

L'ARCHITETTURA DELLE CITTÀ UNESCO-Chair SERIES



Società Scientifica Ludovico Quaroni

L'ARCHITETTURA DELLE CITTÀ



Società Scientifica Ludovico Quaroni

L'ADC L'architettura delle città. The Journal of the Scientific Society Ludovico Quaroni
L'ADC UNESCO Series #2: Hangzhou: from Song Dynasty Capital to the Challenge of Cultural Capital
in Contemporary China

Edited by: Xiaoling Dai, Anna Irene Del Monaco, Wenbo Yu.

Editorial Coordination: Iacopo Benincampi, Valentino Danilo Matteis.

Research directed by Anna Irene Del Monaco

direttore scientifico | managing editor

Lucio Valerio Barbera, Anna Irene Del Monaco, *Sapienza University of Rome*

comitato scientifico-editoriale | editorial-scientific board

Maria Angelini, *University of Pescara*

Luisa Anversa, *University of Rome Sapienza*

Lucio Valerio Barbera, *University of Rome Sapienza*

Yung Ho Chang, *Massachusetts Institute of Technology MIT, Boston*

Jean-Louis Cohen, *New York University NYU, New York*

Stanley Ira Halley, *Catholic University of Washington DC*

Martha Kohen, *University of Florida, Gainesville*

Jean-Francois Lejeun, *University of Miami*

Jian Liu, *Tsinghua University, Beijing*

Roberto Maestro, *University of Florence*

Paolo Melis, *University of Rome Sapienza*

Ludovico Micara, *University of Pescara*

Xing Ruan, *University of New South Wales, Australia*

Franz Oswald, *ETH Zurich*

Attilio Petruccioli, *Polytechnic of Bari*

Richard Plunz, *Columbia University in the City of New York*

Vieri Quilici, *University of Roma Tre*

Daniel Sherer, *Columbia University in the City of New York / Yale University*

Daniel Solomon, *University of California UCB, Berkeley*

Paolo Tombesi, *University of Melbourne*

comitato di redazione | executive editors

Anna Irene Del Monaco, *Sapienza University of Rome*

Antonio Riondino, *Polytechnic of Bari*

Rossella Rossi, *University of Florence*

Fabrizio Toppetti, *Sapienza University of Rome*

Ettore Vadini, *University of Basilicata*

Copyright © 2017 Edizioni Nuova Cultura - Roma

ISSN: 2281-8731; ISBN: 9788868124328.

On-line Working Papers 2015/Printed Second Edition 2017.

Cover Picture: *Hangzhou urban growth* by Valentino Danilo Matteis.

Printed with research grants, Dipartimento di Architettura e Progetto.

Sapienza Università di Roma (International Cooperation Agreements).

CONTENTS

- 5 Foreword by LUCIO VALERIO BARBERA, ANNA IRENE DEL MONACO
Hangzhou. Contemporary Challenges of a former Capital of Imperial China

West-East: Public Space in China

- 65 XIAOLING DAI, WENBO YU, HANYUN WU.
Leisure Life and Space of Contemporary Hangzhou.
From 1980 to 2014
- 79 MANUELA RAITANO
The character of traditional sites in contemporary Chinese
design projects
- 87 PAOLO VINCENZO GENOVESE, PENGFEI LI
The identity of Chinese public space from Ancient times to Contemporary
Society. The sociology of public behaviours in Chinese cities
- 127 IACOPO BENINCAMPI
China and Europe. Hangzhou and the spread of architectural *Chinoiserie*
in the 18th century

Urban Design, Urban Archaeology, Comparative studies Rome- Hangzhou

- 139 VALENTINO DANILO MATTEIS
The Fumihiko Maki *Group-Forms* applied to a case study in
contemporary Hangzhou Inner City
- 147 ALESSANDRO CAMIZ
The fragment 279 ab of the *Forma Urbis Romae*.
A proposal for the partial demolition of Regina Coeli.
- 165 ANNA IRENE DEL MONACO
Hangzhou urban form: between urban archaeology, city-positioning,
placebranding.



Hangzhou - Old views (1912-1949): from the late Qing Dynasy to the Republic of China.

Foreword

by

LUCIO BARBERA, ANNA IRENE DEL MONACO

Hangzhou. The Contemporary Challenges of a former Capital of Imperial China

This book collects writings on the urban history of Hangzhou, the capital city of Zhejiang Province, and writings on comparative and cross-cultural issues related to China and the western architectural culture. Hangzhou is a significant example for scholars interested in studying the challenges that contemporary Chinese cities with a relevant urban history should face up to recover their traditional urban identity. Especially when monuments and urban textures have been widely compromised or destroyed by the recent urban development as it happened in the last three decades in China. So that, what remains as a tangible witness of the old urban past is more related to the collective memory (traditions and old sayings) than to real tangible relics. With a present metropolitan population of about 6 million inhabitants, Hangzhou, an ancient Capital of Imperial China during Southern Song Dynasty (1127-1279), is still today one of the most important historic 'water cities' in the world, especially the West Lake area, a national and international touristic attraction.

The former oxygen industry. Industrial heritage in Xiacheng District, Hangzhou

Our introduction to Hangzhou was in two stages. Between October and December 2009 Lucio Barbera was invited by the HangZhou Tourism Group, entrusted by the Municipality of Hangzhou, to produce a technical report outlining the conceptual basis of the general master plan for the area and the historically important buildings of the former oxygen and boiler factory located in the Xia He District. The design-technical report produced by Lucio Barbera would have supported the competition process in the form of guidelines. The architectural offices involved in the restricted-procedure competition were Steven Holl Office, Herzog & de Meuron, David Chipperfield Architects. In fact, during a mid term review organized by the client, the selected participants asked the organizers more indications in terms of program and constraints. After producing the guidelines Lucio Barbera was invited to be part of the final jury chaired by Zheng Shiling and composed by Wolf Prix, Thom Mayne, Terry Riley and other architects and critics of the international scene. The competition assigned the first prize to Steven Holl. Though the local Government suggested that the Municipality promote the collaboration and the integration between the three participant architectural offices and their (very different) proposals. As far as we are able to know, no real construction work is started yet. Infact, as we understand from an article of 2011 by Iona Whittaker¹ the overall initiative in few years seems to proceed along the expected direction: the production of a new cultural complex in Hangzhou on a enormous scale as a part of a development plan by Handel Lee, the lawyer

1. Iona Wittaker, *Giant new cultural complex planned for Hangzhou*, May 2011; <http://www.ionawhittaker.com/?p=801>

and luxury developer well known for transforming historic landmarks into upscale developments. He was responsible also for the Beijing Centre for the Arts and the Commune by the Great Wall as Whittaker explains “the project, prospectively named the H&H District is a rival on a gigantic scale of the West Kowloon Cultural District in Hong Kong, Legation Quarter in Beijing, Three on the Bund pioneering luxury retailing in Shanghai² and the ware house spaces in 798, (798 Art Zone) Beijing’s famous art district, would fit easily inside these massive industrial shells – amongst them disused furnace and oxygen factories. Design of the tripartite development is to be split between three major architectural firms who competed for the commission. Steven Holl architects (New York and Beijing) are responsible for the master plan; Herzog & de Meuron (Switzerland) will design 4 museum spaces devoted respectively to Urbanism, Contemporary Architecture, Design and Fashion, and David Chipperfield architects (Berlin) a central hotel tower flanked by 10,000 square metres’ worth of ‘installation art gardens’. A curatorial program directed by Terry Riley of MoMA New York has already been finalised as a basis for the physical conception of the museum spaces.” This long quotation by Whittaker related to Mr Lee’s activity as entrepreneur is particularly useful in order to understand the challenges that historical cities like Hangzhou face in the overall transformation of contemporary China and how they and their tangible and intangible historical places become part of potential intervention to restore, rebuild and to reinvent the collective memories.

Lin'an Heritage Park of Southern Song Dynasty: Planning & Design Guidance

Nevertheless there have been further opportunities to deepen the knowledge of a intriguing city like Hangzhou. Few months after the commitments on Xiacheng District, Lucio Barbera was invited by the Hangzhou Academy (a State Company settled in Hangzhou) to form a joint group and submit design and methodology to a restricted international design competition for the *Lin'an Heritage Park of Southern Song Dynasty Planning & Design Guidance*.³ The design theme involved relevant topics in urban archaeology, heritage and preservation, urban landscape and infrastructure. This experience was particularly important to understand the city and its complex whole especially because historical relics lie invisible or have been destroyed. So the exercise of reinvention in this case was rather challenging. Italian might think that the understanding of the Roman and Imperial Fora in contemporary Rome urban scene is one of the most difficult challenge especially for a non-archaeological audience but Hangzhou would deserve surprise in this sense. The majority of the archaeological remains in Hangzhou, indeed, are not excavated (one meter low) or are probably lost because of the construction of the modern residential blocks.

Leisure Life in Hangzhou

A significant contribute to this book is the essay entitled *Leisure Life and Space of Contemporary Hangzhou. From 1980 to 2014*, a study by Xiao Ling Day and Wenbo Yu, our academic partners at Zhejiang University of Technology, with the help of Hanyun Wu. Leisure life is not only a recent issue in Hangzhou – and not only related

2. Jen Lin-Liu, *Enlivening Beijing's Legation Quarter*, <http://www.nytimes.com/2008/12/24/arts/24iht-asiafood.1.18886712.html>

3. During the elaboration of this guidelines Lucio Barbera with Anna Del Monaco and Zhai Fei were joined by Luciano Aletta, Silvia Aloisio, Mirco Barboni, Simone D'Eredità, Isabella Palermo.

to the investment of international developer like the one in Xiacheng District – but it was one of the most diffuse practice in the city past influencing the transformation of public places and urban habits also during Song Dynasty as Jacques Gernet explains in his book *Le vie quotidienne en Chine a la veille dell'invasion Mongle 1250-1276*.⁴ However the research by Xiao Ling Day and Wenbo Yu, co-editors of this book, is focused on leisure life in contemporary Hangzhou and on its shifts in many aspects through three decades and collected 58 senior citizens' personal memory of their life-long leisure life by in-depth interviews. Wenbo Yu, as experienced academic leader, and Xiao Ling Day, as emerging researcher and academicians, hosted two joint design workshops in Hangzhou with the Department of Architecture of Sapienza University and the UNESCO Chair in Sustainable Urban Quality and Urban Culture, notably in Africa of Sapienza chaired by Lucio Barbera.

Inculturation⁵ and cultural exchange

Although not all scholars agree that the city of Hangzhou, much like Venice for the characteristics of its historic layout, was effectively ruled by Marco Polo, being, the city, the last leg of the Silk Road it is certain that it was visited at the end of the thirteenth century by Italian and Arab merchants, and travelers.⁶ This is evident in the contribution to this book by Iacopo Benincampi entitled *China and Europe. Hangzhou and the spread of architectural chinoiserie in the 18th century* expressly commissioned by the curators on this topic and significantly inspired by the prominent book by Giuliano Bertuccioli and Federico Masini entitled *Italia e Cina*.⁷ Benincampi analyses the historical relationship between Italy (Europe) and the Far East (China) with a special reference to the spread of eighteenth-century *chinoiseries*, such as Ferdinando Sanfelice's ephemeral pagodas in Naples and the park-palace known as *Favorita* built in 1799 near Palermo. But other architectural masterworks beyond the ones quoted by Benincampi come immediately to the mind. The Pagoda designed by Sir William Chambers completed in 1762 as a gift for Princess Augusta, the founder of the botanic gardens, at Kew Gardens in London. The Chinese Room at Stupinigi Hunting Residence (1678-1736), near Turin, by Filippo Juvarra, which most probably was built almost in the same period of the Emperor Qianlong's hidden Palace known as "Qianlong Garden" (1776) – during the 41st year of Qianlong's 60-year reign – in the North-East part of the Forbidden City of Beijing. They look like deeply similar to each other. In Qianlong's retreat there is a portrait of Giuseppe Castiglione on horseback and there is a built-in Italian theatre. So there are exotic (Western) presences characterizing the Chinese retreat of Qianlong as the Chinese room of Stupinigi Hunting Residence the Chinese characters are imbued of Western characters as well. Even in the museum of the Amalfi Cathedral you can appreciate an elegant eighteenth-century Sedan built in carved and gilded lacquered wood and decorated in chinoiserie, produced for profane use and later donated to the Cathedral.

4. Jacques Gernet, *La vita quotidiana in Cina alla vigilia dell'invasione mongola*, Traduzione di Edoarda Masi, Edizione BUR Biblioteca Universale Rizzoli, 1983.

5 From Wikipedia entry, in particular: "This is a term that is generally used by Roman Catholics, whereas Protestants tend to use the term "contextual theology."

6. Cfr. MASINI-BERTUCCIOLI 2014, pp. 35-44.

7. MASINI-BERTUCCIOLI 2014, *passim*.

It is decorated by vegetable elements in pure Rococo and initially was attributed to the Luso-Chinese school of Macao for the headgear wear by the figurines but then recognised of a Neapolitan origin compared with similar example of 18th century. Of course the circulation work of Jesuits in these historical events is remarkable: the outcomes of Benincampi's paper demonstrates the long term existence of globalization in both direction (East and West). Indeed, the suggestion given by the curators of this book to Benincampi to deepen the book of Bertuccioli-Masini comes from the awareness that both the Italian sinologists had extensively studied and published on Martino Martini, an Italian Jesuit missionary (Trento, 1614 - Hangzhou, 1661), a pupil of Athanasius Kircher in Astronomy and in Mathematics; also his well-known fellows Matteo Ricci and Giulio Aleni learned Chinese during their long term permanence in "zhōng guó", the "middle state". Martini had taken vows in Lisbon and soon after had left for Macao where he learned Chinese arriving to Hangzhou around 1643. Besides his fundamental scientific contributes to knowledge, even more relevant and precise in geography and cartography than Matteo Ricci's – his most important work *Novus Atlas Sinensis* (1655) was translated in several languages in ancient times by Dutch printers – Martino Martini was involved in the controversy of "Chinese Rites affair" and the issue of "Christianity inculturation" meaning "the adaptation of the way Church teachings are presented to non-Christian cultures and, in turn, the influence of those cultures on the evolution of these teachings." A topic that can be particularly relevant interpreting the Eastern-Western exchanges through the urban sequence of events in the urban life of Hangzhou.

Public space, tradition, contemporary identity

If we were asked to provide a reference of the most western among the Chinese cities we would immediately think of Shanghai or Tianjin, because of their colonial past and of the western Concessions neighborhoods – that still stands and newly renovated during the last decades. Beijing and Xi'an, on the contrary, present a much stronger Chinese character in their urban form (layout and identity) due to the history of their foundations and latest re-foundations. The western character in Hangzhou, as we attempted to affirm in quoting the concept of "inculturation", is particularly evident because of the presence of western visitors that ended spending there a long part of their life there. The complex issue of public space in changing China is developed by the paper of Paolo Vincenzo Genovese and Peng Li and their paper entitled *The identity of Chinese public space from Ancient times to Contemporary Society. The sociology of public behaviours in Chinese cities*. On the same general issue and with a special focus on Hangzhou, in the paper *Leisure Life and Space of Contemporary Hangzhou. From 1980 to 2014*, Xiaoling Dai, Wenbo Yu, Hanyun Wu, describe the main episodes of urban transformation in relation to the changes in leisure venues.

Furthermore, to describe the elements of some temporary public spaces in Chinese traditional urban sites Manuela Raitano proposes the cross-reading by an Italian teaching architect trying to detect which of the traditional characters are interpreted in some contemporary Chinese architectural design and how Chinese culture can approach an authentic idea of renovation and preservation. And moreover how the value of the material nature of a building is interpreted in China if the value assigned to a *copy* indicates a clear recognition of the value of the image of a building which is regarded as being the more estimable the more often it is reproduced.

The second section of the book analyses Urban Design, Urban Archaeology, Comparative studies in Rome and in Hangzhou. From 2012 to 2014 in the framework of the trilateral scientific agreement between Zhejiang University, Zhejiang University of Technology and the Department of Architecture and Design of Sapienza University of Rome four design workshops were organized: two in Hangzhou and two in Rome. The general research theme investigated in the Roman and Chinese workshops are urban archaeology and intangible cultural heritage. The two workshops held in Rome in July 2013 and July 2014 were focused on a well know area in the historic center of Rome, between the Regina Coeli prison (along *Via della Lungara*) and Piazza della Moretta (along *Via Giulia*).

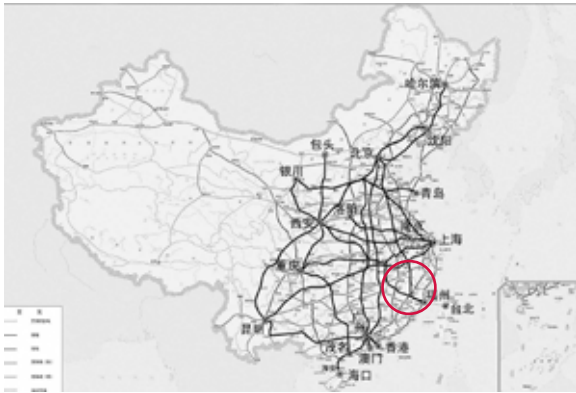
Alessandro Camiz has offered an essay that proposes a detailed analysis on the formation process of *Via della Lungara*, in particular of the block now occupied by the Regina Coeli prison, documenting the complexity in the reading of the urban texture of a city like Rome and providing a potential methodological reference to Chinese readers. The design themes of the workshops held in Rome were concentrated on Piazza della Moretta where recent excavations revealed the expected presence of archaeological remains. This choice was crucial in establishing the teaching coherence and research connection between Rome and Hangzhou as cities of urban archaeology and historic tradition.

