

## 彙 報

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SCHEME FOR GREATER SHANGHAI  
DEVELOPMENT

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## 1. The Importance of the New Scheme

The need for a new city centrally located and capable of future expansion has long been felt by those who are interested in the development of Shanghai. According to latest official census, the population of Shanghai has just passed the 3 000 000 mark. The figure stood at 1 578 167 in 1920 and 2 927 858 in 1930. There has been an increase of 1 349 691 or 86 per cent. in ten years, a growth which is unparalleled in any other city in the world. While reputed to be the greatest port in the Orient, Shanghai is no means anywhere near the standard and requirements of a modern city.

The Chinese City is about a century behind time, although considerable improvements have been made since the inauguration of the new City Government. It comprises Chapei and Nantao which are separated by the international Settlement, the French Concession and the Western District surrounded by the so-called Extension roads.

The systematic building of almost 176 miles of extension roads by the Settlement authorities since 1900, especially during the chaotic period between 1924-1927, has practically deprived the Chinese Municipality of 40 000 mows of land. It is pertinent to note that the area thus lost by the Chinese is greater than the Settlement proper. With this extensive area, over which the Chinese authorities have no jurisdiction, lying between Chapei and Nantao all municipal improvements have been made either difficult or impossible. For instance, two separate power plants and two separate waterworks have had to be operated by the Chinese authorities for the two separate areas.

The International Settlement has been the natural growth of a trading centre. The fact that it was not a preconceived scheme accounts for the present narrow streets, crowded tenement housing, inadequate shipping facilities, and other unsatisfactory features. Instead of being planned in advance, the Settlement has been confronted with various problems of making improvements to meet the demands of the time. This, however, is no reflection upon those who have been responsible for development of the Settlement. The principal factors which are holding back the development of Shanghai at present may be summed up as follows:

1. The existence of three separate municipalities with no unification of policy or plan.
2. The lack of direct connection between the harbour and the railways.
3. The inadequacy of shipping facilities. Many ships have to be anchored in midstream on the Whangpoo or even at the mouth of the River in the Yangtze. Additional wharfs must be

provided.

4. The unusual rapid growth of population resulting in high rentals and congestion. To relieve this condition new residential areas must be provided.
5. With the rapid increase of population the existing means of communication have become inadequate. The improvement of the present street system is very difficult if not impossible and the only solution will be to develop new areas.

The ultimate purpose of this new project is, therefore, to create a new city, which will not only solve the ever increasing demands of the fast growing community but will also make this city worthy of the name of the greatest metropolis of the Far East and which will eventually occupy a place among the greatest cities in the world.

## 2. History of Planning Commission

The idea of developing Woosung, the district situated at the mouth of the Whangpoo River, as a future world port dates back over thirty years ago when Liu Qun-Yi was Viceroy of the Kiangsu Province. It was thought that the logical development of the port of Shanghai would be near the mouth of the Whangpoo, that the river front would eventually move from Yangtzepoo towards the north, that factories and other plants would rise in the northern district near Woosung, and that business and residential development would follow.

In 1927, the city of Shanghai became a special district by order of the Nationalist Government at Nanking. The City Government of Greater Shanghai was then established and to Shanghai's first Mayor, Mr. Huang Fu, belongs the credit of reviving the idea which was first conceived over three decades ago. Mr. Huang's successor, Mayor Chang Tin-Fan, continued to carry on the idea, although it was not until the inauguration of the ex-Mayor Mr. Chang Chun, that definite steps were taken for the carrying out of the scheme. In 1932 Mayor Wu Teh-Chen succeeded Mayor Chang Chun and under him much has been done towards the realization of the project. Whereas it has been customary in recent years for successive administrations of the Municipal Government to replace important staff members when a new chief was appointed, the City Government of Shanghai has been fortunate enough to do away with this vicious practice. Thus, most of the technical experts still remain and have been able to carry out the program of municipal development without interruption in spite of the change of four mayors in the past six years.

