

Motionscapes, Waterland, Maritime Theatre

Three Temporalities in Contemporary Jiangnan

by

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

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Jeffrey Cheng
May 13th, 2011.

ABSTRACT

Jiangnan is on the brink of revolution: a network of bullet train lines will re-territorialize this region of China, including Shanghai, drawing its 80 million inhabitants within a single hour's commute of one another. From the train, the boundaries between Jiangnan's ancient cities, villages, and countryside appear to dissolve into a momentary smear of colour. At the very moment the earth has shrunk by the bullet train, Jiangnan's new mega-city status will erode a sense of community rooted in long stable demarcations of place. The humanity that endures will likely be atomized, lost in a vast, blurred, and indecipherable landscape that has sacrificed community for the high-speed design of a relentless modernity.

Fuciao Cun Village, which stands at the geographic centre of Jiangnan, is being dismantled to accommodate explosive urban growth. Only the abandoned temple remains. The surviving temple is imagined to harbour three voices, each offering an alternate vision

speed, space and time. *Motionscapes* studies the scene from the bullet train window and the power of the temple as a ruin, standing still in a landscape of radical flux. *Waterland* re-tools the temple site to choreograph new economies and transportation networks that respond and reveal a topography continuously animated by water. Finally, *Maritime Theatre* turns to classical Jiangnan gardens, cities, and temples for tactics of place-making. These techniques attempt to evoke collective memory to waken a dormant yet resilient zeitgeist at the uprooted site.

Motionscapes, *Waterland*, and *Maritime Theatre* each offer an architectural intervention, the temple as ruin, waterworks and brickworks, and theatre. In sum, the three proposals at Fuciao Cun Temple are layered to project a fuller and inclusive experience of place onto a broader landscape, otherwise derationed, homogenized, and sacrificed by a manically technologic modernity.

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FOREWORD

The seeds of this thesis about a site in China originate from suburban Canada. Standing where Highway 7 and 407 cross Yonge Street, just north of Toronto, Ontario, the view should capture a pulsating urban intersection corresponding to one of Canada's most rapidly growing regions. Instead, the desolate reality is all too common. Although the lifeblood of the region passes overhead on the two highways, all one sees from the ground on a winter morning is the solitary mist of your breath coloured by the endless stream of red taillights. At the precise crossroads of the region, there is no sign of community. It is the search for, or more precisely, the pull from such grossly ill managed opportunities for community building and the latent potential these orphaned spaces still hold that led the author of this thesis to the largest and most robust city building project of our time, modern China.

The three volumes presented here are as much a summary as well as fragments of a two-year engagement with China. They are driven by three trips to the region and periods of consolidation at home in between.

The first half-year engagement with China, from September 2008 to April 2009, just before enrolling at graduate school, was guided by local architect and educator Zhang Lei. At his office, and in the company of a generation of eager young architects, we immersed ourselves in the unmistakable sense that a better future loomed just beyond reach. Even impassioned optimism

and thoughtful projects, however, could not affect the banal physical reality at large.

I returned to China from August to December 2009, this time as a student under the inaugural Ontario-Jiangsu Exchange Program. Much of those five months was spent in the famed classical gardens and the laneways of ancient Suzhou, documenting traditional methods of place making and city building. A humble Ming Dynasty attic near the heart of the city's restored Pingjiang Lu district served as home. It was, like the gardens, immediately pleasant enough. As winter approached, the inadequacy of the unheated, toilet-less and leaky room, and the lull that settled on the tourist dependent Pingjiang Lu district came into sharp focus and exposed an equally inhospitable urban reality. It became evident that traditional forms of urbanism are futile for the needs of our times.

During this time, I enrolled in Mandarin classes at the local university. Eager to solicit local opinion, I also organized a photography exhibition titled, *Motionscapes*, held at Heterotopia, a small art space in the old city. On the final night of the show I met Ivan Liu, Art Director for a local private contemporary art museum called True Color Museum. With him I began an informative discussion that

eventually led to a third visit, this time through the True Color Museum Artist in Residence Program from May to July, 2010. The museum is dedicated to contemporary Chinese art and became a critical platform from which to survey the suburban landscape around it. The museum was situated in the midst of drastic change; villagers salvaged bricks from their own dismantled homes in anticipation of the expanding city. A sole survivor of the abrupt change, a folk temple at Fuciao Village, became the site of exploration for the eventual thesis.

In a roundabout manner, this thesis also represents a return to the place of my family. The thesis led me to return to the site of the Romance of the Three Kingdoms amongst many legends transmitted orally in my childhood, and the exact place, that four generations ago, my family fled from as refugees of war. In many ways, *Motionscapes*, *Waterland* and *Maritime Theatre* (the three volumes of this thesis) then, not only document three adventures to China, but also constitute ongoing conversations on city building between friends, strangers, family, and now the readers of this thesis.

Jeffrey Cheng

Cambridge, Ontario
April, 2011

EPIISODES IN JIANGNAN HISTORY

Xia Dynasty (2010-1600 BCE) - a period that marks the dynastic beginning of China. The dynasty was founded after Yu the Great became emperor after he stemmed the mythical floods.²

State of Wu (584-473 BCE) – an independent state centred at Suzhou during the Spring and Autumn Period (722-476 BCE). Many of the oldest cities in Jiagnan were founded at this time.

Qin Dynasty (221-206 BCE) - a dynasty that unified China, and that constructed the Great Wall.

Han Dynasty (206 BCE-220 CE) – a period of relative stability and development across a unified China.

Kingdom of Wu (229-280 CE) – a kingdom founded and governed from Jiangnan when China was split into three kingdoms; a period of development for the region, that marked a gradual shift in power and wealth from the north to the south.

Eastern Jin (317-420) – a dynastic period that saw China split in two. The eastern empire was governed from Nanjing, Jiangnan, and saw the transfer of technology and resources to develop the wetlands of to the region.

Tang Dynasty (618-907) – a period of cultural development in a unified China.

Kingdom of Wuyue (907-978) – an independent kingdom during the Five Dynasties and Ten Kingdoms period (907-960) in Chinese history. The kingdom took particular interest in water conservancy and land reclamation projects, and was a period of growth for Jiangnan. Its capital was located in modern Hangzhou.

Kingdom of Wuyue (907-978) - an independent kingdom that rose after the Fall of the Tang and absorbed by the Song dynasties. Its territory largely corresponds the region of Jiangnan, including Suzhou, with Hangzhou as the capital. The Qian family dynasty left a legacy of significant sea wall construction and developed the inland canal system for agriculture.³

Southern Song Dynasty (1127-1279) – a dynasty of prosperity ruled locally from Hangzhou when China was split into northern and southern halves.

Ming Dynasty (1368-1644) – the dynasty was first founded in Nanjing before its capital was transferred to Beijing; a period that witnessed the rise of a distinct bureaucracy for water conservation

and a resulting increase in trade and development in Jiangnan.

Qing Dynasty (1644-1911) – generally a period of prosperity when Jiangnan cemented its status as the primary economic centre for the empire.

Republican China (1912-1949) – marked the end of dynastic China and the beginning of a period of turbulence. Nanjing was briefly installed as the national capital from 1928-1937.

Maoist China (1949-1976) – a period when Mao Zedong and the Communist Party took control of China. Cities in Jiangnan generally declined and depopulated during this period that focused on rural growth.

Period of Economic Reforms (1976-1989) – Deng Xiaoping revised economic laws and set the stage for economic growth. Shanghai begins to retake its place as China's economic centre under the new rules.

MOTIONS CAPES
CHAPTER 1



Fig 1.01 Aboard the bus, Hefei, Anhui Province

...a person entering the space of non-place is relieved of his usual determinants. He becomes no more than what he does or experiences in the role of passenger, customer or driver. Perhaps he is still weighed down by the previous day's worries, the next day's concerns; but he is distanced from them temporarily by the environment of the moment.

Subjected to a gentle form of possession, to which he surrenders himself with more or less talent or conviction, he tastes for a while - like anyone who is possessed - the passive joys of identity-loss, and the more active pleasure of role-playing.

What he is confronted with, finally, is an image of himself, but in truth it is a pretty strange image. The only face to be seen, the only voice to be heard, in the silent dialogue he holds with the landscape-text addressed to him along with others, are his own...

Marc Augé, *Places to Non-Places*, 1995



Fig 1.02 Locating Jiangnan in Asia Pacific

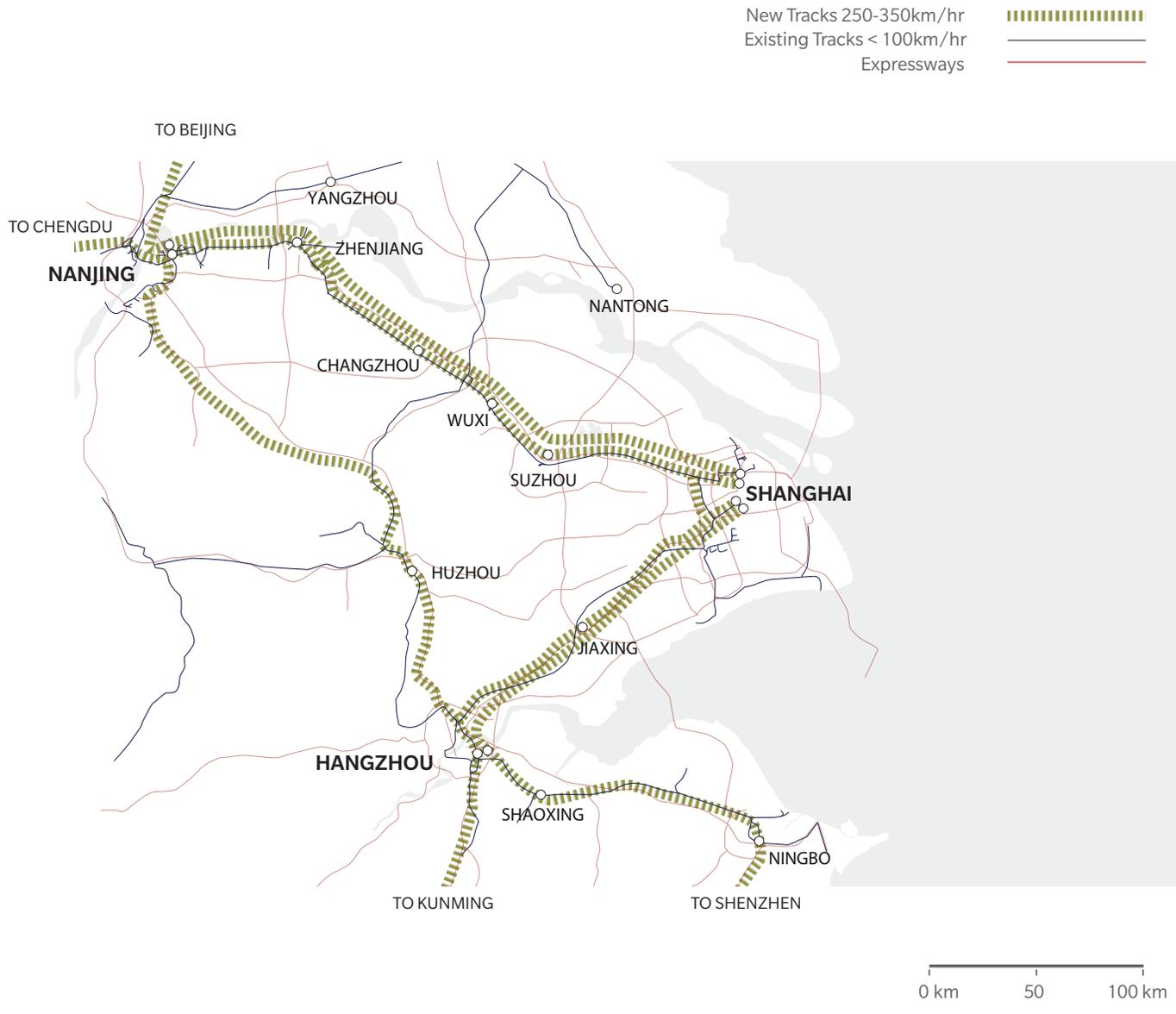


Fig 1.03 Roads and Rails: Proposed Land Transportation Networks in Jiangnan, 2011

PREFACE

The past fifty years has witnessed nothing short of a revolution in mobility in Jiangnan. From the rigid Mao-era Hukou permit system to bullet trains - policies, migration, and transportation have granted an exponentially growing number of people unprecedented freedom of movement (Figure 1.08). This new found mobility fundamentally shifts the perception of place and time in Jiangnan. *Motionscapes* seeks to capture, describe, and distill the thrill of accelerated movement and the new notions of place that increased mobility entails in a spatially reconstituted Jiangnan.

1958 marked the beginning of the Great Leap Forward, including the introduction of the Hukou permit system. The Hukou system identified citizens by their county of birth and restricted the largely agrarian population to power rural factories and collectivized farms. Access to rationed food, housing, employment, and social services were barred outside one's zone of residence. The Hukou system was vigilantly enforced, notably during the famine from 1959-1962, when thirty million people starved to death through the failed industrialization campaigns in their home counties.⁴

Limited reforms to the Hukou system in 1984 unofficially encouraged rural workers to muscle urban growth in a time of renewed urban development. In Shanghai, an initial 564,000 migrant workers swelled to six million people by 2002.⁵ Today, there is one migrant worker for every registered citizen in many Jiangnan cities. Despite their indispensable role in building Jiangnan's growing cities, migrant workers, enjoying an ambiguous legal status at best, face routine social stigmatization and systematic challenges in obtaining housing, education, and medical services. Due to, at least in part, the unsympathetic working environment, migrant workers often leave their families in their rural homes. Once each year, the 'floating population' emerge to the fore of public consciousness when they return on mass to their place of birth.⁶ The flow of people from eastern cities to the rural interior and back during the Spring Festival has been termed the largest human migration on earth, presenting an image of a volatile and vulnerable demographic. To the floating population, the notion of urban place is decoupled from a sense of legal rights, government services or family. The landscapes of the city holds either memory nor history, nor are cities a platform for sustained social involvement. The

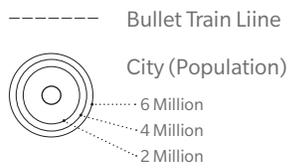
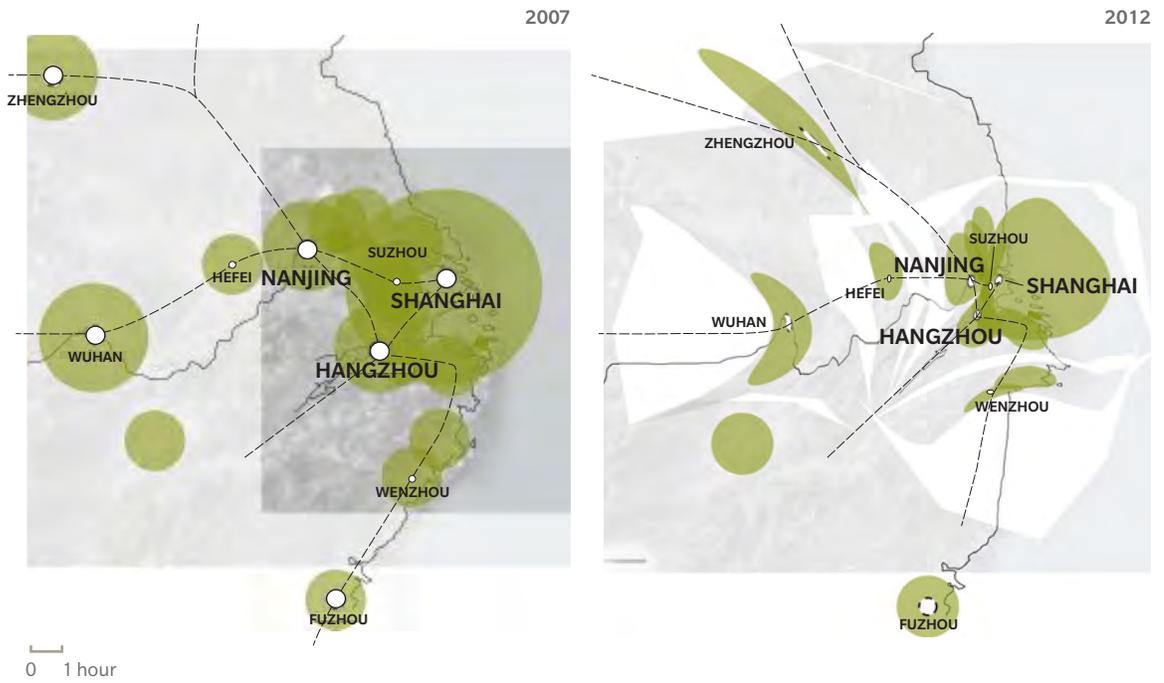


Fig 1.04 Bullet Trains: Mapping Time-Space Compression

Jiangnan city is a place endured in passing. Gradual political freedom of movement is parallel to developments in modes of travel. Like President Eisenhower's freeways in the United States of the last century, a fast train network is today being constructed across China. Jiangnan is a city cluster with particular bullet train density. The three hundred kilometer link from Nanjing to Shanghai is a bundle of six high-speed lines encompassing a pair of intercity, national-scaled, and regional freight lines. At peak times, government officials claim they will operate "as frequently as buses," every three minutes.⁶ Bullet trains pull the three corners of the region, Shanghai, Nanjing, and Hangzhou and the ten cities between them, into a single urban agglomeration. With 80 million people within the rail net, emergent Jiangnan rivals Germany by population numbers. If the 20th century American city was shaped by the automobile, bullet trains have fundamentally re-territorialized both perception and function of the 21st century Chinese city clusters.

To the architect, whose craft is inextricably rooted to place, the migrant's tentative and hostile experience of place amplified by the access and speed of contemporary travel, the revolution in mobility presents a challenge in imagining architecture as an agent for social construction. *Motionscapes* examines shifting perceptions of the landscape that the revolution in mobility may entail to identify

viable places and methods for architectural intervention. Six photographic essays constitute the primary contents of the volume. The following discussion introduces the themes and observations drawn from the photographs.

Motionscapes 01 and *Motionscapes 02* document the speeds of our time and how that speed alters a perception of time, space, and place for the individual. These images are taken across Jiangnan from September 2008 to July 2010. *Cityscapes 01* and *Cityscapes 02* capture Suzhou in the midst of transformation. They document the fringes of the city and the abruptness of the land's urban transformation from November 2009 to July 2010. Finally, a series of photographs document Fuciao Cun Village Temple. This sequence appears between the other five photo essays as the ancient temple is located amidst a landscape in flux. Unlike the other images, the photographs of the temple are taken in black and white, in sharp focus, and depict a specific location. The images are shot in two periods from November to December 2009 and again from June to July 2010. The temple is seen as an artifact that transcends massive change across vast landscapes, but is itself in danger of demolition at the time of this writing. The documentary series of photographs may thus be understood as an intervention, to preserve at least in some form, the temple at Fuciao Cun Village.

TIME

POLITICAL FACTORS

1950

Founding of the People's Republic of China

1960

Great Leap Forwards (1958-1962)
all private land confiscated
20 million die by starvation

Cultural Revolution (1966-1976)

1970

3rd Five Year Plan
Coastal regions receive 42.5% of national investments
5 Modernizations
5th five year plan

1980

Open Door Policy
shifts national economic development from inland
to Shanghai and other eastern seaboard cities

Shanghai, Nantong and Ningbo declared
Special Economic Zones

1990

Shanghai Pudong New Zone
No tariffs, foreign corporations permitted

2000

2010

Shanghai World Expo

PEOPLE

TRANSPORTATION FACTORS



**POLITICS, MIGRATION, TRANSPORTATION
INCREASING MOBILITY IN THE
ONE HOUR MEGA-CITY**

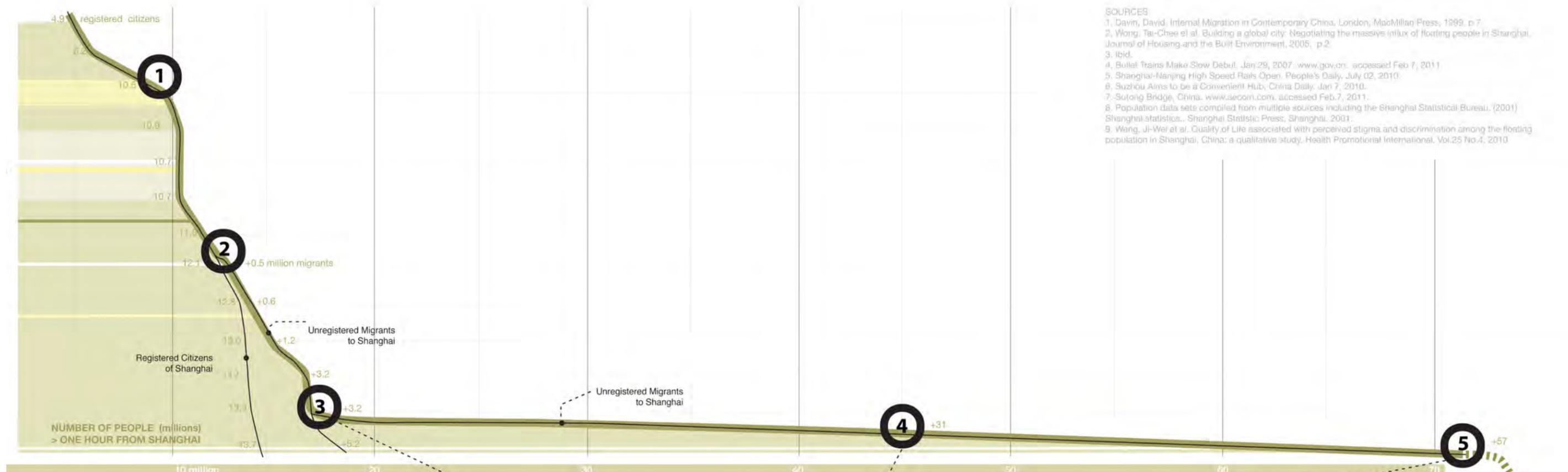
1
1958

CHARTING THE NO. OF PEOPLE ONE HOUR FROM SHANGHAI 1949-2012

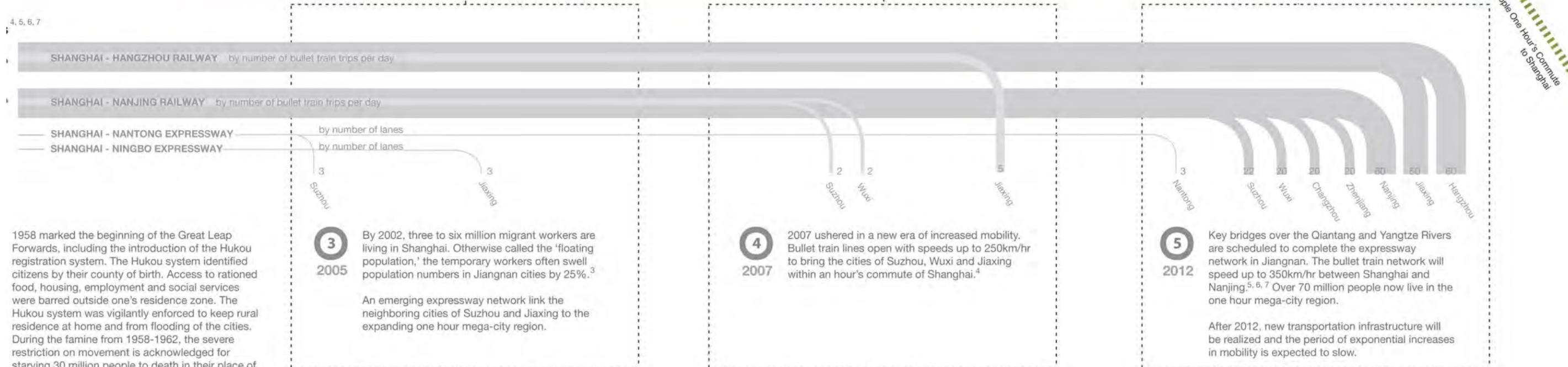
From the rigid Maoist Hukou registration system to bullet trains, the past fifty years in Jiangnan have witnessed an extraordinary increase in mobility for an exponentially growing number of people. This diagram traces the number of people living an hour's commute from Shanghai from 1949 to 2012 and beyond as affected by changes in policy, urban migration, and transportation infrastructure.

2
1984

Fig 1.05 Increasing Mobility in the One Hour Meca-City



SOURCES
 1. Davin, David. Internal Migration in Contemporary China. London: MacMillan Press, 1999. p.7
 2. Wong, Tai-Chue et al. Building a global city: Negotiating the massive influx of floating people in Shanghai. Journal of Housing and the Built Environment, 2005. p.2
 3. Ibid.
 4. Bullet Trains Make Slow Debut. Jan.29, 2007. www.gov.cn. accessed Feb.7, 2011.
 5. Shanghai-Nanjing High Speed Rails Open. People's Daily, July 02, 2010.
 6. Suzhou Aims to be a Convenient Hub. China Daily, Jan.7, 2010.
 7. Sutong Bridge, China. www.sctom.com. accessed Feb.7, 2011.
 8. Population data sets compiled from multiple sources including the Shanghai Statistical Bureau. (2001) Shanghai Statistics. Shanghai Statistic Press, Shanghai, 2001.
 9. Wang, Ji-Wei et al. Quality of Life associated with perceived stigma and discrimination among the floating population in Shanghai, China: a qualitative study. Health Promotional International. Vol.25 No.4. 2010



1958 marked the beginning of the Great Leap Forwards, including the introduction of the Hukou registration system. The Hukou system identified citizens by their county of birth. Access to rationed food, housing, employment and social services were barred outside one's residence zone. The Hukou system was vigilantly enforced to keep rural residence at home and from flooding of the cities. During the famine from 1958-1962, the severe restriction on movement is acknowledged for starving 30 million people to death in their place of birth.¹

Limited reforms to the Hukou system in 1984 permitted qualified rural workers to work unofficially in cities. Basic social services such as health care and education are still not available to migrants at this time. An initial trickle of 564,000 workers begin the gradual trend of increasing rural to urban centres in Jiangnan.²

MOTIONSCAPES: BY TRAIN

From the bullet train window, at 350 km/hr., nothing of the landscape registers. Towering apartment blocks flash by in fractions of a second. Entire cities merge with other cities. Geography ceases to articulate space. City walls no longer hold a sense of enclosure. The 300 km distance that once isolated Nanjing to Shanghai is collapsed into a single one hour blur.

To American sculptor Tony Smith, the arrival of modern speed fundamentally altered our perception of landscape. Along the newly constructed highways outside New York City in the late 1960's, Smith noted that the static scenes of the picturesque landscapes that we all share are overwhelmed by an experience of the fleeting landscape in motion. "I thought to myself, it ought to be clear that's the end of art. Most paintings look pretty pictorial after that. There is no way you can frame it, you just have to experience it."⁸

Director Wong Kar-wai explores the phenomena of speed and the frameless experience of the city in motion in the film *Chungking Express* (1992). The film plunges and loses itself in the pace of Hong Kong, the first contemporary Chinese city. *Chungking Express* is an endless

chase scene from which the characters find no rest. The story follows three figures in a triangle of unrequited love. Detectives on the move, fugitives on the run; lovers escape from each other's grasp - no one catches their man. Time seems to never stand still, and when it does, it is in the minds of individuals deep within their own memories and desires. Like a window into isolated chronologic frames, *Chungking Express* simultaneously choreographs four lives that rub against each other just before slipping by, pulled apart by their past or propelled forwards by circumstance, not realizing the subject of their affection is in fact contemporaneous and in front of them.

Wong Kar-wai scholar, Janice Tong, points to the opening sequence of *Chungking Express* as an example of the overlapping yet incongruous temporalities. Clouds coalesce and disseminate in an accelerated sequence witnessed by the fixed silhouette of rooftops. A voice-over demands that the audience oscillate between what is seen and heard, presumably spoken in the film to be seen. 'At our closest point we were just 0.1 cm apart' says the voice of cop 233, '55 hours later, I fall in love with this woman.'⁹

Tong elaborates on the portrayal of time that,

*Wong's manipulation of time enables us to see incongruous and divergent states of time in the same image. Simultaneously represented, these states of time appear to be in the process of dissemination; the images dilate and stretch, and seem to slip and pull away from each other.*¹⁰

The three characters are shot in motion on Kowloon streets made anonymous in a smudge of light and colour. There are no recognizable landmarks, no iconic buildings that betray a specific place. The city lends no common spatial reference to discern a common temporal framework. All three characters leave no trace in the city they cannot perceive. Each can only see themselves and live within their own, often fictionalized memory. Solitude reigns in Wong Kar-wai's Hong Kong.

Anthropologist Marc Augé (1935-) traces individualized experiences of landscape to early modernists Walter Benjamin (1892-1940) and Charles Baudelaire (1821-1867). Both describe Paris, France from their perspective phenomenologically. Unlike Baudelaire's gaze

that takes in a collage of factory chimneys, gothic spires, and a range of temporal frames they represent, Augé contends that the super modernist gaze only sees one temporal space, the present.¹¹ Like the view from the bullet train window, the blurred landscape is ephemeral, fleeting, and all immersing. Augé contends that such places, or in his words 'non-places,' are unique to our age. Non-places are where we may be surrounded by people, but our experience of space is isolated from the crowd. Like the characters in Chungking Express, non-places are temporally isolated and experientially solitary.

The non-places hold no collective memory. The hurried paths of the individual traveller do not permit a reading of tangible markers in the landscape. They present an elusive experience not readily remembered and shared. In Augé's words, non-places are not anthropological places; they are neither "relational, historical or concerned with identity."¹²

A person entering the space of non-place is relieved of his usual determinants. He becomes no more than what he does or experiences in the role of passenger, customer, or driver. Perhaps he is still weighed down

by the previous day's worries, the next day's concerns; but he is distanced from them temporarily by the environment of the moment. Subjected to a gentle form of possession, to which he surrenders himself with more or less talent or conviction, he tastes for a while - like anyone who is possessed - the passive joys of identity-loss, and the more active pleasure of role-playing.

What he is confronted with, finally, is an image of himself, but in truth it is a pretty strange image. The only face to be seen, the only voice to be heard, in the silent dialogue he holds with the landscape-text addressed to him along with others, are his own: the face and voice of a solitude made all the more baffling by the fact that it echoes millions of others...¹³

Augé's traveller may also well apply to the passenger aboard our bullet train. As if in a dream, and deprived of all territorial markings, passengers are free to project their own desires onto the undecipherable landscape. Freedom, however, is paid for in solitude. The only images passengers see in the landscape-blur are their own reflections in the window pane.

The photographic essay, *Motionscapes 01*, captures the landscape in motion. These photographs are an attempt to depict an image of space and time in contemporary Jiangnan, as well as a prevailing sense of deafening solitude. All the images are taken from the bullet train window on numerous trips across Jiangnan. The photographs span the very first and last impressions of the landscape from September 2008 to July 2010.

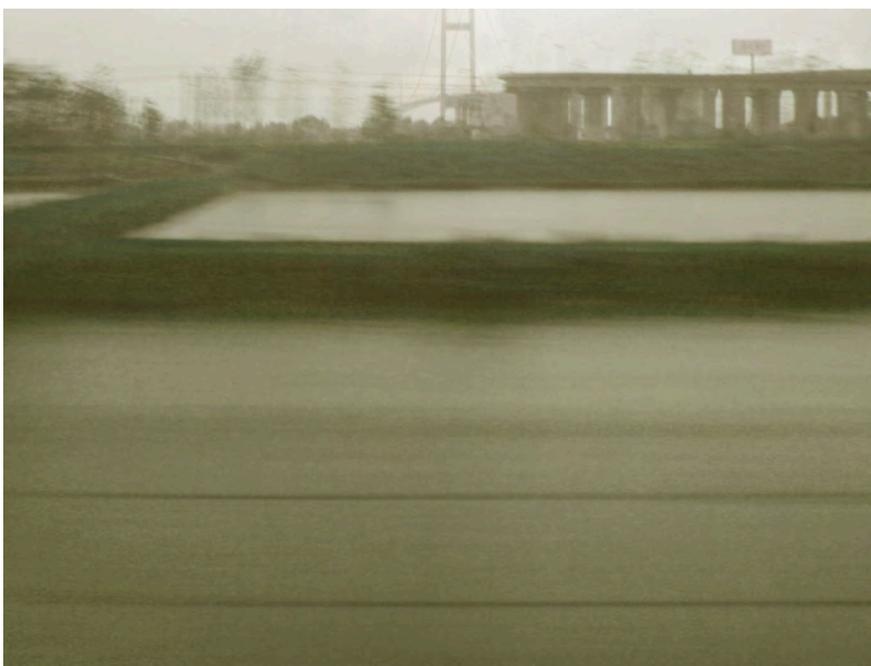


Fig 1.06







Fig 1.07





Fig 1.08



Fig 1.09







Fig 1.10



Fig 1.11





Fig 1.12



MOTIONSCAPES: BY BUS

Motionscapes 02 investigates further the solitary experience of non-places from a reverse perspective, that is, outside of the moving vehicle. The passengers as they experience the landscape in motion are themselves the subject here. The pictures of buses and their occupants are taken from the street, usually momentarily stalled at traffic signals. The series of photographs are taken over a period from November 2008 to December 2009.

Some passengers depicted gaze blankly out the window as if hypnotized by the passing landscape. Others sleep, while another chats with a distant friend by cellphone. Pressed against the transparent canvas of the bus window, the bus offers a cross-section through multiple solitary experiences of the same landscape.

A second theme emerged while composing the photographs. Images plastered against the bus exterior merge and often overlap the bus windows. They feature smiling saleswomen; another, a woman in an exotic tribal headdress selling rice wine, and another, the furnishings of a modern home. For a moment, the larger-than-

life images bring some pleasure. They are the only tangible images in a sea of moving traffic. Their exaggerated emotions cut across the blurred landscape and are readily legible.

A closer inspection of the passengers juxtaposed to the advertisements below them is less satisfying. The combined image of passenger and imagery contradicts itself. No traveller smiles as sweetly as the woman with the headdress. None appears as alert as the sales lady. Advertisements expire. The joint across the sales agent's forehead betrays the thinness and temporary quality of the image. Wording from a previous advertisement tattoos the cheek of the smiling woman with the headdress. The images of fellow passengers are exaggerated in size and by desire for legibility in the blurred landscape. Yet the larger than life images are unconvincing. We see their peeling edges. Juxtaposed to the real condition of the passengers in the bus window, we read that even advertisements designed to be seen in motion are themselves unimpressionable and subject to expire.