The essay by Anna Del Monaco, drawn from the narration of the two workshops⁸ held in Hangzhou in 2012 and 2013, recalls and reflects on some significant phases of the Hangzhou urban history involving topics of water culture, urban archaeology, city-positioning and place-branding and so providing more elements regarding the research phase developed during the previous years at the Hangzhou Academy. The first workshop (2012) was focused on the design of two mixed use development in two wharf-areas along the Great Canal, Xiegun Wharf and Huizhou Wharf. The second workshop (2013) centred on the rehabilitation of traditional dwellings surrounded by high-rises in the inner city of Hangzhou at No. 224 and No. 236 of West Lake Road, a plot between Zhi Yin Ma street and Heng Yin Ma street, not far from Ling Shou temple and Ran Fang road.

Valentino Danilo Matteis's paper deals with this second design issue and describes the application of Fumihiko Maki's theories of *collective forms* to the renovation of the historic urban tissue of the inner-city of Hangzhou. The design approach combines a traditional courtyard house typology with sequential and flexible schemes and was produced during the 2013 workshop at Zhejiang University of Technology.

Hangzhou is a very special city for Italian architects who want to learn about historical and contemporary architecture and about the urban challenges in contemporary China. There are further issues that we would like to investigate about Hangzhou in the future and in order to do that, it would be interesting to involve further experts such as archaeologists and hydrologists given the special presence of historical relics, water and several issues which still deserve a better enhancement.

8. The workshops in Rome and Hangzhou were lead by prof. Lucio Barbera, Wen bo Yu, Anna Irene Del Monaco, Xiaoling Dai, Wu Yong. The survey phases of the workshops were tutored also by Manuela Raitano (2012) and Francesca Romana Castelli (2013). Attilia De Rose offered her fundamental expertise in administrative and managing issues.



Hangzhou - the map of China

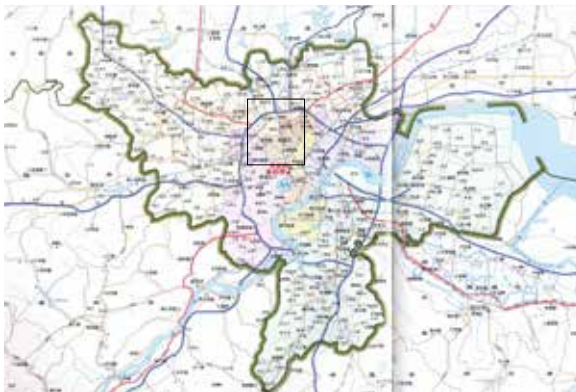
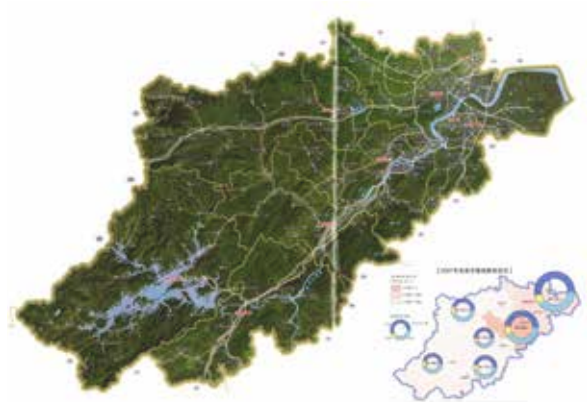


Hangzhou - Shanghai - Suzhou

Hangzhou overview:
national,
regional,
provincial,
municipal
levels



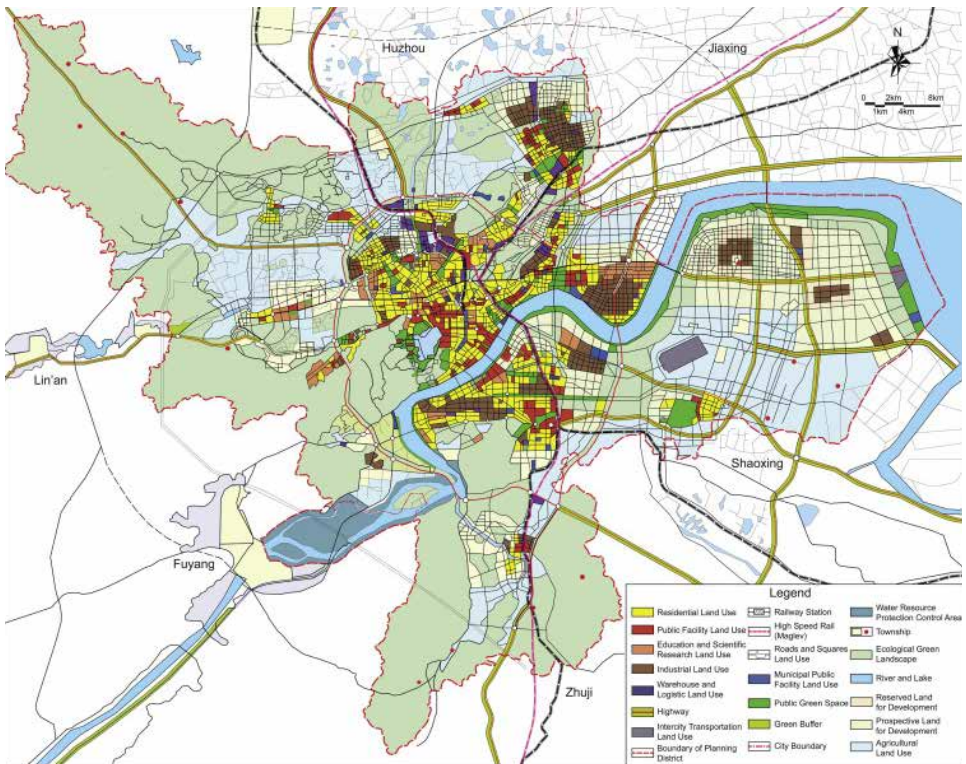
Hangzhou Province map.



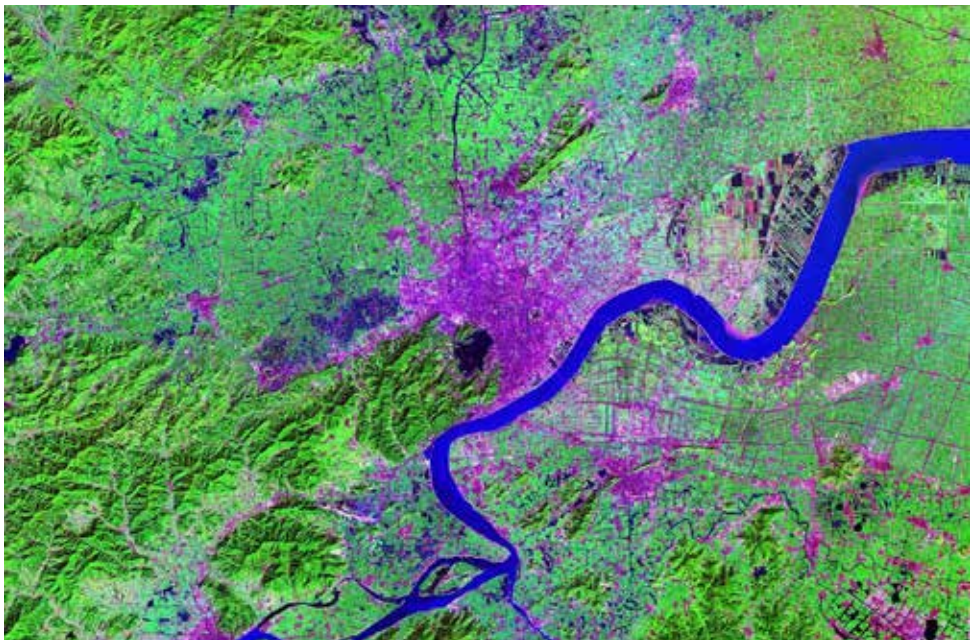
Hangzhou Municipality map.



Hangzhou urban development.



Hangzhou - Master Plan 2007-2020.



Hangzhou - Satellite map.



Hangzhou - Google earth.



TABLE 01 - XIACHENG DISTRICT

Project for the preservation and the functional development of the former Oxygen Industry in Hang Zhou, **Xiacheng district**

First Report to the Hang Zhou Tourism Group

by Lucio Valerio Barbera

with the collaboration of Anna Irene Del Monaco, Zhai Fei.

This Report summarizes the considerations and suggestions about the possible functional planning of the Plots and Buildings in the centre of the Xiacheng urban district, entrusted by the Hang Zhou Municipality to the Hang Zhou Tourism Group for their development and preservation. It takes into account the bid documents given to the Architect called to participate to the Design Competition for the same Plots and Buildings.

the visits to the areas (October 2009)

the discussions held in Han Zhou with the responsible of the Hang Zhou Tourism Group (October 2009)

Plots and Buildings are presented in three groups corresponding to the three different locations of them. The last page of the report presents the overall summary of functions and quantities.



First group of Plots and Buildings

It includes:

two industrial buildings to be preserved;
the areas around them; two of the Plots assigned to commercial functions by the Hangzhou Master Plan.

This group of plots and Buildings are intended to be directly connected to the Underground Train Station to be realized under the Dong Xin Street

With reference to the present report the Plots and Buildings are indicated as:



plot A1
plot A2
plot B
building C1
building C2
plot C3

NOTE

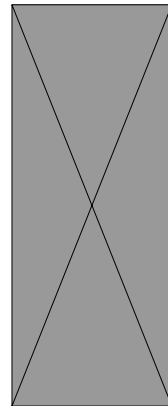
- Plots A3 indicate the bridges to be built between the commercial buildings;
- Plot C3 indicates the area to be assigned to general logistics and parking as presented in the following tables; however within the area of the plot C3 the Hangzhou Master Plan indicates the possibility of realizing a minor building to be assigned to commercial functions. In the present proposal this building is not directly taken into consideration because the overall amount of the commercial area proposed for the First, Second and Third Groups of Plots and Buildings is considered a maximum for the whole project balance.

Second group of Plots and Buildings

It includes two of the Plots assigned to commercial functions by the Hangzhou Master Plan. With reference to the present report

the Plots and Buildings are indicated as:

Plot D1
Plot D2

*Third group of Plots and Buildings*

It includes seven Buildings to be preserved and the areas around them. With reference to the present report the Plots and Buildings are indicated as:

Building E1
Building E2
Building E3
Building F1
Building F2
Building G
Building H
Plot I



TABLE 01 - XIACHENG DISTRICT

Dimensioning the project: generalities

The functional dimensions of the project are based on

- 1) the indications of the Hangzhou Master Plan;
- 2) the location of the Plots and the Buildings within the urban, infrastructural frame;
- 3) the form and the structure of the existing Buildings to be preserved;
- 4) the relations among the different Buildings and Plots;
- 5) the public accessibility to the Plots and Buildings;
- 6) the parking possibilities *within* the areas included in the project.

In particular the dimensioning of the parking areas is crucial and somehow can affect the building possibilities allowed by the Hang Zhou Master Plan. The use of some plots as green areas or as highly frequented locations for mass events (concerts, popular shows etc.) limits the possible parking facilities *mainly* to underground garages. Therefore it is important to balance the cost of the construction of the necessary parking places with the general, economical value of the project taking into consideration that the standard cost per sqm of underground garages grows with the increase of the number of the underground floors while their efficiency decreases.

In this framework, the present report intends to present a functional and dimensional hypothesis directly based on the first five above mentioned points and on *an assumption* regarding the sixth point that can be summarized as it follows:

- an important part of the people will reach the areas of the project using the Underground Train and the other Public Transportation Systems; naturally the number of people which will use the Underground Train will grow together with the expansion of the Underground Train Net and with the general improvement of the Urban Public Transportation System;
- it is important to consider that *at least a part of the underground garages is a common facility* serving all the functions forecast in the whole project. By this way – for instance – the same parking area used for commercial activities during the working hours can be used for mass events or movie theatres during the evening and night hours;
- therefore, the underground garages should be considered as much as possible *one parking system*, so as to balance the different parking possibilities of the different Plots and Buildings;
- an internal mechanized pedestrian system should be considered indispensable both for:
 - connecting all the commercial, cultural, residential and recreational activities of the project;
 - making effective the integration of the parking system.

With these assumptions, the present report considers that the *general ratio* between gross underground garage area and gross usable area can be 30% (i.e. 0,30 sqm of gross garage area per 1,00 sqm of gross usable area). While this ratio can allow one private car-park per apartment (25 sqm of garage area per 83 sqm of dwelling) it can be considered sufficient also for the other functions (commercial, bureau departments, art galleries etc.) taking into consideration the integration among all the garages of the project and the *turn over of the activities* during the day and the week (week-ends and working days). A different and greater ratio is used for the areas usable for mass events, like movie theatres, concerts, popular shows etc. In this case the ratio between gross garage area and gross usable area can be 200% (i.e. two sqm of gross garage area per one sqm of usable area) assuming that half of the audience people will use the Underground Train and that an important part of the garages planned for other functions can be alternatively used for mass events usually organized off working hours or working days.

As for the General Table of 'Plots, Buildings, Functions and Parking areas' presented at page...the overall parking area is supposed to be more than **350.000 sqm** (i.e. approximately **14.000 car-parks**) for more than **one million sqm of usable area** (including new and preserved buildings).

Main Functions

The main functions forecast in the present report are:

- mixed development, including bureau departments,
- commercial, including commercial malls, general stores, shops arcades and their bureau, service spaces and day storage; it is intended that the main, long term storage for the commercial departments is located in specialized, peripheral centres).
- mixed development, including bureau departments, professional premises, hotels, apartment hotels and residences, apartments;

- theatre, including theatre, cinema, and mass entertainments;
- loft, including special shop arcades, maisonettes, private studios;
- cultural, including gallery rooms, exhibition halls or outdoor landscape - for sculpture - where the art is exhibited
- recreational, including fashion shows, indoor and outdoor sports facilities and sports events, special restaurant palaces, *discothèques*.
- connecting mall, including commercial activities and the mechanized, pedestrian main connection through all the area of the project;
- green and parking, including areas to be designed as open space and realized over underground garages;
- general logistic, including open air logistic areas linked or not linked with underground garages
- parking, including garages under buildings, internal circulation of garages, logistic underground areas and circulation;

First Group of Plots and Buildings

Note: for a more detailed break down of figures go to General Quantities Diagramme

Plots A1, A2, (A3)

The three Plots are intended to form *the main commercial and mixed development block of buildings* of the whole project. The direct connection with the Underground Train Station is very favourable to make out of this important block the very *commercial and business core* of the entire development and the 'main gate' of it.

The Plots **A1** and **A2** are separated by a new street and a canal, but can be effectively linked through the underground services and by a bridge, conceived as an actual commercial building of two or more floors (A3), crossing the gap between the two Plots. A second commercial bridge (A3) should be conveniently built between the Plot A1 and the Plots D1 - included in the Second Group of Plots and Buildings - so as to realize a functional continuity along the whole length of the project. The reference for the commercial bridges (A3) can be found in the historical bridges of Venice (Rialto Bridge), Florence (Ponte Vecchio Bridge), London (the London Bridge, demolished in 1838). In modern times many are the examples; among them the Kenzo Tange 'Fuji T.V.' in Tokio and the Steven Holl bridges of the residential complex 'Moma third Phase' in Beijing are very suitable to illustrate our idea that, however, forecasts a couple of bridges conceived as wide commercial malls. (see examples in tables 1, 2, 3, 4, 5, 6, 7)

Taking into consideration the maximum height allowed by the Hangzhou Master Plan (110 m) the functions of the new buildings to be realized on Plots A1 and A2 are:

- **Commercial:** underground 1 and from floor 1 to 3 99.706 sqm

Note: - the underground 1 is partially occupied by the Access Hall to the Underground Station

- the commercial bridges are at the floor 2 and 3

- **Mixed development:** from floor 4 to 25 415.483 sqm

Note: - it is intended that the building above the third floor occupies two third of the Plot area.

- **Parking:** from underground 2 to 4 99.716 sqm

Note: - the main part of the underground 2 is occupied by service circulation and logistic areas.

Plot B

It is a wide area to be left almost free of constructions, destined and to be designed as an area furnished for **open-air mass entertainments, theatre, cinema and recreational activities**. Four underground garage floors complete the parking facilities of Plots **A1** and **A2**.

The functions to be realized in the Plot are:

- **theatre, cinema, recreational activities and mass entertainments:** ground floor 13.000 sqm
- **parking** underground from 1 to 4 52.000 sqm

Building C1

It is an industrial building of the former Oxygen Industry. Its dimensions, form and location – very close to Plot A2 and to the Underground Station – suggest to utilize its space for commercial functions. The internal

TABLE 01 - XIACHENG DISTRICT

height of the building (15 m) can allow more than two floors of commercial areas. But taking into account the necessity of including within the building also the short term storages and the possibility to enrich the commercial malls with some double height spaces, we can realistically reckon on an area corresponding to two entire floors. It is intended that presently it is not possible to forecast any underground service or storage. Only an accurate structural survey will clarify the matter. Therefore, the future functions of this building shall depend on the parking facilities of the near Plots and Buildings. From the functional point of view it would be very convenient to directly link Building C1 with Building A2 and A1 (with canopies or galleries) to form a wider commercial complex.

The functions to be realized in the **Building C1** are:

• commercial	ground and floor 1	17.400 sqm
---------------------	--------------------	------------

Building C2

It is an industrial building of the former Oxygen Industry. Its dimensions, form and location – the building is very close to the Plot B, destined to open air mass entertainments (see above), and to the Plot C3, destined to General Logistic Functions (see after) - suggest to utilize and organize its space as a modular, multimedia environment, apt to different spectacular events, from movie theatres to experimental theatre, from popular shows to mass events. The height of the building and the presence of ‘gantry cranes’ sliding all along the naves, makes the building suitable for the mobile installations necessary to mount and dismount - in short time - perfectly working different functional organizations and spaces of different dimensions. The most suitable example is, naturally, the Berlin (Germany) **Shaubühne**, the most technically advanced modern theatre of Europe. But the technical facilities and the adaptability of any modern Cinema or TV Studio can be taken as an example. In this light the Building C2 could become the maybe most technically advanced multimedia, modular theatre of the world. Its integration with the open-air activities of Plot B (see above) will enforce and enhance its special role as one of the leading entertainment focal points of China.