In 1929 a special organ was created with the name of the City Planning Commission of Greater Shanghai for the purpose of working out a plan which would represent in the broadest way all interests in the community and which would provide for future physical expansion. The Commission is composed of eleven members, mostly technical men, representing the various administrative organs of the City Government and headed by Dr. Shen Yi, a German educated municipal engineer who was also concurrently Commissioner of Public Works of the City Government. Mr. Dayu Doon, an American educated architect, was appointed Advisor to the Commission. Among the foreign experts who have examined the plan and given their criticisms are Dr. C. E. Grunsky, formerly President of the Society of American Civil

Engineers, Mr. Asa E. Phillips, well known American City Planner and Prof. Herman Jensen of Berlin University. The Commission meets every fortnight at which progressive plans and suggestions are presented and discussed, the deepest interest in the problems of the new project being taken by the members of the Commission upon whom rests the entire responsibility of the future development of Shanghai.

In October 1929 an open Competition for a design for the Civic Centre of Greater Shanghai with prizes amounting to \$7000 was announced by the Commission. The program required the civic centre to be placed on or near the intersection of two cross axis: the east-and-west axis being a sixty-meter wide boulevard running eastwards from the new railway station to the Whangpoo River and the north-and-south axis, also a sixty-meter wide boulevard, running north and south to form the principal approach from the present International Settlement to the south; a group of Chinese style buildings, nine in number, with modern conveniences; the site to be embellished with gardens, fountains, pools, bridges and monuments. At the conclusion of the competition Dayu Doon was appointed Chief-Architect to study and prepare plans for the new Civic Centre. The final plans were submitted on May 23, 1931, and contract for the Mayor's building, the first of the group, was awarded and construction immediately begun. This marked the beginning of the building program which will take many years to complete. The progress of building was interrupted for seven months during the Sino-Japanese hostilities in 1932. The building was finally completed and opened on the tenth of October, 1933. Meantime two large temporary buildings were constructed behind the Mayor's building to house the various bureaux.

### 3. The New Plan

**Location:** The site chosen for this project is the Kiangwan District conveniently located between Woosung and the International Settlement. It reaches the Whangpoo River to the east and the Shanghai-Woosung Railway line to the west, Woosung village to the north and the International Settlement to the south, comprising a great plateau with possibilities of unlimited future expansion. Its greatest asset is its nearness to the mouth of the Yangtze River. The choice for the new site is based upon the following principal facts:—

1. From the geographical point of view, the site lies in the true centre of Shanghai and its environs. To the northwest is the Pao-San District; to the west are Ta-Chang and Chen-Ju, to the south are Chapei and the International Settlement and to the east is the great chain of small towns comprising the so-called Poo Tung District.
2. The new site conveniently lies between the future harbour and Shanghai. Since Woosung is destined to become the future harbour, the site will serve as an important central area between the former and the latter in the course of development and the whole district will eventually resolve into one big city.
3. The development of the new site does not involve demolition of existing property, being comprised of thousands of mows of flat field with a few scattered farm houses. There will be practically no physical limitations in the course of development.
4. The New site is favorably located with reference to land and water communications. It is capable

of development even without the completion of the new harbour and the modification of existing railroads.

**1. Allocation of Areas :** The new plan begins with the allocation of areas commonly known as "zoning," though in the present case the form these areas take does not approximate that of a series of belts or zones. At times the "zoning" may be on lines such as in the case of some German and American towns, where the growth starts from the centre and proceeds towards the outskirts. But in the case of Shanghai, the character and the suitability of the ground clearly indicate the use to which it is assigned, rather than a mere diagrammatic relationship to a given centre. Although it is impossible to predict with absolute accuracy what the future development will be, the new plan provides as far as possible for future requirements. It begins with the Civic Centre, surrounded by business and residential areas. Parks and open spaces are well provided along the Whangpoo River and several waterways. To the north is the harbour district and to the north-west is the industrial district with the north-western wind carrying the smoke and dust away from the main city.