Fig 1.13



Fig 1.14



Fig 1.15



Fig 1.16



Fig 1.17

Fig 1.18



Fig 1.19 Going to Work, Machun Road, near Fuciao Cun Village, Suzhou

Fig 1.20 Abandoned Building, Waihai Road, Shanghai

Fig 1.21 Abandoned Building, Fuciao Cun Village, Suzhou

Fig 1.22 Abandoned Tongda Lu Bridge, near Fuciao Cun Village, Suzhou

Fig 1.23 Sorting Rubble, Fuciao Cun Village, Suzhou

Fig 1.24 Waiting for the Bus, Moye Road, Suzhou

Fig 1.25 Surveying, Jichang District, Suzhou

Fig 1.26 City Rising, Hefei, Anhui

Fig 1.27 Pet Lion, Jiusheng Gang, near Fuciao Cun Village, Suzhou

Fig 1.28 Jichang District, Suzhou

Fig 1.29 Abandoned Boats, Fuciao Cun Village, Suzhou

EMERGING CITYSCAPES

In Jiangnan, the very city fabric is in motion. In Hefei city, at the fringe of Jiangnan, a single canal traces the perimeter of the ancient city. Bloated circulatory routes cut and pry open the once walled city. The broad avenues channel the sprawling city south towards its new suburban business districts, such that no distinction can be made between the traditional and new city. No artifacts survive to suggest two thousand years of settlement on the site. As if extruded from the earth all at once overnight, the entire sprawling city has remolded itself as a single glistening yet amnesic image of progress (Figure 4.08). Like the territory experienced from the train, without “relational, historical or concerned with identity,”¹⁴ the city itself becomes a non-place.

What Mao Zedong began, Deng Xiaoping’s economic reforms completed in the 1980’s.¹⁵ Most cities in Jiangnan have already undergone Hefei’s complete and total modernizing transformation.

Cities in Jiangnan are themselves not unlike the sides of buses. Building facades operate like billboards. The new glassy architecture is never

satisfied with being itself. It strives to project through transparency, lightness, and brightness in an image as fleeting and ephemeral as fashion.

Image making extends to infrastructure. Florescent lights illuminate the belly of elevated highways in alternating colours. Authorities obsessed with image making constructed an elegant steel suspension bridge over the Grand Canal, south of Suzhou. To the dismay of motorists, the four lane bridge at Tongda Lu stands abandoned because it cannot accommodate the weight of vehicles (Figure 4.04). In Jiangnan, where speed liberates the landscape of its determinants and ideas of place, image-making supersedes place-making.

Cityscapes 01 predominantly documents the urban landscape at the fringes of Suzhou. These include construction north and west of the city (Figures 4.07 and 4.09) and the destruction of Fuciao Cun Village in preparation for the development to come (Figures 4.03, 4.05, 4.12.).























北



纽崔莱
DOUBLE
倍立健片

双倍付出 健康要有双倍支持

ATIMA

























21:00



21:30



22:00



22:30



23:00



23:30



24:00



24:30

Fig 1.32 Left: 180 Minutes in Wujiang, June 24, 2010, 10pm-1am

Fig 1.33 Below: the factory in Wujiang by day

EMERGING CITYSCAPES 02

The only way to comprehend and perhaps escape the dizzying pace of building and rebuilding the contemporary Jiangnan city is to stand still. The photo series 100 Days in Nanjing, documents a day by day construction and the 89 story Greenland Tower, and its claim to fame for Nanjing as the tallest building in China outside Shanghai. 180 Minutes is another photo series taken in Wujiang, a suburb of Suzhou that cuts through time to depict the rhythm of a factory dormitory. The 180 minutes betray the mechanical likeness of factory workers in their dorms, from the moment they return to their rooms, from the moment they return to their rooms, to when they switch off their lights, from 21:00 to 24:00.







Fig 1.31 100 days in Nanjing. Constructing the Greenland Tower, Nanjing, Winter, 2009.



Fig 1.34



Fig 1.35

FUCIAO CUN TEMPLE

FUCIAO CUN TEMPLE

While riding Bus 501, immediately after detouring around the abandoned Tongda Lu Bridge in the outskirts of Suzhou, the bus turns to follow the shores of Dushu Lake. Abruptly, views of the congested and endless suburban landscape are exchanged for the expansive views of the lake. The nearly three kilometers of road beside the lake are suspended over its waters, except where it gently dips down to touch the land where Fuciao Cun Village once stood.

Fuciao Cun translates to Pontoon Bridge Village. A waterway bisects the town from east to west. The village once spread out south of the watercourse, its temple remains on the north. A stone slab bridge still connects the two sides, replacing the pontoon construction since at least the mid Qing Dynasty.¹⁶ Its thick granite slabs rest on cut granite piers. The bridge is a moment of certitude within the soft surrounding ground. According to inscriptions carved into the bridge piers, the bridge connects “the hustle of commerce in the south” with the “sound of zen bells to the north.” While it binds north with south, it doubles as a gate east to west, a threshold between the lake and former paddy fields, water, and land.

Steps from the temple entrance to the river are made of the same hard yellow stone. The few remaining villagers still draw water from here. The steps that access the water register its seasonal rise and fall. During the height of monsoon season, Lake Dushu rises one meter to the threshold of the temple, but never beyond. The watercourse offers a reflection of the bridge and temple. The glare of sunlight on the surface and its movement distinguish the temple on earth with its double in the water. The gable roof, finished with pairs of dragons, pierces the sky. From the opposite bank, the roofs are the only elements that break the horizon, such that between its reflection and the sky, the temple holds a place between the bottomless depths of water and the infinite heavens.

That was all prior 2010.

On the south bank, as of January 2010, Fuciao Cun Village has now nearly vanished. What remains has been carefully dismantled and loaded onto barges, brick by brick, and shipped for reuse in the growing suburbs. On the north bank, the landscape is entirely bare. Claw marks in the clay indicate the use of heavy machinery

and the violence with which the village has been ploughed under. The temple is the last moment of colour; the last portal to another time, and the only remnant that survives.

Like the village it served, the days of the temple itself are believed to be numbered. Already, the pond immediately east of the temple has been filled in; all the land around it has been extruded one to two meters. The mounded earth pushes against the temple perimeter wall. Once assured of staying dry, the temple is abruptly the most flood-prone location within sight. The horizon has been adjusted upwards and it is the most vulnerable construction to the rising lake waters. The temple no longer indexes itself against the sky and water.

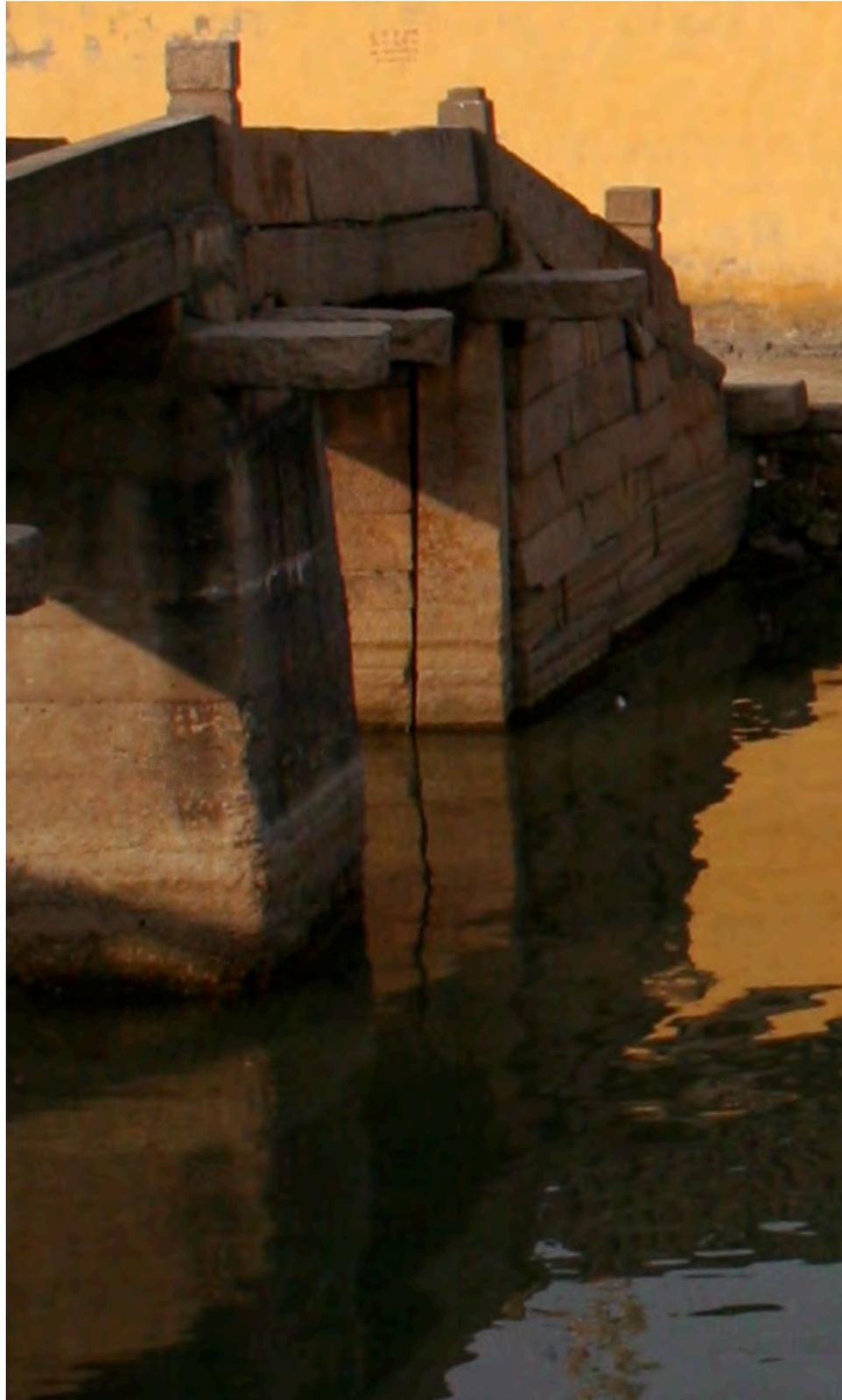
The construction of the temple is unremarkable, and the building itself is not in its own right worthy of preservation. A fire one generation ago ripped through the compound. Some of the large notched roof beams rescued from the blaze are reused as columns. They are planted directly into the uneven concrete floor without the customary stone base. In fact, the two sets of buildings that remain today are the composite of

three sets of buildings from before.

Nor is the temple worth keeping as a place of communal gathering. It has lost its constituency. Each morning, the temple keeper unlocks the gate at sunrise and closes them by mid-morning. He returns for two hours in the early afternoon. On these occasions, he leaves the door ajar - enough to indicate that the temple is open. However, for the most part, the door is closed. Those now scattered Fuciao residents that still come, arrive at the temple on bus 501 via the newly elevated road, and trickle in only on festival days like the ones celebrating the new moon.

Still, the temple at the former Fuciao Cun Village is precious as the only moment of permanence within a restless city. The temple, with all its potentials and obsolete dimensions will be explored in Volume Three. For now, the present section gives itself over to the more immediate desire to preserve the artifact through photography before it too is replaced.

Fig 1.36 Temple of the Water, reflected entrance, Dec 2009





TEMPLE OF THE WATER

Fig 1.37





Fig 1.38

Fig 1.40





Fig 1.39



Fig 1.41

Fig 1.42



Fig 1.43





Fig 1.44

Fig 1.45



Fig 1.46





Fig 1.47



Fig 1.49



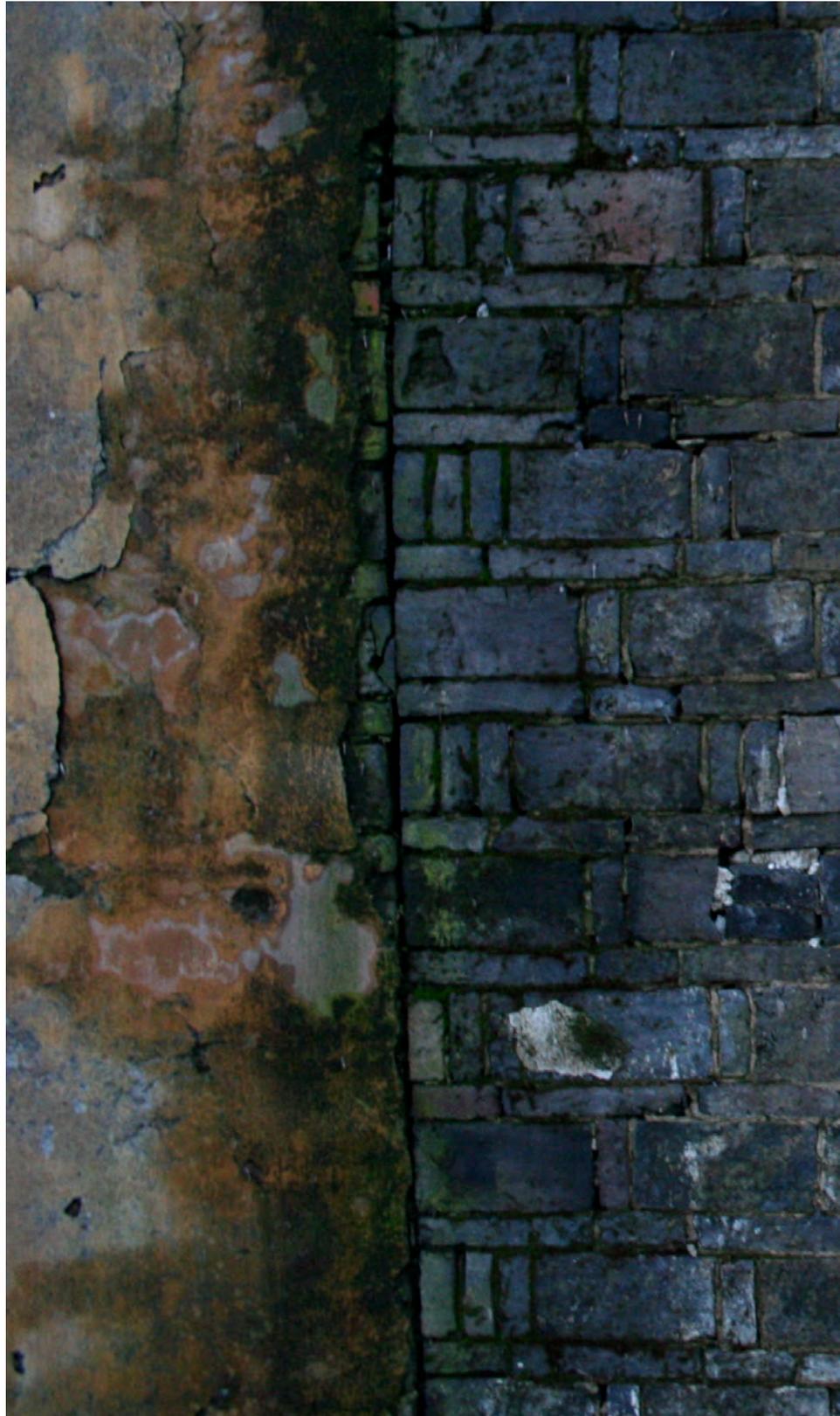
Fig 1.48





Fig 1.50

Figure 1.51
Bricks, plaster, and paint on the temple wall, June 2010





TEMPLE OF THE EARTH



Figure 1.52
The Tudi Earth God, June 2010



Figure 1.53
The Tudi Earth God Hall, June 2010



Figure 1.54
Councilors of the Tudi Earth God's Court, June 2010



Figure 1.55
Paying tribute at the Tudi Earth God Hall, June 2010



Figure 1.56
The temple keeper at the Tudi Earth God Hall, June 2010



Figure 1.57
The space between the Tudi Earth God side buildings, June 2010



Figure 1.58
Between the Tudi Earth God Hall and compound wall, June 2010



Figure 1.59
Paying tribute at the Tudi Earth God Hall, June 2010



Figure 1.60
Paying tribute at the Tudi Earth God Hall, June 2010



Figure 1.61
Entrance to the Tudi Earth God Hall, June 2010



Figure 1.62
The temple keeper at the Tudi Earth God Hall, June 2010



Figure 1.63
Paying tribute at the Tudi Earth God Hall, June 2010



Figure 1.64
Standing at the in filled pond, outside Fuciao Cun Temple, June 2010



Figure 1.65
Standing at the in filled pond, outside Fuciao Cun Temple, June 2010



Figure 1.66
The doorway to the inner courtyard from the Earth God Hall, June 2010



Figure 1.67
Standing above Fuciao Cun Temple, June 2010



Figure 1.68
The new bridge at Fuciao Temple, July 2010



Figure 1.69
Fuciao Temple amidst a new landscape at night, July 2010



Figure 1.70
The temple keeper, July 2010

Figure 1.71
Swallows, July 2010





TEMPLE OF THE SKY

Fig 1.72 Temple Court





Fig 1.73 The Heavenly King



Fig 1.74 Courtyard





Figure 1.75
Above: The Heavenly King, July 2010
Figure 1.76
Left: Window to the sky, July 2010

Fig 1.77 Incense





Fig 1.79 Donar Wall





Fig 1.80 Heavenly King



Figure 1.81
Headdress, July 2010

Figure 1.82
Bottom Left: A silenced drum at the Hall of the Heavenly King, July 2010

Figure 1.83
Bottom Right: Window onto the Hall of the Heavenly King, July 2010







Figure 1.84
Above: Creatures on the roof ridge freeze, July 2010
Figure 1.85
Left: Water dragon on the roof ridge freeze, July 2010



Fig 1.86 Courtyard



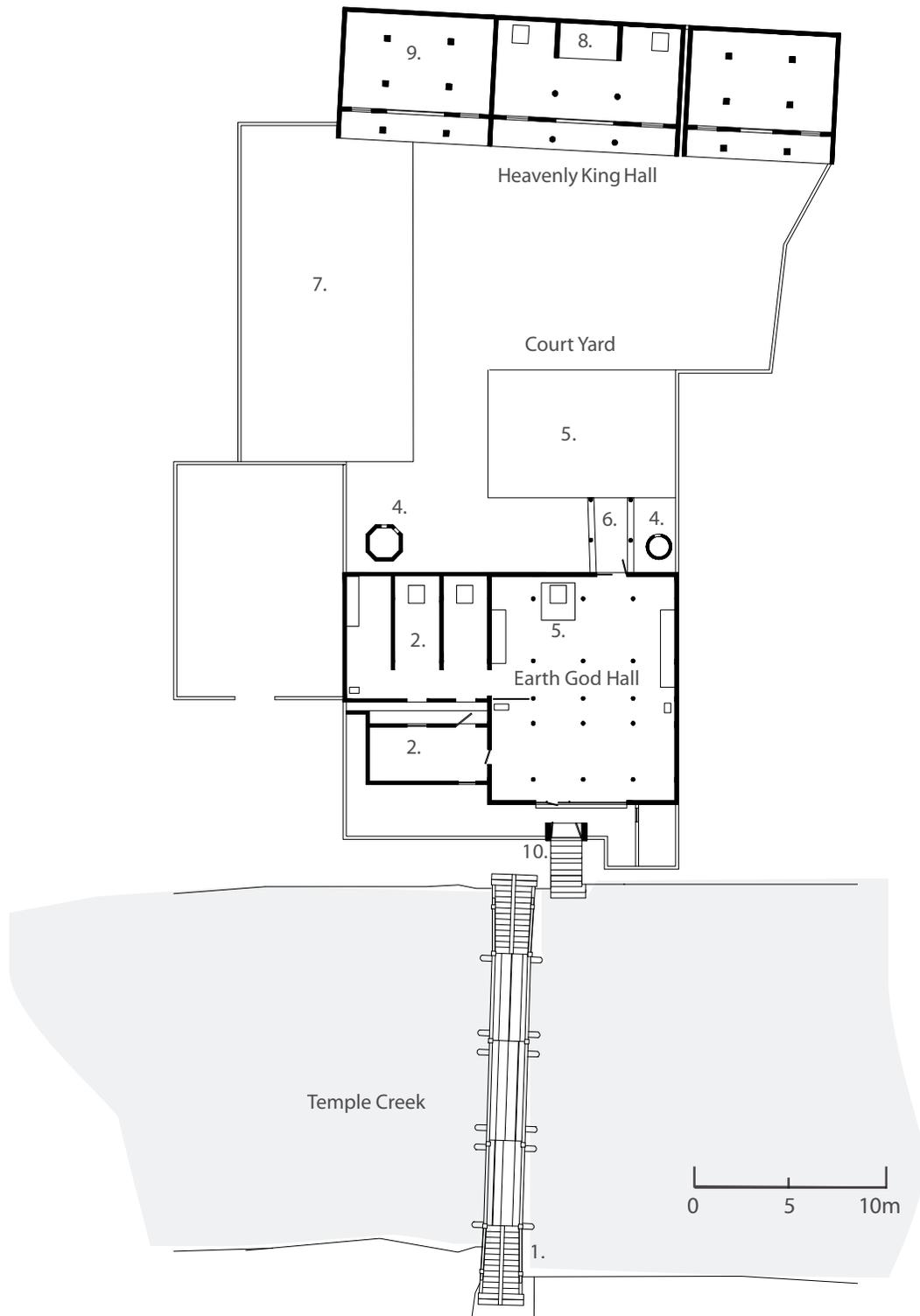
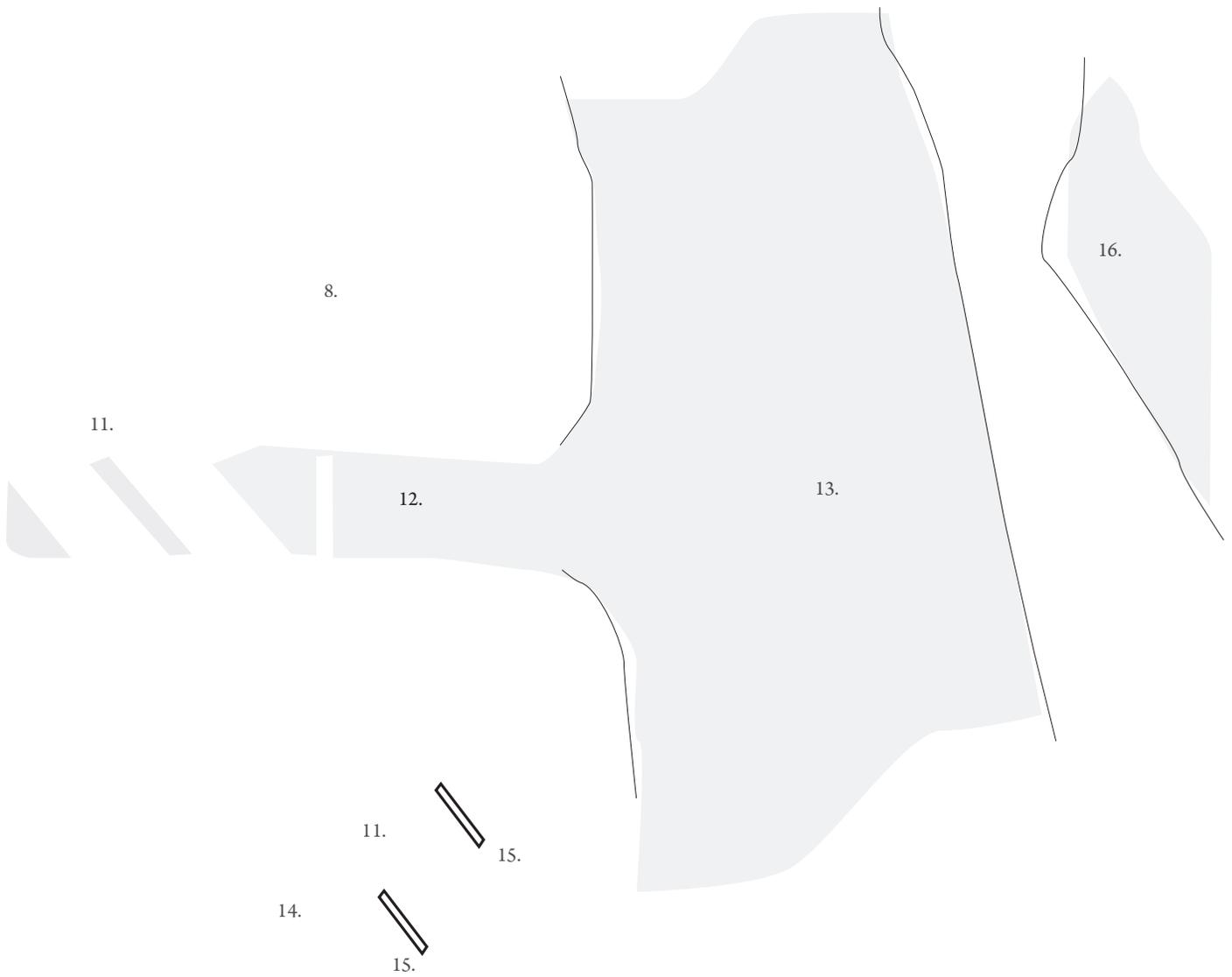


Fig 1.88 Fuciao Temple Plan



- | | |
|-----------------------------------|--------------------------------|
| 1. Stone Bridge | 10. Gate |
| 2. Side Hall | 11. Modern Bridge |
| 3. Offering Ovens | 12. Temple Creek |
| 4. Statue of Tudi Earth King | 13. Dushu Canal |
| 5. Foundation of Burnt Hall | 14. Road to the former village |
| 6. Covered Corridor | 15. Bus station |
| 7. Modern concrete stage | |
| 8. Statue of Heavenly King | |
| 9. Statue of the Goddess of Mercy | |

Fig 1.89
Fuciao Cun Temple Site Plan

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12. Ibid., 63.
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15. See Episodes in Jiangnan History at the beginning of this volume for a list of regional historic periods. These site observations were made from June-July, 2010.
16. Ibid.



Fig 1.90
Waiting for Train D445 in Shanghai Station, October 2009



WAITING FOR TRAIN D445



Fig 1.91
Waiting for Train D445 in Shanghai Station, October 2009





Fig 1.92
Boarding Train D445 in Shanghai Station, October 2009



WATERLAND
CHAPTER 2



Fig. 2.02 Precious Belt Bridge, the Grand Canal, and the rising suburbs, Suzhou, July 2010

What silt began, man continued. Land reclamation. Drainage. But you do not reclaim a land overnight. you do not reclaim a land without difficulty and without ceaseless effort and vigilance. The Fens are still being reclaimed even to this day. Strictly speaking, they are never reclaimed, only being reclaimed.

Graham Swift. *Waterland*. 1998



Fig. 2.03 Jiangnan Waterways



Yangtze River

Wusong River

SHANGHAI

Huangpu River

Eastern China Sea

SHAOXING

NINGBO

ZHOUSHAN

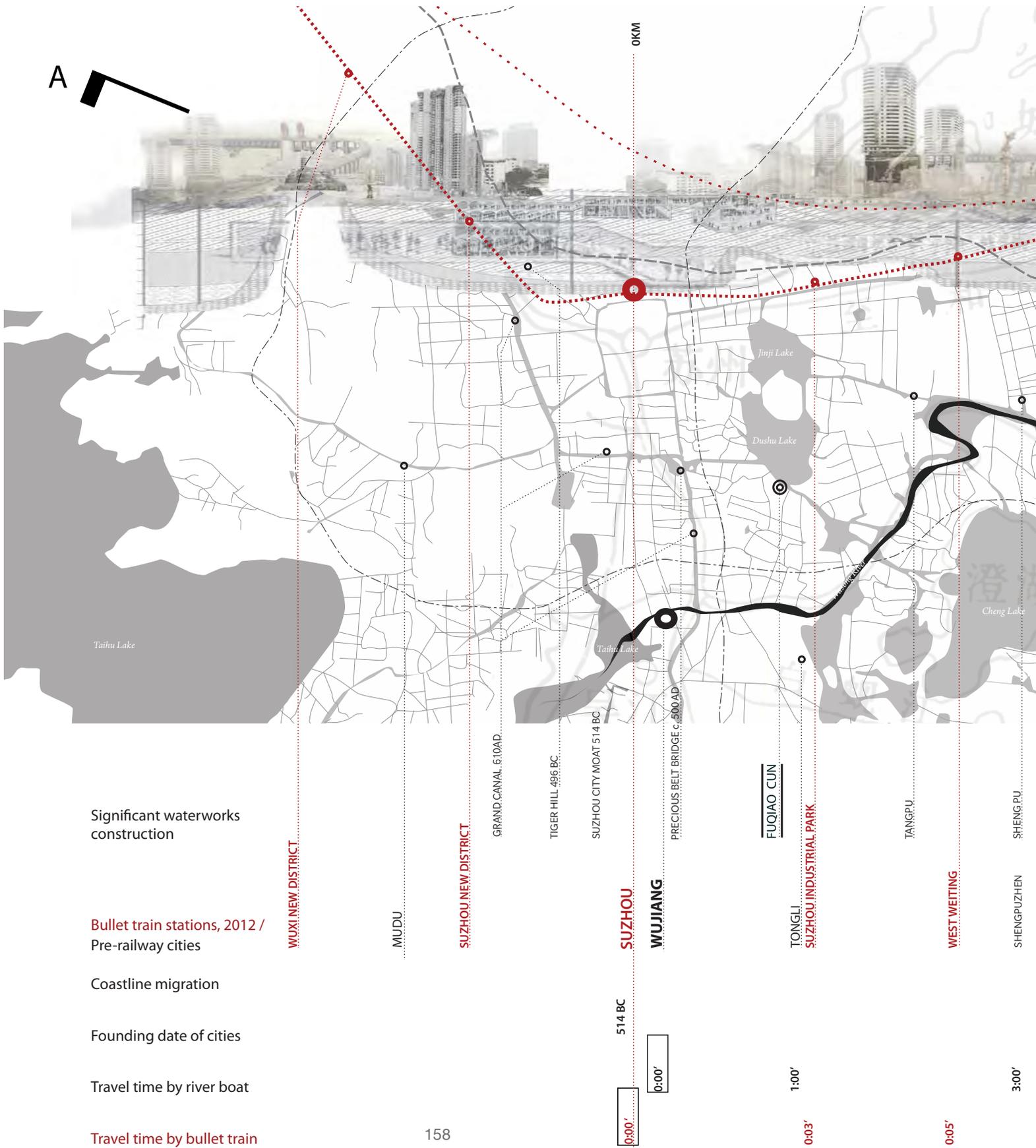
Fig. 2.04 Right: Nanjing canal, Nanjing, June 2010

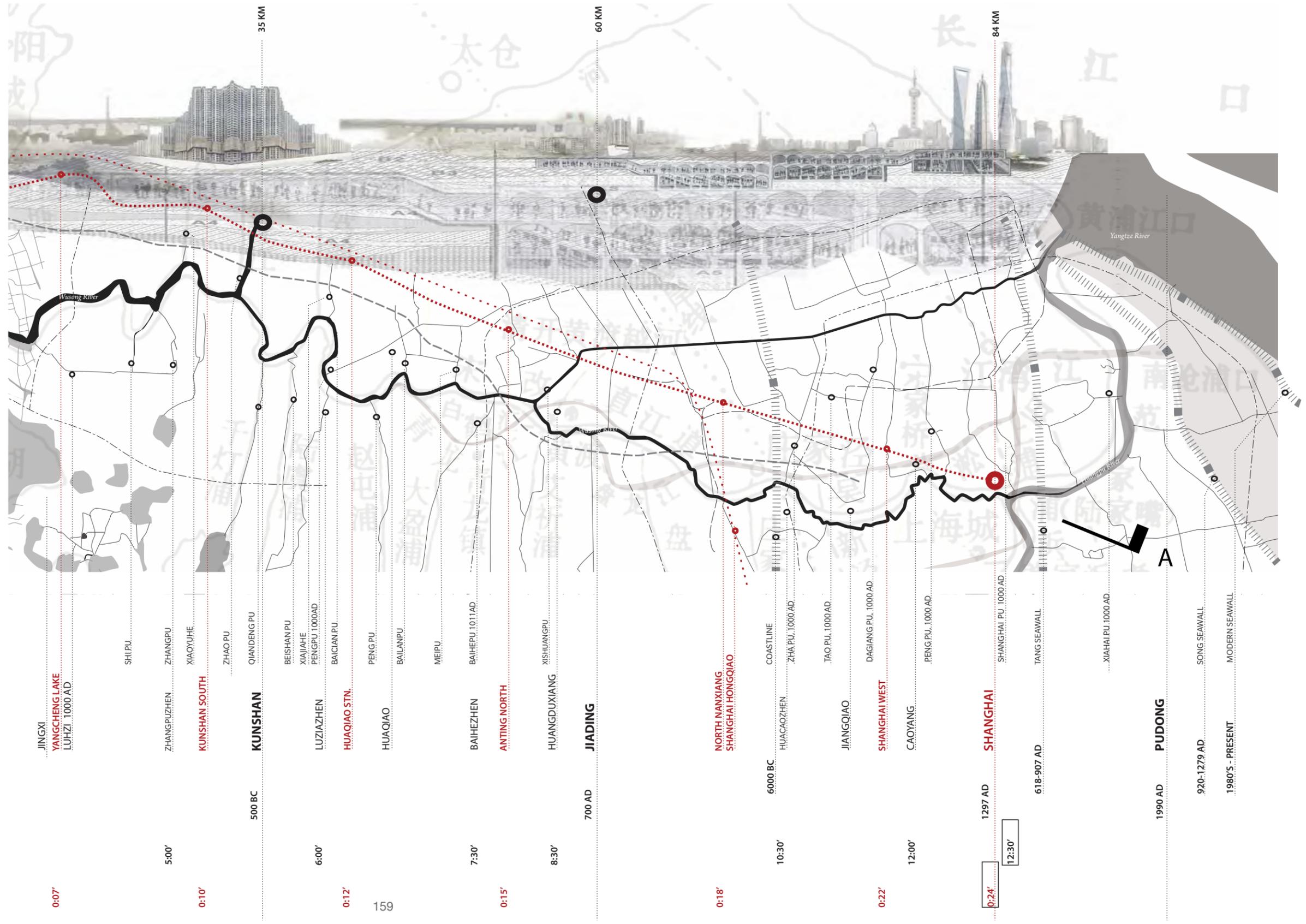


Fig. 2.05 Wusong Corridor

MAPPING THE SPEEDS OF THE WUSONG CORRIDOR

THE BULLET TRAIN, WUSONG RIVER, MIGRATING COASTLINE FROM SUZHOU TO SHANGHAI





0:07

JINGXI
YANGCHENG LAKE
LUHZI 1000 AD

5:00'

SHI PU
ZHANGPUZHEN
ZHANGPU
XIAOYUHE
ZHAO PU
QIANDENG PU

0:10'

KUNSHAN SOUTH

KUNSHAN

500 BC

35 KM

6:00'

BEISHAN PU
XIAJIAHE
PENGPU 1000 AD
BAICIAN PU

0:12'

HUAQIAO STN.