The functions to be realized in the **Building C2** are:

• theatre, cinema, recreational and mass entertainments;	ground floor 1	12.050 sqm
--	----------------	------------

(see examples in table 8)

Plot C3

It includes the areas that form a buffer between the **Buildings C1-C2** and the town. Its easy accessibility from secondary public streets and its location in the ‘outskirts’ of the First Group of Plots and Buildings, makes it convenient to transform these Plot into the most important logistic and garage area of this part of the project taken into account the fact that both building C1 and Building C2 while being in need of important quantities of car-parks and of logistic facilities, cannot have underground expansions because of the special preservation goals of their project. However it should be remembered that the Hang Zhou Master Plan indicates a minor new building to be realized in a corner of the Plot C3. But in the present report the possibility to realize this new building is not taken directly into consideration: certainly it could be possible to allocate in this new building a minor part of the built area forecast in the report, should a special convenience arise; but at this stage of the study it doesn’t seem necessary to increase the overall quantities (built areas and parking spaces) of the project.

The functions to be realized in the Plot C3 are:

• general logistic facilities and service parking	ground floor	21.703 sqm
• parking	underground from 1 to 4	86.812 sqm

Second Group of Plots and Buildings

Note: for a detailed list of quantities go to FQT, ‘Functions and Quantities Table’ in the last page.

Plots D1 and D2

The two Plots are destined by the Hang Zhou Master Plan to commercial and mixed functions. Located along the Dong Xin Street they form the natural link between the Plots and Buildings of the First Group and the Third Group of Plots and Buildings. In principle the maximum height of the new buildings (110 m) could allow approximately 30 floors above the ground. In the present report, taking into consideration the overall dimension of the project, the narrow transversal dimension of the plot, the functional limits given by the proximity of the main street and of the canal – which constraint the plots along both sides – it is suggested a more limited solution in which:

the commercial areas occupy the full extension of the plots at the second, third and fourth floor above ground, while only half of the first floor (corresponding to ground floor) is occupied by commercial functions, the other half being destined to:

car accessibility to underground garages and logistic facilities;

open malls facing the main street (and possibly the canal)

the built area destined to mixed functions above the fourth floor is reduced to 50% of the plot area. Being the maximum height of the buildings 110 m as for the Master Plan, the designers can more freely adopt different architectural configurations.

With the above mentioned **assumptions**, the functions of the new buildings to be realized on Plots **D1** and **D2** are:

- **Commercial:** from floor 1 to 4 88.067 sqm
Note: - the floor 1 is partially occupied by the garage entrances and by an open pedestrian mall facing the main street (and the canal embankment)
- **Mixed development:** from floor 5 to 25 313.525 sqm
Note: - it is intended that the building above the fourth floor occupies 50% of the Plot area.
- **Parking:** from underground 1 to 3 75.486 sqm
Note: - the main part of the underground 1 is occupied by service circulation and logistic areas.

General Note on public accessibility:

the location of Plots D1 and D2 along the main street is very suitable for public bus-stops. Moreover a direct link to the Underground Train Station can be proposed not only for reaching the main public transportation means, but also for realizing an underground link with the First Group of Buildings and Plots.

Third Group of Plots and Buildings

Note: for a detailed list of quantities go to FQT, 'Functions and Quantities Table' in the last page.

It includes the majority of the Industrial Buildings to be preserved. The present accessibility to the area is poor; therefore, the construction of the planned new street along the east side of the area is of primary importance. For the same reason the realization of a mechanized pedestrian boulevard through the new commercial buildings for connecting them with each other and with the main public transportation system is vital for the success of the entire investment.

Taking into consideration the location and the dimension of the existing buildings, they can be divided in three sub-groups. Some very important courtyards or open-air bays enrich the buildings. A special plot (Plot I) is included in the area of the Third Group.

Buildings E1, E2, E3

They are the smallest among the buildings of the Third Group, located very close to the east embankment of the canal. Therefore they can be easily connected with the Second Group of Plots and Buildings through the mechanized pedestrian boulevard (see above), which will overpass the canal as a commercial bridge ending – (see general plan) – just among the E buildings.

The relatively small spans and limited heights of the bearing structure suggest to use these buildings for shops, shops arcades, private premises and lofts, including special dwellings. The percentage of the different functions can be decided only through an accurate feasibility study involving the whole financial and economic strategy of the entire investment. The adaptability of these buildings to functions and activities that do not demand a very complex management or a too heavy financial engagement is nevertheless weakened by the necessity to previously realize an easy and convenient public and private access. Therefore, at the present stage of the study, the functional transformation of these and of all the other buildings of the Third Group seems to be bond to a second phase, when the Second Group of Buildings - with its mechanized pedestrian boulevard - and the east public street will be realized. A less effective – thou less expensive - connection will be provided by a new bridge across the canal to be build between the Plot B2 and B2, as it is forecast by the Municipality Master Plan.

With the above mentioned constraints the functions of the new buildings to be realized on Plots **E1**, **E2**, **E3** are:

- **loft** (shops, premises, special dwellings) 15.560 sqm
Note: the total ground area of the three buildings is 7.780 sqm. Their height is suitable, in some limited

TABLE 01 - XIACHENG DISTRICT

part of the buildings, to host three floors of new construction. But, taking into consideration functional constraints as the natural-light necessity of a dwelling and the normal limitation of its width – special as a dwelling-in-a-loft could be – here it is suggested to consider – at the utmost – an area not exceeding two complete floors.

Buildings F1, F2

The two buildings, already linked with each other by a functional bridge, stand along the South side of the central boulevard of the Third Group of Plots and Buildings. They have very different form and dimension but are very similar in height and architectural features. Both present front elevations with three levels of wide windows and could be easily transformed in three floor buildings without modifying their architectural, external aspect. An open, green courtyard facing south completes the complex of the two buildings. With reference to international examples the complex could be the most appropriate place for a grand recreational centre. In particular the Building F2, the wider of the two, could be organized as a multi-level discothèque, at each level a different style offered to different social targets and to the different juvenile, musical tastes: from metallic to disco, from jazz to karaoke. Naturally the discothèques will be furnished with café, lounges and maybe little restaurants, but the great gourmet restaurants organization shall be set in Building F1; the dimension and the height of this building suggest the possibility to find in it the most appropriate accommodation for a series of different restaurants each offering the cultural and sensual enjoyment of different regional, national and international cuisines. The restaurants shall be completed with lounges, library, conference rooms. In this vision the open courtyard can be either the place in which to arrange open-air restaurants or a green arena in which to expand the activities of the discothèques.

With the above mentioned programme, the functions of the new buildings to be realized on Plots **F1** and **F2** are:

Building **F1**:

- **Commercial** (Centre for the international *culture of the cuisine*: restaurants, lounges, library, conference rooms, kitchens and storages) 5.460 sqm

Note: it is intended that the new functions of building F1 will be accommodated on three complete floors (floor area of each: 1.820 sqm)

Building **F2**

Commercial (*multi-discothèque centre: discothèques, lounges, café*) 15.800 sqm

Note: it is intended that the *multi-discothèque centre* can be developed on three levels. Nevertheless, taking into account the architectural and functional necessity of double or triple height halls, fire escape stairs etc. the functional area is limited to the dimensions of two complete floors (floor area of each: 7.900 sqm)

General Note: the two Buildings F1 and F2 and their courtyard presently have the same poor public accessibility of the Buildings E. At present they, together with all the building belonging to the Third Group, seem to be bound to a second implementation phase, when the public road network will be completed.

Buildings G, H

The two buildings stand along the North side of the central boulevard of the Third Group of Plots and Buildings. Both have wide internal naves of different dimensions, suitable for the realization of more than two floors of new functional areas and for a variety of rooms and halls. When the public road network around the Third Group of Plots and Buildings will be realized, both the buildings could be rationally fed by service lanes running along their North sides (see general plans) and by logistic areas to be set along the service lanes. In this favourable situation both buildings can be destined to important mix of functions, which would include temporary and permanent exhibitions, mounting and dismounting set-ups (the setting-up being intended what can be arranged in gallery rooms, exhibition halls or outdoor landscape - for sculpture - where the art is exhibited; but also fashion shows and indoor and outdoor sports events).

Therefore the functions of the new buildings to be realized on Buildings **G** and **H** are:

Building **G**:

- **cultural**, including gallery rooms, exhibition halls or outdoor landscape - for sculpture - where the art is exhibited. Halls for auctions and art sales, special services and safes for collectors; 32.000 sqm

Note: the Building G is the biggest among the existing industrial buildings to be preserved. Its ground area is 16.000 sqm. In its naves the new functions can be developed on three levels. Nevertheless, taking into

account the architectural and functional necessity of double or triple height halls, fire escape stairs etc. the functional area is limited to the dimensions of two complete floors.

Building H: The Building, which is formed by beautiful, wide naves of different dimension should be conceived as a special complex dedicated to sports, to the culture of personal health and beauty, to healthy recreational activities, to the sport fashion which in our time exerts so much influence onto the personal and collective taste and shapes the common behaviours. The centre of the new environment should be the water and the water sports; in a town as Hang Zhou the water represents to the utmost the cultural landscape. The building encompasses a sort of bay facing South, which could be arranged as a water garden, with swimming pools of imaginative shape linking the outdoor space to the indoor sports hall;

• **recreational**, including indoor and outdoor sports facilities and sports events, fashion shows, SPA (health clubs), specialized commercial halls and shops; 22.300 sqm

Note: the ground area of Building H is 11.150 sqm. In its naves the new functions can be developed on three levels. Nevertheless, taking into account the architectural and functional necessity of double or triple height halls, fire escape stairs etc. the functional area is limited to the dimensions of two complete floors.

Plot I

It includes the central boulevard that goes across the Third Group of Plots and Buildings. It is flanked by the Buildings F1, F2, G and H. It starts at the East Gate (main entrance from the new east road) therefore the Plot I is very important for the general accessibility of the area (but it doesn't directly reach the canal being hindered by the near plot of the public school). Presently it is a tree-lined street and in the future arrangement shall maintain and enhance its character as a major landscape feature of the area. However this is the best – if not the only - area for realizing an important parking service for all the main buildings of the Third Group. Therefore its new design should take into consideration the construction of an underground multi-storey car park and the realization of a new interesting landscape on the ground. It should be an artificial landscape in which water, stones and green could build up an integrated environment together with the courtyards and open-air bays around the buildings.

The functions of the Plot I are:

• **parking:** 47.730 sqm = 1909 cars

Note: - the garage includes three underground floors.

-The gross area per car is 25 sqm

Designing the open spaces

At this stage of the study it is not possible to define in sketches, drawings or diagrams the complete set of the open spaces, which will constitute the actual connective tissue among the buildings, both new and existing. Nevertheless some general indications can be given with reference not only to the main open-air recreational Plots – Plot B and Plot I – but also to the other minor open spaces that enwrap all the buildings. Some of these open spaces are dedicated to logistic functions and to service tracks, but all the others can be conceived as a continuous network of pedestrian paths and open areas including – of course - the major recreational Plots. It cannot be excluded that a part of this network could be covered with non permanent or permanent canopies realized either with traditional materials, like cloth, wood and stone, or with materials of more modern technologies, like steel, aluminium and synthetic materials. It will be of the utmost importance to furnish the major and minor open spaces and pedestrian paths not only with the normal light fixtures but also with the permanent elements of a theatrical electric and sound system. In other words the whole network of the open spaces should be considered an adjunctive, spectacular enrichment to the already very rich palette of functions to be set inside the different buildings. In this report already some specific functions have been indicated as conveniently and naturally expanded – or expandable - in the open space close to the buildings (see the possible functional relations between Building C2 and Plot B, between Building F1 and its courtyard and between Building H and the bay enclosed between its wings). But it is important to care about the aspect, the furniture and the technical fixture of any secondary strip of open space; entering the wide areas in which imposing new buildings and well preserved old ones will form a spectacular environment should mean to be received and accompanied - all along the strolling about - by a continuous, friendly, exciting web of avenues, boulevards and alleys in which light and sound can build up a tissue of continue, mild sensations and – time by time - unexpected great events.

TABLE 01 - XIACHENG DISTRICT

Summary of Tables

Tables 17, 18, 19, 20: The images present an important redevelopment project of a famous industrial building in Italy (Lingotto industrial building in Turin) that is a very good example of how preservation and renewal can be part of the same programme for enhancing urban quality and economy.

Tables 1, 2, 3, 4, 5, 6, 7: They illustrate the complete palette of functions and the main technical features of the new buildings A1, A2, D1, D2, through some memorable examples. The tables 1 and 2 only recall the attention on the high standard that general stores and hotels can/must reach when managed as part of the modern identity of an important Town (Harrods Store in London and Hudson Hotel in New York). Tables 3 and 4 are intended to compare the idea of the mechanized Connecting Mall with some famous and singular public transportation system (the escalators and *tapis roulantes* system to reach the Mid Level in Hong Kong and the pedestrian system – Linear Park – under construction in New York on the structures of the old High Line). Tables 5, 6, 7 illustrate some examples of modern Bridges or Fly-over realized in Japan – architect Kenzo Tange – and in China – Architect Steven Holl and Rem Koolhaas; this last examples stads among the others either to demonstrate the feasibility of big, impending structures with the technology of our time, or the strong formal impact of such kind of structures onto the urban landscape, favourable to building up the identity of a great investment.

Table 8: It illustrates the most famous example of modern theatre, fully transformable and adaptable to many events of different style and dimension (*the Schaubühne in Berlin – Germany*). Note that the Schaubühne Theatre was realized as a transformation (1981) of an older wide building designed by the architect Enrich Mendelshon in the year 1928.

Table 9: It presents a residential unit that illustrates - especially in the cutaway isometric cross section - a possible combination of dwelling units and private premises following some strong sustainable principles. An interesting example for the riqualification of Building E1, E2, E3.

Table 10: A very good example of a *Gourmet Restaurant Palace*, realized in Rome – Italy – rehabilitating an old industrial, multi-storey building.

Table 11: An example of *multiple-discothèque* realized in New York rehabilitating an old industrial building

Tables 12, 13, 14: The most famous examples of successful and fascinating utilization of old industrial buildings as art galleries, museums and artists' studios (London, Rome, Beijing)

Tables 15, 16: The most famous reference for an urban aqua-park enriched with gymnasiums, libraries, gardens, internal and external pools, spaces and facilities for open-air events is certainly the old model of the Roman Thermal Baths. A modern way to realize an *aqua-park* can be enjoyed in the American *aqua-parks* like Typhoon Lagoon in Orlando – Florida – whose conceptions can be conveniently grafted onto the classical idea of Thermal Baths.

Introductory Note to FQT: 'Functions and Quantities Table'

The FQT summarizes the Functions and the Quantities expressed in square metres "sqm".

The first column presents the name of each plot or building. Thee content of the other columns is the following:

- A. building area; i.e. area within the perimeter of an existing building or of a building plot
 - B. number of the floors above ground;
 - C. number of the floors underground;
 - D. gross built area; sum of gross sqm of all the floors after the implementation of the project either in the new buildings or in the buildings to be preserved;
 - E. minimum ratio between parking area and gross area; multiplied for the gross built area (point D) it indicates the minimum amount of parking space that should be realized;
 - F. minimum amount of parking space that should be realized;
 - G. the actual parking area realizable in the project following the assumptions of the present Report;
 - H. difference between the the actual, realizable parking area and the minimum amount of parking space that should be realized
- Note: For a more detailed discussion see the Report.

FQT Functions and Quantities Table

Plots & main functions	A - Building Area	B - Floors above ground	C - Floors underground	D - Gross built Area	E - Parking area/ gross area Ratio	F - Requested Parking Area	G - Realizable Parking Area	H - Difference between F and G	
First Group									
A1 commercial	10.316	3	1	41.264	0,30	12.379			
mixed development	6.877	25		171.933	0,30	51.580			
TOT				213.197		63.959		41.264	
A2 commercial	14.813	3	1	58.452	0,30	17.536			
mixed development	9.742	25		243.550	0,30	73.065			
TOT				302.002		90.601		58.452	
A3 commercial bridges	5.000	2		10.000	0,30	3.000			
TOT				10.000		3.000			
B theatre, cinema and mass entertainments	13.000			13.000	2,00	26.000			
TOT				13.000		26.000		52.000	
C1 commercial	8.700	2		17.400	0,30	5.220			
TOT				17.400		5.220			
C2 theatre, cinema and mass entertainments	12.050	1		12.050	2,00	24.100			
TOT				12.050		24.100			
C3 general logistic	21.703			21.703					
TOT				21.703				86.812	
TOT functions A, B, C,				567.649					
TOT parking A,B,C						212.880	238.528	25.648	
Second Group									
D1 commercial	8.720	3,5		34.020	0,30	10.206			
mixed development	6.880	25		121.500	0,30	36.450			
TOT				155.520		46.656		29.160	
D2 commercial	15.442	3,5		54.047	0,30	16.214			
mixed development	7.721	25		193.525	0,30	57.908			
TOT				247.072		74.122		46.326	
TOT functions D				402.592					
TOT parking D						120.778	75.486	-45.292	
Third Group									
E1 loft (shops, premises, special dwellings)	2.400	2		4.800	0,30	1.440			
TOT				4.800		1.440			
E2 loft (shops, premises, special dwellings)	3.000	2		6.000	0,30	1.800			
TOT				6.000		1.800			
E3 loft (shops, premises, special dwellings)	2.380	2		4.760	0,30	1.428			
TOT				4.760		1.428			
F1 commercial	1.820	3		5.460	0,30	1.638			
TOT				5.460		1.638			
F2 recreational	7.900	2		15.800	0,30	4.740			
TOT				15.800		4.740			
G cultural	16.000	2		32.000	0,30	9.600			
TOT				32.000		9.600			
H recreational	11.150	2		22.300	0,30	6.690			
TOT				22.300		6.690			
I green and parking	15.910			15.910					
TOT				15.910				47.730	
TOT functions E, F, G, H				91.120					
TOT parkings E, F, G						27.336	47.730	20.394	
Grand Total									
GENERAL TOT functions				1.061.361					
GENERAL TOT parking						360.993	361.744	751	

FQT Functions and Quantities Tables by Lucio Valerio Barbera.