**2. Flood Prevention :** The land of future Shanghai will be flat and uniform in elevation. Its surface is about five feet lower than the highest recorded flow of the Whangpoo and Yangtze Rivers. When this area has become a developed city its protection against inundation will be of the utmost importance. There must be therefore broad embankments of adequate height along the banks of the Whangpoo River and also the bank of the Yangtze. The existing Military Road, formerly a dike, about five feet above the elevation, was built for this very purpose. It is intended that this road be continued toward the north of Woosung along the south bank of the Yangtze River and be constructed as the bank of Hudson River on Manhattan Island, known as the Riverside Drive of New York City. It will serve for the double purpose of providing a parkway and a dike. All roads are raised about three feet above the old elevation so as to prevent possible flooding.

**3. Harbour :** When one comes to consider the importance of communication by water in Shanghai, one is inclined to give the Whangpoo River first consideration. Although known as the greatest port in the Orient, Shanghai needs much improvement in the way of docks and wharves, warehouses and shore communications. The Woosung district offers an ideal site for port development. With its extending waterfront over thirty feet in depth, vessels of all sizes and tonnage will have no difficulty in finding accommodation. An area of some 10 000 mows has been allocated for this purpose.

The layout of the harbour will probably be of the "basin type" with access from the river to a succession of basins on both sides of which will be piers slightly inclining toward the river. The piers will have transit sheds along one side and godowns on the other side. The space between piers will be wide enough to accommodate vessels at both sides and lighters alongside and navigation space between the lighters. The details of the wharves will be planned with a view not only to allowing comfortable transfer of freight from rail to ship and vice-versa but also to provide ample means for the loading and unloading of small coastal and river boats.

Railway transportation will be linked directly to the wharves so that unnecessary delay and expense may be avoided.

A belt railway stretches from the harbour site, westerly and southerly around the major portion of Shanghai and thence across the river and down to the bank of the Whangpoo as well as throughout the full length of Pootung to the mouth of the river. Although the district lies in the extreme north of the new site it is at the same time easily accessible by several trunk highways from the central district, as shown in the map. The above described scheme, however, involves an expenditure of tens of millions of dollars. Its realization will probably take years. For the purpose of relieving the present congestion, plans are being completed for the building of new wharves along the east bank of the Whangpoo River at the terminal of the new east-and-west main thoroughfare, namely, Wu Chuan Road. These wharves will be accessible via the Shanghai-Nanking railways.

**4. Railways:** Certain modifications of the existing lines will be effected. Chen-Ju, a small town located north-east of the International Settlement, will be made a railway junction. From Chen-Ju four lines will branch out: to the east all passenger trains will be brought into the new Grand Terminal located at the west end of the east-and-west axis of the city: to the west will be the Shanghai-Nanking line; to the north will be the Shanghai-Woosung line: and to the south will be the Lung-Hwa Station and the Shanghai-Hangchow line. From Lung-Hwa a line will be built to cross the Whangpoo and extend northwards to a point opposite Woosung. With a net-work of railway lines the future development of Shanghai may be assured.

**5. River Crossings:** It is evident that the growth of Pootung, the wide tract of land on the opposite side of the Whangpoo, will naturally follow and the need for better means of crossing the river than by ferries or sampans will become increasingly passing. While the time is not ripe for the planning of crossings by bridges or better still by tunnels, nevertheless the locations should be selected where such crossings would be most desirable. The future problem of providing these crossings will thereby be greatly simplified. Two points are selected—one at the terminal of the new east-and-west main thoroughfare and the other at the Nantao bund.

**6. Main Arterials:** A net-work of main arterials is carefully laid out, providing for the relief of overloaded routes and a free movement of traffic between the various centers so that the business of the districts may be carried on without handicap of inadequate means of communication. The general flow of traffic in future will be north and south. There are five principal roads running north and south to take care of future traffic in this direction. A belt highway system is planned to link all the neighboring towns and villages on both sides of the Whangpoo River.