HUAQIAO

159

7:30'

BAIHEZHEN

ANTING NORTH

0:15'

HUANGDUXIANG

700 AD

60 KM

0:18'

NORTH NANXIANG
SHANGHAI HONGQIAO

6000 BC

COASTLINE
HUACAOZHEN
ZHA PU, 1000 AD

10:30'

8:30'

JIANGQIAO

TAO PU, 1000 AD

0:22'

SHANGHAI WEST

12:00'

CAOYANG
PENG PU, 1000 AD

0:24'

SHANGHAI

1297 AD

SHANGHAI PU 1000 AD

12:30'

618-907 AD

TANG SEAWALL

1990 AD

PUDONG

920-1279 AD

SONG SEAWALL

1980'S - PRESENT

MODERN SEAWALL

Yangtze River

Wusong River

A

INTRODUCTION: THE WUSONG CORRIDOR

I like to take my camera to the Suzhou River and just drift along, west to east, through Shanghai. There's a century wealth of stories here. And rubbish, which makes it the filthiest river. Many people live here anyway, making a living on the river. They spend their whole lives here. Look, you can see them. If you watch it long enough, the river will show you everything...

Lou Ye, Suzhou He, 2000.¹

Just south of Suzhou, the Wusong River meanders its way across the flatlands of Jiangnan from Lake Taihu to the East China Sea. The Wusong is among earliest mentioned rivers in Jiangnan² with as many names as it has changed its course, from the Suzhou, and Wusongjiang, to the Songjiang and Liu Rivers. Its mouth was said to be as broad as twenty li (Chinese miles).³

The story of the Wusong is suggestive of the hydrologic narrative of Jiangnan as a whole. The State of Wu was the first to actively manipulate the river in 248 BCE.⁴ By digging canals for drainage and navigation, the Wu Tribe set in motion a ceaseless negotiation between the watery landscape and its inhabitation. Since the Tang Dynasty (618-907 CE) the

shoreline at the Wusong's delta advanced one kilometer seawards every twenty five years.⁵ Each generation aggressively claimed the emerging land, erecting earth berms secured by deep piles and plated with stone. The monumental earthworks are a reminder that the boundary between land and sea is made stable only by seawalls fashioned by sheer human determination.

What land was gained was also lost. By throwing itself further into the sea, the Wusong elongated its course, minimizing its gradient and compromising inland water from reaching the sea. Flood events increased. The Panlong (coiled dragon) and Baihe (white crane) channels were dug perpendicular to the Wusong to expedite drainage to the sea. Thirty additional such channels, named *pu*, were additionally constructed in the same manner during the Northern Jin (1115-1234). Spaced every five kilometers from Suzhou to what would be Shanghai, the *pu* offered a steady water supply and opened up vast new territories for cultivation, and a network of cities the channels would eventually support (See diagram on previous page to locate the *pu*).⁶

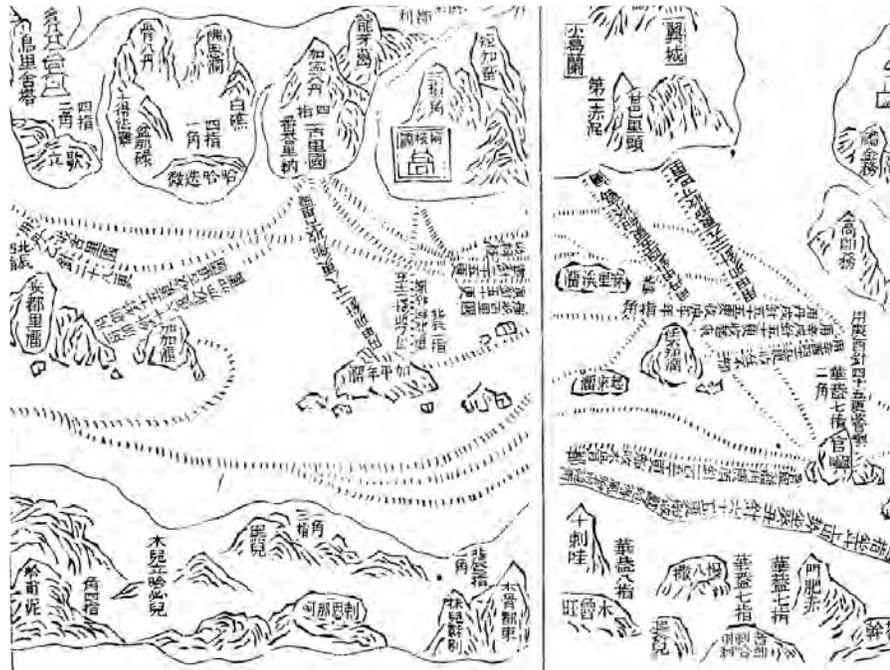


Fig. 2.06 Left: Navigational Chart from Zheng He's expedition, 1621

Fig. 2.07 Centre: Early Han Dynasty Map, c. 200 BC

Fig. 2.08 The Tracks of Yu Gong, grid map carved in stone, 1137

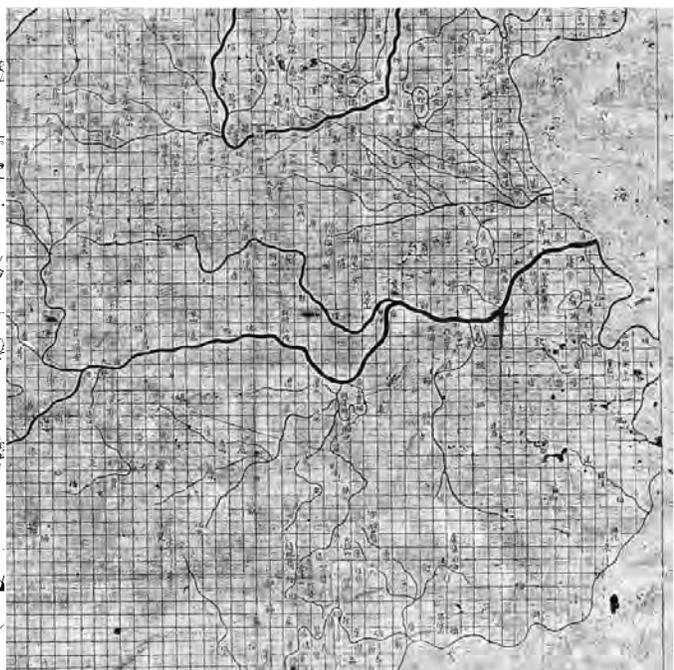
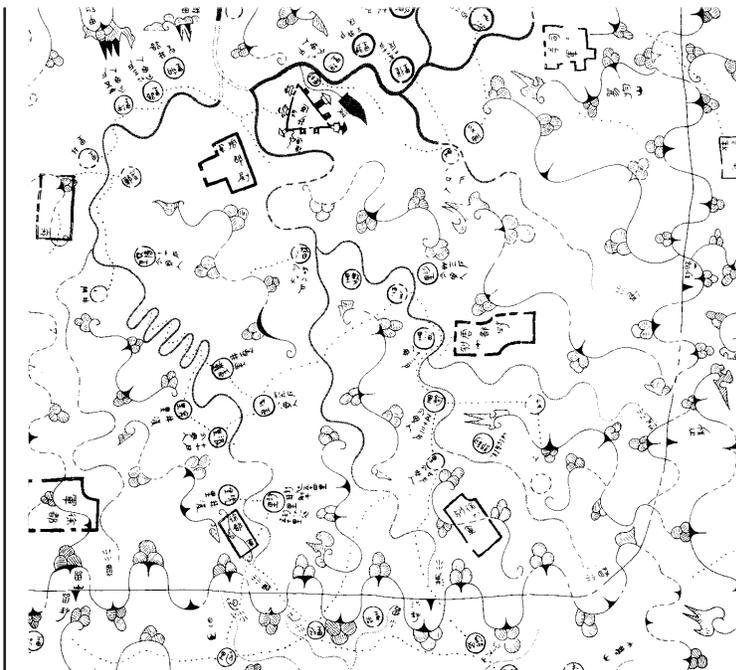
At the dawn of the modern era, an intricate lattice of canals crisscrossed the entire Jiangnan plane, negotiating a complex range of transport, trade, agriculture and flood protection interests. Jiangnan became the Netherlands of China. In a postmodern Jiangnan, mesmerized by speed, however, the slowness of the waterway transport has recast canals as obsolete. Neglected by the fundamental shifts in transportation and the disappearance of paddy agriculture, the antiquated *pu* have lost the economy that sustain them. The channels clog up. No longer able to drain itself, the Jiangnan plane demands new strategies to manage the waterland.

Waterland seeks out a new relationship between the a hydrological landscape on the brink of radical change and its inhabitation. The ingenious working and reworking of the land and water is constant and the consequent landscape is an ever faithful register of deep social investments. This volume examines the landscape as surface for intervention that

resonates with the active geologic thickness of its section. It aspires to reveal a latent collective identity imbedded in hydrologic rhythms and processes otherwise obscured by the prevailing the solitary speed of contemporary Jiangnan.

HYDROLOGIC WRITING

Before proceeding, it may be instructive to survey both hydrologic writing and its allied discipline, cartography, as they constitute the two parallel strategies in constructing the following investigation. Hydrologic writing is a particular genre in Chinese scholarship dating to Guo Pu's (276–324 CE) *Waterways Classics*.⁷ A grand strategy for managing floodwaters in Jiangnan is central to hydrologic writing. Two competing approaches can be traced to the Song Dynasty (960-1279) with Shan E, who advocated flushing floodwaters, versus Jia Dan, chief proponent for floodwater retention. The two approaches implicate vastly different roles for the state and its people.⁸ Draining floodwaters relied on the



state to mobilize a standing army of labourers and to secure sustainable funding sources to annually dredge the waterways at a regional scale. This approach arguably empowers and entrenches a hierarchical command structure best described by Karl Wittogel's seminal book, *Oriental Despotism* (1957).⁹ Alternatively, the strategy to retain water demanded strengthening private dikes and channels. Such a system arose in the Ming Dynasty when local landholders organized their own farmhands to maintain their respective infrastructure to water their own fields.¹¹ The history of water conservancy in Jiangnan, then, was the alternating practice of dual traditions, expulsion and retention, tied to questions of government and ownership over a shared resource.

CARTOGRAPHY

As early as the endeavor to record the hydrologic environment in writing is the desire to draw it. Jiangnan maps abstracted the infinitely rich environment using methodologies that

produce radically differentiate maps. The same civilization that invented the spatially accurate grid map¹⁰ (Figure 2.08) recorded the voyages of admiral Zheng He (1371-1435) as a memory map (Figure 2.06). The navigational chart is illustrated as a single uninterrupted line of travel through space and time, revealed to the viewer as the five meter scroll it is drawn on is unfurled. In a memory map, time like distance is relative; those familiar places along the Yangtze River in Jiangnan are represented at 7 miles per inch. The exotic African shore is drawn at 215 miles per inch.¹²

Waterland depicts the environment from a hydrologic perspective. Three principal maps Geologic Time, New Hydrologies, and Just-in-Time layer freeze-frames of the restless landscape continually animated by water in three durations of time. As palimpsests of hydrologic landscapes, overlapping information in the maps are pursued as territories particularly susceptible to change, speculation, and intervention.

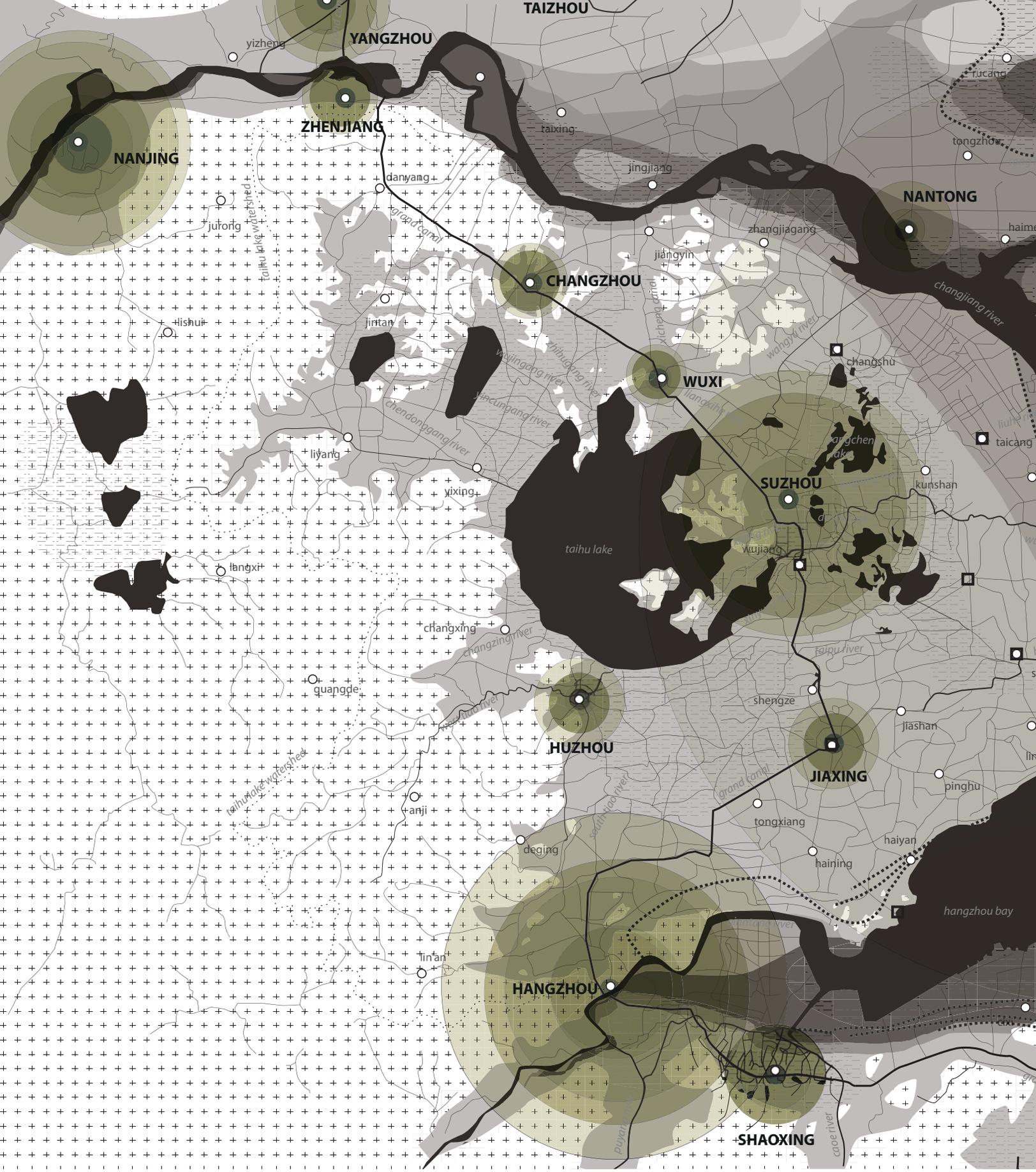
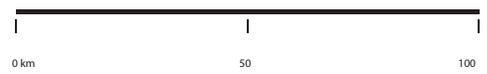
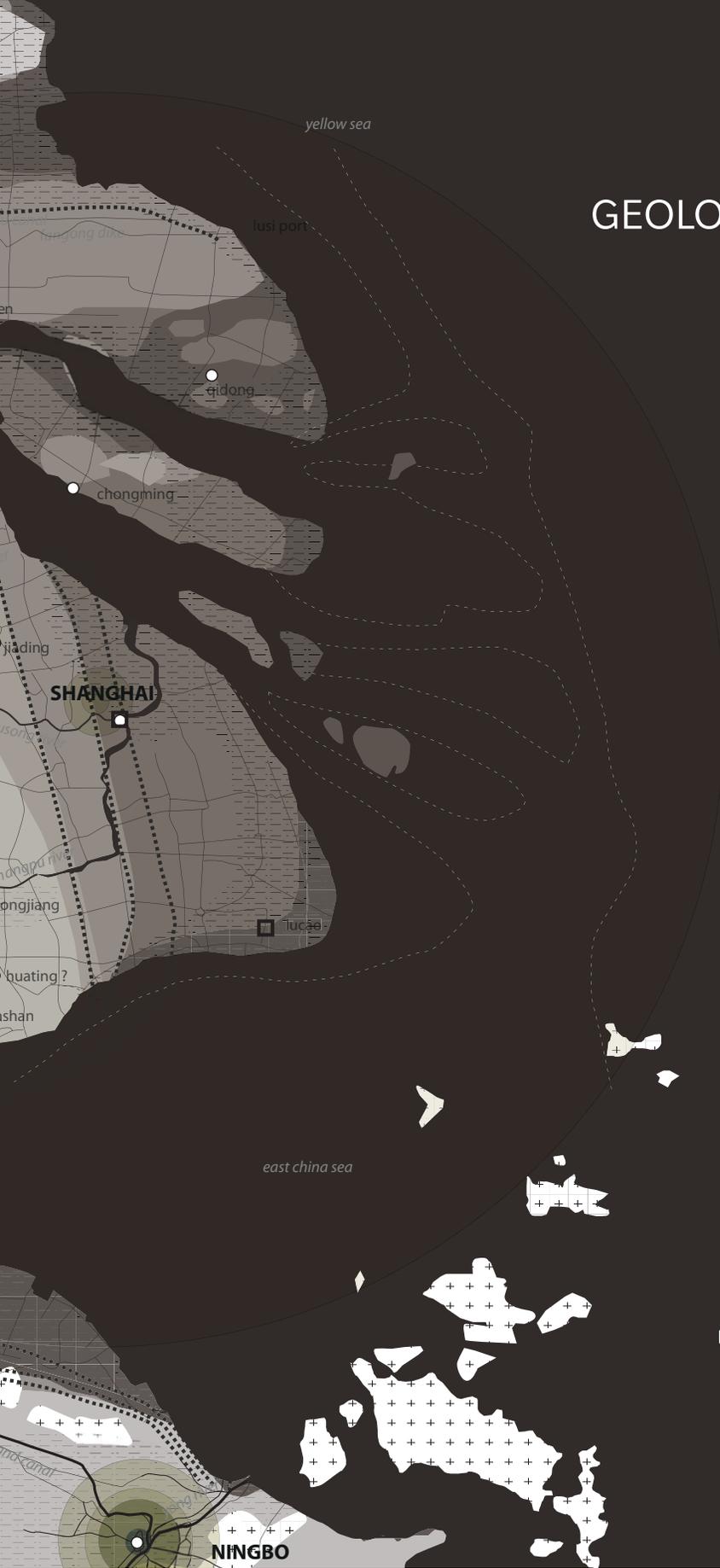


Fig. 2.09 Mapping Geologic Time

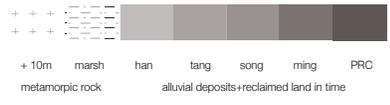


GEOLOGIC TIME 2000 BC - 2000 AD

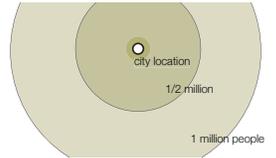


.....
 water infrastructure

—
 sea wall
 waterways



sediments over time
 165



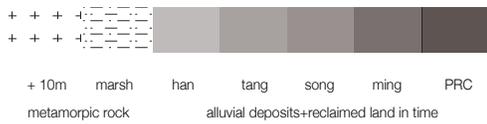
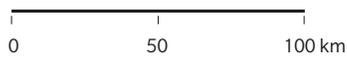
population growth 250BC - 1949AD



Fig. 2.10 Bronze Age 2000 BC

GEOLOGIC TIME

Mapping Land Formation & Erosion
2000 BC - 2000 AD



sediments over time



water infrastructure



Fig. 2.11 Spring and Autumn Period 770-476 BC

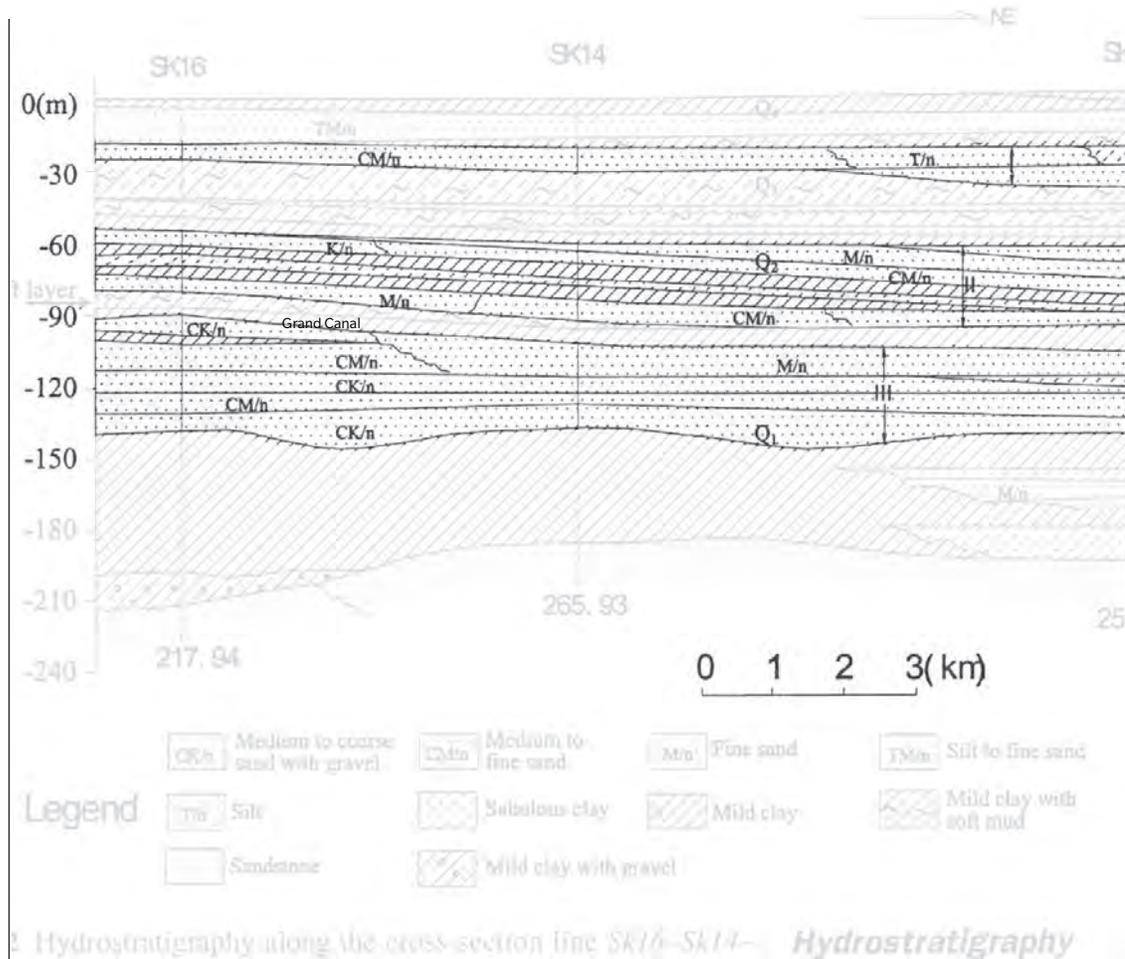


Fig. 2.12 Recording the Geologic Past in Section

GEOLOGIC TIME

Northwest of Shanghai, through a valley in sight of the Nanzhen Ridge Mountains, the Yangtze River flows from highlands of Anhui onto the coastal plain of Jiangnan. The 6000 km Yangtze or Changjiang, literally the 'Long River,' flows broad and yellow coloured.¹⁶ It not only drains, but carves and conveys bits of ground up continent. It splinters and slows at its delta as it pushes into the sea, thereby depositing vast sums of silt at its mouth. Jiangnan is the accumulation of that silt compiled over centuries; a tentative peninsula at once projected into, and continually eroded by the sea.¹⁷

The battering over time between the accumulation of land and the erosion of it has created a low brow of land halfway between the present coast and Jiangnan's centre. The ridge forms a shallow bowl centered around Lake Taihu. The lake basin averages only two meters above the sea. Sluggish rivers, falling one millimeter for every ten meters, reluctantly discharge their muddy contents to the ocean.

The contest between land and water is recorded in the thickness of the earth. In most places, two hundred meters of sedimentary deposits lie between bedrock and the surface: Forgotten rivers contributed layers of sand. Slower moving

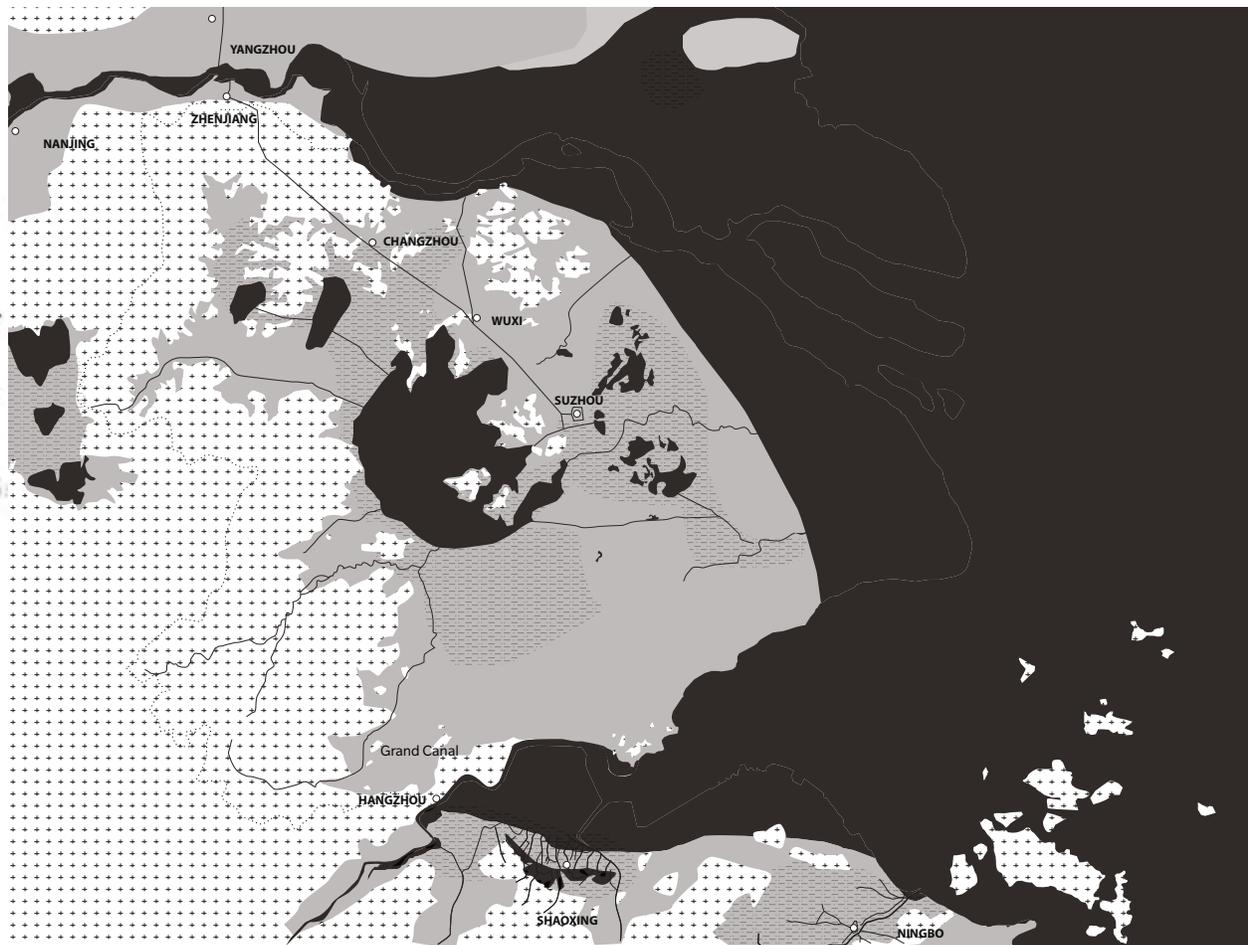
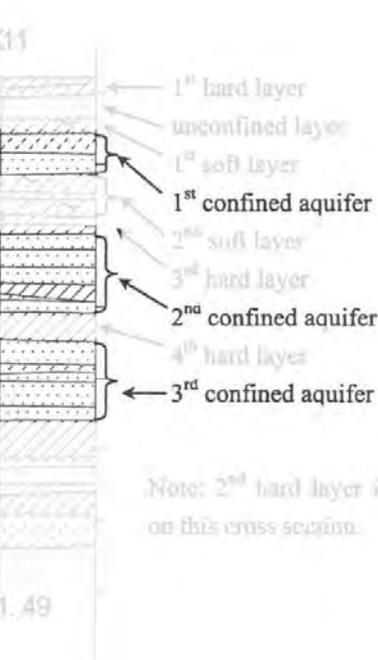


Fig. 2.13 - Han 206 BC - 220 AD

rivers and lakes left strata of hardened clay. Lagoon and marine deposited dark and softer clays mixed with rich organic matter.¹⁵ Not only buried and history frozen in time, the geologic section is continually animated by water. Surface water seeps into the ground, refilling the voids in the sandy strata: In this manner, aquifers are like the ghosts of paleo-rivers. Occasionally, the bedrock heaves upwards, interrupting sedimentary soil and spilling the contents of the underground aquifers back into daylight.

Apart from the ancient metamorphic ruptures, the only seemingly stable moments on the otherwise tireless changing water-logged surface, firm land is difficult to discern from water. Even

reservoirs of water like the expansive Lake Tai is only two meters deep. The Jiangnan plain is a bath of brackish mud. Its inability to drain itself well, coupled with monsoon rains, induces summer flooding. Before their boundaries were fixed and fortified, lakes and streams would swell by one half, to one and half times their dry season limits.¹⁸

At least five successive civilizations have emerged and were extinguished by water in Jiangnan.¹⁹ Their survival depended on their ability to adapt and control both the water-frayed boundary and flood-prone heartland of Jiangnan; their character is sculpted by this waterland.

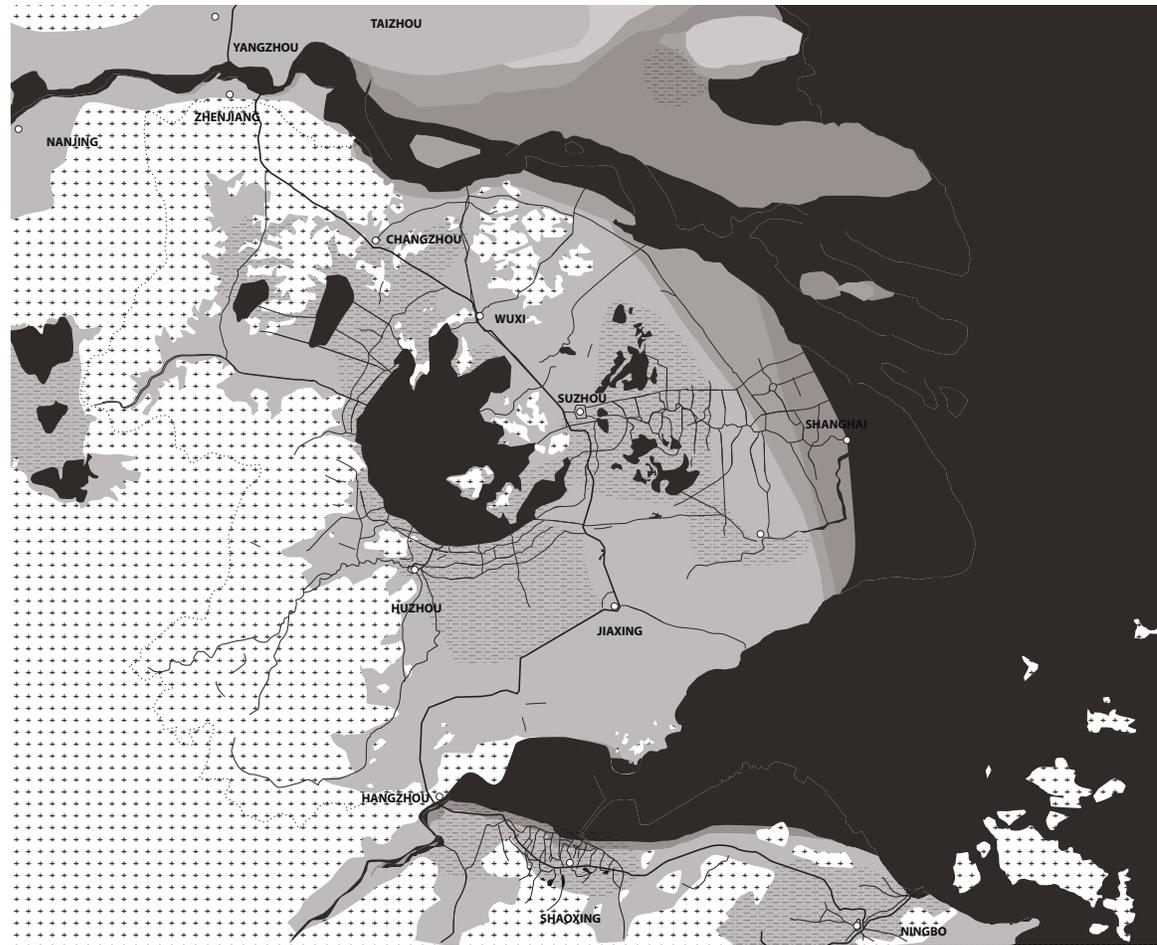


Fig. 2.14 Song 1127-1279

RICE

For the purpose of managing the hydrologic landscape, the people of Jiangnan found an ally in rice cultivation. Rice is native to Jiangnan and thrives on its seasonal variations. Cultivating rice demands dry ground for ease of harvest, and submerged conditions during its growth. Too much water early on and the seedlings drown; too little water and the tender plants overheat in their shallow pools. Timing is everything. The growing period corresponds with the rainy season and excess water is stored in reservoirs to quench the paddies in dry spells.