TABLE 01 - XIACHENG DISTRICT

First Report to the Hang Zhou Tourism Group - former Oxygen Industry Xiacheng district
by Lucio Valerio Barbera with the collaboration of Anna Irene Del Monaco, Zhai Fei.



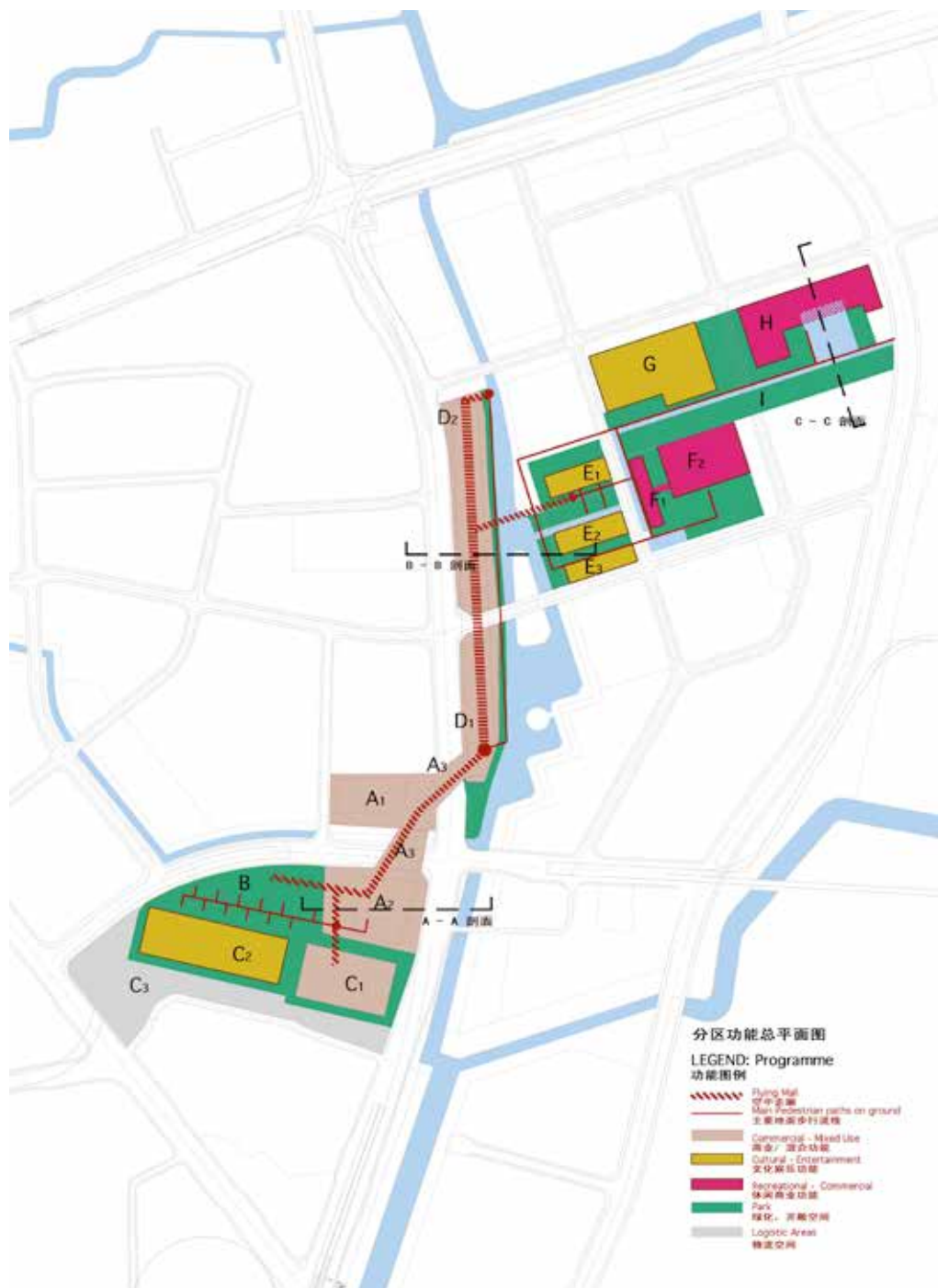
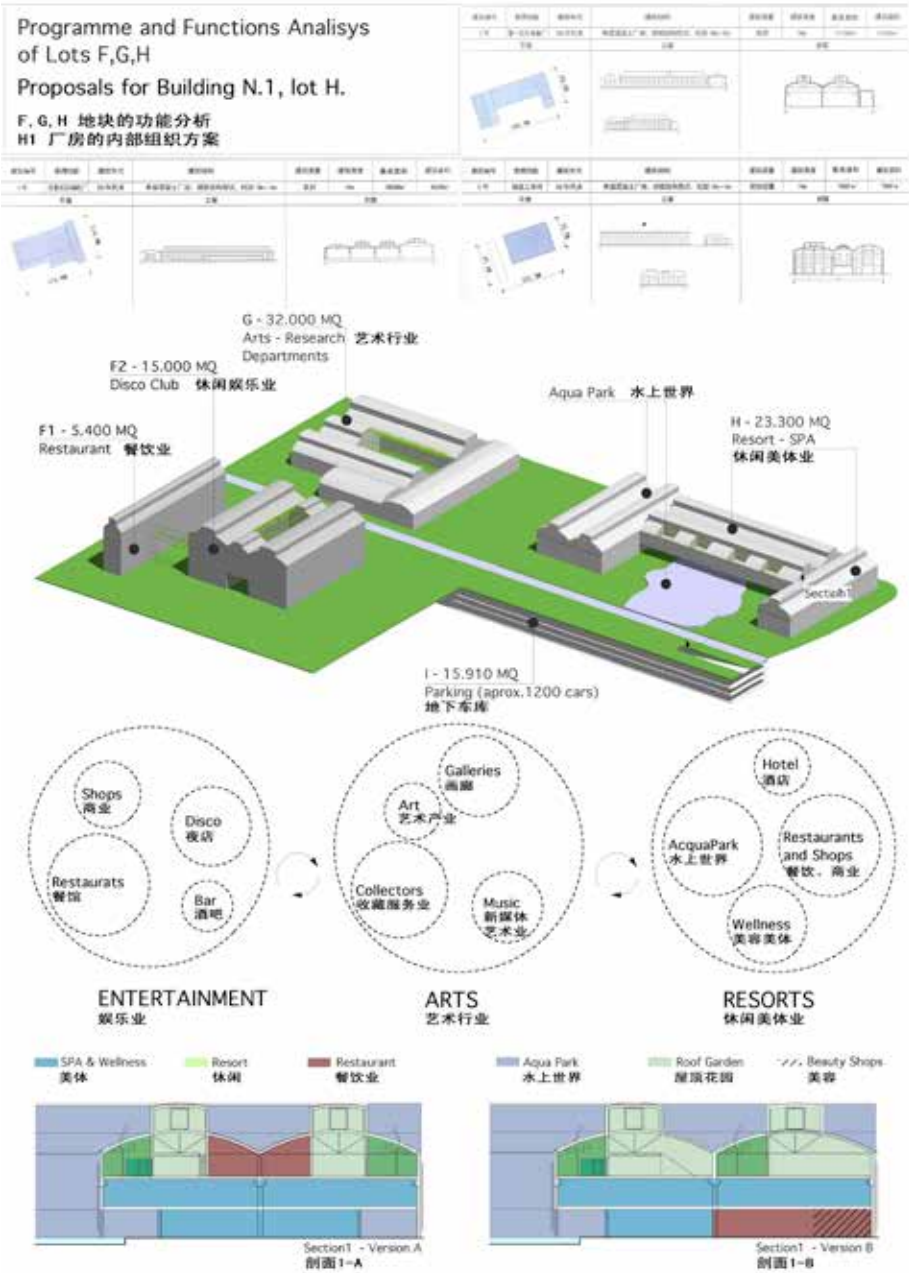


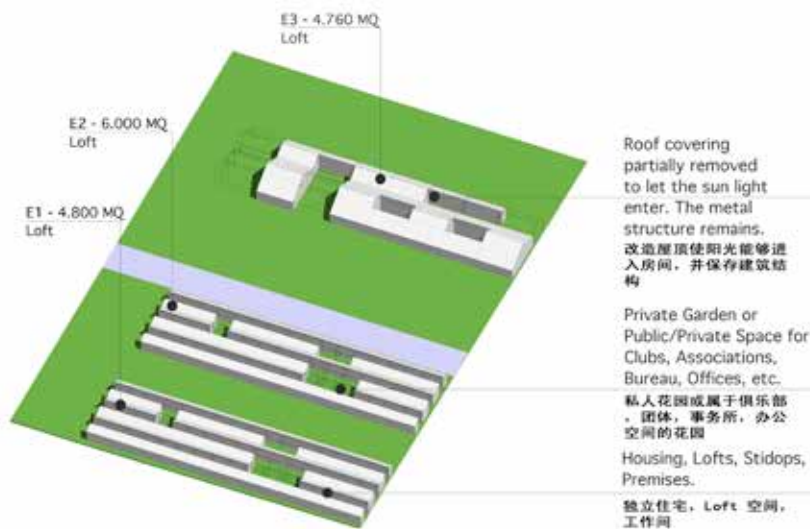


TABLE 01 - XIACHENG DISTRICT

First Report to the Hang Zhou Tourism Group - former Oxygen Industry Xiacheng district
by Lucio Valerio Barbera with the collaboration of Anna Irene Del Monaco, Zhai Fei.



Programme Analysis of Lots E1, E2, E3				E1, E2, E3 功能分析			
建筑类型	建筑规模	建筑年代	建筑现状	建筑类型	建筑规模	建筑年代	建筑现状
工业建筑	约 10000 平方米	约 1950 年	现状为工业建筑，改造为住宅、商业、文化、娱乐、办公、居住、混合用途	工业建筑	约 10000 平方米	约 1950 年	现状为工业建筑，改造为住宅、商业、文化、娱乐、办公、居住、混合用途
							
工业建筑	约 10000 平方米	约 1950 年	现状为工业建筑，改造为住宅、商业、文化、娱乐、办公、居住、混合用途	工业建筑	约 10000 平方米	约 1950 年	现状为工业建筑，改造为住宅、商业、文化、娱乐、办公、居住、混合用途
工业建筑	约 10000 平方米	约 1950 年	现状为工业建筑，改造为住宅、商业、文化、娱乐、办公、居住、混合用途	工业建筑	约 10000 平方米	约 1950 年	现状为工业建筑，改造为住宅、商业、文化、娱乐、办公、居住、混合用途



E1: 90 Loft (60mq each) or 45 lofts (120 mq each) or 25 lofts (240 mq each) or MIX

E2: 90 Loft (60mq each) or 45 lofts (120 mq each) or 25 lofts (240 mq each) or MIX

E3: 80 Loft (50mq each) or 32 lofts (300 mq each) or MIX

E1, 90间每间60平米, 45间120平米, 25间240平米的Loft空间

E2, 90间每间60平米, 45间120平米, 25间240平米的Loft空间

E3, 80间每间50平米, 32间300平米

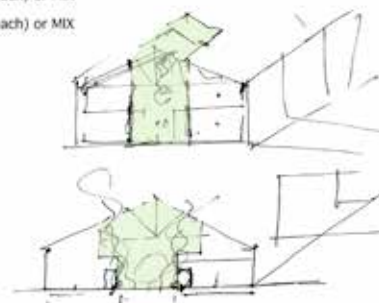
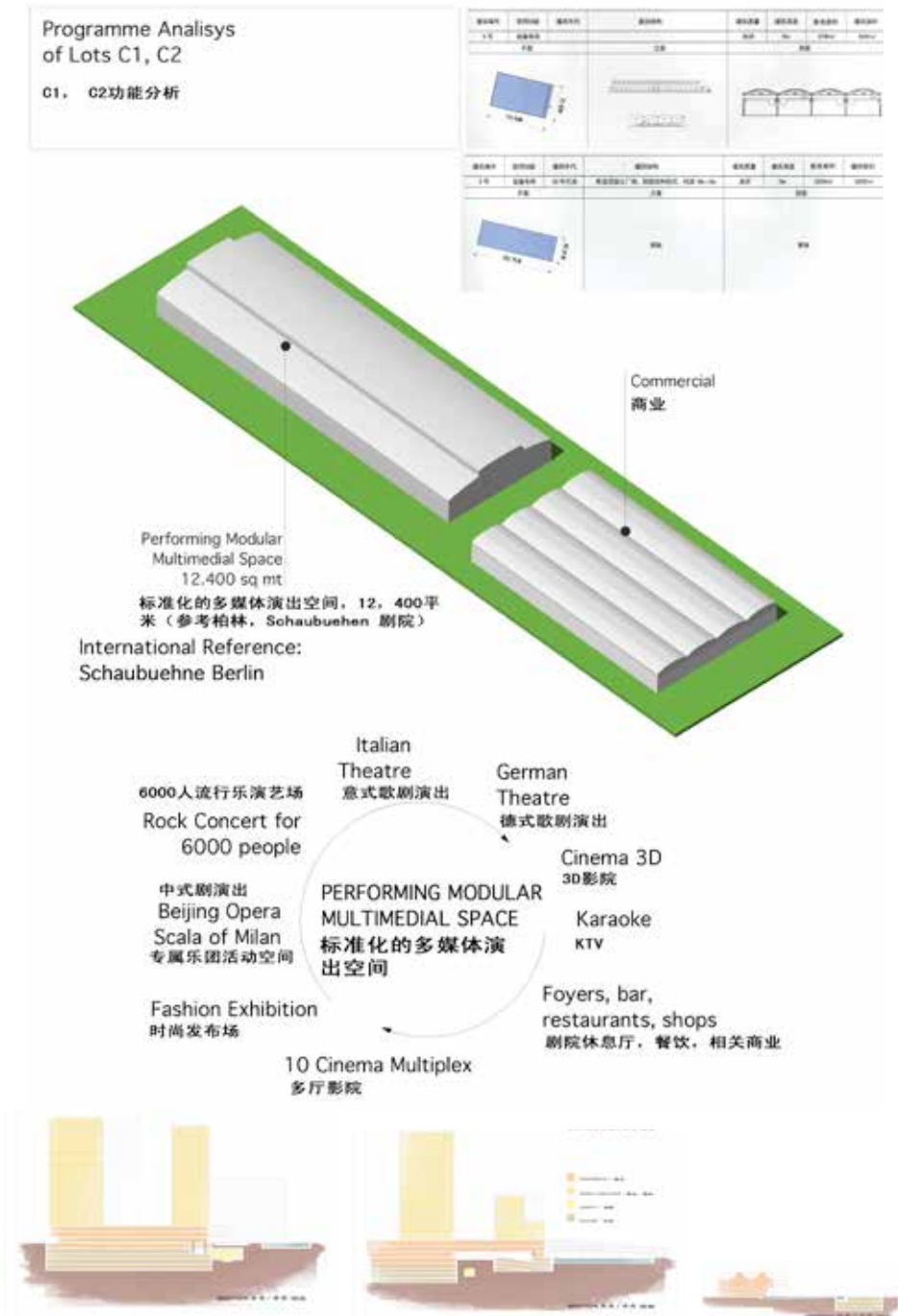
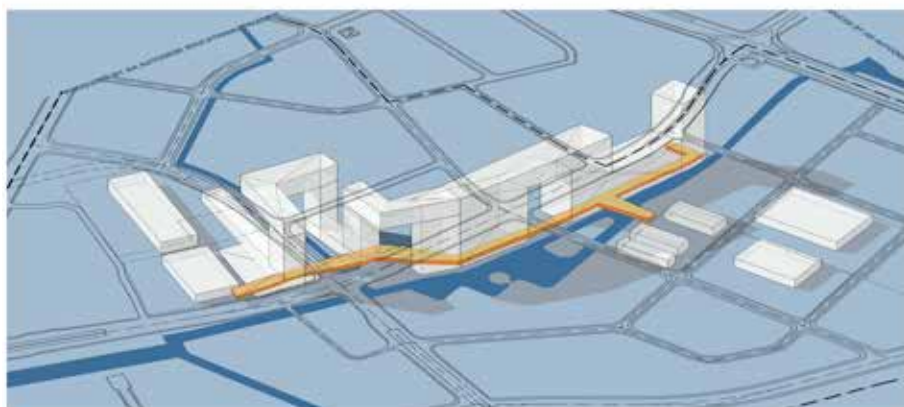
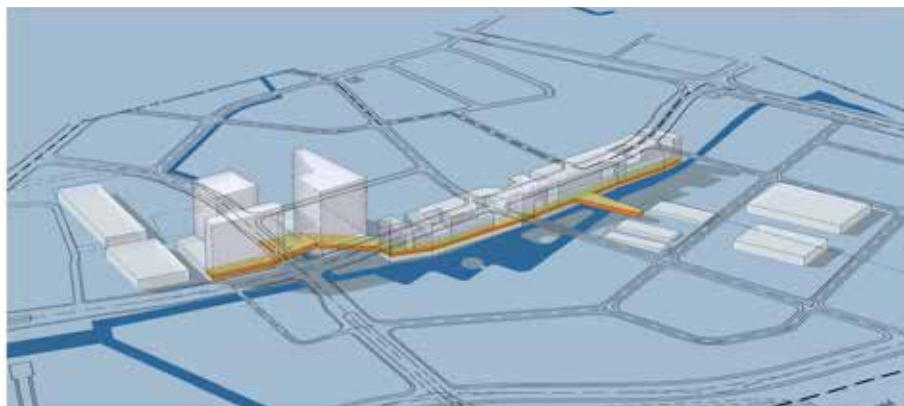