**7. Street System:** The Streets are so planned that they intersect mostly at right angles. A standard is suggested for the width of the streets: boulevards sixty meters, and minor arterials thirty meters. Ordinary streets twenty-five meters, and minor streets twenty meters. This scale of width may be somewhat over-generous and may involve greater cost, although the land value at present is comparatively low. The

Commission is impressed with the handicap and great expense under which most growing cities are suffering by reason of inadequate width of the streets. The orientation of the street blocks has also been considered. With the exception of the limitations of the existing roads, the blocks will run east-and-west so that the buildings will mostly face either south or north. In this way the intensive summer heat may be mitigated. The dimensions of the average block is determined by reasonable economical size. In the residential districts circumferencial or ring streets will be introduced. They will not only give a picturesque effect to the city but will also reduce the through traffic which is a great nuisance to residents. Open public spaces are provided at the intersection of principal streets for the double purpose of relieving traffic and adding beauty to the monotonous long thoroughfares.

**8. Parks and Open Spaces :** Many so-called modern cities lack parks and open spaces because the system of creating such is quite a recent development in city planing. Some cities acquire land at great expense to provide for such areas. Fortunately for Shanghai, the parks and open spaces planned thus far will be areas of little real estate value. The several waterways averaging forty feet in width are, in their present condition, unsightly and unsanitary. It is planned to improve the water courses and convert the banks into beautiful parks comparable to those of many other big cities in the world. A complete and well distributed system of parks and open spaces is shown on the map. About 15 % of the area is devoted to parks.

**9. Civic Centre :** The most dominant feature of the new city is the Civic Centre, which will be adorned with "Chinese Renaissance" architecture. Taking the shape of a cross, the Civic Centre of Greater Shanghai is located at the intersection of two cross-axis: the east-and-west axis is represented by a two hundred feet wide, three-tracked boulevard known as "San-Min Road" (meaning "Three Principals") to the west of the Civic Centre and the "Wu-Chuan Road" (meaning "Five Rights") to the east of the Civic Centre. It begins at the future railroad passenger station to the east and terminates at the Whangpoo River to the west. The north-and-south axis is represented by another two hundred feet boulevard known as "Sze-Chai Road" (meaning "World") to the north and the "Ta-Tung Road" (meaning "Universal") to the south of the Civic Centre. They form the principal approaches from Woosung to the north and from the International Settlement to the south. The centre of the axes, known henceforth as the Centre of Shanghai, is, marked by a 165 feet Pagoda which can be seen from all directions and from which a complete view of the new city may be obtained. The Mayor's building is located directly 500 feet north of the Pagoda, flanked by eight other buildings comprising the eight Bureaux of the City Government.

Where a city occupies level ground, monumental buildings can only be seen to advantage if they are approached by streets of adequate width and length affording them a view from a distance. Therefore about 1 000 mows (approximately 170 acres) of ground are reserved for this purpose. Approximately 120 mows are devoted to a piazza where public meetings and reviews may be held. A huge reflecting pool, about 2 000 feet long with impressive boulevards on both sides mark the southern approach

to the Civic Centre; two smaller pools are located similarly to mark the eastern and the western approaches. Immediately behind the Mayor's building rises the great roof of the Municipal Auditorium which has a capacity of accommodating 3 000 persons. Clustered around the cross are the Library, Museum, Art Gallery, Court Houses, and other public or semi-public buildings. An existing waterway approximately 65 feet wide supplies water to the pools; its banks are improved and converted into parks. Several bridges add to the aesthetic appearance of the waterway. A five-arched Chinese bridge spans the large pool. At the southern end of the long pool is a five-arched memorial "Pai-Lou" forming the gateway to the Civic Centre. The existing main thoroughfare, Hsiang Ying Road, crosses diagonally at the extreme south of the Civic Centre. The ground is embellished with gardens, monuments, pools, fountains, bridges, etc., to form, with the future buildings, a monumental and beautiful ensemble. The advantage of grouping the public buildings is not only to permit the concentration of public business and facilitate the conduct of inter-bureau affairs but also to add dignity to the city and make a favorable impression upon visitors. The enclosed area, comprising approximately 2 000 mows, is owned by the City Government.