The archeology from Chuodun Shan, 10 km east of ancient Suzhou (31°25'N, 120°50'E)

are amongst the earliest indications of rice cultivation in China, dating to date to 4000 BCE. The remains reveal a network of fields surrounded by interconnected dykes and ditches intimately sculpted, likely without more than sticks and bare hands.²⁰ The rice growing regime reached its apex by the late Ming Dynasty when the wild water-logged Jiangnan wetlands had been transformed into an immense landscape of commercial rice production. “When Suzhou and Huzhou ripen, the empire has enough,” or so the adage goes.²¹ Artificial systems of interconnected canals tied polders and reservoirs were functionally indistinguishable from natural lakes and rivers.²² The complexity of the hydrologic landscape may be indicated by its intricate waterway network. In its entirety, even after a

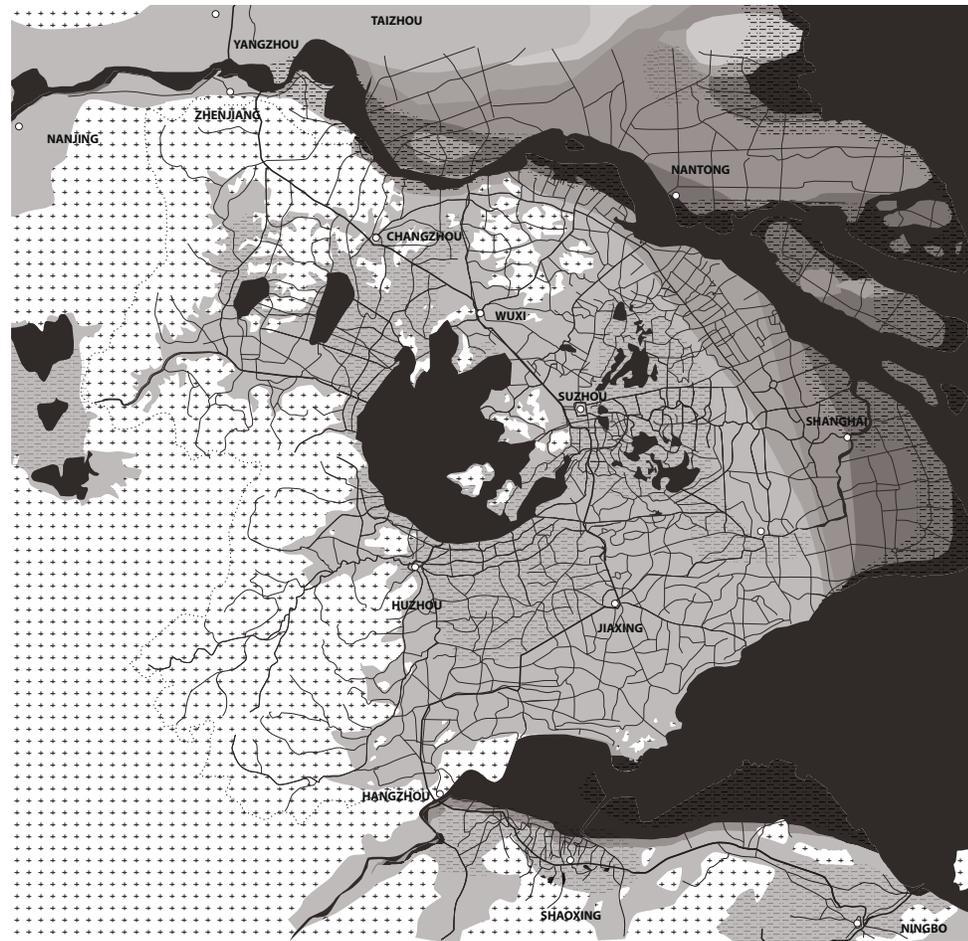


Fig. 2.15 Qing 1644-1911

half-century of war, Suzhou inherited 27.8 miles of canals and linear ponds within a given square mile in the 1930's.²³

The intricate web of canals enabled the artificial adjustment for water depth, flow and temperature across the Jiangnan plane. In the summer, the entire plane appeared like a shallow but infinite inland sea, compartmentalized by dikes and roads into an array of finely tuned characters of water.

yellow sea

NEW HYDROLOGIES 2011

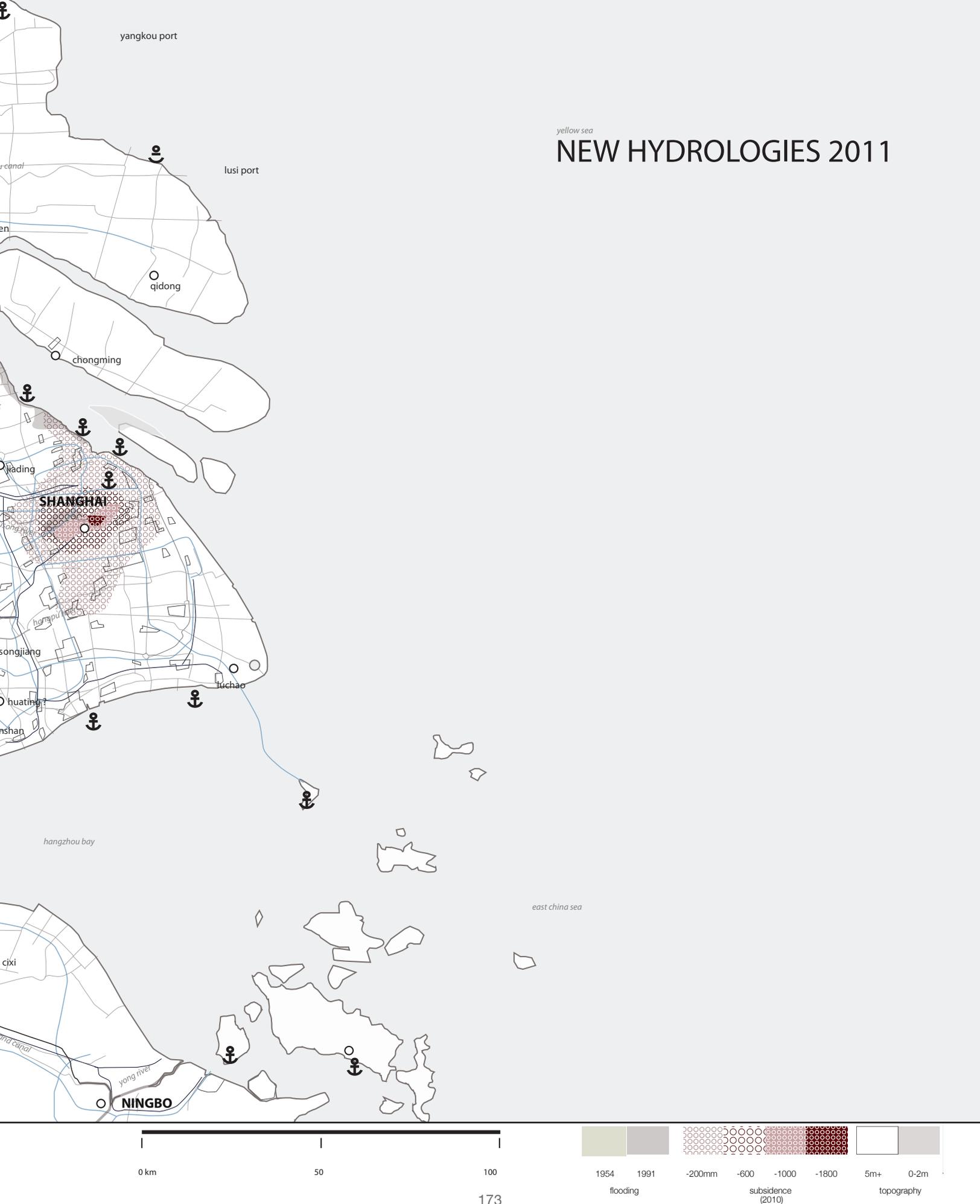




Fig. 2.17 Mapping Dushu Lake region, 2006



Fig. 2.19 Diminishing waterways, 2006



Fig. 2.18 Mapping Dushu Lake region , 2009

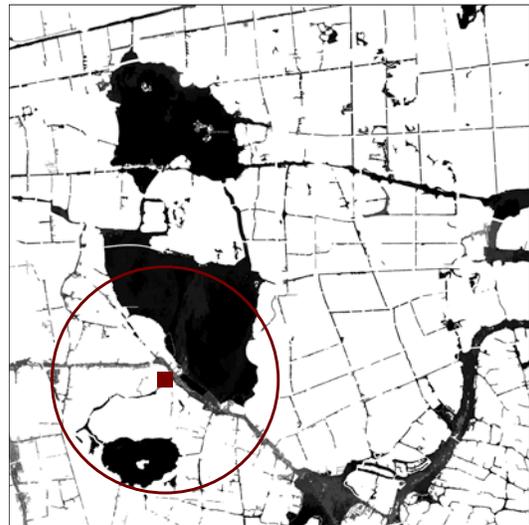


Fig. 2.20 Diminishing waterways, 2009

MAPPING CHANGE ON LAND & WATER
DUSHU & JINJI LAKE REGION, SUZHOU 2006-2009

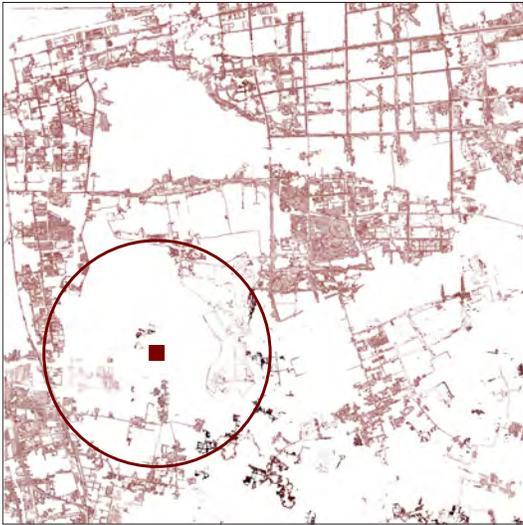
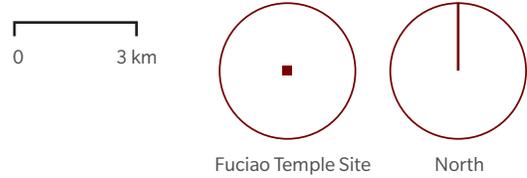


Fig. 2.21 Urban growth, 2006



Fig. 2.22 Urban growth, 2009



NEW HYDROLOGIES

As certain as the conversion from natural ponds to polders is, the hydrologic landscape in Jiangnan is once again under transformation. From the breadbasket of China, Jiangnan is today a manufacturing basin for the world. Accounting for over 50% of the surface area in 1995, shallow paddy fields have been the primary land type surrendered to the expanding urban Suzhou and have decreased at a rate of 13% per year.²⁴ Meanwhile, urban Suzhou increased by 20% per year and has grown over four times its sized in the past twenty years.²⁶

Hydrologic change is particularly acute west of ancient Suzhou in the Suzhou Industrial Park (SIP) where construction began in 1994. An enormous 288 sq. km tract of paddies and wetlands, nineteen times the area of the ancient walled city, was simply filled in and extruded by one meter for flood proofing.²⁷ The lands south of the SIP surrounding Dushu Lake is slated next for development. Satellite images from 2006 and 2009 depict the broad avenues from the SIP extending southwards. Large channelized waterways follow the grid iron boulevards, replacing the existing composite network of capillary waterways. All the area within the grid is cleared of paddies (see figures, above).²⁸

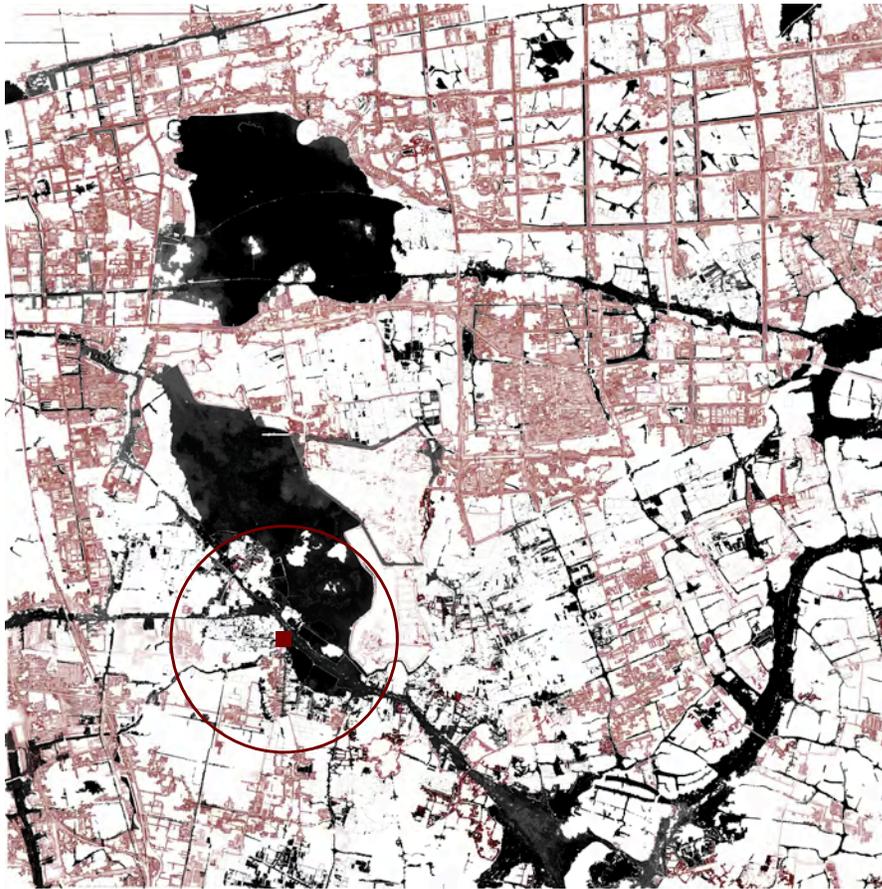
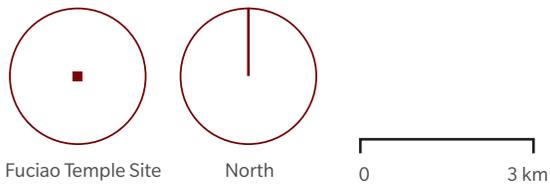


Fig. 2.23 Urban growth + Waterways, 2006

MAPPING EXPLOSIVE URBAN GROWTH DUSHU & JINJI LAKE REGION, SUZHOU 2006+2009



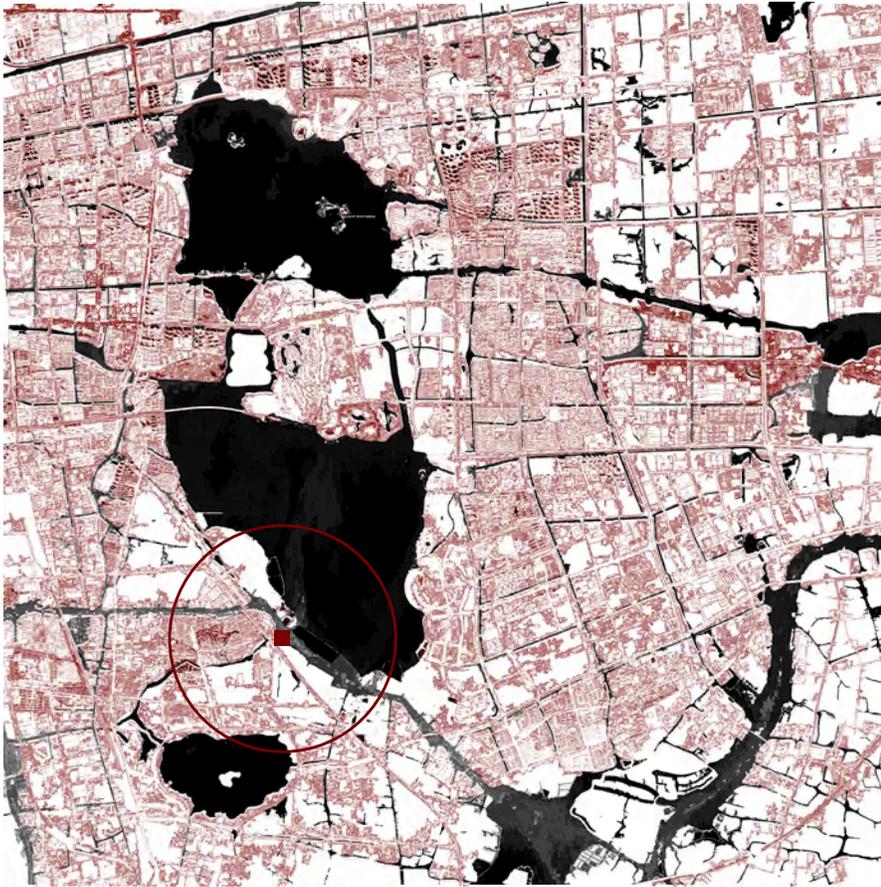


Fig. 2.24 Urban growth + Waterways, 2009

The challenge presented by the expanding city at the cost of rice paddies is the difficulty for urban land to absorb and retain water. In the case of the SIP where paddies are filled in the very act of flood proofing displaces water absorption capacity and exacerbates flooding .

Additionally, projected meteorological patterns promise a drier northern China at the cost of an even wetter Taihu Lake Basin, particularly during the traditional monsoon months.²⁹ Water levels in the inland lakes are already on the rise. Taihu Lake levels increase 1 mm in the dry season and 3-5 mm during the rainy season. In response, the lake's flood walls have been raised three times since the 1980's. Water levels in the East China Sea are also expected to rise 20-60 mm by 2050. Such change would compromise the

effectiveness of the seawall from the 1000 year storm surge, to a mere 50 year event by 2050.³⁰

Subsidence compounds water level rise. Enough water has been extracted from the ground to feed the expanding cities and industry causing the earth to sink in order to fill the vacated aquifers. Cones of land depression effect multi-city regions. The earth has sunk three meters in some areas of Shanghai since the 1950's where ground level sits at the same three meters above the rising sea.³¹

Subsiding land and rising sea levels also lower the natural gradient of the peninsula towards the sea. The process threatens to reverse the flow of Jiangnan's already sluggish rivers. Some channels already take in water from the sea.³² Already,

MAPPING SUBSIDENCE
1980-2010

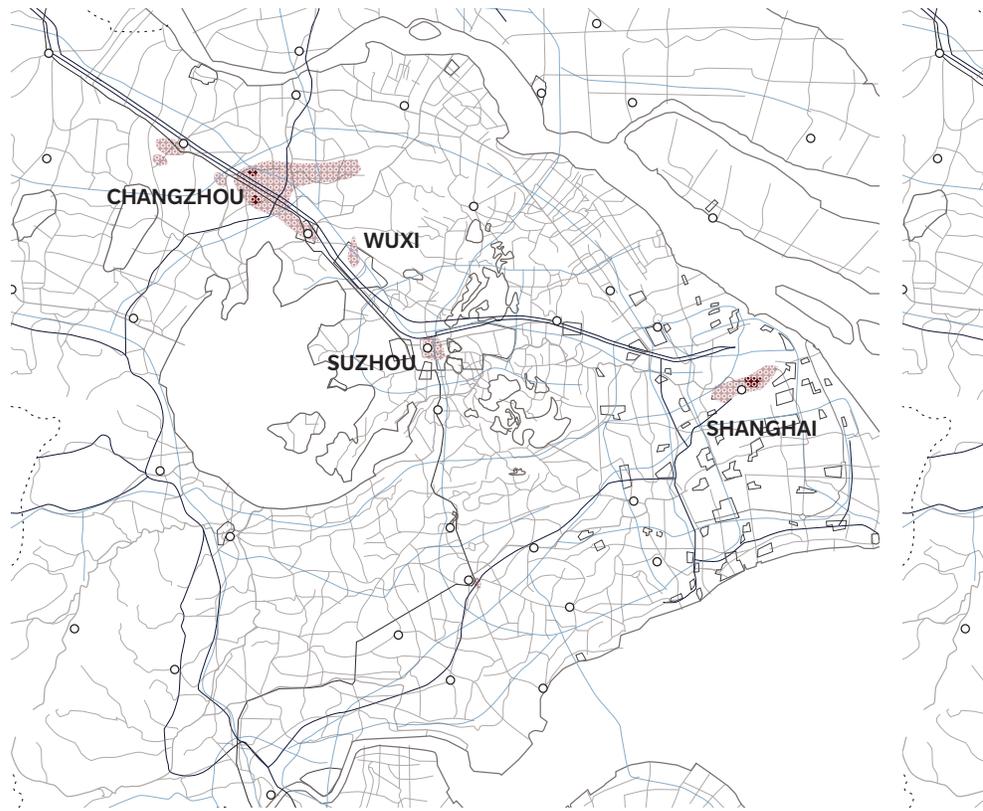


Fig. 2.25 Subsidence 1980's

some waterways have been channelized and expanded to expedite drainage, and all channels leading into the sea are protected by sluices and mechanically emptied. Should current trends continue, Jiangnan will lose its ability to naturally expel water entirely by the end of the century and the hydrological flow motored by electric pumps.

The present hydrologic landscape appears untenable. Land use change and subsidence, coupled with intertwined climatic factors, exponentially impact an already water-logged Jiangnan. Current strategies to wall in lakes and wall out the sea and escalating inputs of energy to mechanically circulate water flow may prove to be costly if not entirely in vain.³⁴ The new hydrologic landscape demands a fundamentally

new relationship with water. Instead of fortifying seawalls and adding pumps to keep water out, perhaps Jiangnan must absorb more water within.

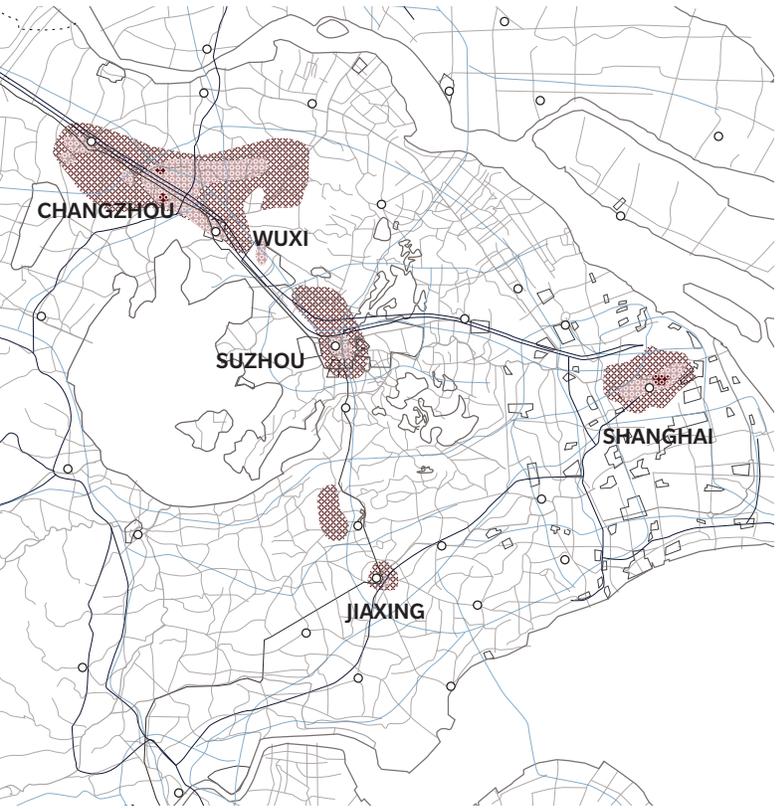


Fig. 2.26 Subsidence 1990's

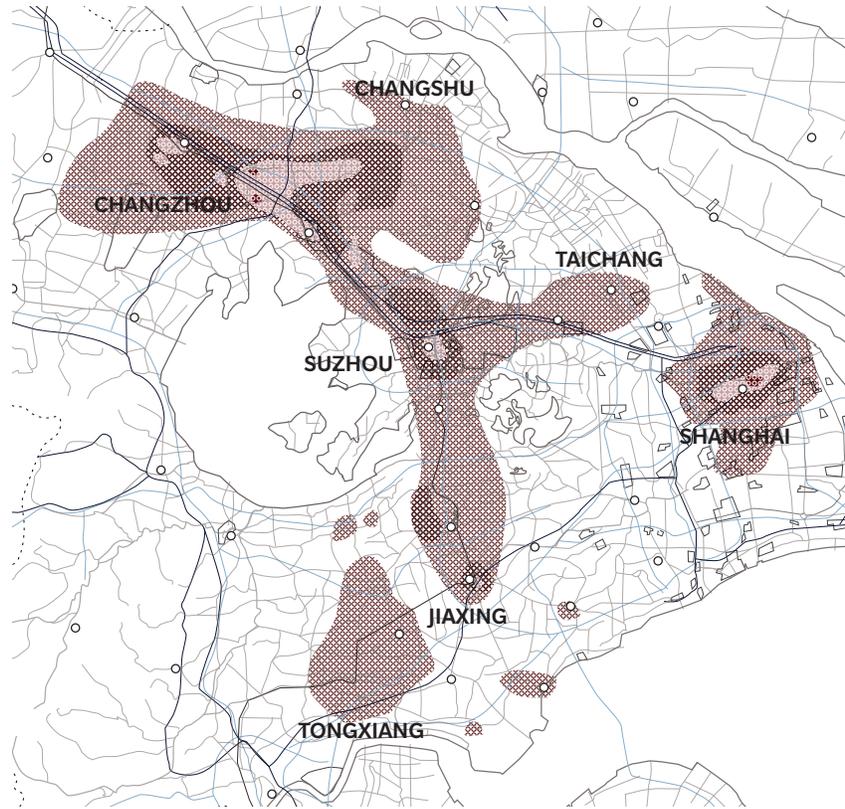
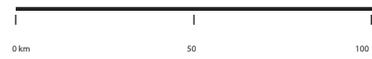
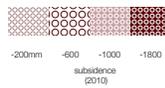


Figure 2.27 Subsidence 2000's



HYDROLOGICAL CALENDAR

CHARTING PRECIPITATION, RETENTION, & WATER DISCHARGE IN ONE YEAR

JIANGNAN, 2010

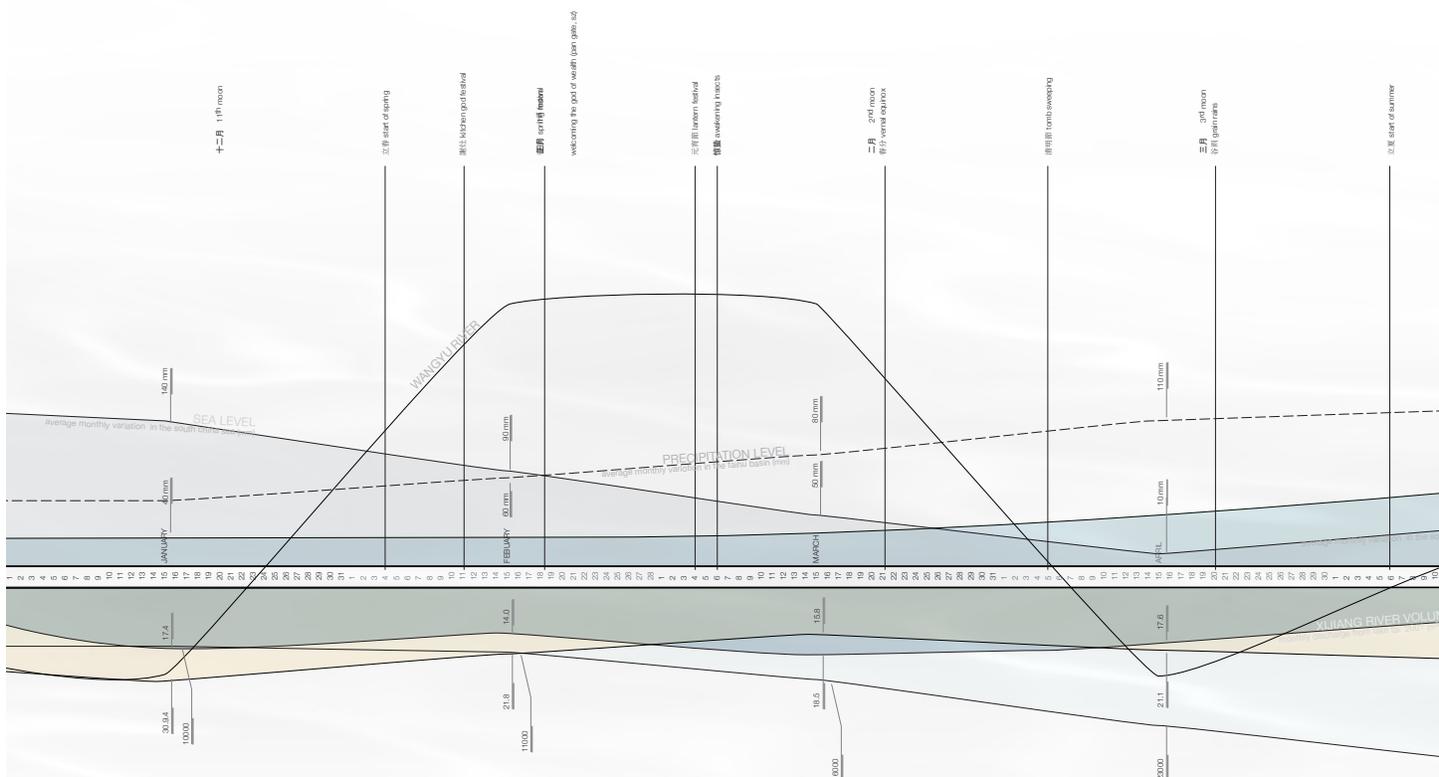
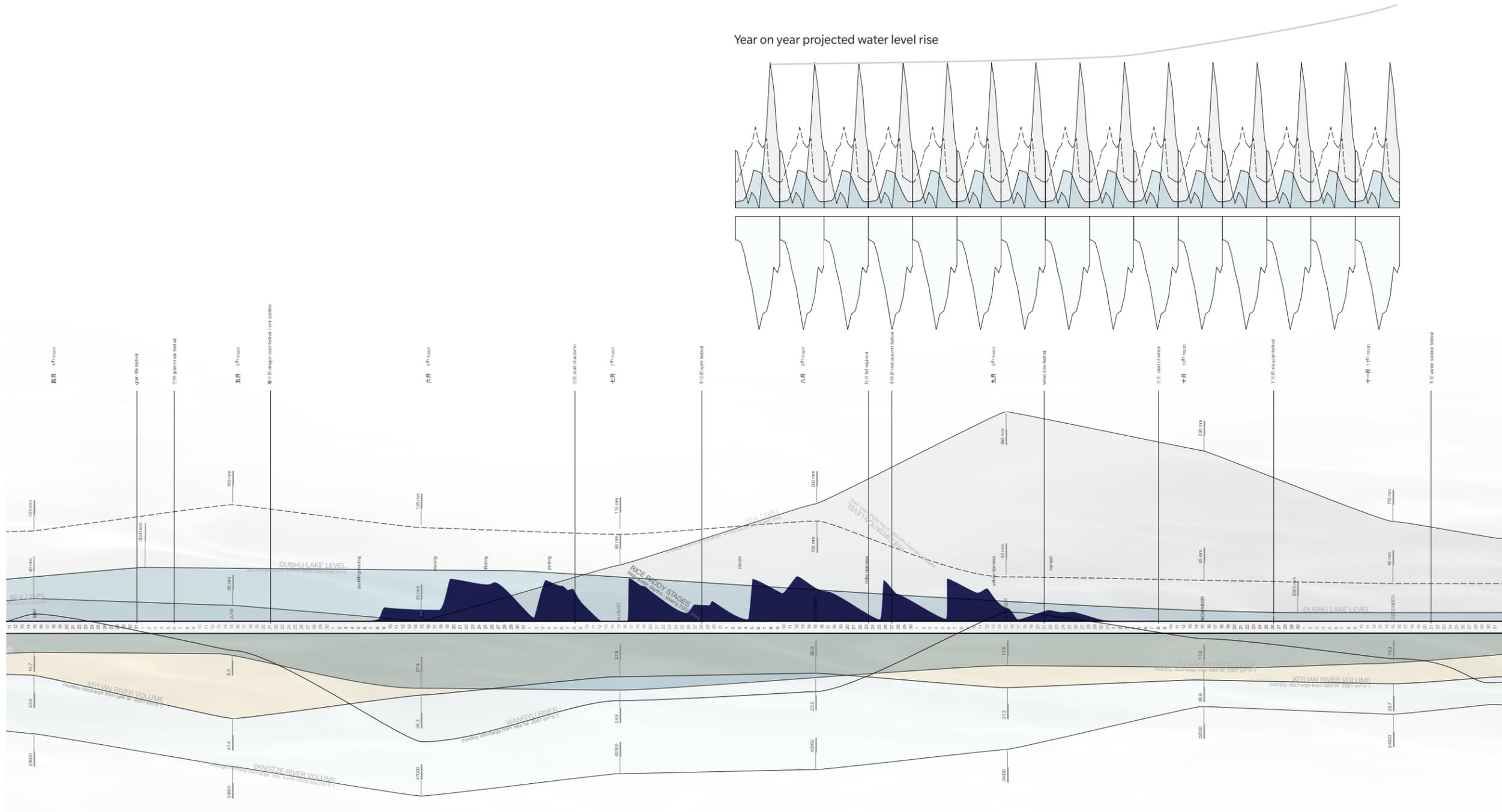