TABLE 01 - XIACHENG DISTRICT

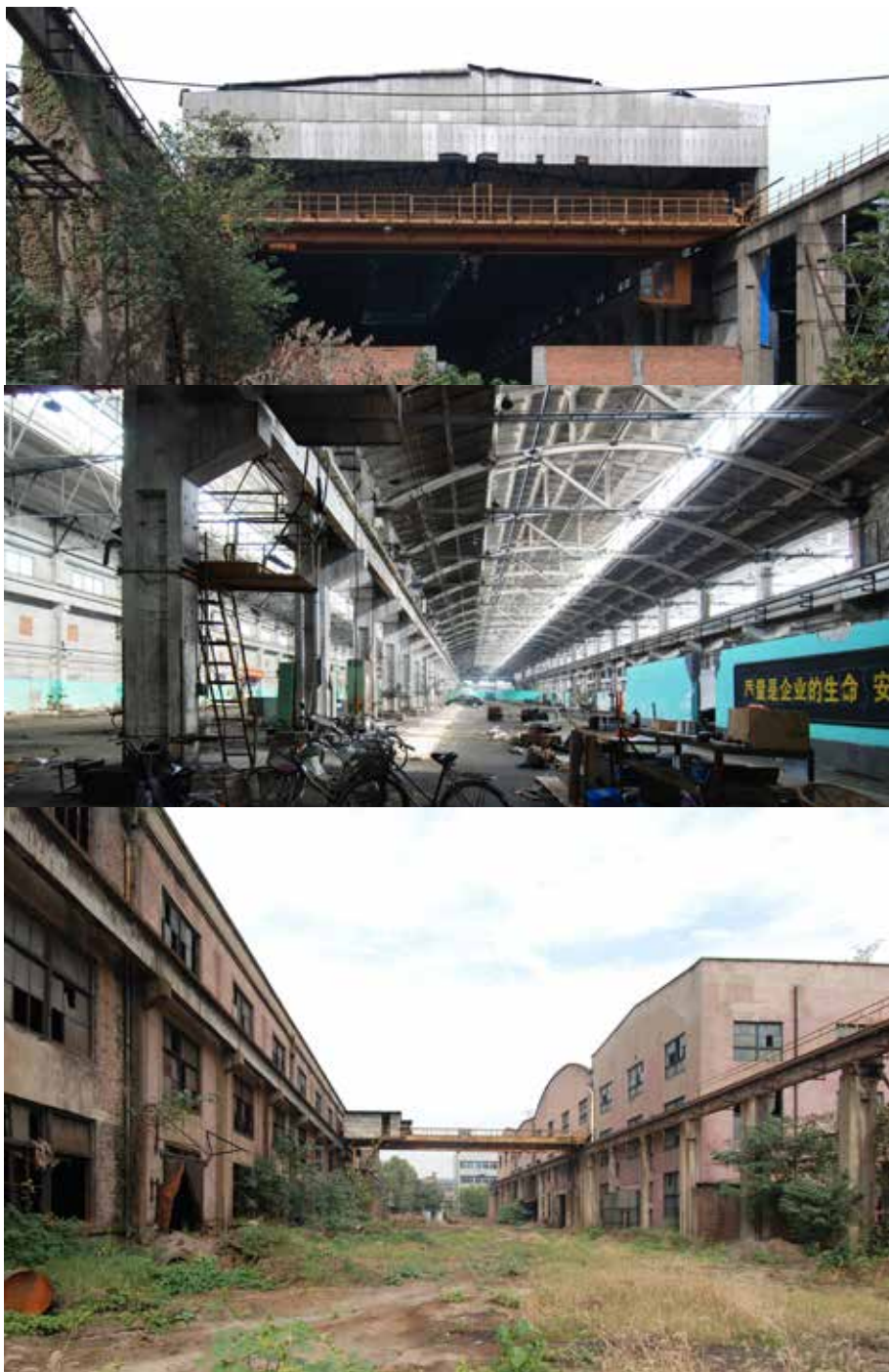
First Report to the Hang Zhou Tourism Group - former Oxygen Industry Xiacheng district
by Lucio Valerio Barbera with the collaboration of Anna Irene Del Monaco, Zhai Fei.





新建商业建筑体形研究

TABLE 01 - XIACHENG DISTRICT

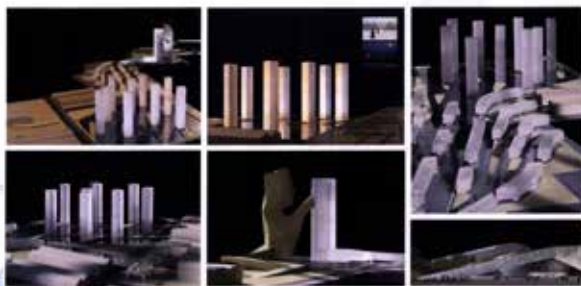


Former Oxygen Industry Xiacheng district of Hangzhou: photos by Lucio Valerio Barbera.

■ 史蒂芬霍尔事务所方案总平面图



■ 史蒂芬霍尔事务所方案效果图



Steven Holl Architects.

■ 赫尔佐格德梅隆事务所方案总平面图



■ 赫尔佐格德梅隆事务所方案效果



Herzog & de Meuron

■ 大卫齐普菲尔德事务所方案总平面图



■ 大卫齐普菲尔德事务所方案效果图



Chipperfield Architects

Former Oxygen Industry Xiacheng district. Competition entries: Steven Holl Architects, Herzog & de Meuron, Chipperfield Architects.

Lin'an Heritage Park of Southern Song Dynasty Planning & Design Guidance

1- General interpretation of Hangzhou Town

1. Modernity, Tradition and History: qualities, conflicts, incumbering dangers and living opportunities in Hangzhou.
2. Hangzhou in front of other Historical Capitals Towns with comparable exceptional qualities and crucial stratification of historical levels: similarities, differences, examples of good practice.
3. The main elements of the Architectural Identity of Hangzhou Landscape.

2 – General and specific Objectives and Methodologies

1. Scientific Urban Archaeology in a modern town: Hangzhou as a future model.
2. Water and Town Life.
3. The main water fronts: lake and river.
4. The Historical streets.
5. Regeneration of modern environments: buildings and urban spaces and their sustainability.
6. Monuments, memories (the archaeological presences) and memorials (symbolic reconstruction of the monuments of the past).
7. The Landscape (natural and urban) as the final and unified objective.
8. The economics of preservation and regeneration.

3 – The program overview and presentation

1. The systems of the urban regeneration: The Linear Park, the New Gates, the Urban Waterways, the Archaeological Parks, the Thematic Parks.
2. The improvement of the modern building aesthetics.
3. The re-functionalization and requalification of the South Areas (Railway logistic areas, South Gate environment, Buddhist environment).

4 – The Linear (Memorial) Park: functions, typologies, materials, design methodologies, some concept design specimen.

5 – The New (Memorial) Gates: functions, typologies, materials, design methodologies, some concept design specimen.

5 bis – A proposal for the Hangzhou Urban Cableway: possible technologies, capacity as a urban transportation system, technical constraints, tourist and cultural potentialities in the framework of the present international realizations and proposals. Suitability for a Landscape Town as Hangzhou.

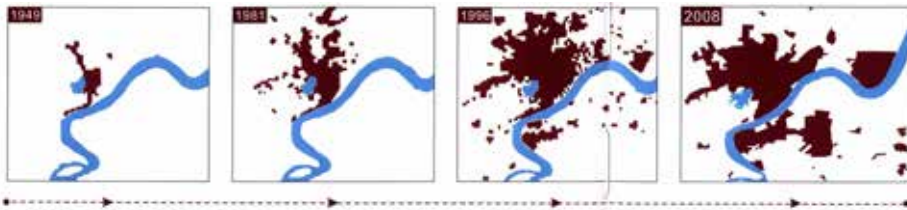
6 – The Urban Waterways: the regeneration of some old canals, possibilities and phases of the implementation, the re-qualification of the building facades, opportunities for a sustainable and energy saving architecture, some concept design specimen.

7 – *The Archaeological Parks*; guidelines for scientific and implementation methodologies and phasing, proposal for a temporal sequence, some concept design specimen.

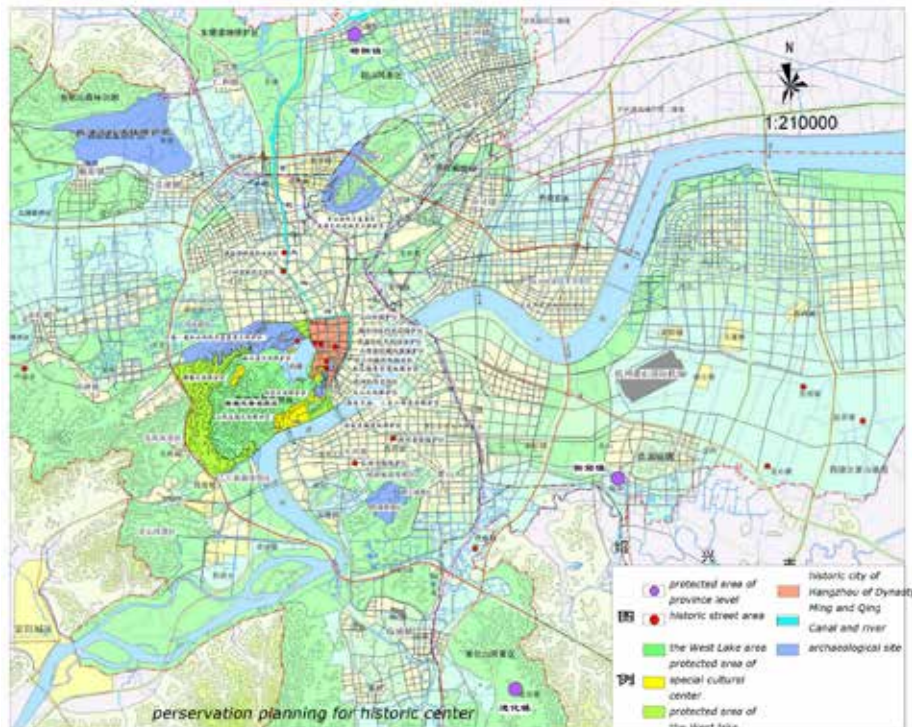
8 – *The Thematic Parks* (with special attention to the Bhuddist, South Area); guidelines for scientific and implementation methodologies and phasing, proposal for a temporal sequence.

9 - *The re-functionalization and requalification of the South Areas* (Railway logistic areas, South Gate environment: guidelines for the urban design and a proposal for the implementation phasing, some concept design specimen.

10 – *Logical structure and main elements for general and specific Official Guideline Documents.*



Hangzhou urban development.



Hangzhou Preservation Plans: General Masterplan.

TABLE 02 - LIN'AN HERITAGE PARK



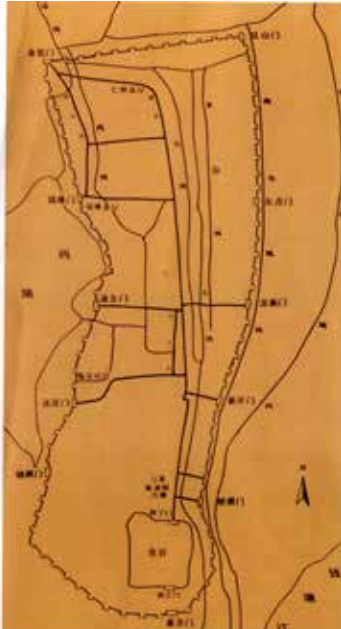
Hangzhou, Sui Dynasty (581-618)



Hangzhou, Tang Dynasty (618-907)



City Walls from Sui to Yuan Dynasty



Main city-roads in Southern Song Dynasty



Lin'an, capital Southern Song Dynasty



Hangzhou (Lin'an) in Southern Song Dynasty



Hangzhou in Qing Dynasty



Hangzhou in P.R. China



汉宫图

(绢幅, 绢本, 设色, 约24.5cm)
作者: 赵伯驹 年代: 南宋早期 (约公元12世纪)



风檐展卷图

(绢幅, 绢本, 设色, 24.9×26.7 cm)
作者: 赵伯驹 年代: 南宋早期 (约公元12世纪)



古松楼阁图

(绢幅, 绢本, 设色, 24.2×24.9 cm)
作者: 佚名 年代: 南宋中期 (约公元13世纪上半)



高烧银烛照红妆图

(绢幅, 绢本, 设色, 24.6×25.2 cm)
作者: 马麟 年代: 南宋中期 (约公元13世纪上半)



焚香祝圣图

(绢幅, 绢本, 设色, 24.8×25.8 cm)
作者: 李嵩 年代: 南宋中期 (约公元13世纪上半)



宫中行乐图

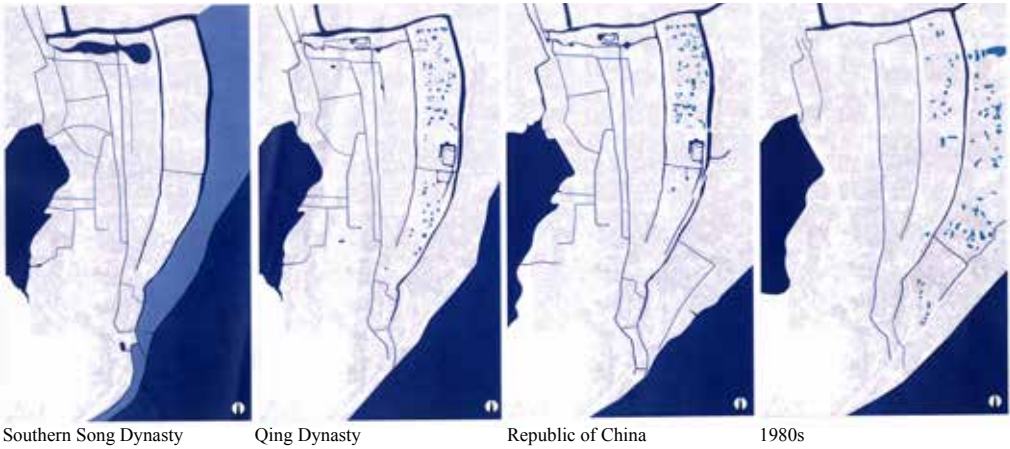
(绢幅, 绢本, 设色, 25.9×26.5 cm)
作者: 佚名 年代: 南宋 (公元12—13世纪)

