai

After the defeat of First Sino-Japan War, Chinese society filled with anxiety of backwardness and subjugation, therefore, the intellectuals regarded the transformation of bodies as the basis for the improvement of national strength, hoped to 'cleanse the Sick Man of East Asia stigma with a healthy country' [2]. Meanwhile, the reformists continuously advocated learning advanced science, technology, and political system from the west since Self-Strengthening Movement and New Cultural Movement, they believed

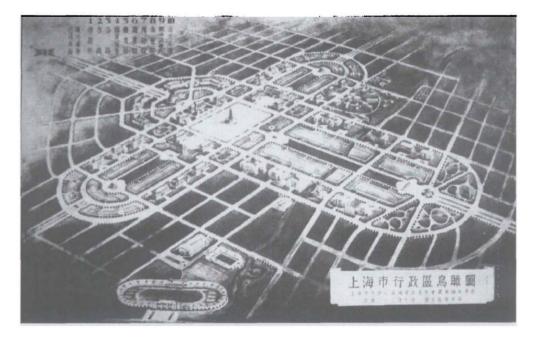


Figure 1. overview of New Civic Center of Greater Shanghai in 1934 and the location of Municipal Hospital Resource from: Shu Wei. The Greater Shanghai Revelation. Nanking: Southeast University Press, 2011.

that 'western is new, Chinese is old'[3], which 'new' represented modern and scientific while "old" was unscientific and should be abolished. As Hu Ding-an (director of Nanking Bureau of Health)said, 'we must promote health to enhance national strength, especially the health of the citizens, in order to achieve the rejuvenation of the China'[4], Western Medicine Worship became the social collective medical value in the period of Republic of China. The purpose of scientific medicine was no longer merely to treat diseases but took on the political halo of saving the national crisis, established a new bond between body and country.

Before 1927, the medical and health services in Shanghai was mainly led by foreign missionaries and the concession governments. After the establishment of City Government of Greater Shanghai (or 'Special Municipality') in 1927, built a Chinese modern medical and health administration system and strengthened the folks' body constituted the political goal of the new government, possessed the characteristic of politicization and nationality. Shanghai Bureau of Health immediately took the western public health system as an example, conducted population census, controlled urban sanitation, established seaport quarantine offices and hospitals, supervised medical and food safety had became the

specific scenes of practicing western medicine and public health awareness within the urban space.

# The development characteristics of Shanghai hospital buildings (1928-1937)

In the so-called 'Golden Decade' of the Kuomingtang government, shopping malls, theaters, hospitals, apartment buildings, libraries, museums, stadiums, and other modern building types all participated into the modernization process of Shanghai. Chinese architects began to practice and study hospital architecture design consciously and systematically from the 1930s. For instance, the Central Hospital as the largest national hospital in capital Nanking was completed in 1933, the prologue of the Chinese Architecture Magazine(1934) stated that 'hospital buildings are vital to people's life and death, so designers have to exhaust their efforts to make them suitable', and Tang Pu, a Chinese architect, published an article 'General hospital design' to put forward design suggestions on the distribution of eleven types of rooms, including office, ward, surgery, and X-ray department, as well as the traffic flow, ward size, special requirements, and interior light. In addition, the article 'Modern hospital design' by Hans Ekcstein and 'Famous ancient hospital

buildings in Europe' by Dr. C. W. Turner, published in Ciba Quarterly Magazine(1935) introduced modern design development and European history of hospital buildings separately.

The hospital buildings in Shanghai was obviously influenced by the International Style architecture during this time, such as Isolation Pavilion of Sainte Marie Hospital(1933), S. M. C. Victoria Nursing Home(1933), Hongqiao Sanatorium(1934) and Maternity and Infant Health Hospital in Da-xi Road(1935), presented initial performances of 'form follows function' principles. Not only volume and rooms' arrangement was based on modern hospital demands, but the facade windows and interior lighting were conceived before external styling or decorations. Also were equipped heating-cooling systems or other advanced instruments for patients' comforts. However, reinforced concrete structure was no longer directive as existed technical experience had been able to fully satisfied temporal needs.