Fig 2.28 Hydrological Calendar



Year on year projected water level rise

Lunar Calendar & Festivals

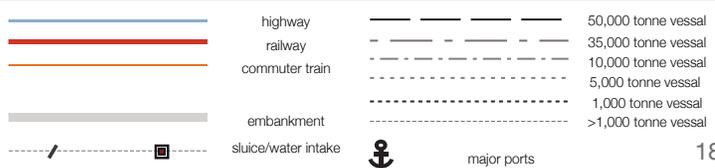
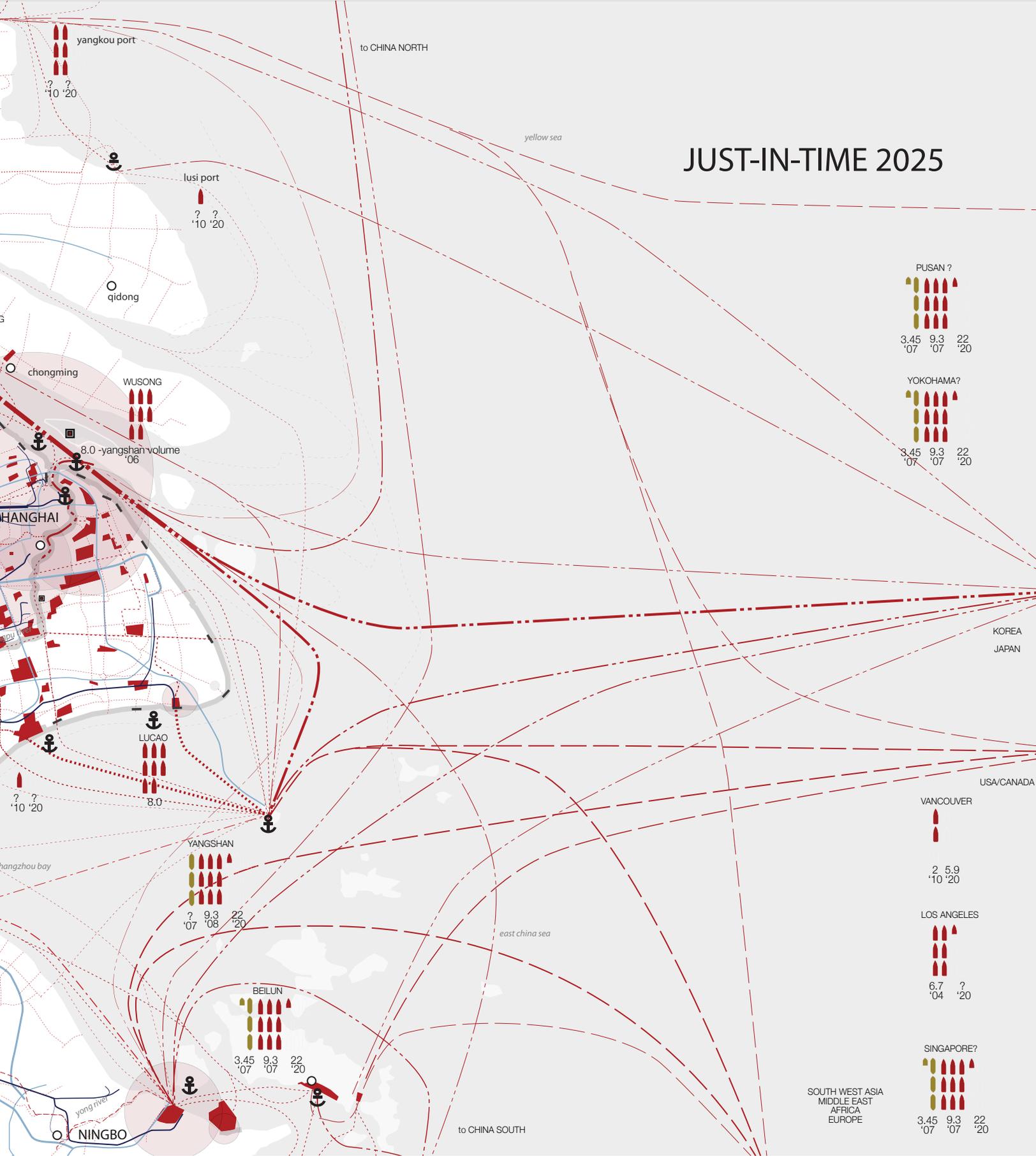
Sea Level

Precipitation Levels

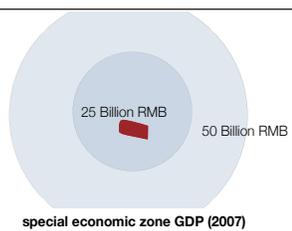
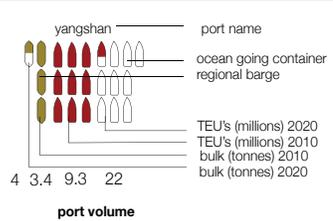
Julian Calendar dates

Yangtze River Level

JUST-IN-TIME 2025



183



other transportation modes

shipping routes by tonnes

port volume

special economic zone GDP (2007)

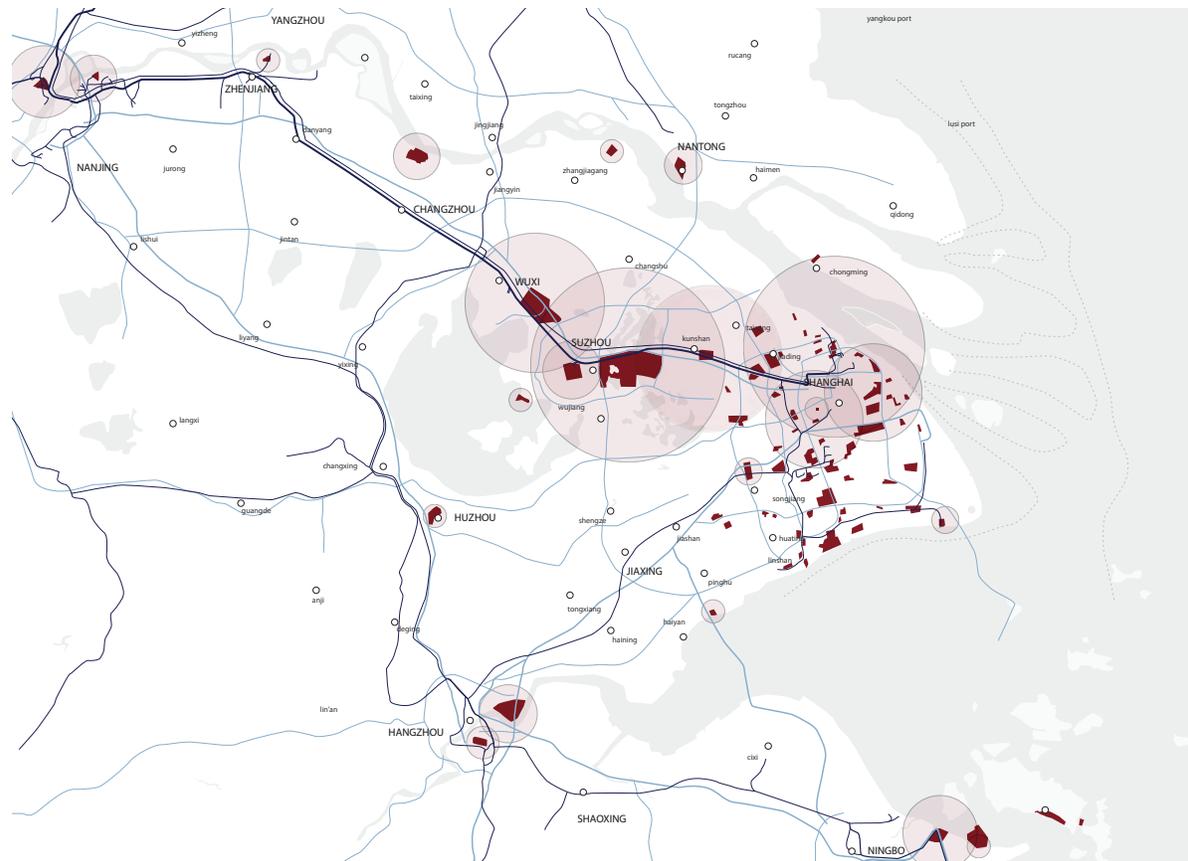


Fig 2.30 Economic Zones + Land Transportation Routes 2011

UTILIZING WATER NETWORKS

The intricate web of waterways and lakes that lace Jiangnan may be instrumental to a strategy of water retention over water expulsion. Since the 1980's, however, the widespread conversion of paddies to cities has rendered the water network obsolete for agriculture. During the same period, waterways have been eclipsed by faster land-based modes as avenues for transportation. From 1990 to 2000, the total number of land-based motor vehicles rose from 94,026 units to 1,414,000 while the number of barges fell from 3,685 ships to merely 384.³⁵ The less the canal network is used for agriculture and transport, the fewer canals remain. A total of 80 to 90% of all drainage channels have been lost in Suzhou Prefecture alone since the 1950's.³⁶

Paradoxically, in the age of increasing speed, 90% of the global value of goods is carried as slow sea-borne container traffic. Looking beyond its borders after the economic reforms of the 1980's, China has firmly established itself within, and also fundamentally altered, global trade circuits. Shanghai's Yangshan Deep Water Port has within just five years of operation become the busiest port by container traffic in the world in 2011.³⁷ Nearly equal in trade volume, the port in Ningbo, along with international ports at Nantong, Taicang, Wusong and Changshu position the Yangtze River Delta as the largest cluster of international ports in the world.

The above statistics demonstrate the potential for shipping within Jiangnan itself. Inland shipping may be a new economy that reverses

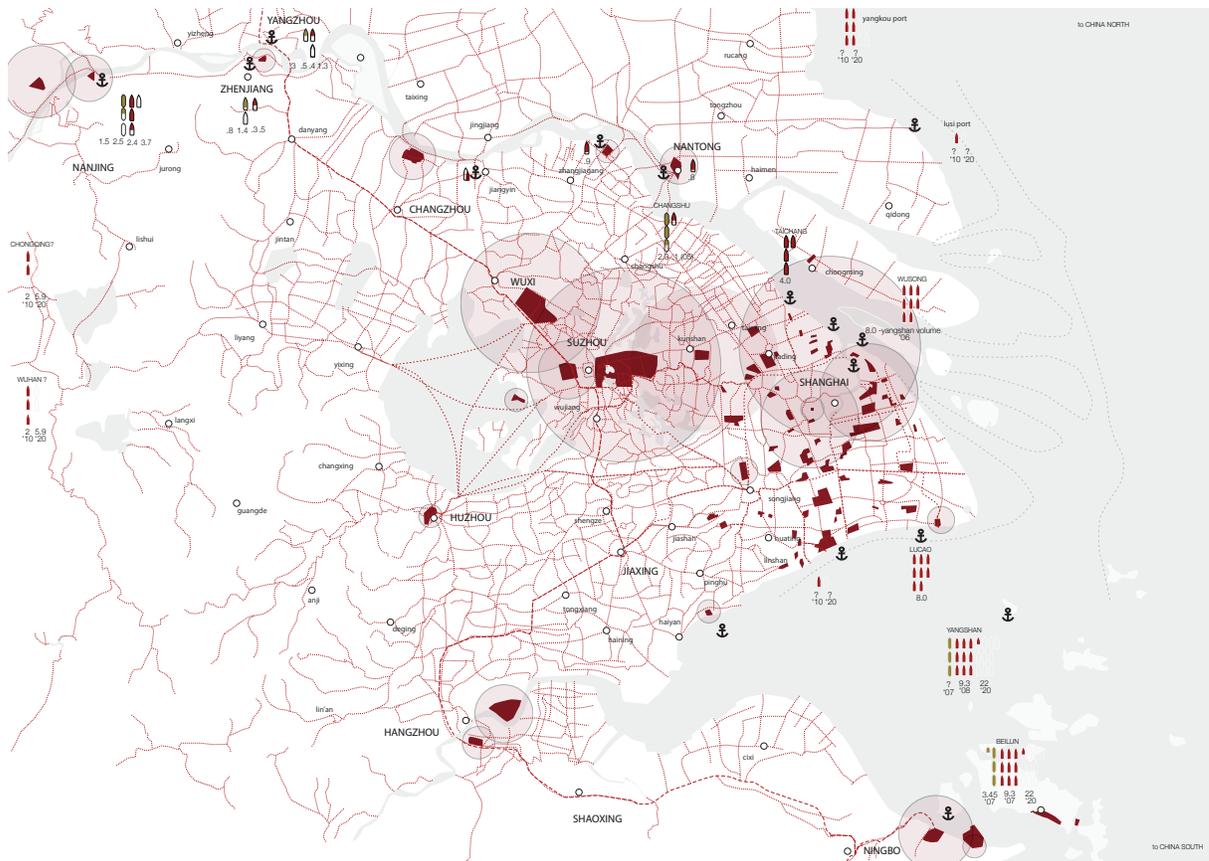


Fig 2.31 Economic Zones + Proposed Inland Water Routes 2025

the deterioration and expanded the waterway network. Only 10% of Yangtze River Valley exports are transported by water today, despite 50% higher transport costs associated with roads and rail. As fuel prices rise, the US Corps of Engineers estimate that one tonne of goods per gallon of diesel can travel 96 km by road, 325 km by rail, but 828 km by barge, which render waterborne traffic increasingly attractive.³⁸

Linking Jiangnan's production sites, waterway networks to its ports represent significant economic advantages for the region. A mere 1.4% of Shanghai's inland water routes, however, are passable to modern barges. Several key routes including the Wusong River are scheduled to be expanded for navigation by the Shanghai municipality, but the patchwork of three provincial and 14 municipal governments

LARGER SHIPS

Inland shipping is currently facilitated by a fleet of 300 dead weight tone self-propelled barges. *Waterland* proposes the addition of 1000 tone vessels to ferry goods along canals and across open water, enabling direct access to Shanghai's deep water international port without the inefficient need for transshipment.

DEEPER CANALS

Larger ships require deeper canals. Typical water bodies and canals in Jiangnan average less than two meters deep. 1000 tone barges can easily navigate wider Suzhou waterways including the Grand Canal, Dushu Canal, and Wusong River, provided they are frequently dredged.



Fig 2.32 Ship profiles

and their agencies have been unable to plan a comprehensive system.³⁹

Just-In-Time maps unrealized waterborne transportation capacity in Jiangnan. The map illustrates the dominance of Shanghai's Yangshan Deepwater Port and the potential for inland water routes leading to the port. The fine mesh of possible inland waterways connects every corner of Jiangnan, including the suburban economic zones that account for the majority of manufactured goods. As in the Wusong Corridor, waterways often parallel existing highway and rail corridors, presenting a viable and immediate alternative.

As transport by road and rail increase in economic and environmental cost, and

Jiangnan positions itself as a primary node within global shipping lanes, inland shipping appears increasingly viable. Shipping may be the economy that drives an expanded canal network.

Two immediate challenges are associated with increased inland water transport, that being the contaminated water and earth. Larger barges demand deepened waterways and the dredging of highly toxic canal beds. The earth is contaminated by the water. The Suzhou Water Authority estimates that over 15% of water bodies are contaminated beyond suitable levels for irrigation. Another 60% of lakes and rivers are polluted beyond suitability even for machine use.⁴² Even if the water is treated and cleaned, contaminants accumulated in lake and river beds remain. Once dredged, contaminated soils

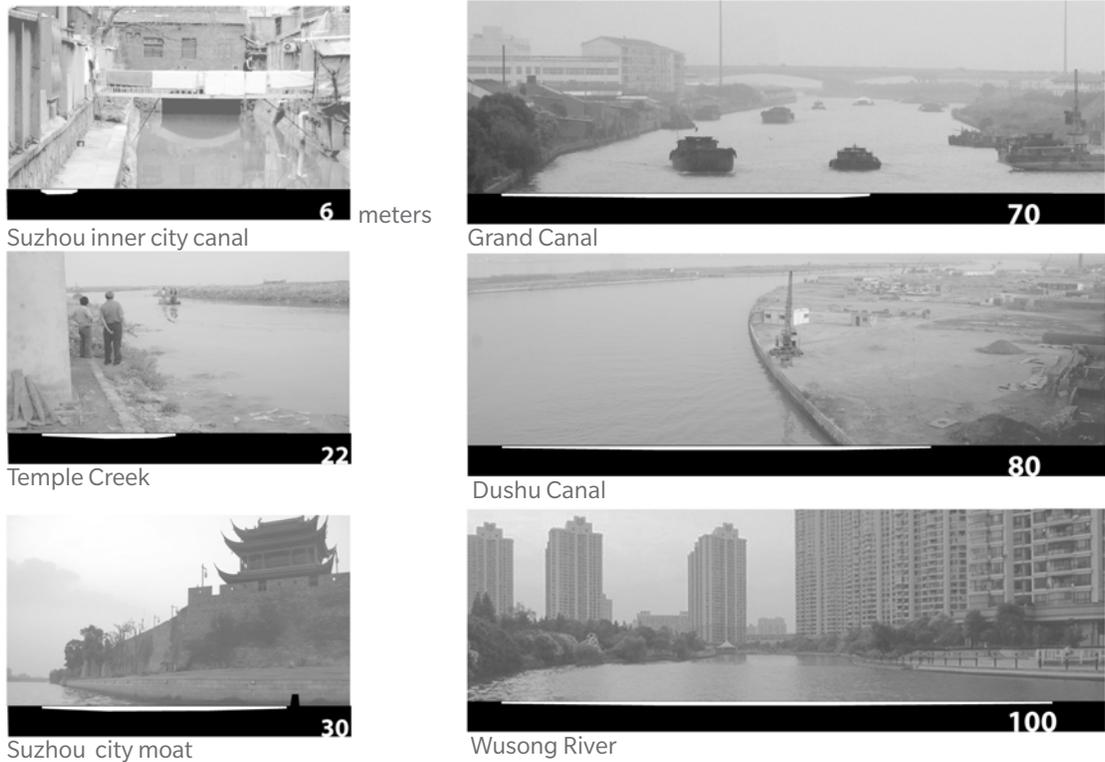


Fig 2.33 Suzhou canal profiles

must be either stored or remediated. Studies have found that only extreme heat can destroy or stabilize contaminants. In order to open inland water routes, contamination must be solved.

Issues pertaining to a new economy aside, utilizing waterways may additionally leverage the deep social investment in the historic waterways. As in Li Daoyuan's *Commentary on the Waterways Classic*, water is the connective narrative across Jiangnan. The rhythmic hydrological ebb and flow animates Jiangnan's collective experience of landscape and offers an alternative to the solitary landscape blurred by the speed of our time.

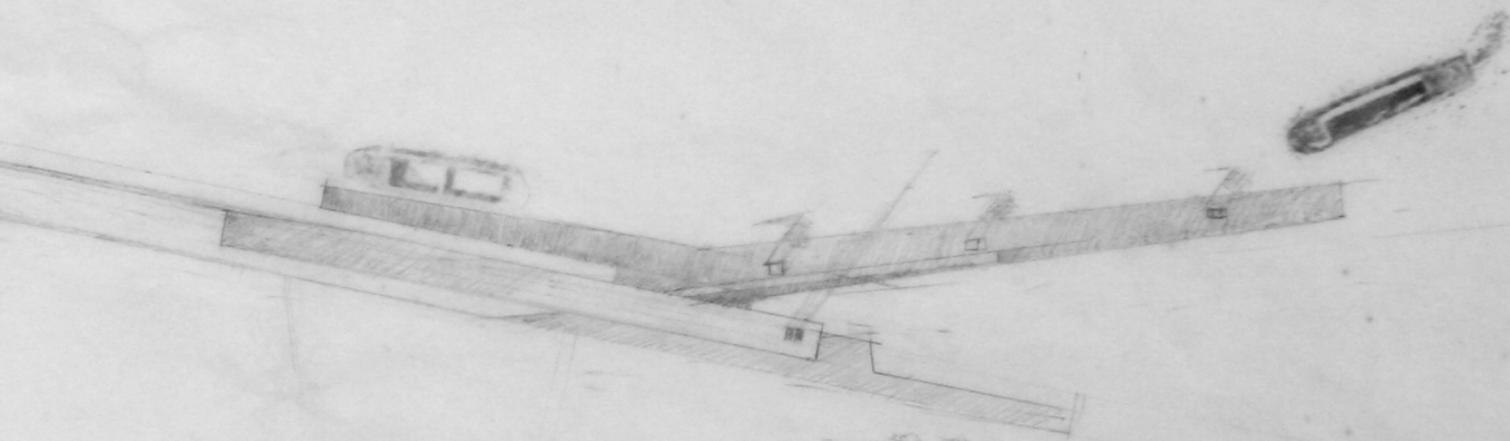


Fig 3.34 Passing barges on the Grand Canal, Suzhou April 2010



THE BRICK AND WATERWORKS: A PROPOSAL



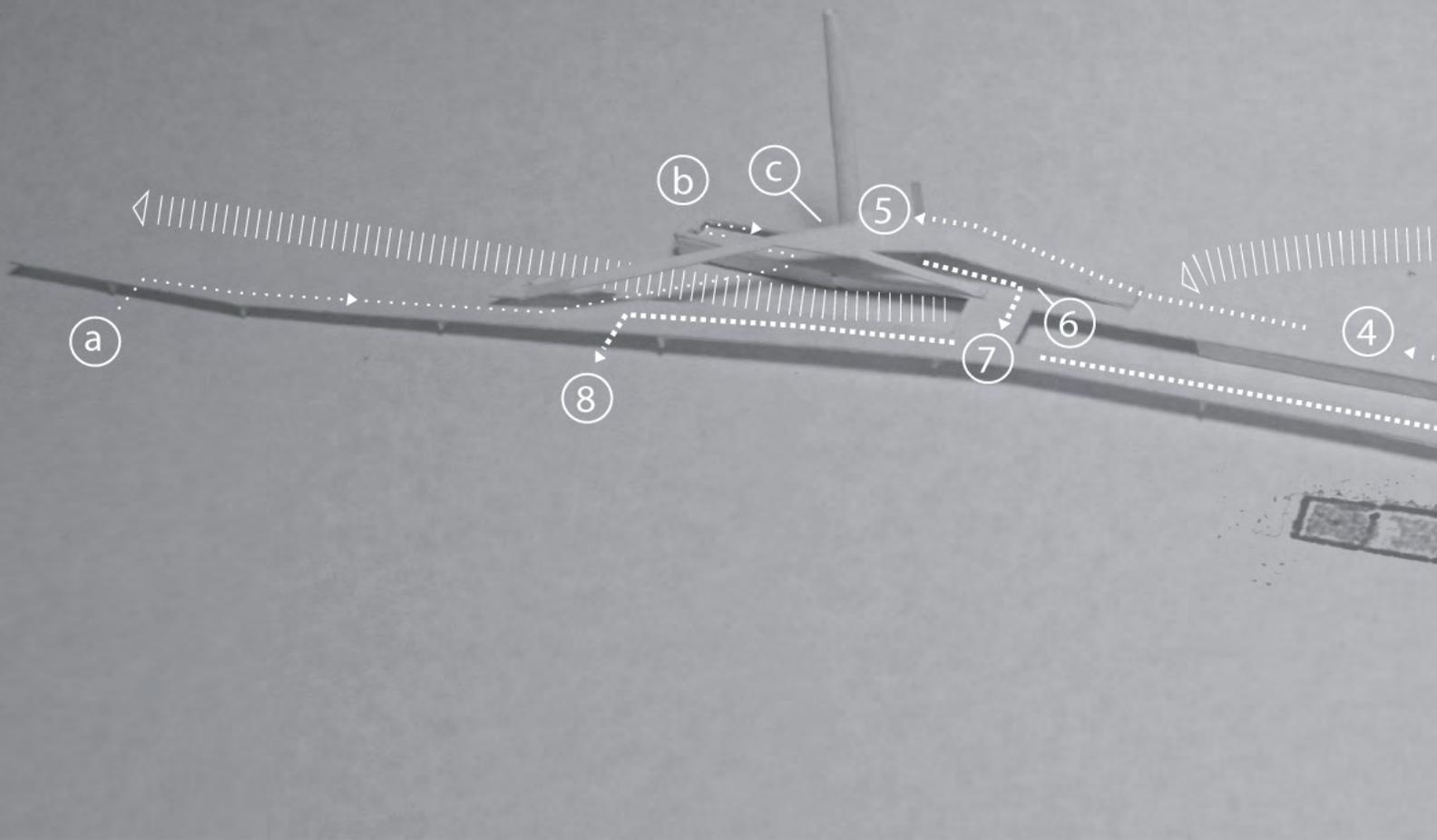


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Fig 3.35 The Proposed Brickworks at Dushu Lake

Fig 3.36 Brickworks Operations



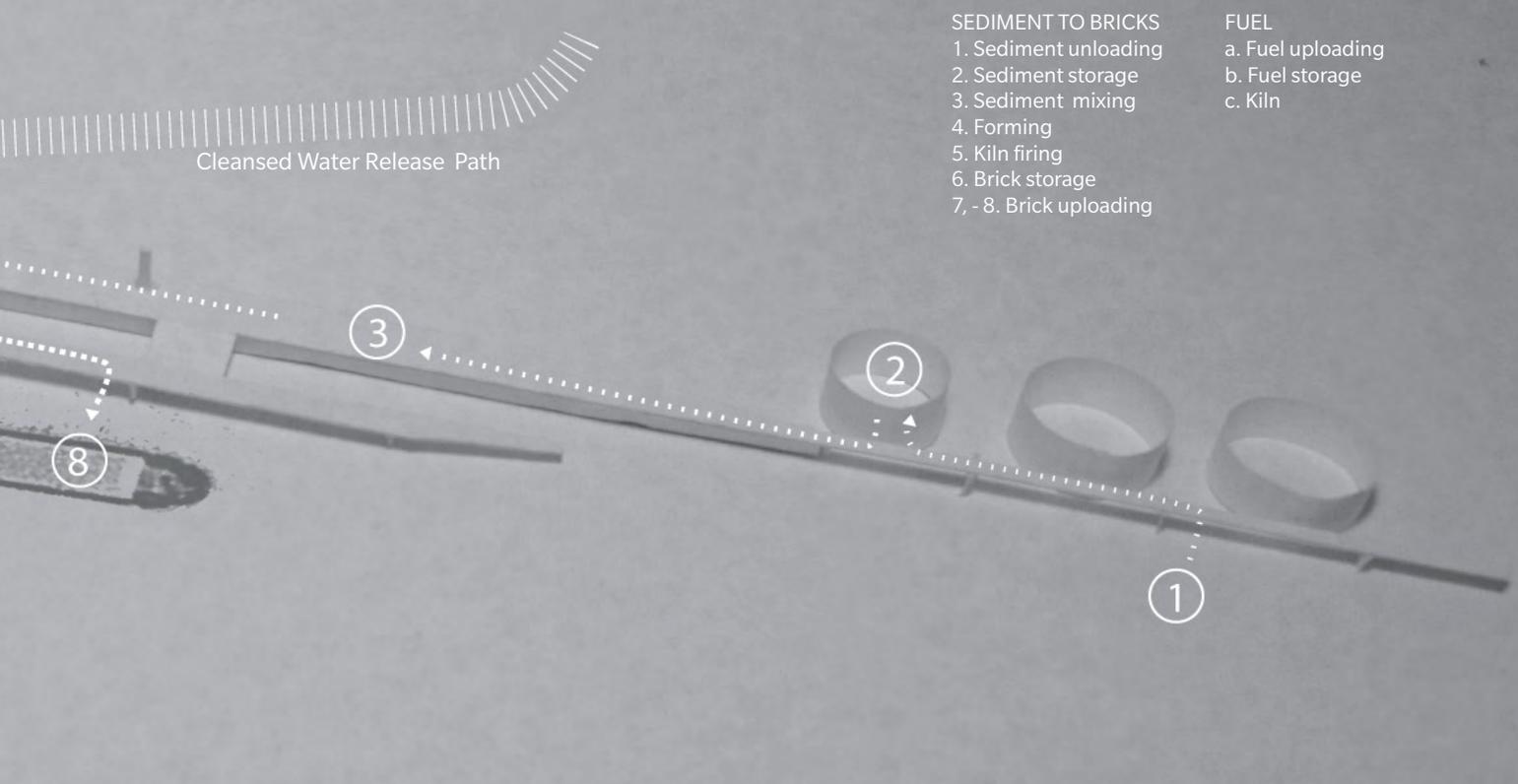
BRICK AND WATERWORKS: A PROPOSAL

A proposed brick and waterworks facility is to be located at the former village of Fuciao Cun. The brickworks will float within Dushu Lake, immediately east of the village. The waterworks are to be installed in the abandoned village temple. Together, they are the twin moments that will anchor a sense of place for the new community - between land and water.

The muddy Dushu Lake and the surrounding canals continually fill with sediment. Instead of consuming precious agricultural soils, the proposed brickworks will harvest the endless

material from the bottom of the lake and waterways, and transform them into bricks.⁴³

The proposed brickworks will be nearly a kilometer long and 20 meters wide. Its form owes its slender plan to the linear process within. Barges will haul their loads of toxic dredged earth to the north tip of the brickworks. The earth will be emptied into storage silos and dewatered. From the silos, the earth is to be conveyed to large mixing machines. The mixers ensure the contents and consistency of the earth is suitable for brick making before damp earth is pressed into slabs, cut into shape and dried. The process from mixing to drying will take place on a gradual incline leading to a three story, vertical



stacked brick kiln. The bricks are then loaded into the shaft from the top and exit the kiln at the bottom. Firing occurs in the middle of the shaft, the heat from which rises to pre-fire the bricks entering the kiln. Fired bricks at the bottom of the shaft cool and transfer their heat to preheat the updraft air. In this manner, the vertical kiln uses half the energy as required by conventional horizontal kilns (Hoffman Kilns).⁴⁴

Like a pivot, the vertical kiln will pierce the long floating platform and anchor the brickworks to the lakebed. The chimney is expected to rise 18 meters above the low building, staking a place in the vast landscape at the precise location where the brick making will culminate. The finished

bricks will then be rolled into storage under the ramp, before being transferred to a parallel dock for export. As ancient cities constructed their walls from the contents of their moats, the brickworks will fire the dredged earth into bricks for the burgeoning city.

The sediment in Lake Dushu is heavily contaminated, particularly with heavy metals.⁴⁵ During the firing process, however, the heavy metal melts, crystallizes, and is locked into the brick. Dredged materials from the port in Hamburg, Germany have been processed in a similar manner. The privately owned company, Hanseaten-Stein Ziegelei GmbH, has been operation an experimental brickworks since

Fig 3.37 Dushu Lake, Winter



1. Waterworks / temple
2. Brickworks
3. Dushu Canal
4. Exposed settling basins
5. Exposed terraces
6. Floating wetlands
7. Navigable routes

1996.⁴⁴ The Hamburg harbour tests indicate that once bound in brick, the heavy metals do not leach back into the water at noticeable levels.

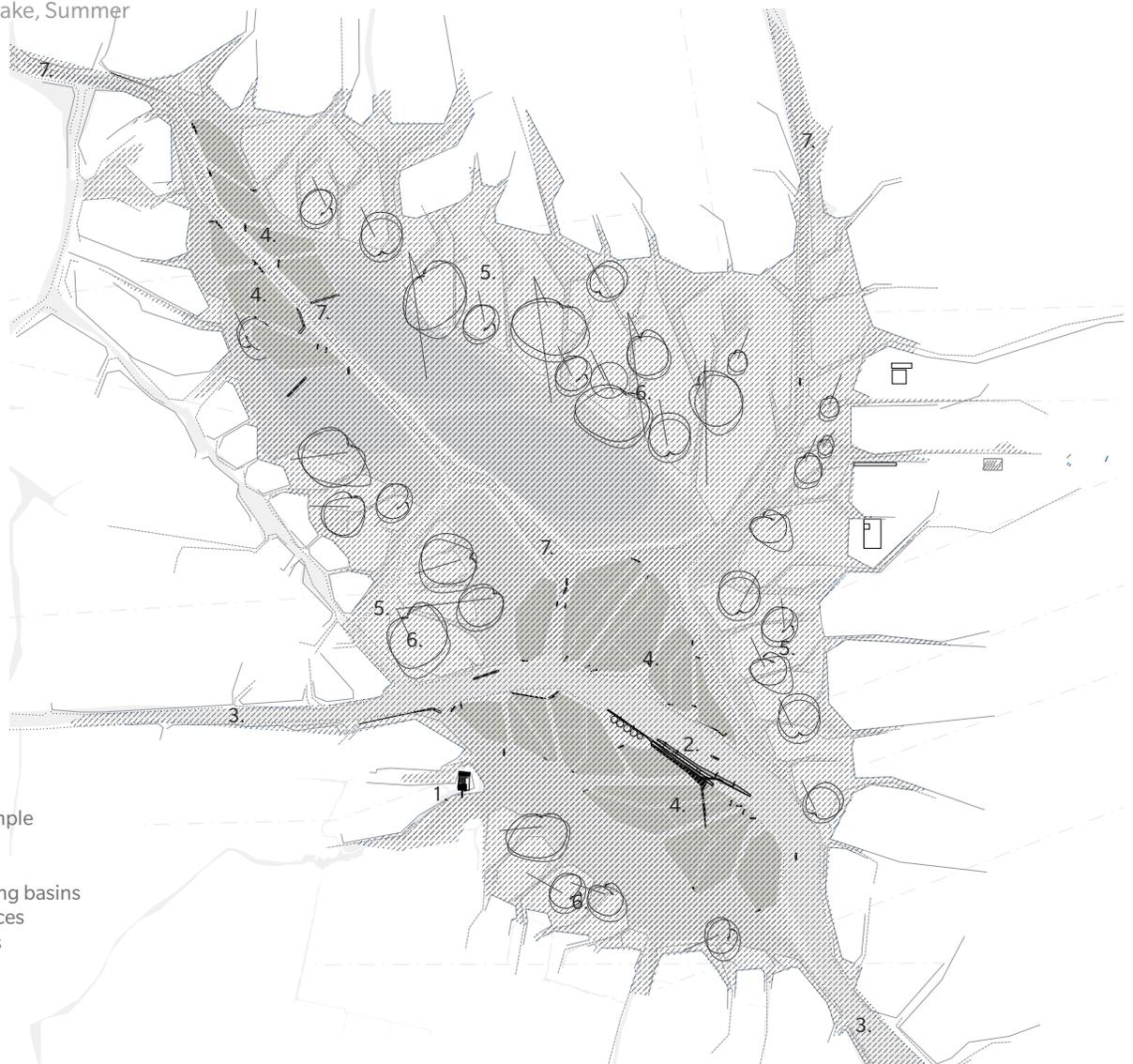
From cutting through firing and shipment, the bricks will be moved by trolleys that glide on tracks mbedded into the surface of the brickworks. From the shore, a visitor can trace the linear manufacturing process; formless earth transforming into hardened bricks along the long horizontal profile of the brickworks. The architecture also signals a similar process beneath lake's surface where the purification of the water parallels the making of bricks. As if an immense gut for the city, a sequence of digesting

ponds is proposed to clean the outflow water from the city in Dushu Lake.

The pools are not unlike the man made rice polders and fish ponds they replace. Those ponds that trap the water from Suzhou city and the Wusong River have thin concrete walls that isolate their contaminated contents from the larger lake. Toxic laced particles settle in these ponds before the water is circulated into Dushu Lake. Half of the outer lake is likewise compartmentalized, but terraced, so that their boundary walls emerge only as water levels subside by a meter in the drier winter.