#### 4. Conclusion

Rome was not built in one day. We cannot expect to see the new city rise like magic from the fields in a few years. The building of a new city is a task of generations, especially in view of our political and economical limitations. However, the rapid growth of Shanghai during the last few decades, the increasing demand for further expansion to provide for all interests in the ever-growing community and the growing interest in civic development shown by the citizens give us great hopes that the building of a new Shanghai will probably take less time than we anticipate.

With the full support of Mayor Wu Teh-Chen, the City Planning Commission of Greater Shanghai is sparing no effort in bringing about the new development. When the scheme is carried out Shanghai will be the first well planned city in China, with the possible exception of Peiping which is a remarkable achievement. It will be also one of the most up-to-date cities in the world. It will not only be a great monument to New China but will also set an example for the general city planning movement throughout the country.

Shanghai, October, 1933.

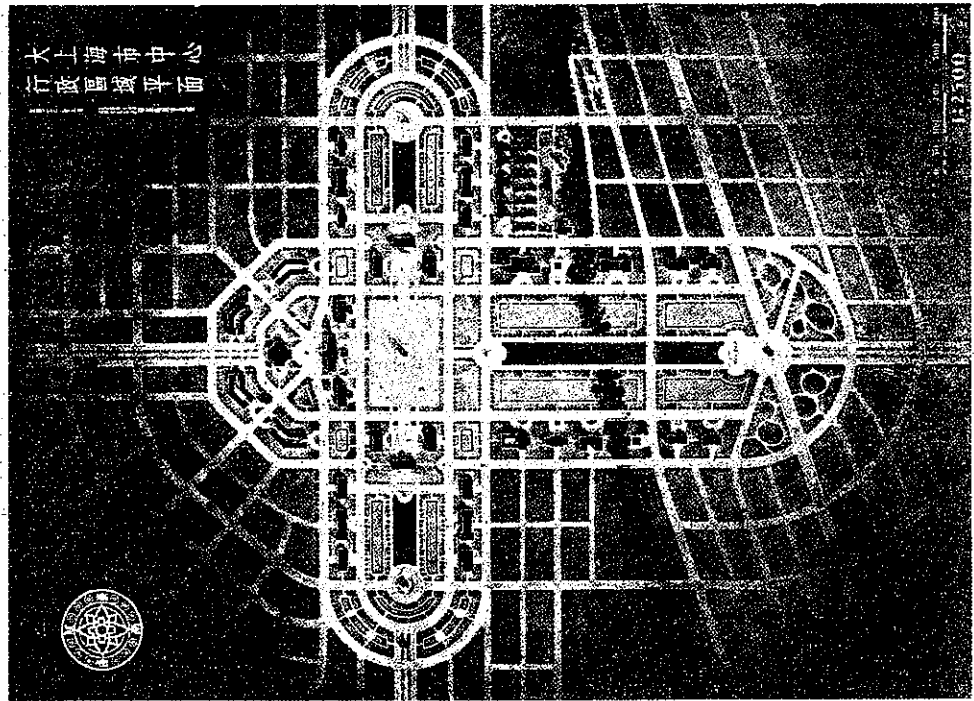


Fig. 2. Plan of Civic Centre of Shanghai

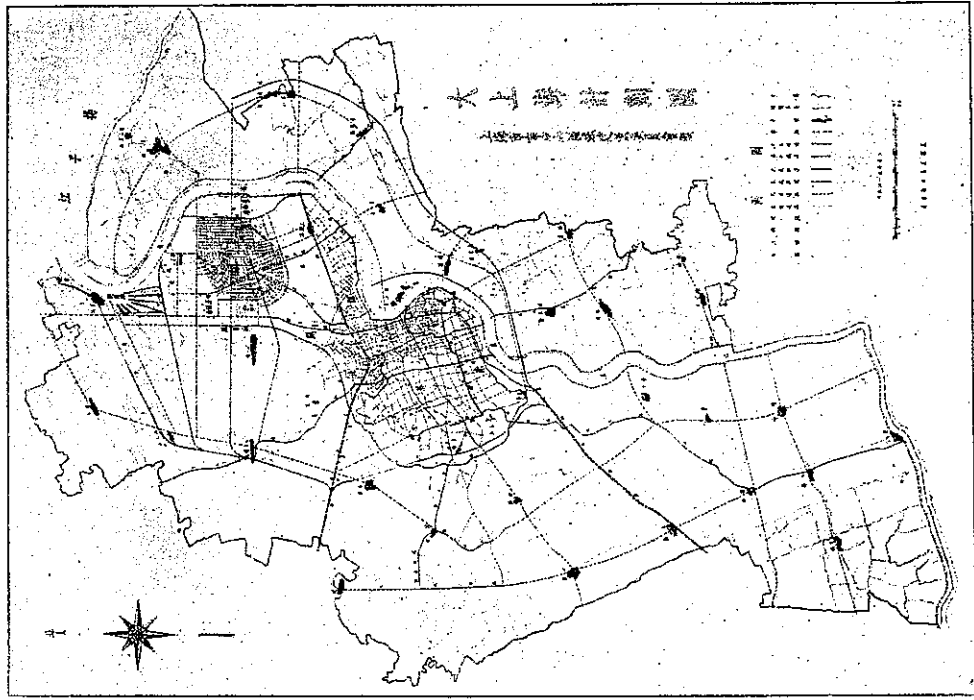


Fig. 1. Plan of Greater Shanghai





Fig. 3. New City of Shanghai

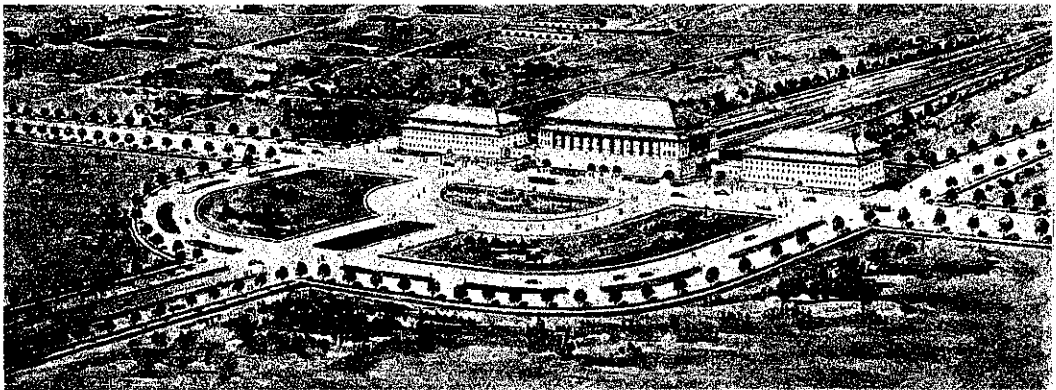


Fig. 4. New Railway Station

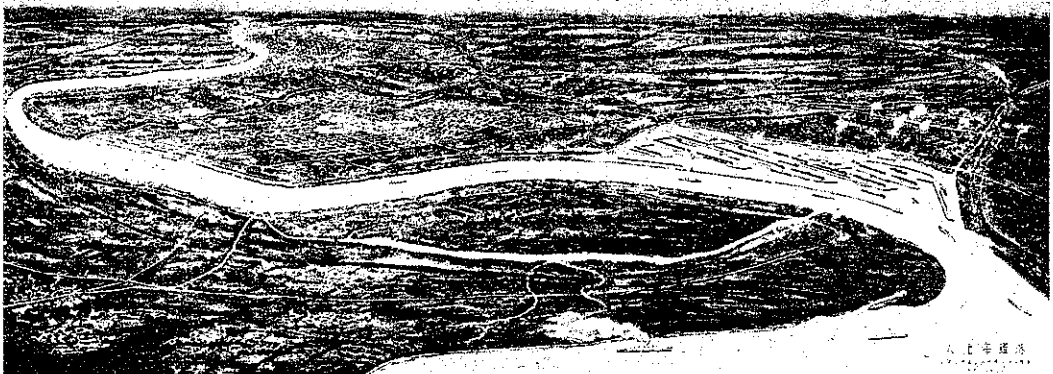


Fig. 5. Future Shanghai Harbour