### Modernity and national character in Shanghai Municipal Hospital Building

The construction background of Shanghai Municipal Hospital was the synthesis of modernity and national character. The City Planning Commission began to compile The Greater Shanghai Plan in 1930—a milestone in the history of Shanghai's urban planning, which was a creation from the cooperation with Chinese architects and foreign technical consultant. This grand proposal used a modern urban planning composition method to reconstruct the prospective Chinese space in Chiang-wan District, conveying traditional Chinese regime power order through a huge cross-shaped axis sequence and symmetrical layout in the New Civic Center(Figure 1). The Municipal Administration building, Municipal Hospital, museum, library, stadium, and some other municipal infrastructural architectures were planned and requested to be Chinese Renaissance Style[5], 'a combination of traditional Chinese style with modern comforta'[6]. It fully reflected the ambition of the City Government of Shanghai to compete with foreign settlements.

As a center of medical research, disease treatment, and medical education, the Municipal Hospital was designed by Tung tayu (or Doon Dayu), constructed in 1934. It located in the southeast corner of the cross in a

fan-shaped layout, eight department pavilions encircled the south of central office building(Figure 2). A similar geometrical composition with the end of the macro cross demonstrated a latent continuity from the modernity of urban planning. Nevertheless, only the central building(now is No. 21 building in Shanghai Changhai Hospital) was successfully completed until 1937 for economic reasons.

After the government had spent 770,000

Chinese yuan on the construction of the Municipal Administration Building(Figure 3), remaining insufficient funds objectively required the hospital to find a new economic and national style (Figure 4). The building was composed of three simple modern boxes with a flat roof rather than the traditional curving roof, but it implied a connotative classical elevation pattern, even the volume relationship between protruding center and wings conformed to classicism. Orderly vertical windows and slender simplified Ionic pilasters formed recurring lines on the gray artificial stone facade. This obvious contradiction had to do with Tung's Beaux-Art and modern architecture education background at the University of Minnesota and Columbia University successively. In order to match the Chinese Renaissance style of other buildings, the architect designed anaglyphs with Chinese blessing, longevity, auspiciousness and auspicious clouds(Fu, Shou, Ji-Xiang, Xiang-Yun in Chinese) pattern on entrance canopy, breast and plinth, first floor without pilasters and ornaments showed a traditional 'foundation' element image. Shanghai Architecture Association claimed 'promoting China's inherent artistic spirit blends with western material civilization for creating epochal architecture form'[7] in 1934, which reflected the cultural values and architectural values that generated from combination with western scientific civilization and Chinese spiritual civilization, or say, through unity of scientificity and nationality to obtain a Chinese psychological sense of modernity. As an interpretation of this overlapped value, the modified Chinese Renaissance form of Municipal Hospital Building was compromise and self-adjustment from actual construction conditions and spatial implications, expressed the fusion of modernity and national character by means of contradiction juxtaposition.

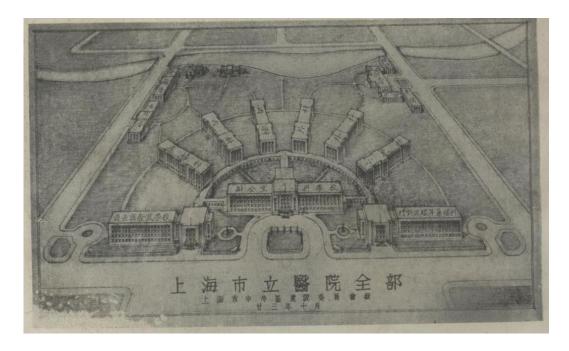


Figure 2. Layout out of Municipal Hospital Resource from: Wei Sheng Monthly Magazine, vol. 5, no.1(1935).

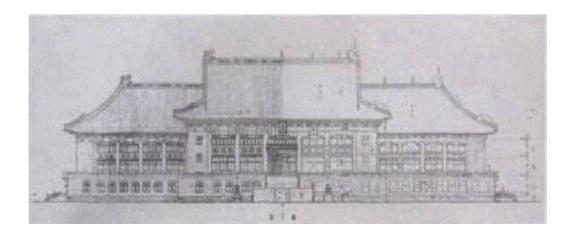


Figure 3. Elevation of the Municipal Administration Building Resource from: Chinese Architecture Magazine, vol. 1, no. 6(1933).