In the summer, colonies of floating water ferns

Fig 3.38 Dushu Lake, Summer

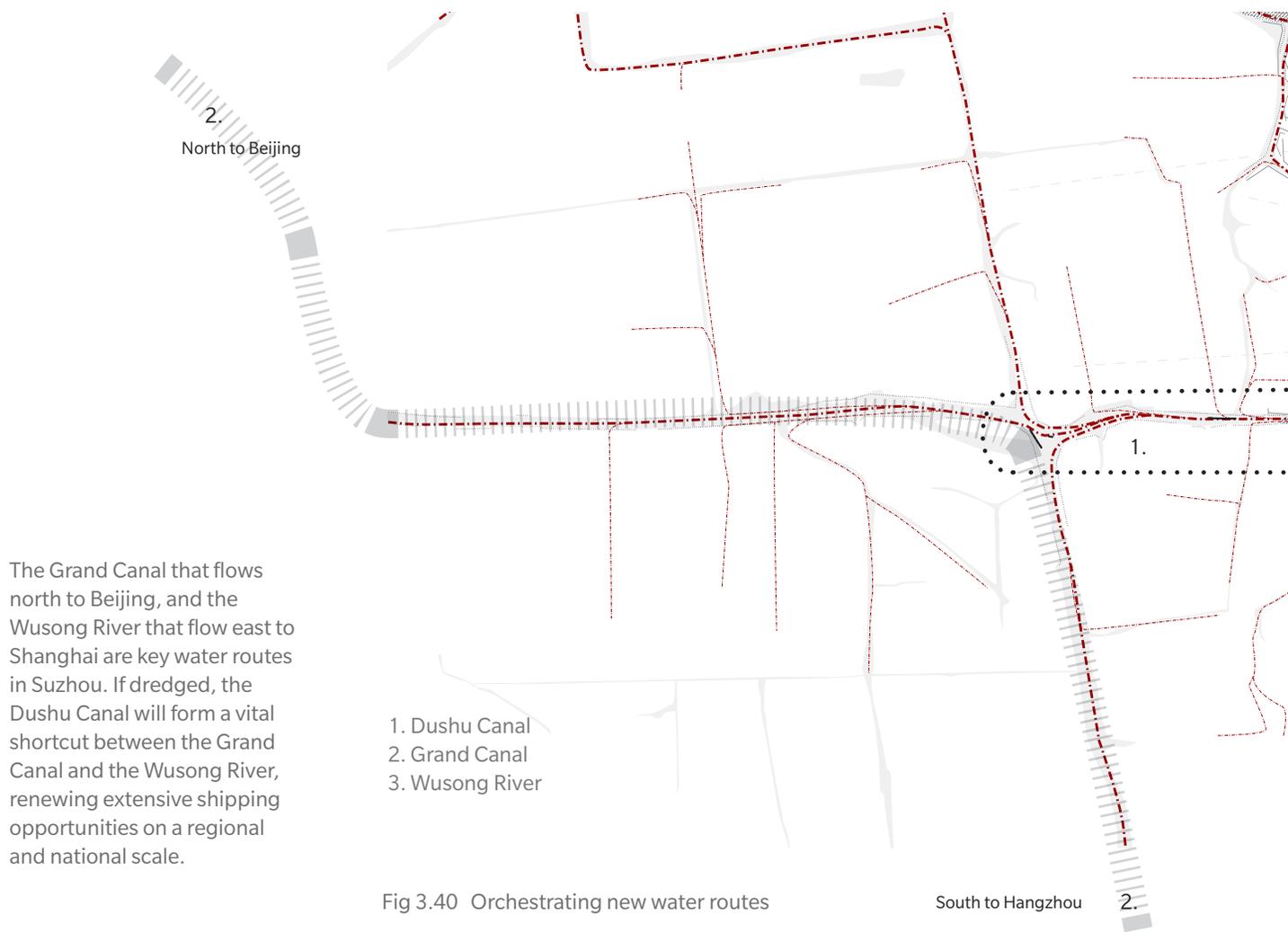


1. Waterworks / temple
2. Brickworks
3. Dushu Canal
4. Submerged settling basins
5. Submerged terraces
6. Floating wetlands
7. Navigable routes



Figure 3.39
Water fern

(*Azolla filiculoides*) ringed by a buoyant polymer barrier are dispersed towards the edges of Dushu Lake, hovering above the submerged terraces. The thin mesh of roots comb the water of finer suspended particles. Having made contact with the roots, the particles adhere to an algal film on the roots, coalesce, and slough off as heavier particles that settle to the lake bed.⁴⁹ After the monsoon season, the water ferns turn from green to red in the coming cold. The floating mats are hauled towards the deeper centre of the lake and the lake bed with a fresh supply of sediment are exposed and harvested.



The Grand Canal that flows north to Beijing, and the Wusong River that flow east to Shanghai are key water routes in Suzhou. If dredged, the Dushu Canal will form a vital shortcut between the Grand Canal and the Wusong River, renewing extensive shipping opportunities on a regional and national scale.

Fig 3.40 Orchestrating new water routes

Greater capacity for water absorption and flow is critical for a new flood strategy that favours absorption over containing water behind floodwalls. With the dense city encroaching on Dushu Lake, lake capacity is augmented by expanding downwards instead of outwards. Selective pockets of the lake will be mined more frequently by the brickworks. To recover the water retention capacity of lost paddy since the 1950's, one quarter of each lake in Jiangnan must be excavated by two meters. The excavated pockets distinguish themselves on the water surface from the other sediment pools by their varying plant life, clarity of water, colour, and the darkness of their shadows from their varying depths. To look across the proposed Dushu Lake is to sample a myriad of lakes within lakes.

A deepened Dushu Lake will double as a reservoir for shipping canals. It will retain the monsoon rains and release the water into the canal during the dry winter months to maintain an even depth of water for year-round shipping.

If not released into the Wusong River, some of the purified water will seep into the waterworks courtyard. Formally the temple sanctuary a series of exposed pools will constitute a public water garden. The interconnected pools are arranged like an array of ponds in Dushu Lake, such that the garden is an interpretive diagram in miniature of the larger landscape. To the east side of the courtyard, a narrow pump house completes the square of the otherwise irregularly shaped temple compound. Inside, three pumps



will send the contents of the water garden to replenish three deep aquifers and prop up the temple and surrounding city from subsidence.

More than production sites for bricks and purified water, the brick and waterworks will fundamentally reorganize the landscape. They will shift land-based manufacturing and transportation to water. By introducing an economy to dredge the waterways and lakes, the brickworks promote the viable expansion and maintenance of the broader canal network.

The brick and waterworks proposal addresses the primary environmental issues of our time - contamination, impending floods and subsidence - by facilitating brick making, dredging, transport and ground water recharge.

The utilitarian architecture of the buildings signifies and embodies these operations. To view the brick and waterworks, then, is to be aware of the economics, flows and threats that shape the contemporary landscape. These include the rise and fall of the lake's surface, the manufacturing of bricks, the machinery on barges destined for overseas, and the colour of local contamination. This is the counter image, in all its perverse slowness, stench, and industrial grit, to a landscape obscured by the speed of our time. The brick and waterworks are at once capable of responding to the new hydrologic landscape and critical to anchoring a new sense of space and time upon which to construct an inclusive new identity in the place where the water village of Fuciao Cun once stood.

Fig 3.41 Winter

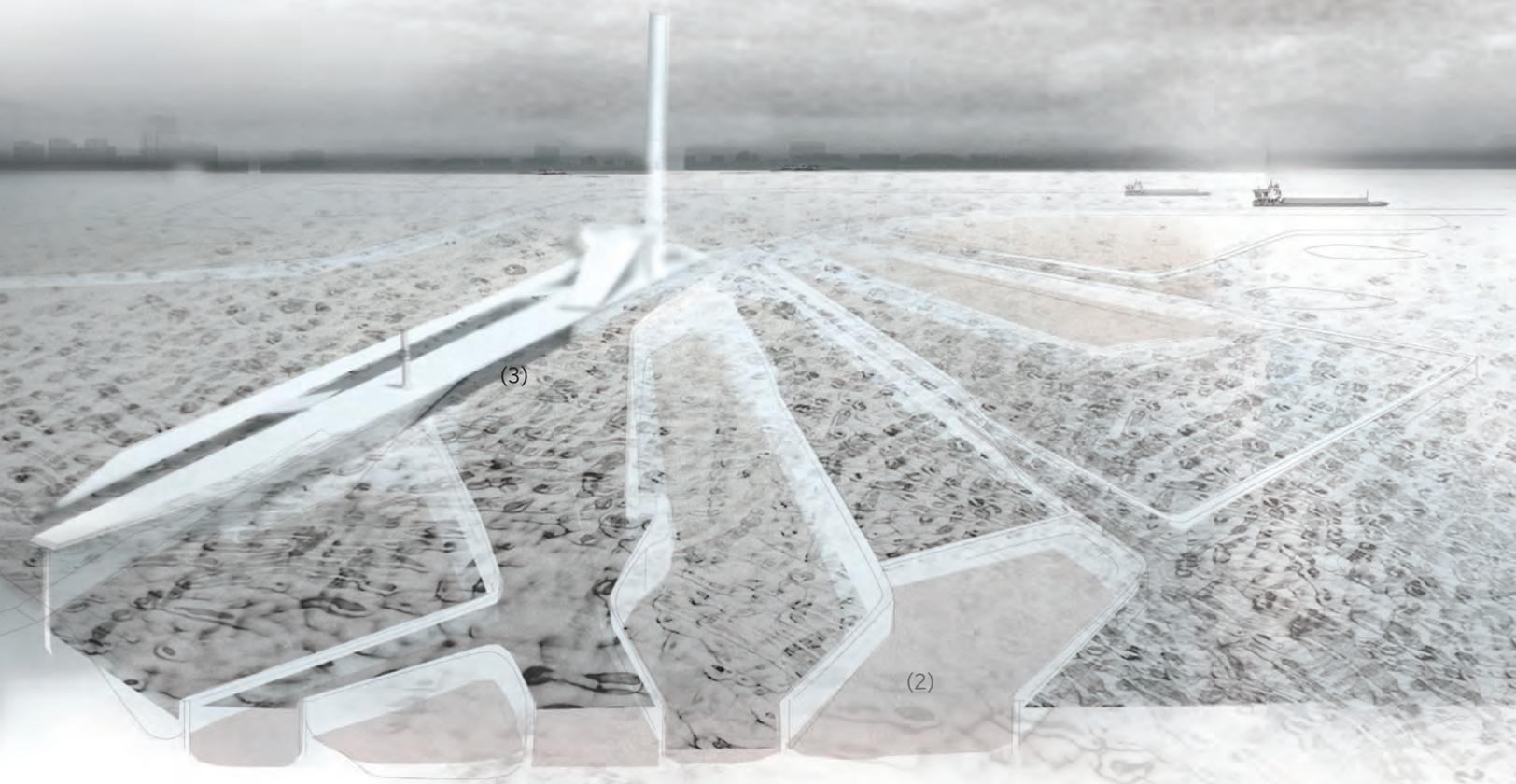


Fig 3.42 Summer

Thin masonry walls contain the settling basins. In the summer, water enters the basins from the canal. Slowing to fill the volume of the basin, the muddy water will release its suspended contaminated particles before spilling over channeled basin walls (1). In the winter, the lake waters will fall below the height of the basin walls (2). The phenomena permits the brickworks to harvest the muddy deposits. By spring, the basins, mined of their contents, are deepened to accept the rising water lake levels again.

A water gate (3) between the constructed basins and the greater lake will be located beneath the brickworks, adjoining the foundations of the brickworks chimney. At the precise moment the clay is fired into brick, the purified water will be released into the larger Dushu Lake.

Matts of water ferns circled by thin netting will freely float across Dushu Lake (4). Their dangling rootlets trap, and coalesce finer suspended particles from the water. In the winter, the lake withdrawals from its summer time expanse and the wetlands, turning from green to red in colour, drift towards the centre of the lake. Even in the dimmer winter light, the shadows from the fern matts along the lake bottom will be easily seen through the shallower waters.

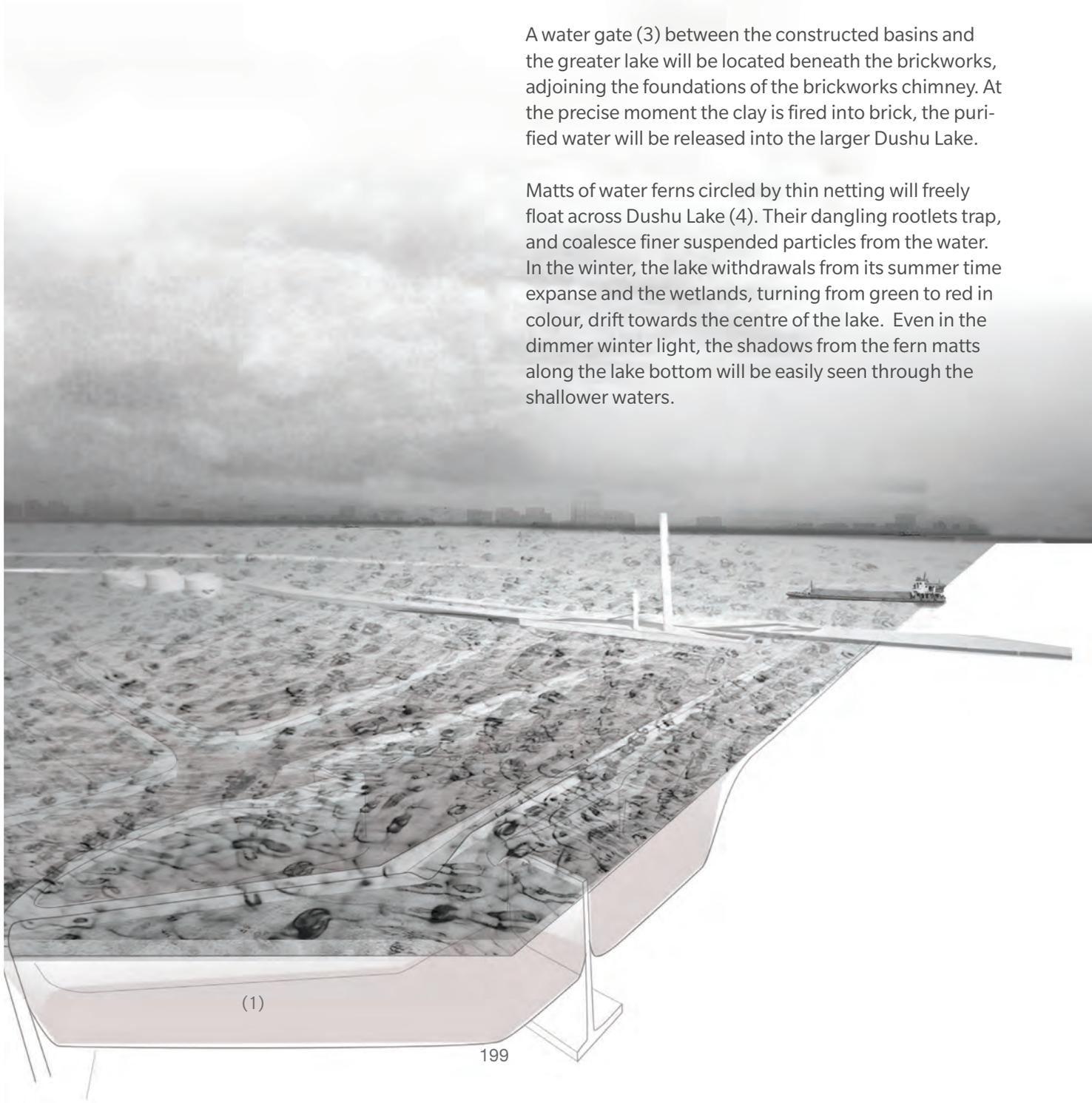




Fig 3.43 Orchestrating new water routes across Suzhou



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MARITIME THEATRE
CHAPTER 3

An hour after dusk disappeared in to the earth the people came in silence, in small and large families, up the slope towards the half-built waterworks. Emerging from darkness, moth like, walking towards the thin rectangle of the building's southern doorway. The movement was quickly over, the wave of bodies had seemed a shadow of a cloud over the slope.

Inside the building they moved in noise and light. It was an illegal gathering of various nationalities and the noise of machines camouflaged their activity from whoever might have been passing along Queen Street a hundred yards away....

The four-piece band was playing by the stage. It was a party and a political meeting, all of them trespassing, waiting now for speeches and entertainment. Patrick found a seat and took a sip from his flask. Almost immediately the electric lights were turned off, leaving only the glow from oil lamps on the edge of the platform.

Michael Ondaatje, *In the Skin of a Lion* (1987).¹



Taihu Lake

Fig. 3.01 Suzhou Regional Waterways



Yangcheng Lake

Grand Canal

TIGER HILL

SUZHOU INDUSTRIAL PARK

ANCIENT SUZHOU

Jinjie Lake

Dushu Lake

Grand Canal

FUCIAO CUN VILLAGE

Wusong River

Grand Canal

CITY OF WUJIANG

Taihu Lake



Fig. 3.02 Temple Remains, Suzhou

CHOREOGRAPHING RUINS

In the book *Survival: A thematic guide to Canadian literature* (1972), Margret Atwood identifies a cultural identity rooted in a particular notion of space.² Canada, Atwood claims, was a sprawling half continent sparsely dotted by isolated outpost settlements that affected a notion of ourselves as survivors within a wide wilderness. Traditionally, China has had the inverse spatial sensibility. Among the initial acts of its first unifying emperor was the construction of the Great Wall. With it, all the space within its confines was governed and domesticated. The modern experience, however, fundamentally re-territorialized China, and with it, the collective sense of identity. The static walled-in spaces have been blown open by trade and transportation and a new fragmented and solitary experience of space has emerged.

A constellation of autonomous cultural sites remains. In Jiangnan, these sites include temples and gardens. The artifacts are often either abandoned or preserved as museums, and restricted in use by being isolated in time. Still, these sites voice alternate temporal

realities that thicken the current achronologic perception of space in Jiangnan.

Giorgio Agamben articulates the processes and the outcome for a contemporaneity that recognizes multiple temporal flows. To Agamben, to be contemporary is to “recall, revoke and revitalize” the past, not as something that is final and dead but as a corpus of desires that may be awakened to inform the present:³

*...he [the contemporary] is also the one who, dividing and interpolating time, is capable of transforming it and putting it in relation with other times. he is able to read history in unforeseen ways, to 'cite it' according to a necessity that does not arise in any way from his will, but from an exigency to which he cannot not respond. It is as if this invisible light that is the darkness of the present cast its shadow on the past, so that the past, touched by this shadow, acquired the ability to respond to the darkness of the now.*⁴

The following discussion tests the potential of Fuciao Cun Temple in order to provide a new

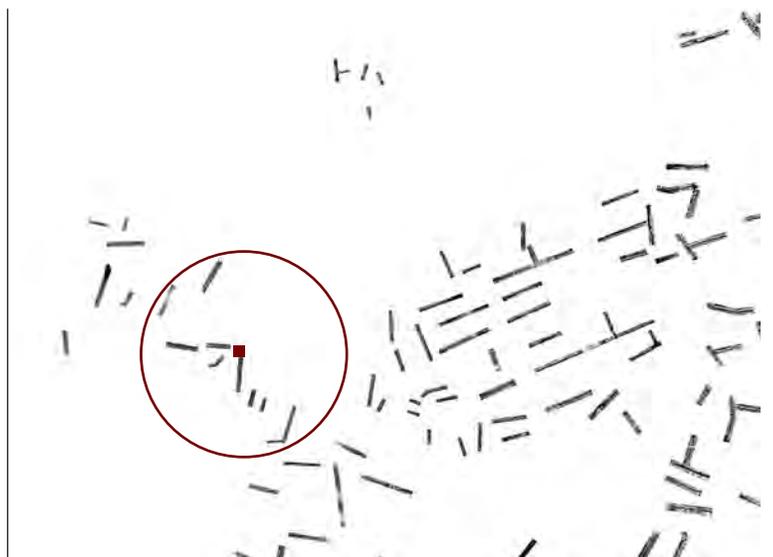
MAPPING VANISHING VILLAGES

DUSHU LAKE REGION, SUZHOU 2006,2009, 2012

Fig. 3.03 Left: Mapping Villages, 2006

Fig. 3.04 Centre: Mapping Villages, 2009

Fig. 3.05 Right: Mapping Villages, 2012 (projected)

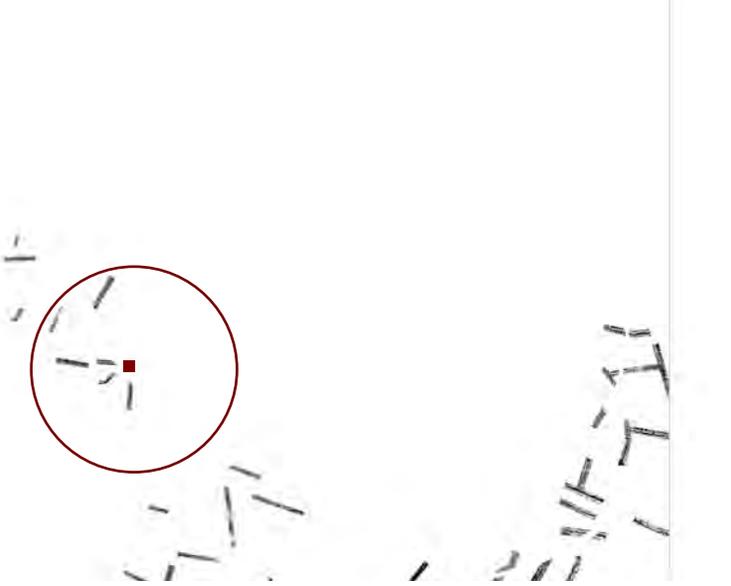


spatial awareness by recovering multiple flows of time.

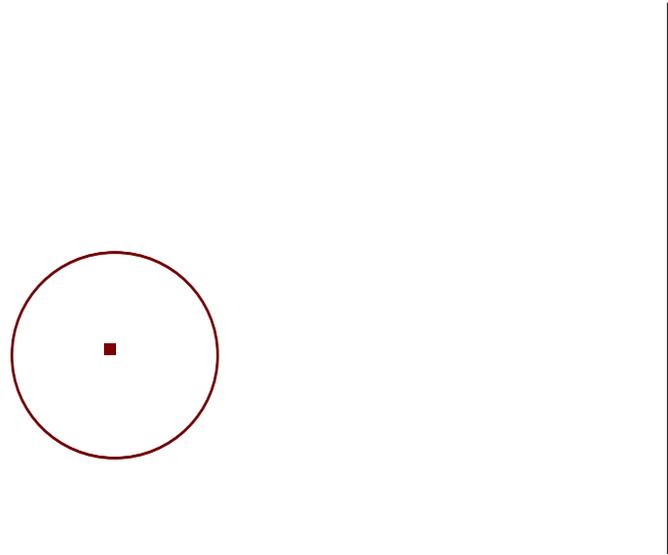
Four additional examples of cultural artifacts are examined before turning to Fuciao Cun Temple. All are indigenous to Jiangnan, and demonstrate a local sensibility to time. Li Garden dramatizes the dominant water-earth motif in Jiangnan culture and a hydrological or cyclical notion of time. Suzhou City embodies a later turn from a water-earth to sky-earth awareness, or the shift from cyclical to eternal adaptations of time. Meanwhile, Canglang Ting Garden offers refuge for the individual within the eternal stream of time in Suzhou, and Mazhen Temple utilizes ritual to reconcile the individual within a community and an evolving landscape.

The analysis of the four sites draw from both Chinese and Western sources. Two authors in particular, Stanislaus Fung and Xu Yingong have been indispensable for their comparative scholarship between Chinese and Western notions of space and time.^{5 6} They are among the first cohort of writers on architecture raised in China but educated and published abroad. Still, available literature on the cities, temples and gardens examined here is sparse. In the case of Li Garden and Mazhen Temple, scholarship in English is entirely absent. While Fung and Xu are consulted for general concepts, analysis on all four sites also derives from site observations. The following discussion is then deeply personal, complete with the insights and fallacies a single passing visitor-scholar may bring to the depths of Jiangnan history.

villages - 2009



villages - 2012



VANISHING VILLAGES

The Village of Fuciao Cun was one in a network of rural settlements constructed along an intricate canal network. The villages are often no more than two lines of houses built along opposite banks of the canal they front.

Both canals and the villages along them have been raised to facilitate explosive urban growth. Google Earth satellite images indicate this process began around 2006 around the Fuciao Cun Village. In 2009, Fuciao Cun Village itself was being dismantled. By 2012, it is perceivable that the surviving temple at Fuciao Cun will be the only remnant of an entire pattern of settlement.

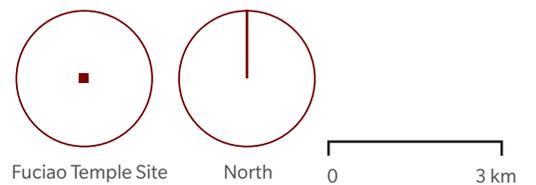




Figure 3.06 By the Water Corridor, Li Garden, 2009

LI GARDEN: BETWEEN WATER & LAND

Li Garden (1912) is, in every sense, a water garden. It is located where Wuxi City meets Lake Taihu. It comprises a series of embankments and the pools enclosed between them. The garden evokes prominent Jiangnan water-land motifs. Before examining the architecture at Li Garden, it may be constructive to explore the phenomenological properties of water and the cultural response it evokes to gain a regional awareness of time and space.

Water is two-faced. It is what nourishes life but can also be a potent force of destruction. When floodwaters rise, cities submerge. These have been the region's darkest moments, its hours of horror. Acts of cannibalism are reported as late as 1454,⁷ when the region was at its economic peak and held cultural sway before succumbing to water. The intricate patterns of life painstakingly choreographed on land reclaimed, periodically return with abrupt violence to the muddy plane that Jiangnan once was.

Water is often feared but it also enchants. It evokes the supernatural. Before the people of Jiangnan began to engineer and manipulate water, they sought out and courted water spirits for their good will. Well after the inhabitants in the more arid north aligned themselves with the fixity of the sky, the people of Jiangnan privileged the water-earth duality by retaining their beliefs

in water spirits.⁸

The primacy of water runs as a persistent theme throughout the Songs of the South (Chuci) (1030 - 223 BCE), the earliest anthology of poetry from the region. In his introduction to the poems, David Hawkes (1985) defines the poems describing the relationship between people and water spirits as 'love-songs:'

[a shaman] pursues, through rivers, lakes and wooded islands, a brooding presence which he senses and sometimes believes he can hear, but never, or only in faint, fleeting glimpses, ever sees, evokes for us, with an extraordinary vividness, an ancient, forgotten time in which men loved, even more than they feared, the mysterious world of nature that surrounded them.⁹

Perhaps the elusive and even seductive qualities of water are best articulated in the poem, Goddess of the Xiang River. Hawkes proposes that the poem was performed by a shaman in a ritual on a given spring day. A similar ritual to the same goddess may have been performed in autumn. By dramatizing the seasonal search for the goddess, the theme of water punctuated the lives of early Jiangnan inhabitants. To the ancient inhabitants of Jiangnan, water was a force that animated a more inert earth.

The goddess comes not, she holds back shyly.
 Who keeps her delaying within the island,
 Lady of the lovely eyes and the winning smile?
 Skimming the water in my cassia boat,
 I bid the Yuan and Xiang still their waves
 And the Great River make its stream flow softly.
 I look for the goddess, but she does not come yet.
 Of whom does she think as she plays her reed-pipes?
 North I go, drawn by my flying dragon,
 Steering my course to the Dong-ting lake;
 My sail is of fig-leaves, melilotus my rigging,
 An iris my flag-pole, my banner of orchids.
 Gazing at the distant Cen-yang mooring
 I waft my magic across the Great River.
 I waft my magic, but it does not reach her,
 The lady is sad, and sighs for me;
 And my tears run down over cheek and chin:
 I am choked with longing for my lady.
 My cassia oars and orchid sweep
 Chip all in vain at ice and snow.
 I am gathering wild figs in the water!
 I am looking for lotuses in the tree-tops!
 The wooing is useless if hearts are divided;
 The love that is not deep is quickly broken.
 The stream runs fast through the stony shallows,
 And my flying dragon wings swiftly above it,
 The pain is more lasting if loving is faithless:
 She broke her tryst; she told me she had not time.
 In the morning I race by the bank of the river;
 At evening I halt at this north island.
 The birds are roosting on the roof-top;
 The water laps at the foot of the hall.
 I throw my thumb-ring into the river.
 I leave my girdle-gem in the bay of the Li.
 Pollia I've plucked in the scent-laden islet
 To give to the lady in the depth below.
 Time once gone cannot be recovered:
 I wish I could play here a little longer.

Goddess of the Xiang
 Qu Yuan. from Nine Songs. 3rd Cen BCE.⁹

Figure 3.07 By the Half Moon Bridge, Li Garden, 2009





Figure 3.08 Opposite the Winter Pavilion, Four Seasons Court, Li Garden, 2009

Every path at Li Garden orchestrates the ephemeral qualities of water alluded to in the poem. The fragile pavilions and galleries, as well as the people that move amongst them, appear in silhouette-like shadows, hovering momentarily on a sliver of earth between a changing sky and the brewing water. Doubling as embankments, the paths that encircle the ponds are also caught horizontally between expanses of water. Visitors stroll between the calm and sheltered inner pools and the wind-swept open lake as if walking between mirrors that reflect an elusive and ever-changing environment. The sense of space in Jiangnan is as fluid as the boundary between firm land and water.

The themes of water, seduction, and courtship recall another shamanistic ritual, the Legend of Ho Po. Sinologist Whalen Lai (1984) deepens Jiangnan constructs of space by analyzing the legend.¹¹ On another spring day, in a different river valley, a courtship ritual takes place as villagers gathered by the river bank for the wedding of a village girl to Ho Po, the River God. Dressed in her finest, the bride descends into the river to curry favour of the River God. In a Confucian revisionist tale, a certain official, Ximen Pao, chances on the ritual and challenges the tribute to Ho Po. The official Ximen Pao

convinces the villagers to ban their pagan rites. Ximen Pao then tames the River God by taking up the plough, and draws twelve deep furrows in the earth to divide dry land from water.

The name, Ximen Pao, is a homonym for 'Leopard of the West Gate.' Lai notes that the Leopard of the West Gate is reminiscent of the Queen Mother of the Earth, depicted in pottery with a gaping feline jaw lined with canine teeth. The Queen Mother is often illustrated consuming her own children. She represents earth, endings, and death.¹² If the official Ximen Pao is associated with the earth and death, Ho Po, relates to water and birth. In fact, illustrations of Ho Po depict an image of a man with the body of a fish. Reminiscent of the great flood myth in China, water is associated with beginnings and creation. The rivalry between the River God and Ximen Pao may therefore be understood as the polarity between water and land, birth and death.

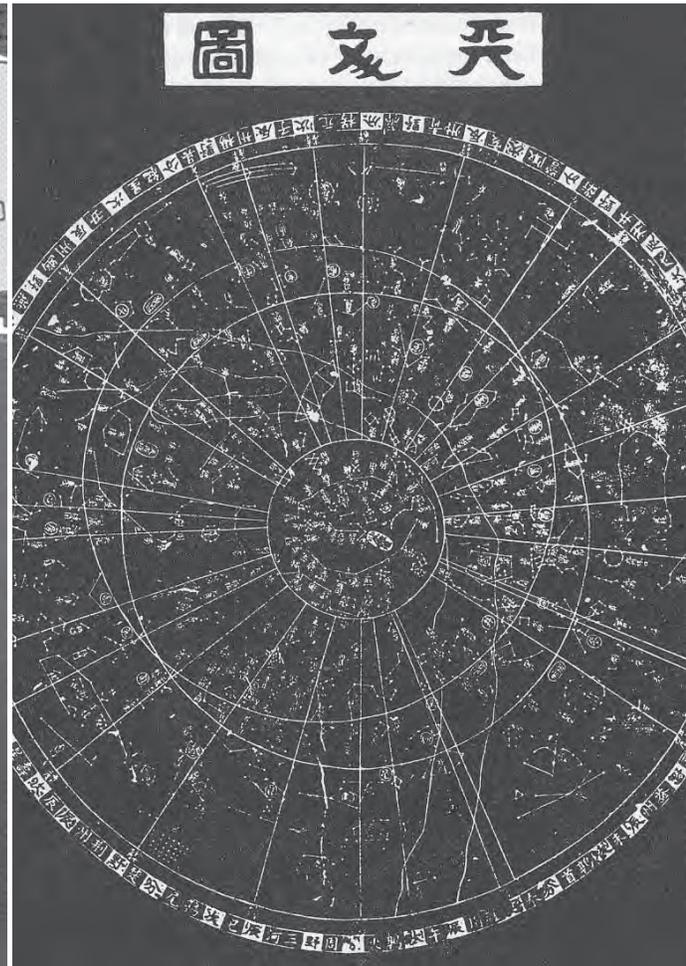
The legend also assigns a spatial overlay, crucial to interpreting architecture in Jiangnan. The Earth Mothers' domain is assigned to the west, in the direction of the setting sun. The province of the fish is thus to the east, in the direction of the rising sun.¹³

Fig. 3.09 Li Garden



0 60m

Fig. 3.10 Star Chart



- 1. Four Seasons Water Court
- 2. Spring & Autumn Tower
- 3. Li Lake
- 4. Garden Entrance
- 5. Ponds

The water - land axis may also be described chronologically. In the night sky, the fish (in the flood stories a dragon) and the leopard (sometimes a tiger) also constituted, together with the tortoise and the bird, two of the Four Great Celestial Animals. Each constellation dominated the sky during a specific season. The dragon governed spring and the wettest months; the tiger presides over autumn and the driest season.¹⁴ Thus, through the seasons and the starry sky, time itself is driven by the struggle between the tiger and dragon, land and water.

Li Garden is a collection of smaller gardens centred around a pool, where every pond is experientially distinct. The Four Seasons Court is one such unit. It is constructed where the garden extends the furthest into the lake. A large irregularly shaped pond surrounds a smaller square shaped pool. One pavilion sits on each of the four sides of the square pool. Each is named after a season. Plantings of plum, oleanders, osmanthus and calyx canthus, for spring, summer, autumn, and winter respectively, heighten the sensation of each pavilion's season they in turn depict.¹⁵

The entire ensemble of pavilions is orientated to the spatial constructs derived from the legend of the River God and Ximen Pao. The autumn pavilion is aligned with the west, and

the spring with the east. On a smaller scale, this alignment also permits the Four Seasons Court to correspond with the daily course of the sun. The morning sun appears in the direction of spring, and it sets in line with autumn. Just as the water court sits within a larger pool, which itself rests in the larger Lake Tai, the ensemble is also a series of nested temporal frames - where the cool morning and the heat of a late summer afternoon mimic at an accelerated tempo the freeze and thaw passing of a year.