TABLE 02 - LIN'AN HERITAGE PARK

City-Walls System from Southern Song Dynasty to 1980's

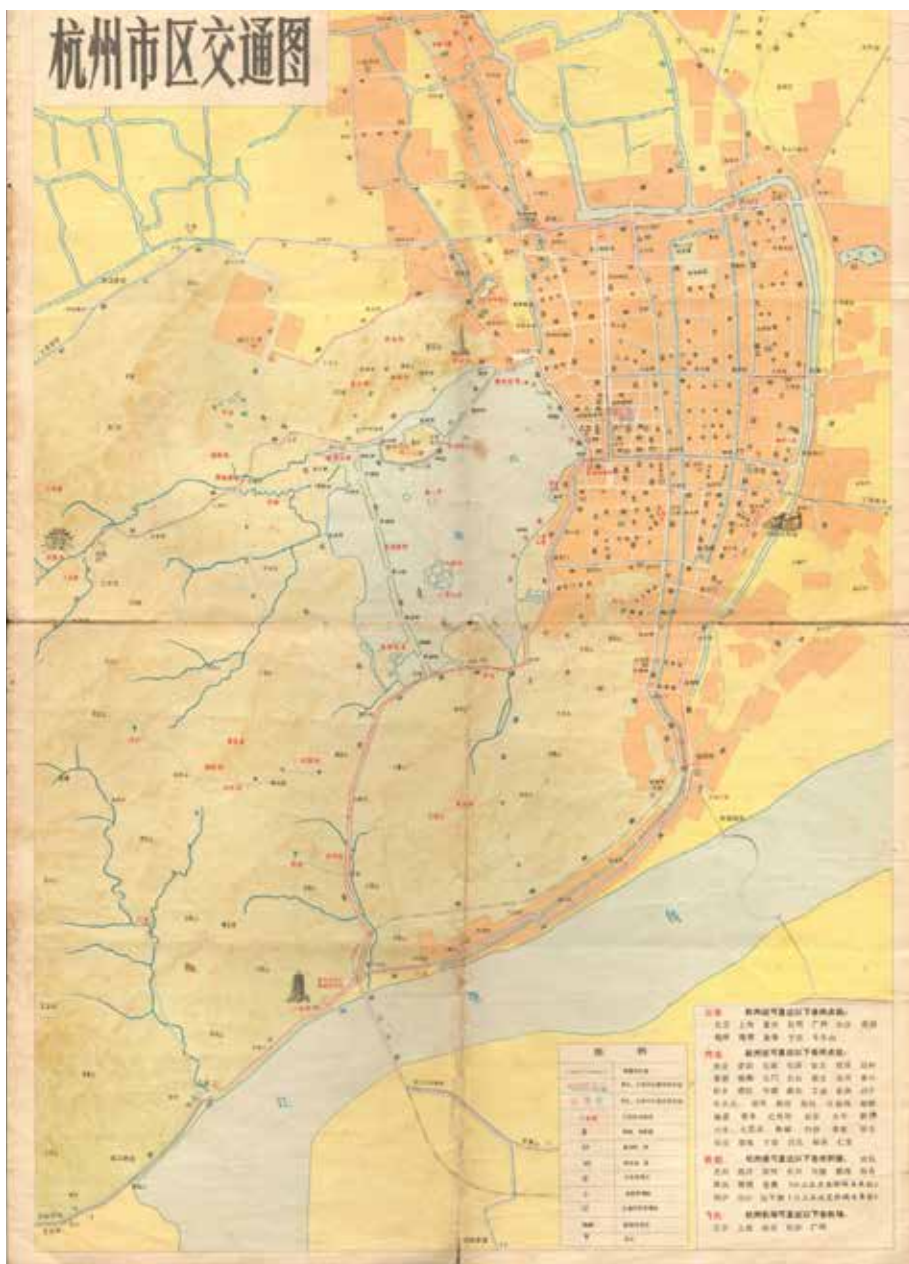


Water System from Southern Song Dynasty to 1980's



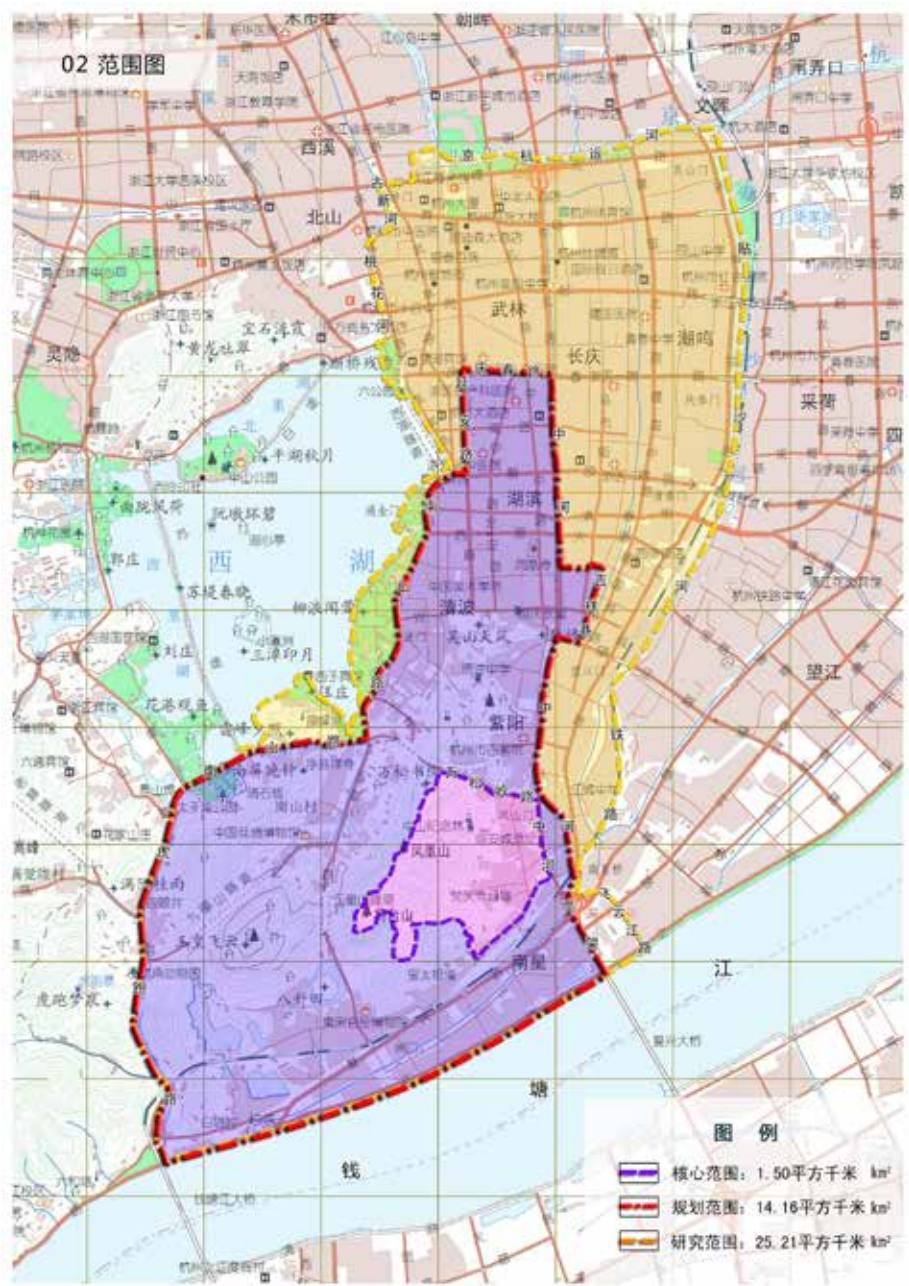
Main Street System from Southern Song Dynasty to 1980's



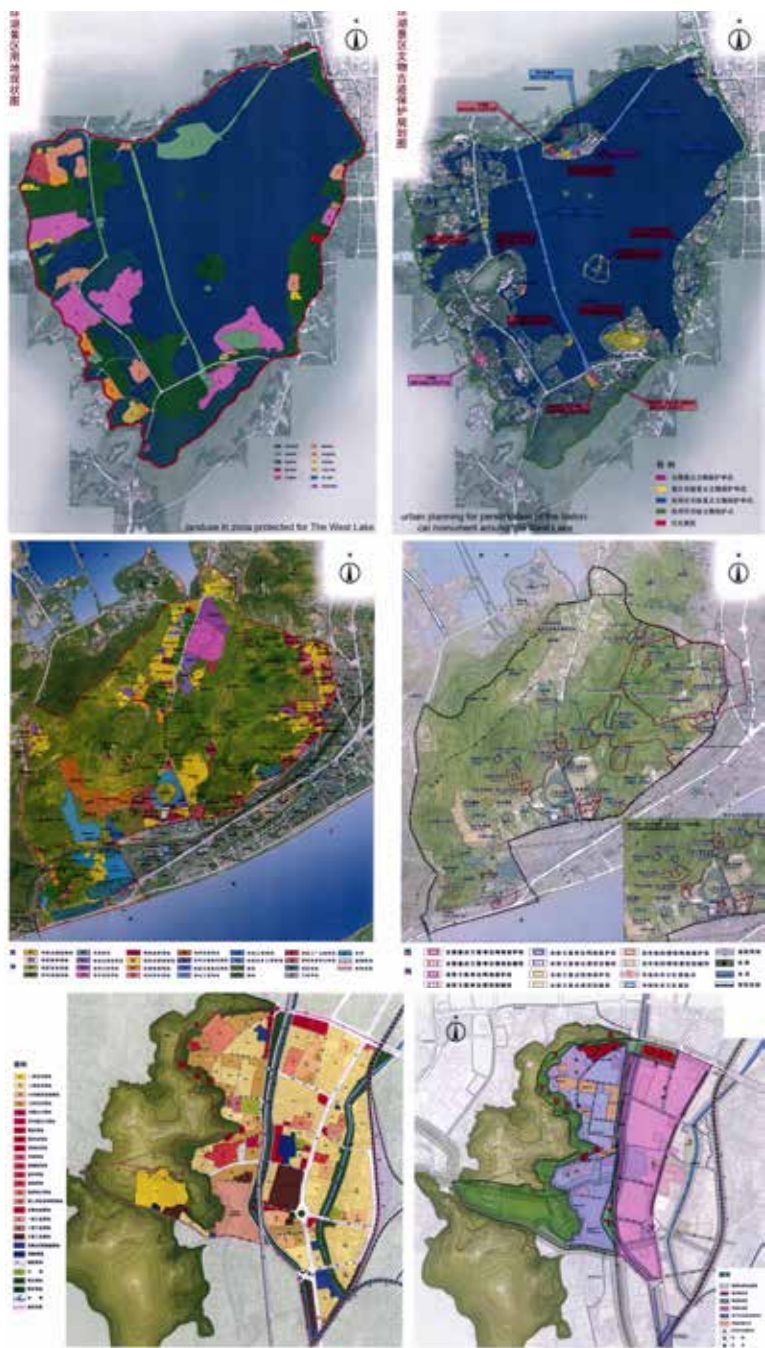


Hangzhou map in 1976.

TABLE 02 - LIN'AN HERITAGE PARK



Lin'an Heritage Park of Southern Song Dynasty Planning & Design Guidance: the central design area (pink); competition area (violet); study area (orange) - Courtesy by Municipality of Hangzhou.



Land Use and Preservation Plans: around the West Lake, of the historical monuments on Feng Huang (Phenix) Hill - Forbidden City Hill; along the Imperial Road (ZiYang area).

TABLE 02 - LIN'AN HERITAGE PARK



Lin'an area: land use.



Hu Bin area: land use and location of historical monuments and historical residential blocks

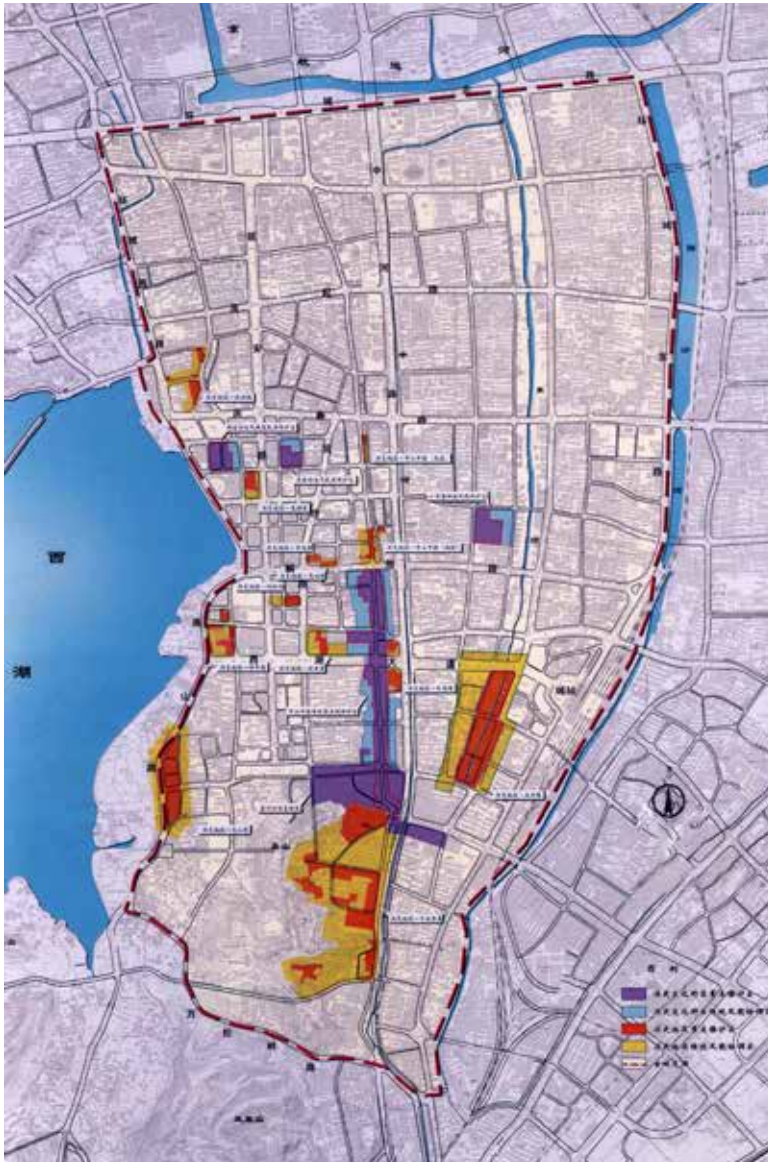


Qingbo area: land use and location of historical monuments and historical residential blocks.



Fuxing area: land use.

TABLE 02 - LIN'AN HERITAGE PARK



Location of the heritage protected sites in contemporary Hangzhou.

The Grey pictures (in the next pages) are from Mark L. Moody, University of Southern California. Libraries, 1921-02. <http://digitallibrary.usc.edu/cdm/ref/collection/p15799coll46/id/202>.

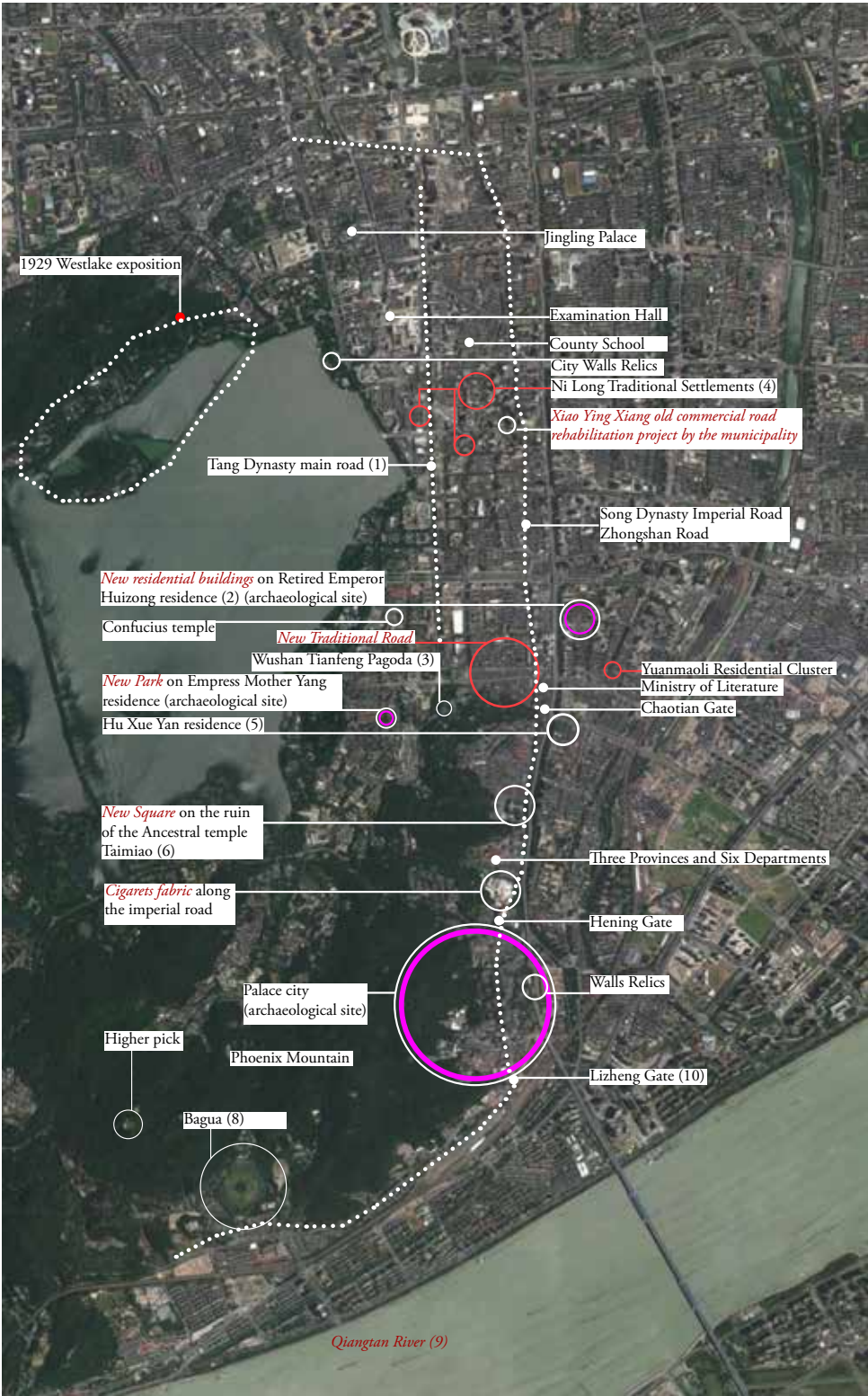


TABLE 02 - LIN'AN HERITAGE PARK



Roof View (web source).



Southern Gate (Lizheng) from Palace city. (Robert Pendleton) 1930-32 (10). *Qiantan River view. (Robert Pendleton) 1930-32 (9).*



New residential buildings on Retired Emperor Huizong residence: North and south views, 2011 (AIDM) (2).



New Square on the ruin of the Ancestral temple Taimiao, 2011 (Photo: Zhai Fei) (6).



Southern Gate Palace city Area, 2011 (Photo: Zhai Fei).



Qiangtan River, 2011. (Photo: Zhai Fei).



Lake view from the Southern hills.

TABLE 02 - LIN'AN HERITAGE PARK



Hangzhou - Old views (1912-1949): from the late Qing Dynasy to the Republic of China - photo collection.



(Robert Pendleton 1930-32).

Old views: web source.



Old views: web source.



Ni Long Traditional Settlements along XiHu (West) Lake. Underground construction (Photo: Anna Irene Del Monaco) (4).



South West view from Wushan Tianfeng Pagoda (3).



Tang Dynasty main road from Wushan Tianfeng Pagoda (1).



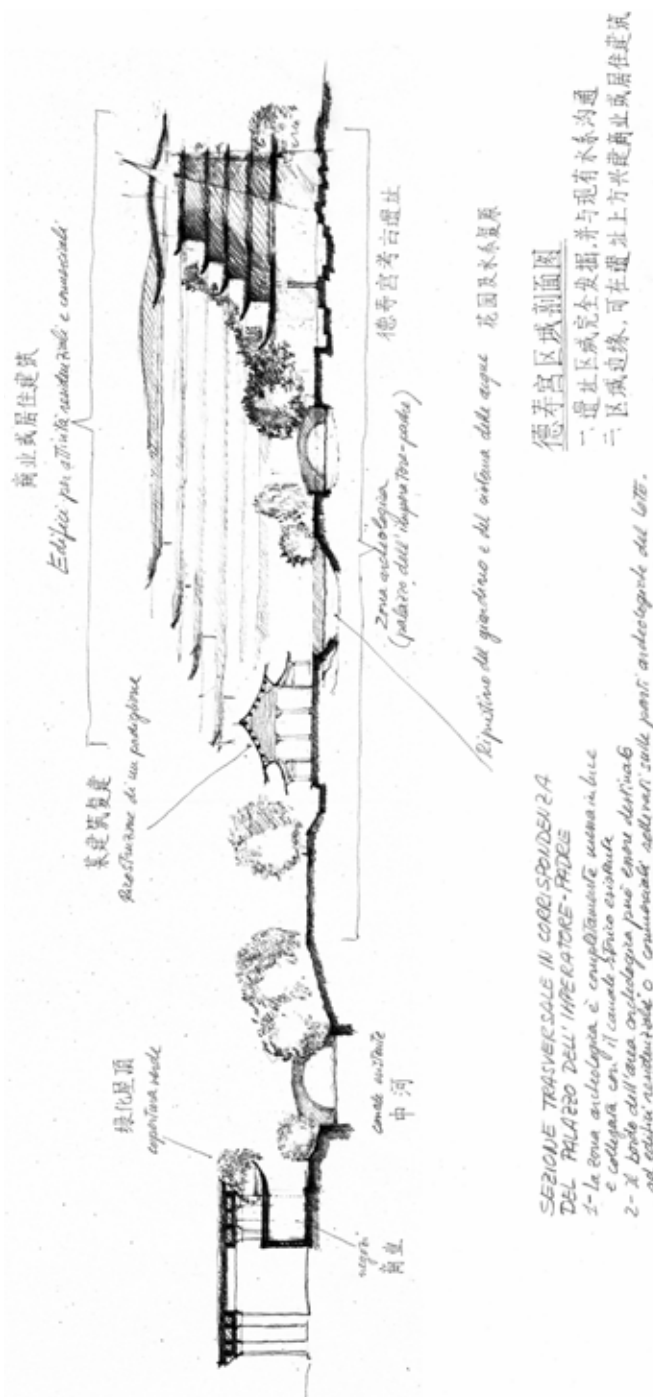
North West view from Wushan Tianfeng Pagoda (3).