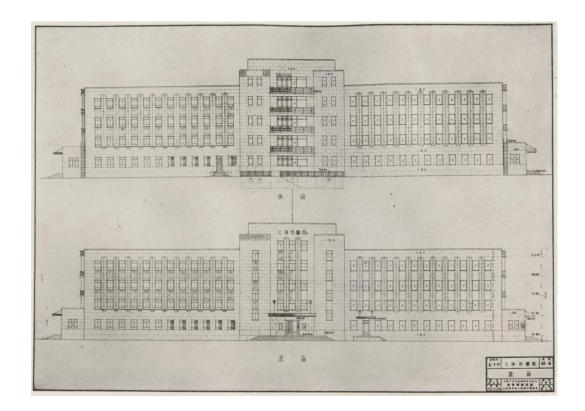
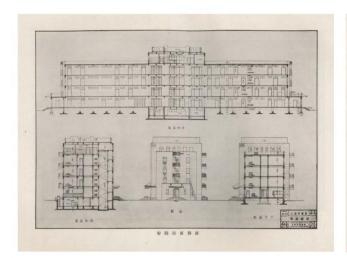


Figure 4. Elevation of Municipal Hospital Resource from: Architecture Monthly Magazine, vol. 4, no. 1(1936).



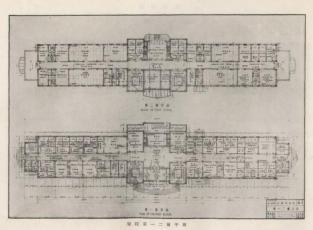


Figure 5.Plan of ground floor and second floor, sections Resource from: Architecture Monthly Magazine, vol. 4, no. 1, 1936.

In order to bring modern, high-quality medical experience and treatment results to Chinese patients, the functionalism interior space was designed, but it presented a separation even irrelevance from the eclectic appearance. The floor plan was based on functional requirements, technical conditions and economic rationality of western general hospital(Figure 5). Followed the 'Block system' hospital trend[8], consultation rooms, clinical department, medical technology department and management rooms are compact in layout, where took corridors as internal skeleton then rooms divided into sides orderly. Extroverted emergency room, outpatient clinic, X-ray room, pharmacy and offices located in the first floor, long-term introverted ward units and operating rooms on the 2nd to 4th floor, and the service space including traffic, patient rest area and teachingresearch section at the core intersection of each floor. The central fifth floor was a kitchen and dining room. The hospital was equipped with advanced X-ray machines, the Differential Vacuum System for heating was popular in the U.S. but not in China, and the calling bell for each bed was also precedent. Windows, another important modern architectural element, were arranged on the building in quantity to bring sufficient light to each room, while the operating room was deliberately placed on the north for uniform light. It can be seen that interior space of the Municipal Hospital provided an efficient and comfortable medical treatment environment for doctors and patients, as well as fully met the scientific requirements of hospital design at that time, which demonstrated Chinese ability in getting hold of advanced science (including medicine and architecture), or modernity. Wang Ying in her book In Seeking of a Chinese Shi Yang believes that 'Chinese Western combination' was a political ideal in the 1930s, hence the resulting eclectic design pattern was widely used in public buildings during the Republic of China, such as Sun Yatsen Mausoleum, National Central Museum in Nanking and Shanghai Municipal Administration Building mentioned above[9]. No matter how the Chinese Renaissance transformed, it had a fixed connection with national identity, the correlation of external form and internal layout was at service of finding a reasonable expression of that political ideal, whether in a physical or spiritual way. According to this logic, the new China

Renaissance appearance was an explicit expression of national character, while the modern internal space built for the actual medical function where undertook the responsibility of Chinese people's health. That is to say, the common destination of both was national rejuvenation.

### **Conclusion**

During the Republic of China, social medical consciousness in Shanghai was a mixture of multiple factors, including Chinese reverence for western medicine and eager for national modernization. Compared with office buildings, theaters, prisons, and other burgeoning public architecture types, hospital architecture needs to face the western medical technology and national ideological requirements simultaneously, whose political purpose and functional needs form a competitive-unified relationship. As Alan Colquhoun put forward that eclecticism not only allows two irrelevant styles to coexist but also represents a dominant moral ideal and is associated with a social reform ambition[10], the modernity and national character serving for different purposes in Shanghai Municipal Hospital building can be also regarded as two divergent features, however, their contradictions were eventually unified in the goal of national identity, as an architectural answer of a political ideal.

### **Endnotes**

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