As the water animates the earth, the flow of time cuts a precise moment into the landscape. This is what lends Li Garden its power to describe a tangible place even as its landscape is in continual flux. The water garden is awash with the brewing presence of water spirits and the experientially enchanting ebb and flow of water. Like an enormous water clock, the garden explains phenomenological change - no matter its scale from the momentary breath of wind to the passing of seasons - as a series of nested chronological clogs turning at different speeds to the same natural rhythm. In this manner, Li Garden not only annexes the water of Lake Tai as its own, but projects back out onto the vast, enchanted, and haunted waterscape a temporal framework that renders the changing waterland manageable and habitable.



Fig. 3.11 Approaching Tiger Hill, Suzhou 2010

SUZHOU: BETWEEN HEAVEN & EARTH

In a time when wondering water spirits still brooded over the waters, the tribe of Wu, known for the images of water snakes and serpents tattooed over their bodies,¹⁶ lived as semi-nomads on the water logged Jiangnan plane. Their capital moved several times within the hilly regions west of Lake Taihu until at last, in 514 BC, Wu Zixu, (? - 484 BCE) trusted minister to newly crowned King Helu, established a new and permanent capital, Suzhou.¹⁷

Wu Zixu “surveyed the land and tasted the water,” choosing for the capital a site at the very centre of the muddy Jiangnan plane, away from the hills. He laid out the city according to “the form of Heaven and the processes of earth,”¹⁸ and, like Ximen Pao, victor over the River God, he carved a ditch to part firm land from water. The ditch marked off a square from the vast plane. The fill from the trench was piled on the inside to construct the four walls and these were aligned to the cardinal axes.

Like the walls that fixed the settlement to a particular place, the shaman’s search for water spirits now took place at a specific place, that

being the Altar to the Earth and Grain. This altar was placed in the east, while the Ancestral Temple was located to the west. Thus, the city embodied the earlier, cyclical sense of time and their spatial coordinates. It aligned rituals for fertility, Spring and growth in the east, and the worship of predecessors, Autumn and death in the west. The city of Shaoxing, Jiangnan’s second early node and arch-rival to Suzhou, placed its altars along the same fashion.¹⁸

While locating itself along an east – west axis, Suzhou also anchors itself to a second spatial alignment. Every face of the square city was pierced by a pair of gates, each one aligned towards each of the eight winds. The north gate on the west face was named Cheng Gate; it designated the Gate of Heaven (Tianmen). The south gate on the east side was named She Gate, or the Gate of Earth (Dihu). The wind that blew from the Heaven diagonally to the Earth Gate was named the Breadth of Heaven (qi), such that the city found itself at the intersection of both a horizontal east-west diagonal axis.²⁰

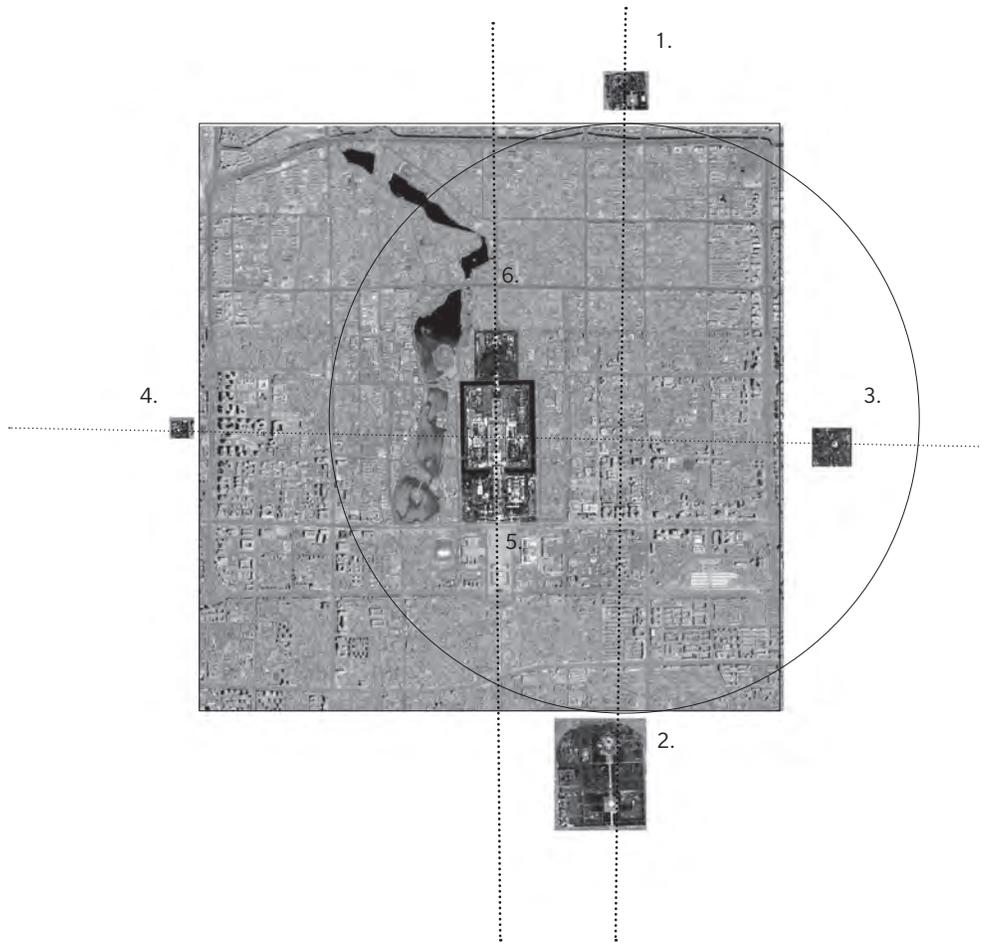


Fig. 3.12 Earthly and Sacred Axis, Ming Beijing c. 1420



- 1. Altar to Earth and Grain
- 2. Altar to Heaven
- 3. Altar to the Sun
- 4. Altar to the Moon
- 5. Forbidden City
- 6. Drum tower

Upstream and upwind from the ancient city, the diagonal axis also crossed Tiger Hill. Referred to as the 'mountain that rises from the sea,' Tiger Hill is an abrupt metamorphic mound that pierces the watery plane. The hill is the burial site of King Helu. Reminiscent of the feline Earth Mother, the hill owes its name to a white tiger that appeared to guard the body of King Helu. The body was lowered into a deep spring atop the hill, such that to this day, the body of the king waters the city he founded. It may be concluded that together, the spring water from Tiger Hill and the wind named the Breath of Heaven, aligns the Suzhou to a diagonal axis and a source of continued nourishment in perpetuity.²¹

The diagonal and horizontal axis in Suzhou contrasts with Chinese cities to its north. Northern cities hold themselves along the cardinal north-south axis, not Suzhou's diagonal alignment. The Tang Dynasty Xi'an (617-904) was organized in a near perfect north-south symmetry; the royal city and southern gate located on its centre line, and the city evenly laid out to its east and west. The Ming capital at Beijing (1421-1644) also followed suit, with a similar primary north-

south axis running through the drum tower, an artificial mountain, the Forbidden City, and the main southern gate. Four altars were eventually built immediately outside the walled Ming Dynasty Beijing. The Altar to Earth and Grain, the same institution found at Suzhou, was the first to be built, but placed in the north, rather than in the east of the city as in Suzhou. The largest of the four altars by far was the Altar to the Sky, which was placed in the south. The two smallest altars, to the sun and moon, were positioned to the east and west respectively (See 3.11).

Despite its remarkably stable square form, Suzhou was reoriented as northern belief systems were adopted. Religious temples seem to have replaced the now lost Altars to Earth and Ancestors. Suzhou's earliest state temple (Taoist, 276 AD) was compatible with the old water-land duality. It was located near the geometric centre of the city along its ritual east-west axis, and housed a trio of water, earth, and sky gods. Geographically, it was aligned to the city's water-land axis. The North Buddhist Temple was constructed north of the Taoist Temple, while the Confucian Temple was

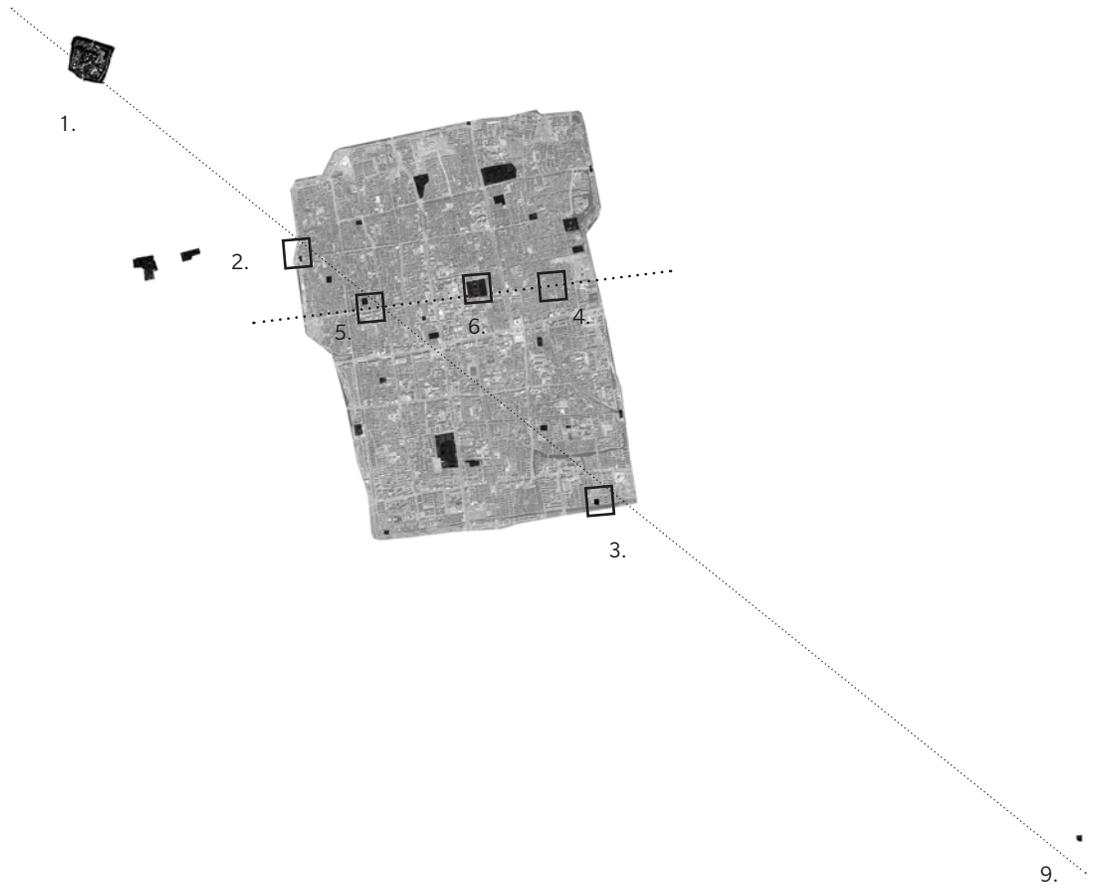


Fig. 3.13 Water-Earth & Earth-Sky Axis , Suzhou c.550 BC



Fig. 3.14 Earth-Sky Axis , Confucian Suzhou c.1031 AD



- 1. Tomb of King Helu, Tiger Hill
- 2. Gate of Heaven
- 3. Gate of the Earth
- 4. Altar to the Earth and Grain
- 5. Ancestral Altar
- 6. Taoist Temple of Mystery
- 7. Buddhist Temple
- 8. Confucian Temple
- 9. Fuciao Temple

established in 1032 in the south. Together, the three dominant religious institutions formed a central axis through the city along its principal road, Hulong Street (today, Renmin Street). Symbolically of interest, after the establishment of all three temples, the diagonal axes was blocked with the decommissioning of the Gate of the Earth Song.²² With the blocked gate and new temples, the east-west and diagonal axes were replaced by a single north-south axis.

The re-alignment of Suzhou from the duo east-west and diagonal meridians to the single north-south axis demonstrates an epistemological shift in time and space. The older scheme located the city at the intersection of terrestrial and celestial movements. Suzhou's primary gates opened to accept the elements of the earth: the fixity stone (the metamorphic Tiger Hill), the air (the Breadth of Heaven), and water (the spring atop Tiger Hill). Meanwhile, Suzhou's high altars aligned the city to the skyward arch of the sun. Suzhou achieves an address in space and time by cross referencing the two streams of movement. The sense of space is that of a pivot around which the dynamism of earthly and heavenly processes revolve. Meanwhile, the temporal space is intimately tied to the two

phenomenological processes. Human birth, death, and rebirth, like the diurnal rhythm of the sun, flow within the over arching cyclical folds of time but punctuated by the less predictable hydrologic events.

The later Suzhou is comparatively static. The three temple sites articulate neither geographic events nor phenomenological processes. Each courtyard complex is self referential. Their towering pagodas are the new coordinates around which the city is internally orientated. Time is marked through religious observance, the dominance of ritualistic or calendrical ordering of an infinite yet directional flow of time. This shift from the natural to anthropologic sense of time is reminiscent of Confucian belief in a fixed hierarchical social structure headed by a lineage of emperors with a mandate of heaven and independent from seasonal and cyclical time. Later Suzhou, like most Chinese cities, is aligned to the vertical fixity of the North Star.²³

The ambitions of Suzhou's duo spatial and temporal systems, however, remain similar; to stake out a territory from the plain, transcend the tyranny of hydrologic time alone, and escape the ambiguity of space amidst the waterland.



Fig. 3.15 Approaching the South Gate , Altar of the Earth, Beijing 2010



Fig. 3.16 On top of the Altar of the Earth





Fig. 3.17 On approaching the Altar



Fig. 3.18 Marble path to the Altar of the Earth



Fig. 3.19 The water ditch from which the altar mound rises

The image of firm land rising from water is evident at the Alter of the Earth. The altar mound rises from a water filled ditch. Similarly, carvings in the stone plaque holders follow the same iconography, and not unlike the image of the sacred Tiger Hill in Suzhou, rising from the muddy plane.



Fig. 3.20 Carved marble plaque holders, mountains rising from water



Fig. 3.21 Speeding by the ceremonial north entrance



Fig. 3.22 Above: North screen wall to the entrance of Canglang Ting Garden, 2009

Fig. 3.23 Below: South screen wall , entrance to Canglang Ting Garden, 2009

CANGLANG TING GARDEN: PROJECTING AN ILLUMINATING MEMORY

Where Suzhou is an entity that draws on exterior coordinates to choreograph the lives of its inhabitants within, the Jiangnan garden is a device that draws on its contents to project back out and illuminate the wider world. That content which the Jiangnan gardens houses, renews, and projects are collective memories.

It may appear counter intuitive to claim that the Jiangnan garden is concerned with the outside world at all. Some gardens were set in temples. Most were integrated into private garden villas, but all gardens were walled. They were discrete units of space, like a city unto itself.

While physically insulated, the architecture of the Jiangnan garden is linked to the broader landscape by devices of scale. Often, rockeries were crafted to recall distant scenes of mountain peaks, caves, and canyons while bonzais present the plant world in miniature. Gardens could thus be said to constitute multiple cities in the city and not unlike the walled Suzhou itself within a walled China.

In addition to spatial connectivity, transferring collective memories also depend on a fluidity in time. In the essay, "Record of the Make-do Garden" (1674), author Huang Zhouxing writes:

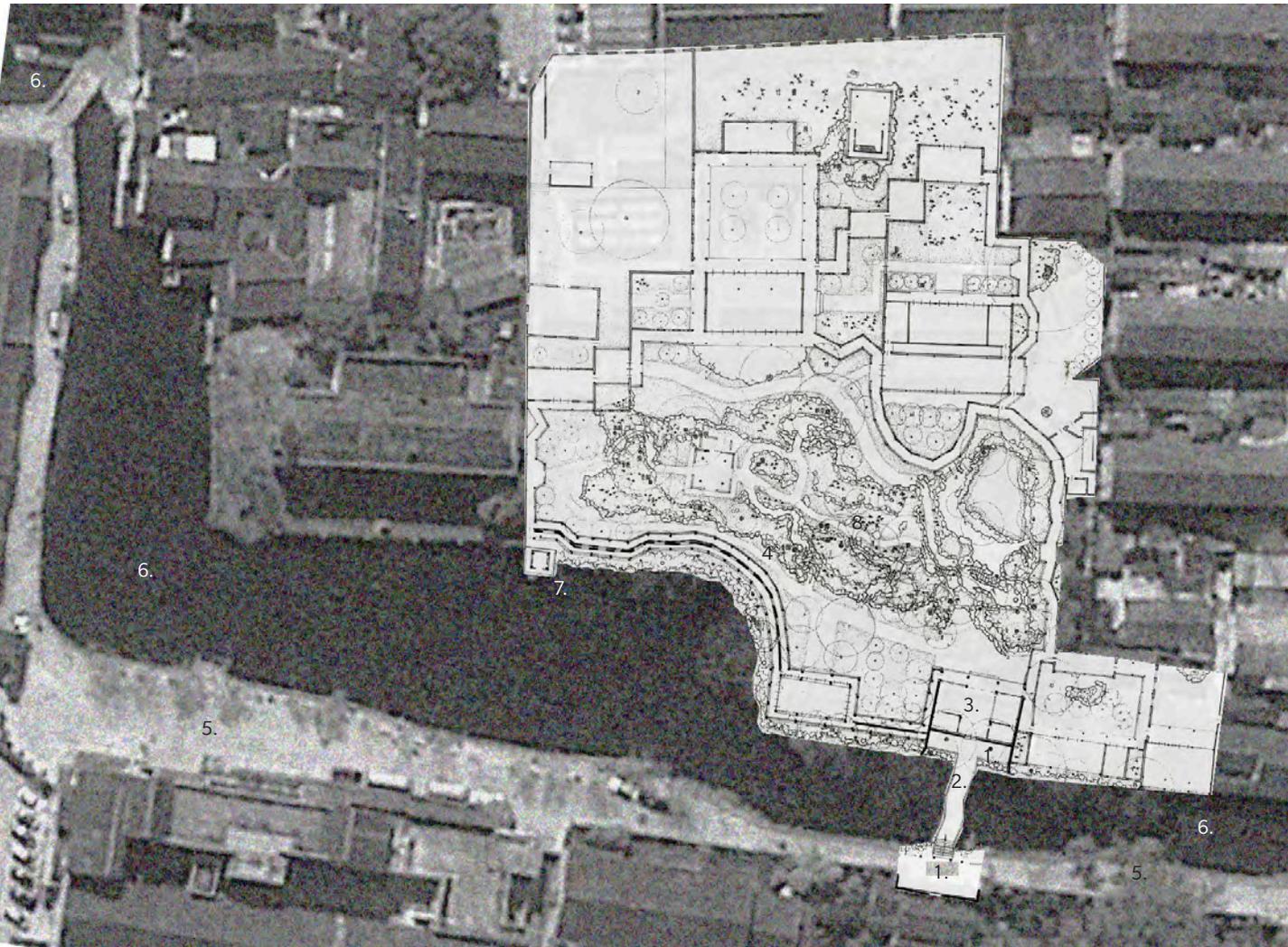
"My garden has no fixed location. I merely select the place where the landscape is finest under the Four Heavens, and construct it there. What is called 'the finest place' is in the world, yet out of this world, is not in the world, yet not out of this world. Since I have searched for it from the day I was born, and have only found it after several tens of years, I have not been inclined to speak of it to men of the world."

The guests said, "Please describe its general features."

Jiuyan replied, "Certainly."²⁴

Stanislaus Fung (1984) argues that the 'Make-Do Garden' is neither entirely in the present nor in the past. It is neither nostalgic nor an idealized future, 'Arcadia nor Utopia.'²⁵

Fig. 3.24 Plan of Canglang Ting Garden



0 30m



- 1. screen wall
- 2. zigzag bridge
- 3. entrance hall
- 4. double corridor
- 5. street
- 6. canal
- 7. pavilion
- 8. hillock

Gardens are therefore devices, in Agamben's sense, to stand apart from the spatial and temporal contemporary condition in order to perceive it anew.²⁶

Collective memory is woven into the fabric of Jiangnan gardens. In fact, the garden's legitimacy as an oasis or a retreat depends on the spatial and temporal slippage from the city around them. One tactic for storing and retrieving collective memories including the act of naming. Prospect Garden is perhaps Jiangnan's most fabled garden. It is the fictional setting for the 18th century story 'A Dream of Red Chamber,' one of the Four Classical Novels in Chinese literature. The novel describes the garden for the first time as the protagonist, Baoyu, and his father, Jia Zheng, inspect their new garden, discussing what names to assign to the events in their garden:

Suddenly raising his head, he [Jia Zheng] saw a white rock polished as smooth as a mirror, obviously intended for the first inscription.

'See, gentlemen!' he called over his shoulder, smiling.

'What would be a suitable name for this spot?'

'Heaped Verdure,' said one.

'Ebroidery Ridge,' said another.

'The Censer.'

'A Miniature Zhongnan...'

Now his father called on him [Baoyu] to propose a name.

Baoyu replied, 'I've heard that the ancients said, 'An old quotation beats an original saying; to recut an old text is better than to engrave a new one.' As this is not the main prominence or one of the chief sites, it only needs an inscription because it is the first step leading to the rest. So why not use that line from an old poem:

'A winding path leads to a secluded retreat.'

A name like that would be more dignified.

'Excellent' cried the secretaries.

Our Young master is far more brilliant and talented than dull pedants like ourselves.²⁸

As father and son attribute names, they fix the collective stories and poems from the past into the experience of their new garden.

Naming is also employed at Canglang Ting Garden to tether a collective memory to the present. Canglang Ting Garden (Surging Waves Pavilion Garden) is the oldest surviving garden site in Suzhou and owes its name to a legendary pavilion erected on the site by exiled scholar and poet Su Shunqin in 1047. The original pavilion has been lost, but through its iterations as part of a Buddhist temple, private garden, and government rooming quarters, to one of the nine UNESCO protected gardens today, the name transcends a thousand years.²⁹

The phrase ‘Canglang’ references the poem ‘The Fisherman’ composed by the celebrated poet in exile, Qu Yuan (ca. 340-278 BCE). In the poem, a fisherman offers words of advice to the banished Qu Yuan:

*‘When the Canglang’s waters are clear,
I can wash my hat-strings in them;
When the Canglang’s water’s are muddy,
I can wash my feet in them.’
With that he was gone, and did not speak
again.³⁰*

Interpreted, the poem may read,

“if the government is righteous, the Confucian gentleman should seek official employment,

signaled by the ribboned cap of official rank; but if government is corrupt, then a gentleman should retire to an idle existence and dangle his feet in the pond.”³¹ Once again, the theme of the garden as a retreat emerges at Canglang Ting Garden and Su Shunqin’s withdrawal is aptly expressed by aligning the name of his garden with the well known poem.

Collective memory in the Jiangnan garden is not strictly bound to objects or landmarks as in the Western tradition suggested by sociologist Maurice Halbwachs (1950). Rather, collective memory resides in space or voids in Jiangnan’s courtyard garden. In addition to the cerebral tactic of naming, Jiangnan gardens also depends on the visceral experience of that space to access collective memory.³²

The entry sequence to Canglang Ting Garden coaxes the visitor from the space of the city to the interior of the garden. Standing twenty meters apart, two sets of facing tall whitewashed walls gently bracket the entry space through which a public street and canal flow. A stone slab bridge offers access from the street across the canal to the garden. As if bending to the current of the water underfoot, however, the bridge refuses a direct path to

the gate and zigzags in its plan. To cross the bridge to Canglang Ting Garden, is to shuffle from side to side, to feel the pull of the water underfoot with the memory of the Canglang's water in the Fisherman's Tale.

Beyond the pylon gate, visitors are confronted with a forested hillock that screens the rest of the garden. Hints of pavilion roofs beckon the onlooker forwards. Where the garden abuts the broad waterway east of the gate, two sets of covered galleries run parallel to each other, with the garden wall between them. Although both swerve and climb in tandem along the contours of the site, each is visually unaware of the other and inscribes opposing experiences of the garden. One path looks to the interior of the garden; the other follows the canal, but is screened from the water and its destination blocked by piled rocks and willows. The

experience is cinematic; a sequence of frames articulated by the colonnade that gradually reveals the landscape without the cerebral use of axis or constructed perspectives.

At last, a pavilion marks the end of the water-side corridor. Like a balcony, the pavilion extends over the water, low enough to its surface so as to enable the visitors to dangle their own feet in the water. Similar to the entry bridge, visitors are confronted by their own reflection in the water, not entirely alone, but with the words of the fisherman, the founder of Canglang Ting Garden, and those that hold the garden in their collective memory. Raising their gaze up from the water, visitors, bolstered by the fisherman's antidote, cast their illuminating sight back onto the larger city from whence they came.

MAZHEN TEMPLE: BORROWING VIEWS

The village Temple of Mazhen is a curious complex on the fringe of the ancient city of Shaoxing, in the southern reaches of Jiangnan. It survives in three adjoining parts, each with its own function and manner of addressing space and time, namely a Buddhist temple, a folk memorial hall to the locally revered Mazhen, and his tomb. The pairing of a folk temple with a state-sanctioned Buddhist shrine is not entirely uncommon, but is seldom documented. Few such local examples survive. Most village temples were routinely cleared and converted, most recently in Maoist China, but also systematically in modernization efforts in the late Qing.³⁴

As the first governor of Shaoxing, Governor Mazhen undertook the construction of a massive earthen embankment wall to collect spring runoff flowing off the mountains south of the city. The dam enclosed a sprawling Mirror Lake (Jianhu), a construction that would supply a stable source of irrigation and prevent flooding, a construction which stood until the Tang Dynasty.³⁵ Since he submerged homes and tombs beneath his reservoir,

Mazhen was tried and executed. Citizens thankful for his works recovered his body, buried it, and erected the current temple to his memory on the shores of his Mirror Lake.

Each component of the temple has a unique orientation. Mazhen's tomb is at odds with the street leading to it, a consequence of intentionally aligning itself precisely with a north-south axis. Most temple complexes align themselves along the same north-south axis, but Mazhen's worship hall is rotated gently eastward. With one's back to the temple entrance, the slight turn permits the compound to point precisely towards the distant Tingshan peak. It is the dominant peak in front of the Kuiji Range behind it; like Tiger Hill, it is an iconic cone rising abruptly from the flat plane as geometrically symmetrical as the mound atop Mazhen's tomb.

The orientation of the Buddhist compound is the most surprising. It attaches with the Mazhen compound to the west and opens directly onto the street, facing east. The temple facade and a facing whitewashed screen



Fig. 3.25 Above: Facing Mazhen Temple , 2010

Fig. 3.26 Below: Looking out from Mazhen Temple , 2010

Fig. 3.27 Visual Axis from Mazhen Temple

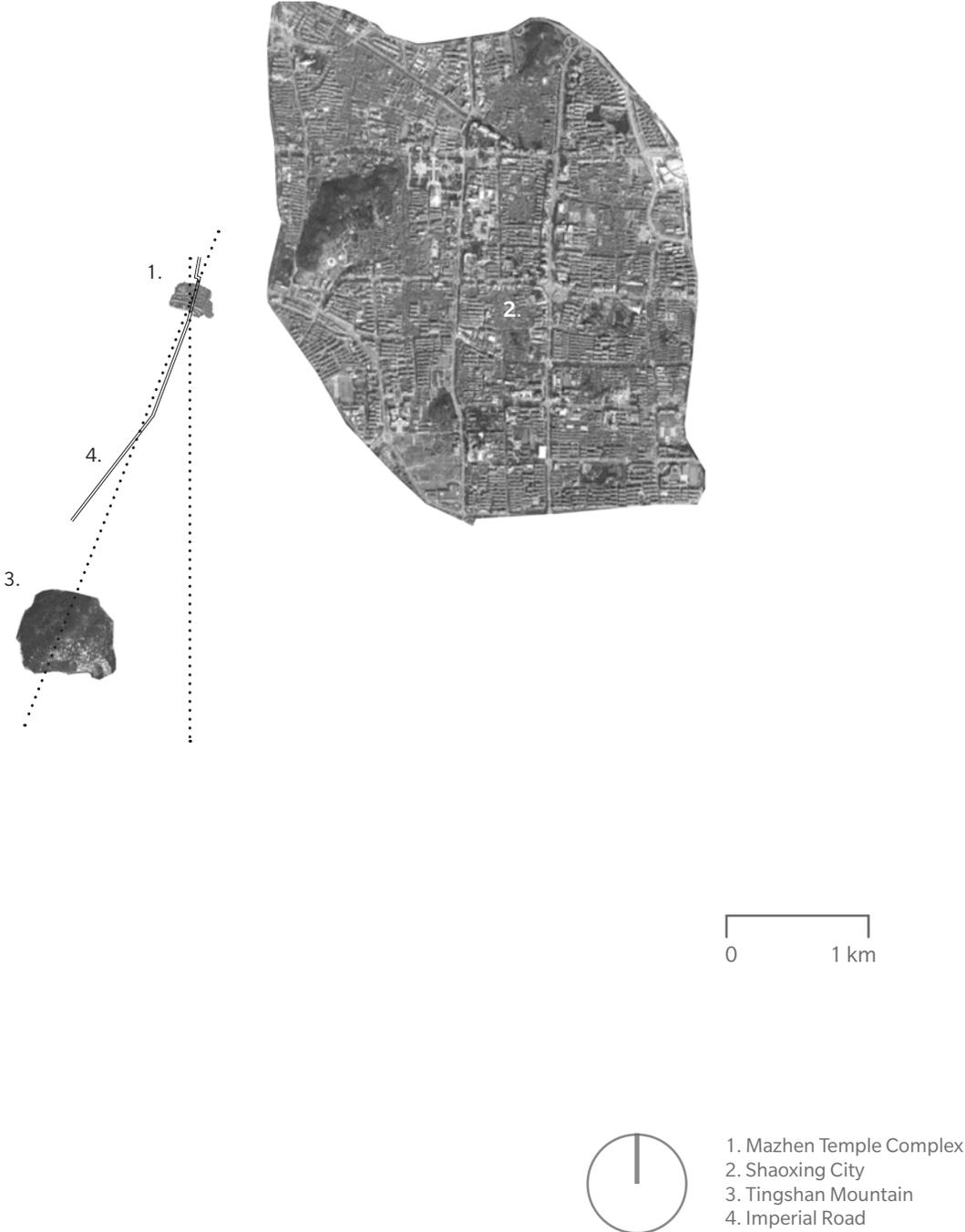
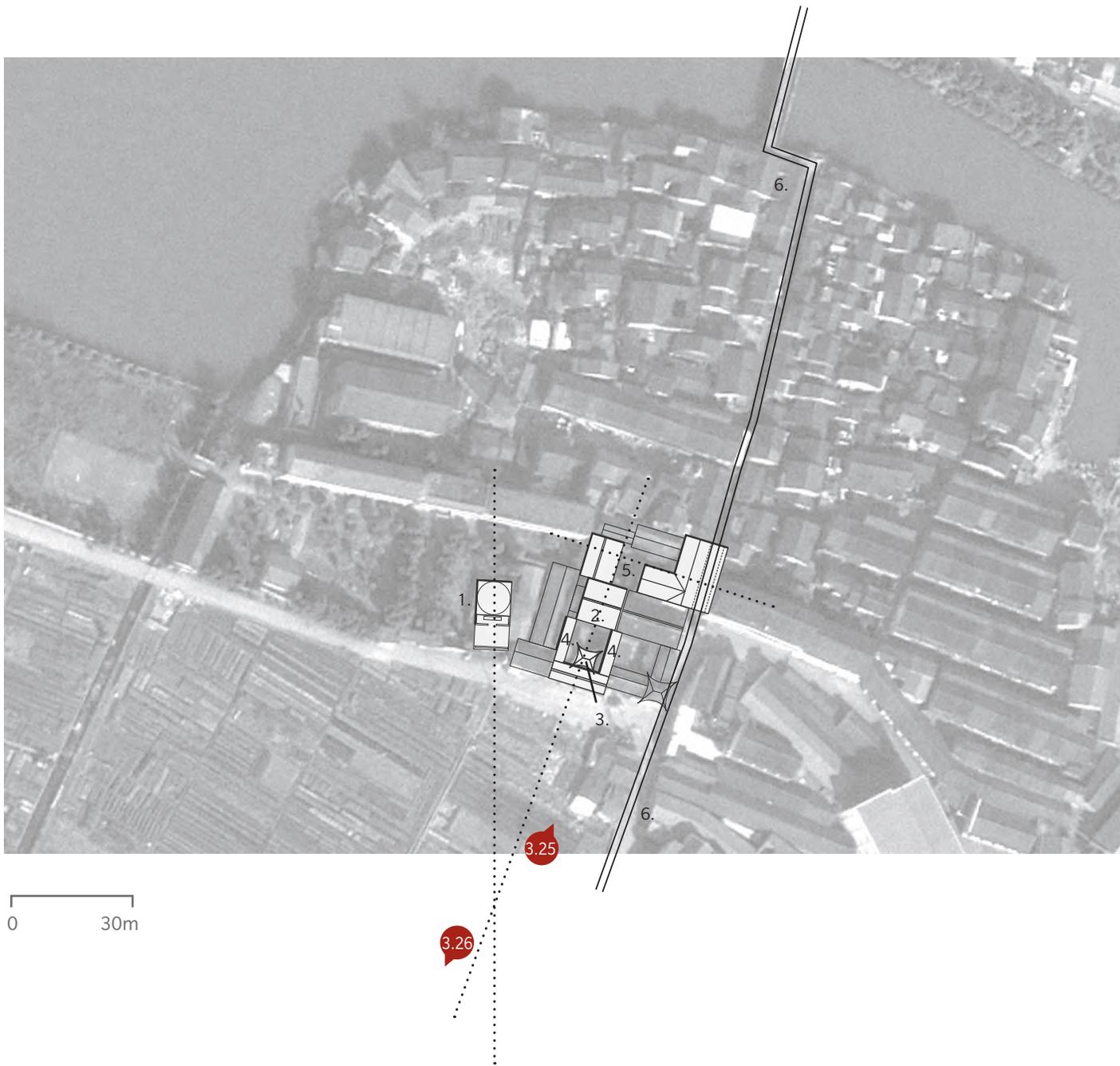


Fig. 3.28 Plan of Mazhen Temple



1. Mazhen's Tomb
2. Mazhen Worship Hall
3. Temple Stage
4. Seating Galleries
5. Buddhist Shrine
6. Imperial Road

Fig. 3.29 Visual connections from Mazhen Temple, including the former Mirror Lake



wall opposite it annex the street as its own foyer to the temple. The roof of the shrine extends out over the street, completing its internalization into the temple complex. Three large stone steles record the dates and deeds of previous emperors who have renovated the embankment road that once extended from the village across the lake and into the distant mountains.