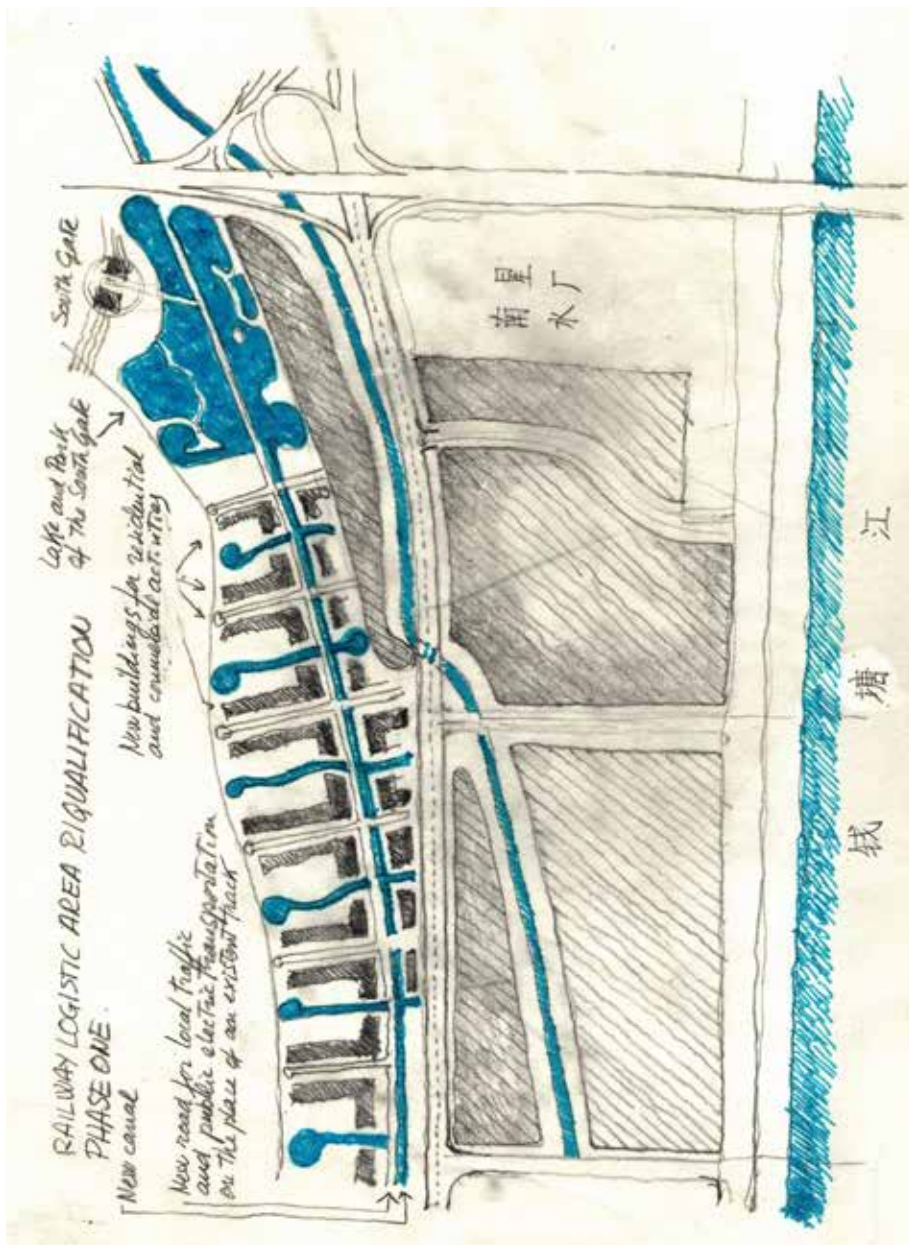
Hu Xue Yan residence (5).



Bagua (eight symbols) (8) - web source.



The proposal for the regeneration of the Deshou Palace, here after presented, can be understood as a methodological proposal valid, in principle, also for the other main urban archaeological site [B].
Design Sketches by Lucio Valerio Barbera.



*The layout of a future low-rise development for the Southern area (see picture actual situation) [A].
Design Sketches by Lucio Valerio Barbera.*



The Linear Park is introduced in the project as the simulacrum of the ancient Song Dynasty City Walls and Gates (red dots above). The Linear Park is also traversed by a cable railway with mainly touristic purpose. Design Sketches by Lucio Valerio Barbera



The New Gates

1-

- 1- To create a living memory of the Song City we propose to realise a linear park approximately on the trace of the ancient City Wall. The linear Park will join the places of the old City Doors which will come to life again in special, memorial buildings approximately placed where the old Doors were, but not including the archeological remnants.
- 2- The Doors (or New Gates) will be of different height and dimension, but with always similar shape, covered and designed in modern forms but with an artistic reference to the Song Architecture.



The New Gates

2-

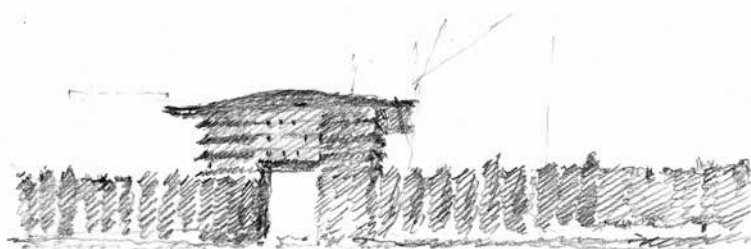
- 3- The dimensions of the New Gates will depend on the site. But they will always be suitable for automatic parking facilities (also underground) and for tea houses and restaurants.
- 4- The lower part of the pillars will be covered with green, climbing plants so as to match the natural quality of the linear Park and the overall landscape.
- 5- IT IS POSSIBLE TO SUGGEST THE REALIZATION OF AN URBAN CABLE WAY, CONNECTING THE NEW GATES (SEE THE SKETCH ABOVE). The cable way will be a very important cultural and tourist attraction, particularly suitable to the special landscape of Hangzhou!



The New Gates

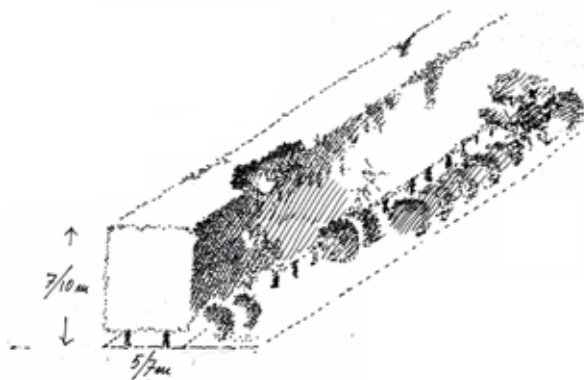
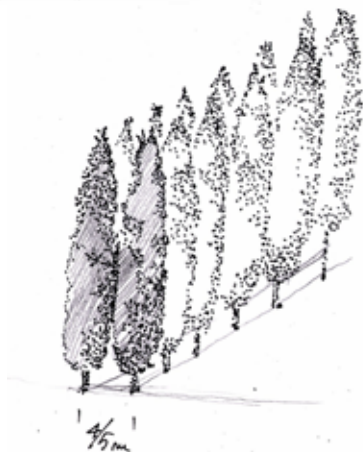
3-

- 6- In the North and East side of the Linear Park the New Gates can reach a height suitable to the modern shape of the town so as to show all their modern formal strength (see sketch above and following).



New Gates · 5

A simple view of the connection between a New Gate and The Linear Park

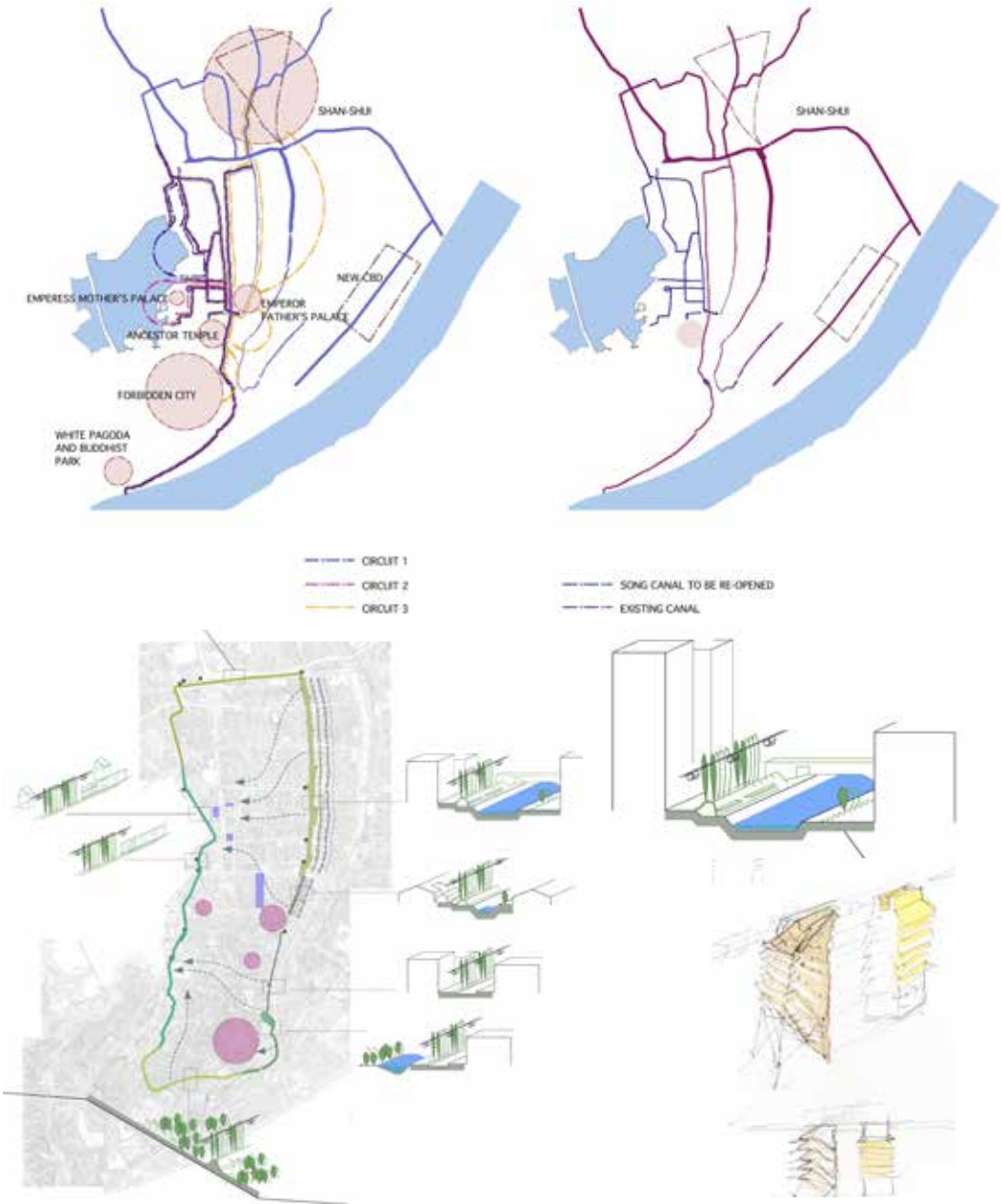


The Linear Park, a living memorial of the old City Wall, can be realized with a core of evergreen trees and ancillary flower trees. The trees suitable for the core could be of the *Chamaecyparis* family, typical of East China, Japan and North America or of trees of the same quality. Such trees can be treated in an architectural way, very interesting for some parts of the Linear Park, especially when it goes along very elegant urban gardens with a cable railway.

Due to the very different urban condition through which the Linear Park goes along, it is useful to rely onto different dimensions and typologies. Here different typologies of row of formally shaped green walls and gates are presented. Design Sketches by Lucio Valerio Barbera.



TABLE 02 - LIN'AN HERITAGE PARK



Schemes by Anna Irene Del Monaco: Lin'An Heritage Park: heritage sites and canals.



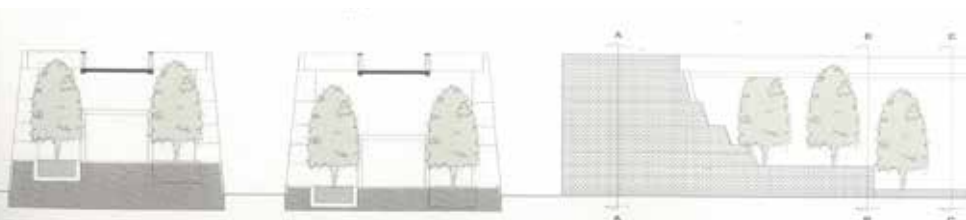
Water Canals System.



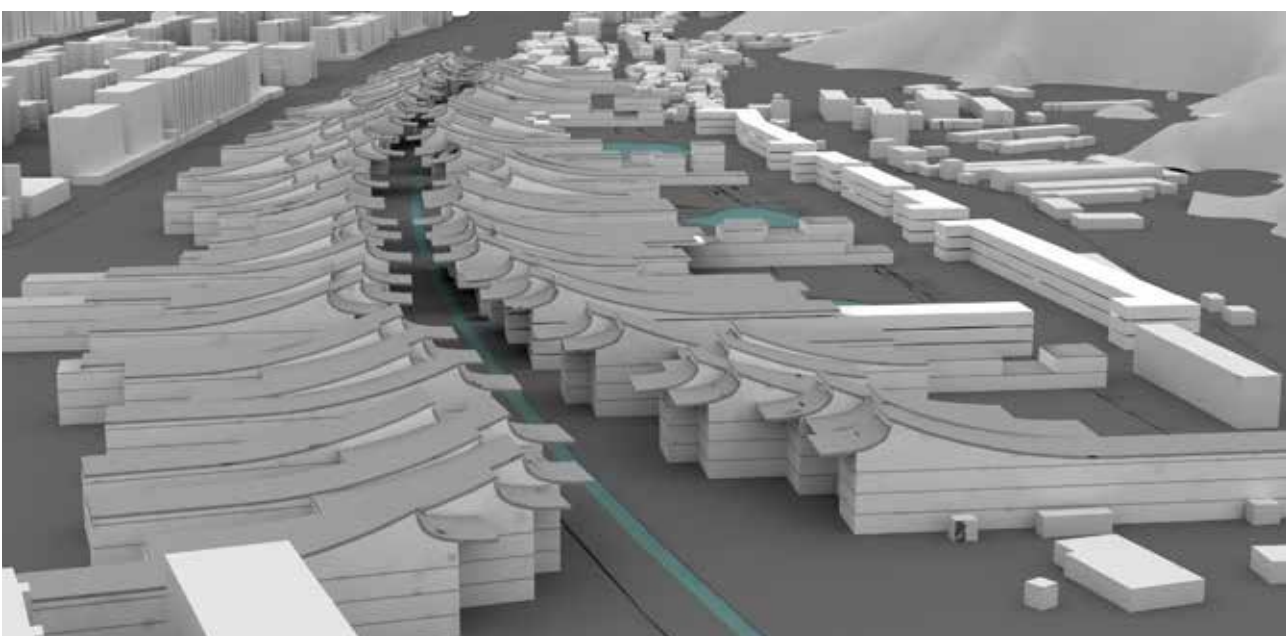
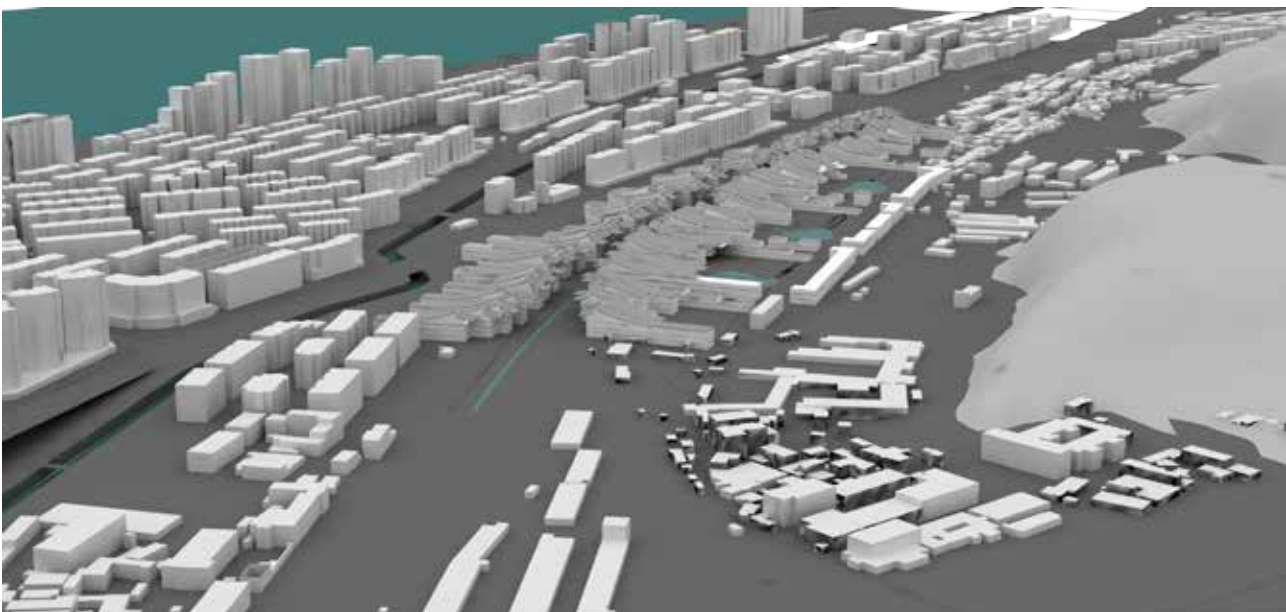
Green System.



TABLE 02 - LIN'AN HERITAGE PARK



The Forbidden city of Hangzhou according to Chinese scholars; a proposal for the re-construction of a City Walls Park along the ancient path. Photos of the Forbidden City area today and of the excavation of the archaeological remains of the Forbidden City: in evidence, covered by a coloured cloth the basement of the column of the pavillions. Photos (AIDM).



Southern area: design development by Anna Irene Del Monaco with Simone D'Eredità based on design sketches by Lucio Valerio Barbera for the Southern area (see previous page).

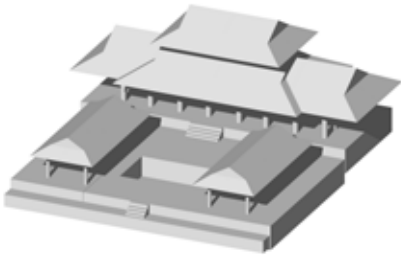
TABLE 02 - LIN'AN HERITAGE PARK



Emperor Qinzong was the eldest son of Emperor Huizong. His mother was the empress consort, from the Yang family, known posthumously as Empress Gongshengreinlie (1084–1108). The Hangzhou Municipal Institute of Cultural Relics and Archaeology conducted rescue excavations to the remains of the Mansion of Empress Yang. Six exploration ditches, architectural foundations, a courtyard, alleys and well were uncovered. The bases of all of the architectural units were built on platform foundations higher than the ground at that time; they were built with tamped-earth of yellowish clay mixed with pebbles and rubbles.



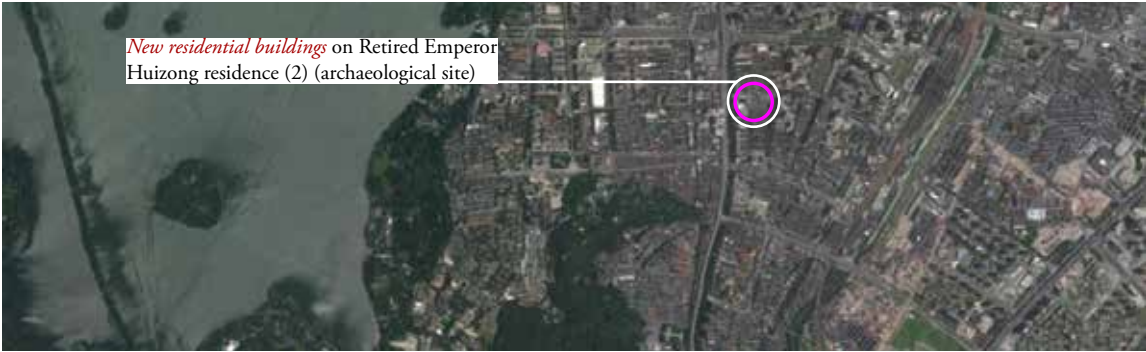
[WH]: Wang's house.

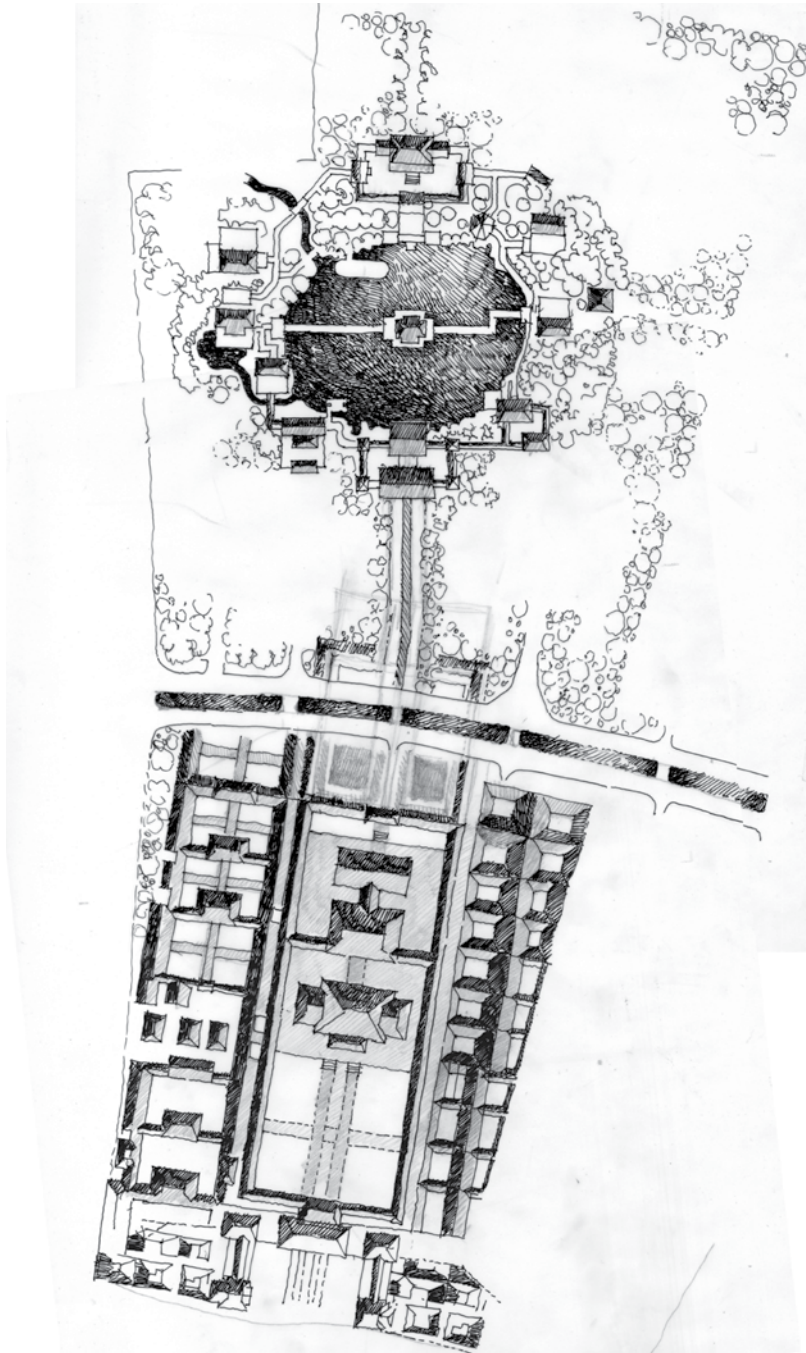




Above: the post-excavation park on the relics of the Empress Gongshengreinlie Masion. Down: the archaeological survey excavation. Previous page: [WH] Wang's house. Between 1931 and 1932; the building presents similarities with Empress Masion and is located in the South West are of the Inner City (near by the Empress Gongshengreinlie's Masion). Source: Pendleton, Robert Larimore, 1890-1957. Hangchow [Hangzhou], North of, within, and SW of the city. Wang's house. Grayscale. Pendleton nitrate negative, Box 22 of 384; <http://collections.lib.uwm.edu/cdm/ref/collection/agsphoto/id/9973>.

TABLE 02 - LIN'AN HERITAGE PARK



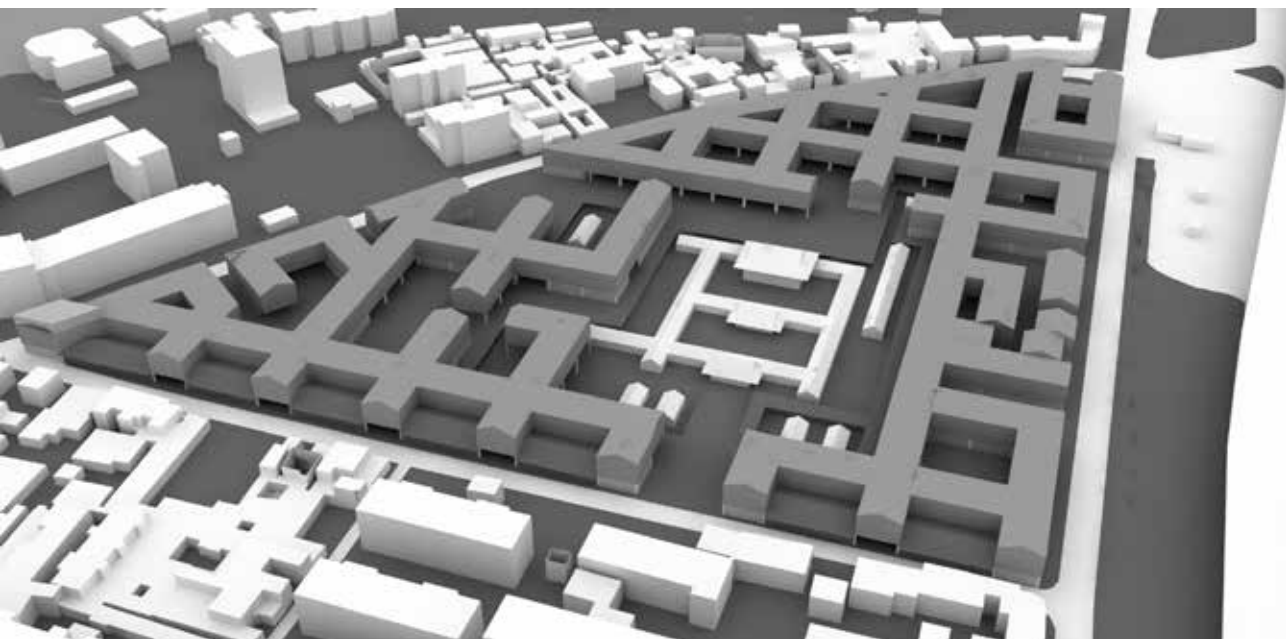
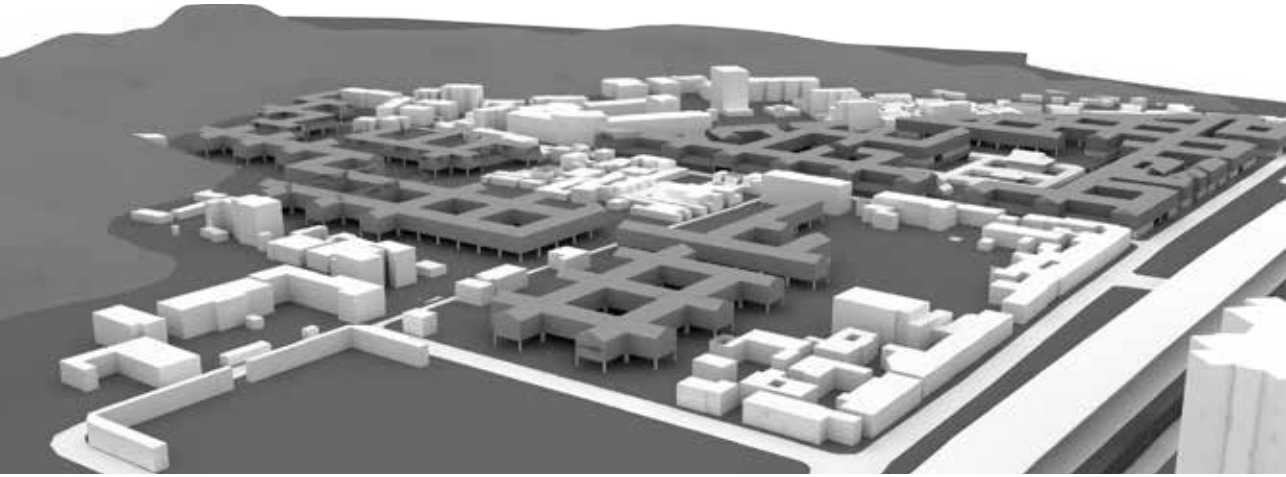


Deshou Palace Northern Palace area: in white dots the archaeological survey (left). Hu Xue Yan residence (right) demolition/rehabilitation process. Above: Design Sketches by Lucio Valerio Barbera for the reconstruction of the Deshou Northern Palace based the literary descriptions (translated by Zhai Fei) and from the archaeological survey remains. To be re-constructed in the white dots' area.

TABLE 02 - LIN'AN HERITAGE PARK



New Square on the ruin
of the Ancestral Temple
Taimiao





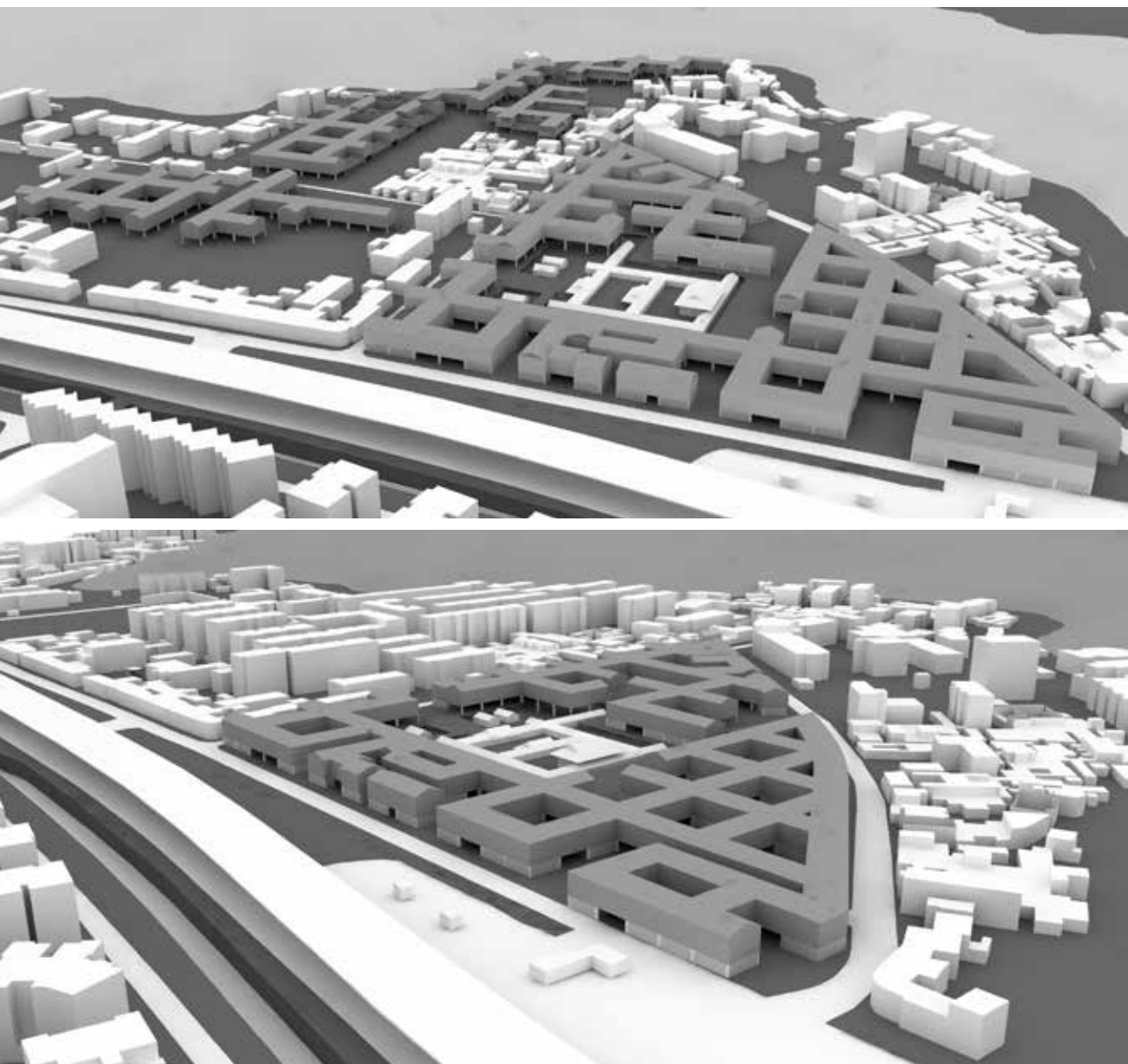
Right: Design Sketches by Lucio Valerio Barbera for future development (demolition and reconstruction in steps) for the Ancestral Temple Taimiao area to manage the possible discovery of archaeological remains.

The proposed methodological approach has the scope to introduce in this area a new urban pattern coherent with the ancient urban pattern set up by "fang" (urban courtyards) corresponding to the social census and trade.

Left: design variant by Anna Del Monaco and Luciano Aletta based on the design sketches by Lucio Valerio Barbera.



TABLE 02 - LIN'AN HERITAGE PARK



The new urban courtyards – 20x20 mt wide – are organized by three-floors-buildings and have been tested through the help of environmental design experts (Prof. Eliana Cangelli, Arch. Maurizio Sibilla) which provided comments on strengths and weaknesses for their energetic efficiency. The new urban courtyards can host a commercial program at the ground level and a residential program at the second and third level. The pictures above present a design variant by Anna Del Monaco and Luciano Aletta (3d drawings) based on the Lucio Barbera's hand drawing (previous page). Next page above: hand drawing section by Zhai Fei describing the coexistence between the new housing/commercial development pattern and the eventual archaeological discoveries.