The hall memorializing Mazhen takes on the form typical of temple architecture with one exception. An elevated platform is built into the courtyard, just beyond the entrance hall. The stage is open on three sides with its front facing the deified Mazhen. Double height galleries along the sides of the courtyard provide general seating for the villagers. The stage backs to the entryway, such that when entering the temple theatre, patrons emerge from behind the stage as if all are actors in the performance.

Unique to the temple-theatre at Mazhen Temple, the backdrop to the stage doubles as doors. These, presumably, open during

the performance. In this event, Governor Mazhen may peer out over the stage and its performance, beyond the fields south of the village towards the distant, iconic Tingshan Mountain. The temple is not only an interior hall for Mazhen, but an instrument, like a camera, with which to look out into the landscape. To the assembled villagers, the backdrop of the play includes their fields laced with hydro wires, their factories, and the dusty new highway in the distance. It is the image of the ever-changing landscape. The villagers also share Mazhen's gaze, although only obliquely from the periphery of the courtyard. Through Mazhen's gaze, the villagers may recognize the fixity of Tingshan Mountain, and perhaps even Mazhen's lake and the imperial road.

The spatial and temporal layering may be further thickened by the notion of 'borrowed views.' Borrowed views (*jie jing*) are a device regularly used in Jiangnan landscape design to draw elements at a distance casually into one's sight. To Stanislaus Fung, distinct from the Western and static relationship between subject and object, borrowed views rely on a

“reciprocal relationship between sentiment and scenery.” As poet Li Bai writes, “we look at each other and never get bored - just me and Jingting Mountain.”³⁶ Borrowed views is a reciprocal act that relies on the receptiveness and willingness of the subject as much as the power of the object. Its qualities are seemingly casual, like a “current or impulse within a temporal flow.”³⁷

To return to Mazhen Temple, as if casting Agamben’s shadow of the present into the past “so that the past, touched by this shadow, acquires the ability to respond to the darkness of the now,”³⁸ the temple throws open its

doors to borrow views of the contemporary landscape. The backdrop to the play relies on what each member of the audience can relate to. It encompasses the subtleties from individual to individual and evolves over time. The view is personal. Still, Tingshan Mountain, the memory of Mirror Lake, and the imperial road relate the multiple individual views to a common understanding of the landscape, and bestow on the audience the deepest sense of place only a personalized understanding space and time can offer within the eternal flow of time.³⁹

Fig. 3.30 Temple door and reversible stage, 2010



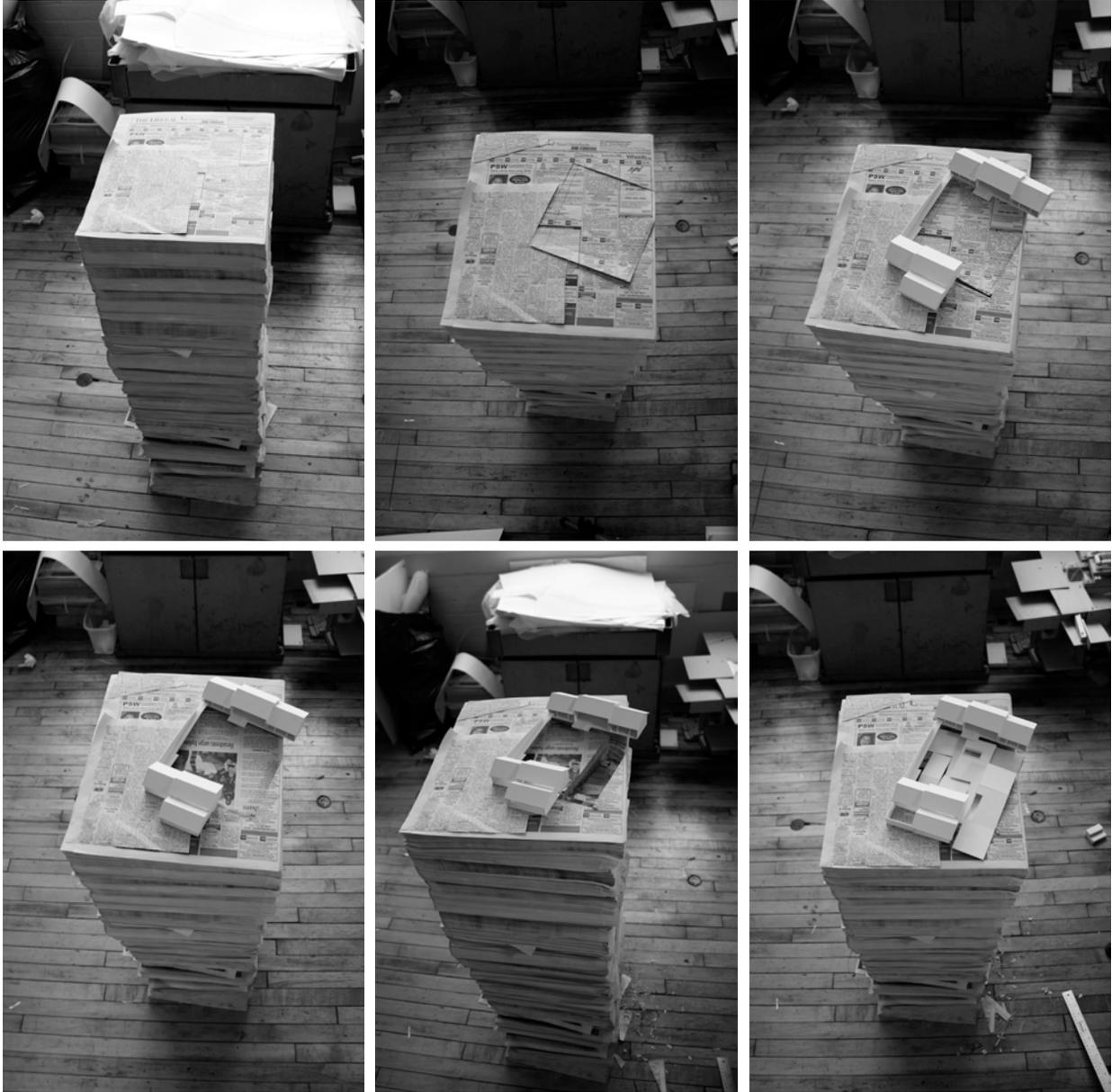


Fig. 3.31 Constructing the proposed temple

MARITIME THEATRE: A PROPOSAL



Fig. 3.32 the Proposed Fuciao Cun Temple

MARITIME THEATRE: A PROPOSAL

A restored Fuciao Cun Temple is the only fixed moment within a landscape in motion. Its stillness is its voice. It is the pivot around which human interaction and the landscape move, such that it interprets the origins and projection of the landscape as it is transformed. The temple walls, now also retaining barriers, speak to the abruptness and violence with which the ground around them was raised. The resulting sunken temple floor, two meters below current ground level, marks the elevation of the dismantled and buried village it once served.

A water garden takes the place of the temple courtyard. Although the walled complex stands fixed in the dynamic landscape, it is porous to hydrologic cycles around it. A series of pools collect the water that seeps into a low lying courtyard via channels from the lake. The shape of the pools traces the contours of the compound, namely, the foundations of a burnt out worship hall, the dimension of the interstitial courtyards, and a recently constructed stage. Each pool varies in depth. The deepest three pools are stable and fed

by a trio of deep underground aquifers. Each aquifer, the ghost of paleo lagoons and rivers, offers a distinct water coloured by age. Water from the pool fed by the deepest aquifer has filtered through 200 meters of sediment. They are the coolest, cleanest and have the least sediment. The shallowest aquifer pool is tinted yellow with traces of mud.

Shallow pools are fed by the lake and empty in the dry winter. All the pools merge into an all-encompassing sheet of water during the wettest times of year. As if a water clock, the courtyard pools also tell of rising water levels year on year. The increasing number of wet paddies that are filled, the higher and longer the submersion events will become. Water levels rise 3-5mm per annum. In 400 years, the temple site will be completely submerged.

Like the view from Canglang Ting Garden or Agamben's past that responds when touched by the shadow of the now, water flows into the topography of Fuciao Temple to animate the shells of abandoned worship halls. By filling the hollowed footprint of the burnt out

buildings, water pools and fills an upside-down temple suspended from the ever changing surface of the present.

Fuciao Cun Temple testifies to an inversion between land and water. The temple site, once the high and driest point, is now the lowest most water-prone in the landscape, a natural pool. Formerly the Temple of Earth and Sky, the temple at Fuciao Cun Village is now a temple to earth and water.

If earth and water were once associated with death and life, their affiliations are now reversed. The rapid transformation of the landscape on land is more akin to life, while the slower memory laden water is closer to memory, the past and death.

Where the temple was once approached from the village in the south, it is now frequented from the new elevated road to the east. From the bus station, visitors walk west via a series of ramps that slip over the wall into the sacred compound. The gentle ramps double as seats.

A stage projects into the courtyard opposite the ramps at ground level.

A new community gathers in the very place where the lost village of Fuciao Cun once assembled. The community's view of the stage takes in the various depths of voided temple buildings enlivened with water, the stage and beyond the actors, brickworks. As one watches a barge docks at the brickworks in front, and one hears an idling bus engine pausing to let off its passengers behind, for a fleeting moment, the temple at Fuciao Cun becomes the hinge that relates the eternal verticality of time with the immediacy of the vast industrial landscape of the present. Precisely at that moment, the restored temple and brickworks offer a place within the terrifyingly expansive vertical and horizontal temporal planes; a modest place the new community recognizes and claims as their own.



Fig. 3.33 Axis: Fuciao Cun Temple, the brickworks, Tiger Hill

Fig. 3.34



Fig. 3.35



Fig. 3.36



Fig. 3.37



Fig. 3.38 The Water Court

The abandoned temple is animated by its water court. A single tree marks the elevation of the former temple courtyard. Breaking the reflective surfaces, it is the only moment of certainty in the water court.



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ADP
Thomas
1910
R.B.
1057
1941
1946
Adam
Harris

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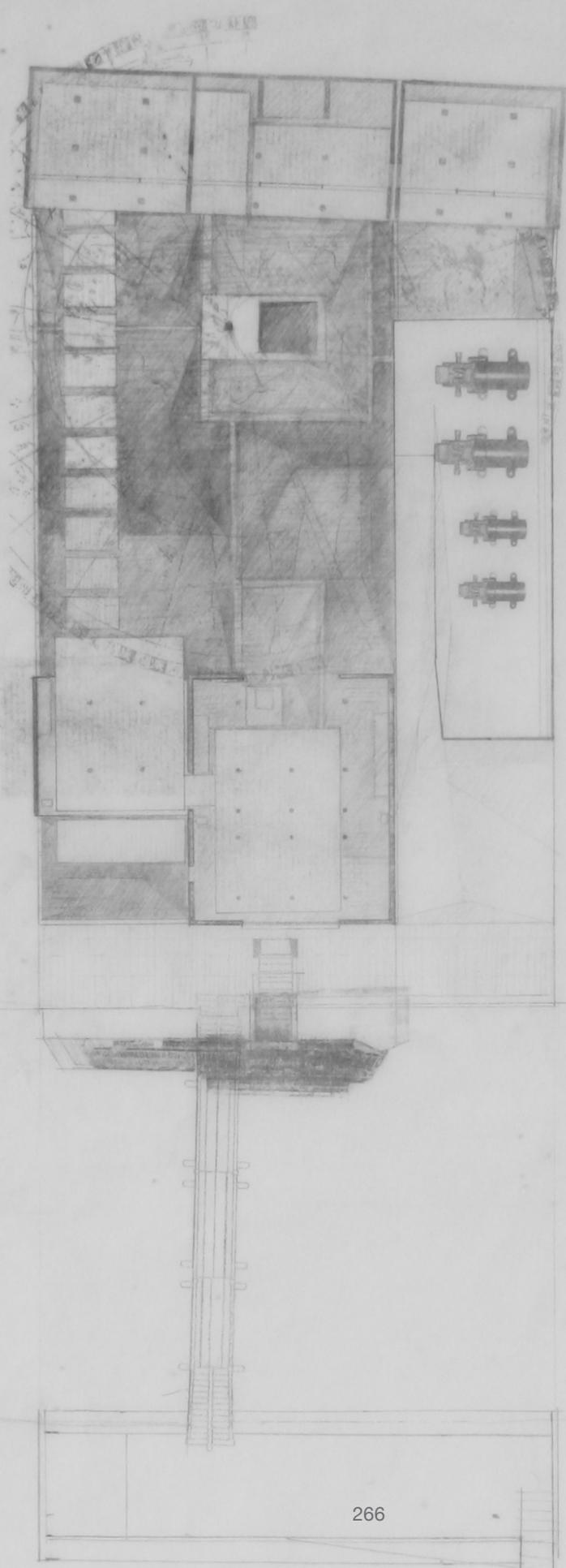


Fig. 3.39 Ground Plan

The surface of the water court mediates between current lake levels, the historic ground and the reflected sky.

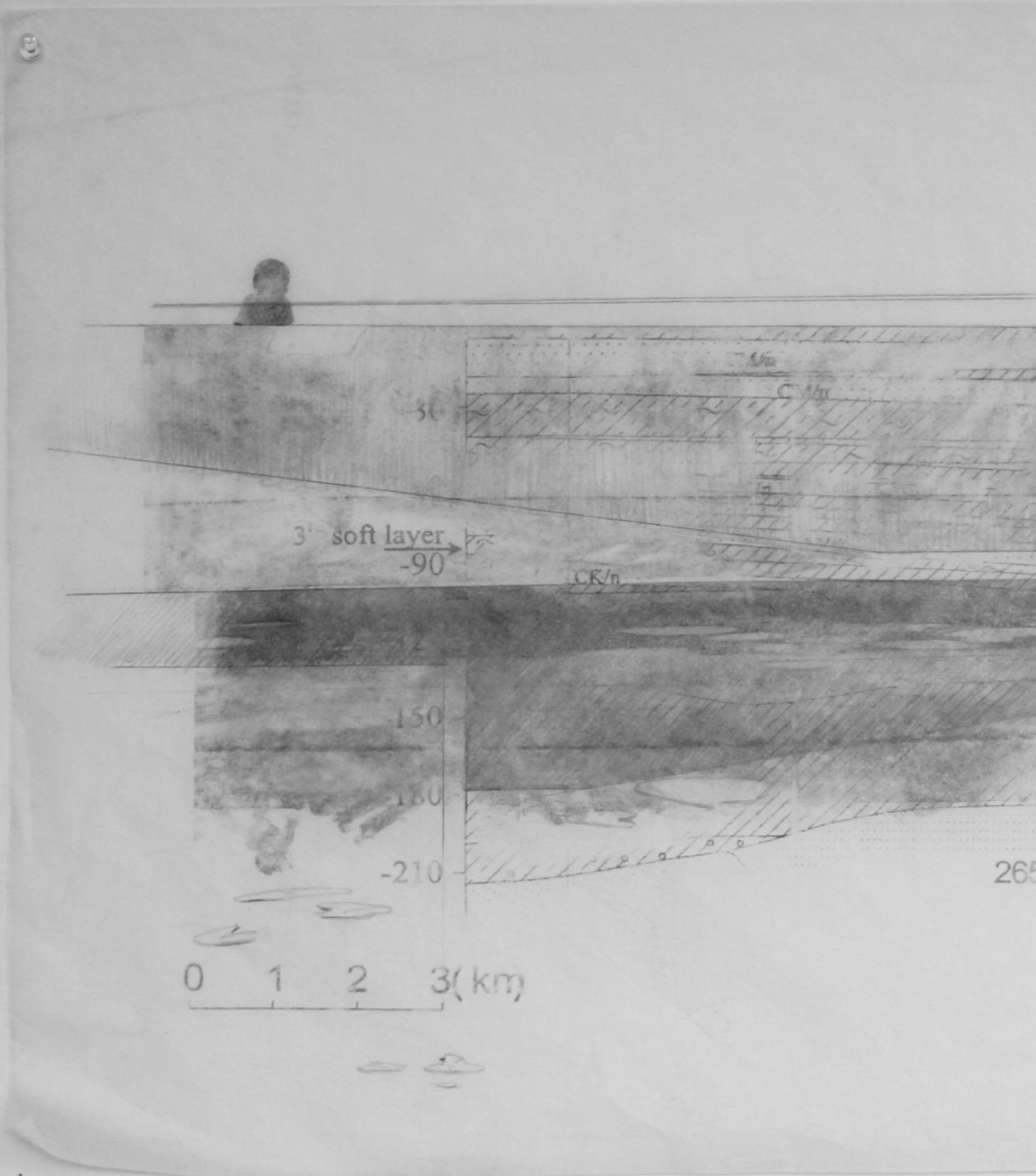
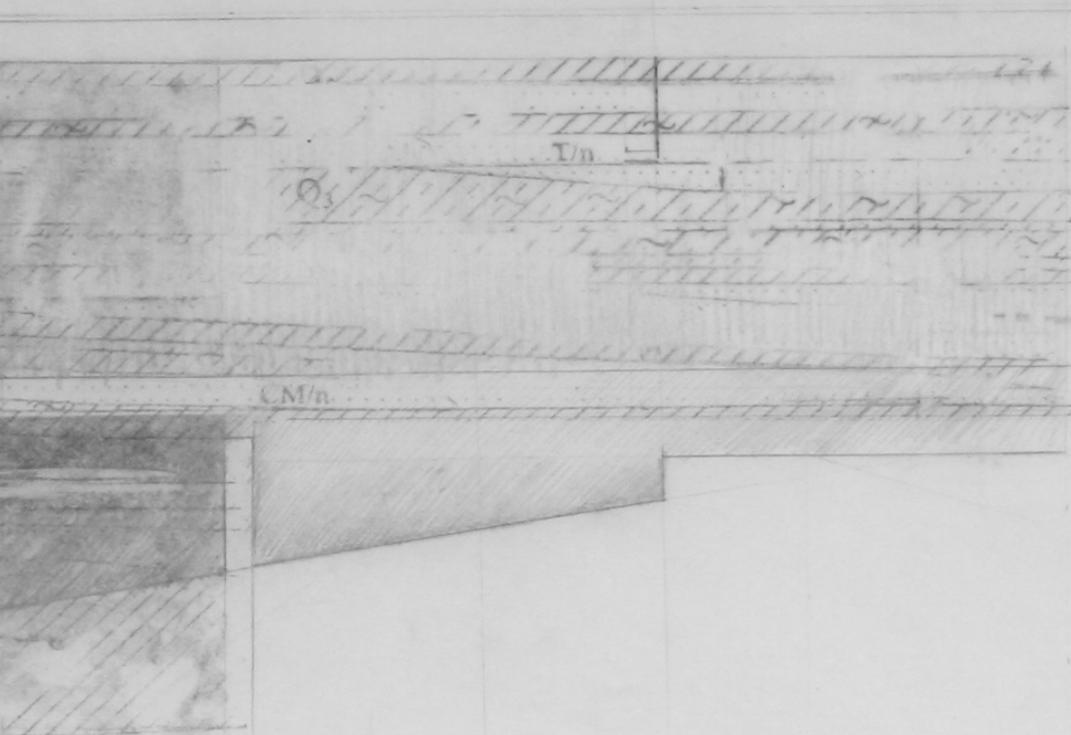


Fig. 3.40 The west wall

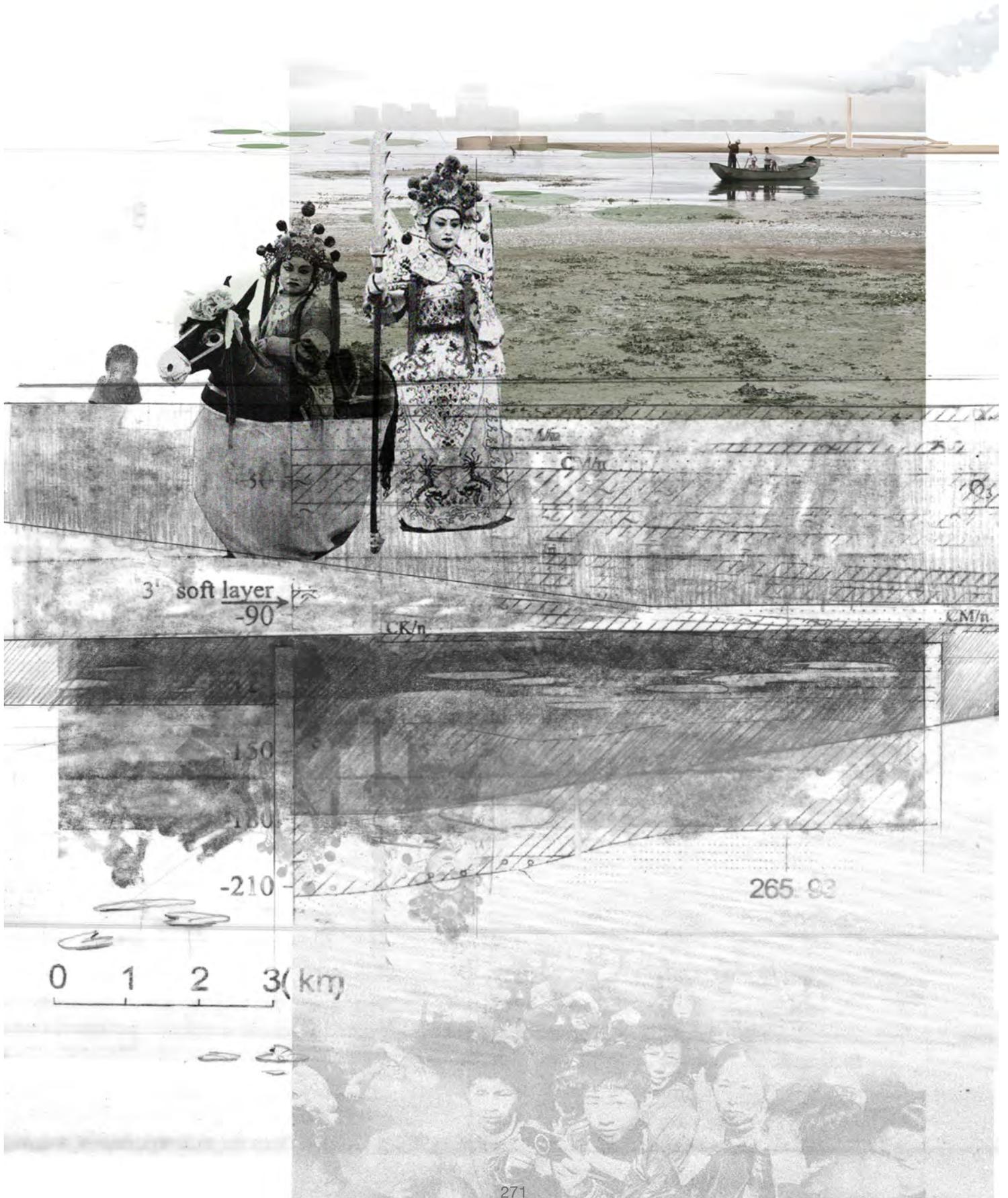
oscillating between the historic ground plane, the since extruded ground, and other long buried horizons.



5. 93

Fig. 3.41 East-West Axes

The visual axes borrows the view of the distant brickworks from the temple, linking the audience, the actors, the landscape, and the brickworks.



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13. Ibid., 347.

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15. Notes from an on site visit to Li Garden, December, 2009.
16. Xu Yingong, *The Chinese City in Space and Time* (Honolulu: University of Hawaii Press, 2000) 16.
17. *Ibid.*, 9, 43.
18. *Ibid.*, 43. [Xu's translation from the ancient text, *Wu Yue chunqiu* (Spring and Autumn Annals of the Wu and Yue, Zao Ye, c. 40 AD, Eastern Han. Nanjing: Jiangsu guji chubanshe, 1986)].
19. *Ibid.*, 37-38.
20. *Ibid.*, 40, 43, 52.
21. The image of King Helu's body nourishing Suzhou via the spring on Tiger Hill is an unorthodox position taken by the author. The claim is derived partially from the tomb of the first Ming emperor. He is said to be buried on Purple mountain, where the streams from the mountain continue to nourish the Nanjing, his capital, below. These notes are taken from the Ming Xiaoling Mausoleum Museum exhibit, Nanjing (visited Dec, 2009).
22. Xu, 50-52, 116.
23. *Ibid.*, 32-33.
24. Fung, Stanislaus, 'Notes on the Make-do Garden,' *Utopian Studies* 9, 1 (1998) 142-148.
25. *Ibid.*, 147.
26. Agamben, 54.
27. Fung, Stanislaus, 'Notes on the Make-do Garden,' 144.
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30. Hawkes, 206.
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36. Following Stephen Owen's translation in *The Great Age of Chinese Poetry: The High T'ang* (New Haven and London: Yale University Press, 1981), 138.
37. For a discussion on 'borrowed views,' see Stanislaus Fung, *Here and there in 'Yuan Ye.'*
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EPILOGUE

In an era of shrinking distances and accelerated time, traces of compressed space and time are especially alluring. It is as if the sight of peeling paint or the smell of rotting wood delays the fleeting present and awakens a poignant certitude in the ephemeral non-place. Such is the draw of the surviving Fuciao Cun Temple. Its crumbling walls and emptied halls powerfully evoke the village that was dismantled.

Motionscapes intervenes at Fuciao Cun by preserving the abandoned temple in photographs. The seemingly logical extension, to preserve the power of the abandoned temple outright as a museum, however, felt perverse. This scheme would freeze the temple as it appears today, breaking the process of decay. An alternate conclusion to *Motionscapes* may be to simply let the temple fall into ruin. Left to the ravages of time, the emptied temple could quietly point to the contemporary condition that made it irrelevant, the volume of a once holy site, and the foundations of a new community linked through the temple to specific place in the progression of time.

Rather than extruding the earth two meters

for flood proofing at the Suzhou Industrial Park, *Waterland* proposes place-making by heightening the awareness of how water animates the landscape and the act of choreographing the city in hydrologic time. The seasonal flow of time is marked by the dynamic lake levels rise and fall that expose and submerge the broad settling ponds. Once revealed, the trapped sediment is dredged, made into bricks, and shipped to feed the emerging city, tying hydrological cycles to the city as rural villages utilized water rise and fall in rice cultivation.

Maritime Theatre attempts to anchor an awareness of community in the solitary non-place by evoking collective memory. The temple at the former Fuciao Cun Village is transformed into a stage. In designing the space, tactics for place-making are collected from Jiangnan gardens and temples. They include metaphor, alignment to earthly and heavenly processes, ritual, and borrowing views, in short, tactics dependent on events in time as much as on physical space. The renewed temple casts the non-place as a backdrop and employs performative tactics to conjure collective memories. In folding the shared experience of



Fig. 3.42 From the terrace of True Color Museum, 2010

theatre into the view of the non-place perhaps new notions of community may be grafted onto the contemporary, even with the dismantled village.

The non-place in its profound solitude, deep disorientation, and unrelenting silence inescapably blankets contemporary Jiangnan. Yet, in all its vacuity, there may be moments of community as well. *Motionscapes*, *Waterland*, and *Maritime Theatre* demonstrates that the inclusive character of public places is not linked to architectural form or even a physical site alone, so long as a resilient temporal frame persists. The gradual decay of the temple in a landscape of radical flux, the weaving of the visceral hydrologic experience into contemporary manufacturing and transportation processes, and the performing of rituals that transcend time may all be temporal means of place-making and community building in a landscape that offers few physical tokens of group identity.

On a typically sweltering July morning after representing Italy at the Shanghai World Exposition, a Milanese industrial designer was brought to the True Color Museum in Suzhou. He was ushered through whitewashed cavernous halls, past a collection of contemporary pieces from across China, and brought to the roof terrace. From the balcony, the vantage point took in the immediate cobblestone paths on the museum grounds, its collection of wooden boats, and the pleasant willow planted banks of the canal. Beyond the premises, a canal wound

its way by factories, vacant lots, a city under construction, and Fuciao Cun Village in the distance (left). The talented Italian remarked it was a shame that the museum campus was spoiled by its chaotic surroundings. The approach to the excellent museum, he felt, was undignified, suggesting that the environment be “cleaned up.”³⁹

This thesis respectfully concludes with a contrary opinion to that observation. It recognizes the tableau from the terrace as real and telling of Jiangnan as the contemporary art inside the gallery. During the course of this thesis, the urge to displace the non-place, to fill its raw, uncertain, and solitary void diminished. In its place an idea that the non-place may not be intolerable, that the desire for an inclusive public can be realized within the non-place emerged. When augmented by resilient temporal frames of stillness and decay, hydrology, and theatre, perhaps the non-place is as exquisite, telling, and indispensable to sculpting place in contemporary Jiangnan as the classical temples or gardens were pleasing and necessary for their times.

The thesis ends where it began. The enduring allure of the expansive and illusive non-place with one addition: the little temple at the former Fuciao Cun Village as ruin, waterworks, and theatre that attempts to choreograph a notion of a community on the otherwise solitary Jiangnan plain.



Fig. 3.43 *Motionscapes 03*, Shanghai 2009



Fig. 3.44 *Motionscapes 03*, Shanghai 2009

Fig. 3.45 *Motionscapes 03*, Shanghai 2009



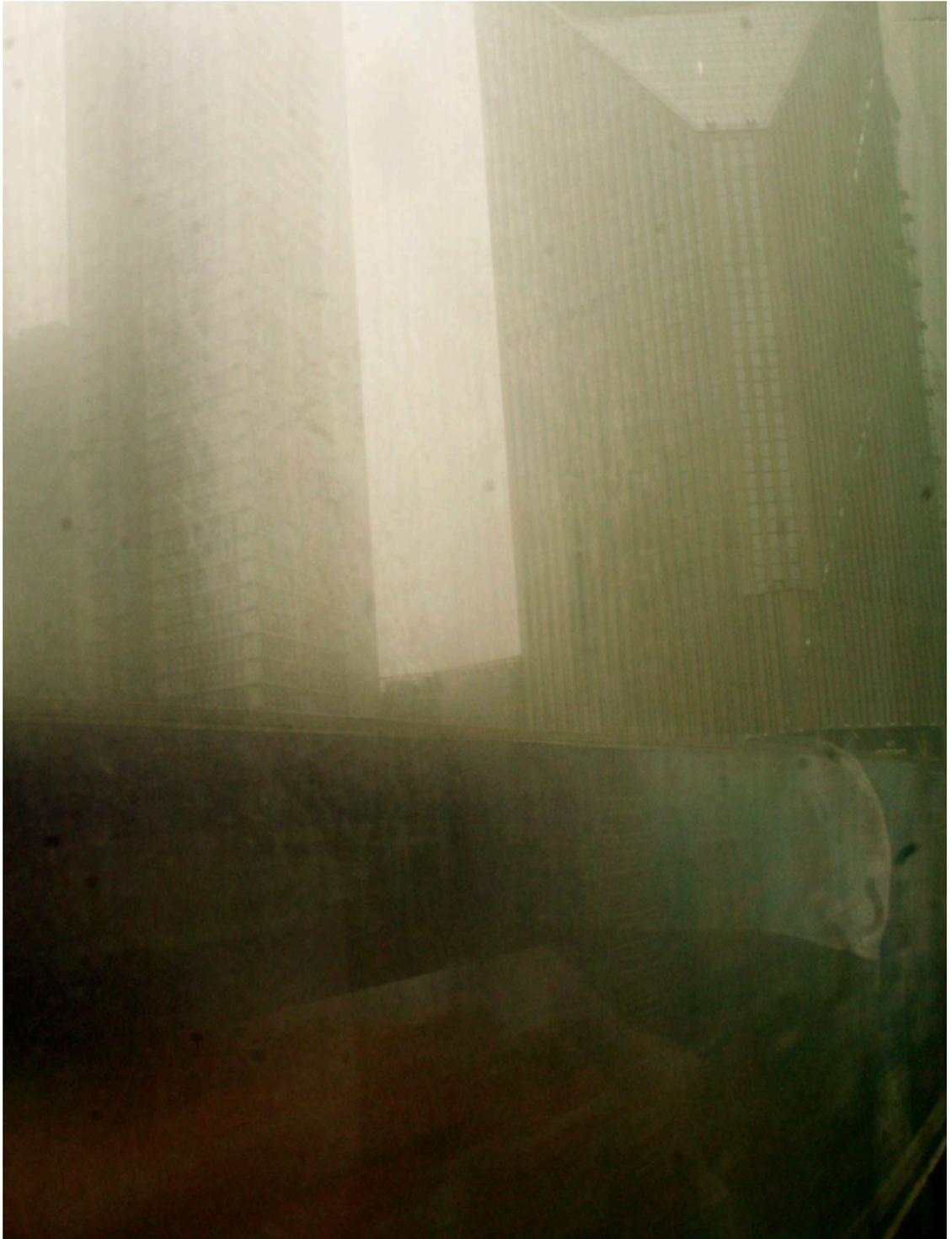


Fig. 3.46 *Motionscapes 03*, Shanghai 2009

GLOSSARY

Achronologic – the condition of being outside or out of sync with time.

Hydrologic writing – a genre of literature dedicated to water flow. It is a distinct arena of research in China stemming from.

Jiangnan – a term specific to this thesis to describe the urban agglomeration of 80 million people, living within a one hour commute to Shanghai by bullet train; historically, this term indicated a cultural and hydrologic region at the Yangtze River Delta.

Motionscapes – a term specific to this thesis describing the landscape experienced in transit.

Maritime Theatre – a term specific to this thesis describing the restored temple of Fuciao Cun Village. Adopted from the name of the final chapter in the novel 'In the Skin of a Lion' by Michael Ondaatje (1987), that takes place at the Harris Filtration Plant in Toronto, Ontario. Name also alludes to a place at Hadrian's Villa

outside Rome, Italy, where Emperor Hadrian constructed a small island surrounded by water that mimicked in miniature the larger world.

Non-place – a term coined by anthropologist Marc Auge to describe super modern space experienced in transit; the non-place stands outside the flow of time, and is solitary by nature.

Polders – a wet rice paddy commonly contained by earthen dikes and weirs.

Stele – a large stone tablet with an engraved description, commonly erected by government to communicate and document their action to the masses; may also depict maps and charts.

Waterland – a term specific to this thesis describing the muddy geography of Jiangnan. The term is borrowed from 'Waterland,' a novel from 1983 by Graham Smith.

