

**DESIGNED ECOLOGIES**  
**The Landscape Architecture**  
**of Kongjian Yu**

For Candace—high-spirited, funny, lovely, generous....

GRAPHIC DESIGN:  
Proxi Barcelona, [www.proxi.me](http://www.proxi.me)

EDITORIAL SUPERVISION:  
Ria Stein, Berlin

A CIP catalogue record for this book is  
available from the Library of Congress,  
Washington D.C., USA.

Bibliographic information published by  
the German National Library.

The German National Library lists this publication  
in the Deutsche Nationalbibliografie; detailed  
bibliographic data are available on the Internet at  
<http://dnb.d-nb.de>.

This work is subject to copyright. All rights are  
reserved, whether the whole or part of the material  
is concerned, specifically the rights of translation,  
reprinting, re-use of illustrations, recitation,  
broadcasting, reproduction on microfilms or in other  
ways, and storage in databases. For any kind of use,  
permission of the copyright owner must be obtained.

© 2012 Birkhäuser, Basel  
P.O. Box, CH-4002 Basel, Switzerland  
Part of De Gruyter

Printed on acid-free paper produced  
from chlorine-free pulp. TCF ♻  
Printed in China

ISBN 978-3-0346-0738-4

9 8 7 6 5 4 3 2 1  
[www.birkhauser.com](http://www.birkhauser.com)

**Editor's note**

*Throughout the book, Chinese  
proper names are given in  
the traditional order, with the  
surname first. In the cases of  
Chinese designers, scholars,  
or authors known outside of  
China with surname second,  
this order is used in the book  
as well. This refers to Yung Ho  
Chang, Dihua Li, Hailong Li,  
Qingyun Ma, and Kongjian Yu.*

# **DESIGNED ECOLOGIES**

## **The Landscape Architecture of Kongjian Yu**

**WILLIAM S. SAUNDERS (ED.)**

**BIRKHÄUSER**  
**BASEL**

7		
Foreword		
KONGJIAN YU'S CHALLENGE		
Peter Walker		
8		
Introduction		
ECOLOGY, WITH PLEASURE		
William S. Saunders		
10		
POPULAR AESTHETICS, PUBLIC HISTORY		
John Beardsley		
20		
VALUE THE ORDINARY: ZHONGSHAN SHIPYARD PARK, ZHONGSHAN		
34		
FIASCOES OF CHINESE URBAN DEVELOPMENT AND TURENSCAPE'S ALTERNATIVES		
Antje Stokman		
42		
THE BIG FOOT REVOLUTION		
Kongjian Yu		
50		
GO PRODUCTIVE: THE RICE CAMPUS OF SHENYANG JIANZHU UNIVERSITY, SHENYANG		
56		
THE ART FIELD: NORTH GRANT PARK, CHICAGO		
60		
THE BOY WHO READ BOOKS RIDING A WATER BUFFALO		
William S. Saunders		
66		
MAKE FRIENDS WITH FLOODS: THE FLOATING GARDENS OF YONGNING RIVER PARK, TAIZHOU		
78		
RESHAPE AN URBAN WATERFRONT: YINZHOU CENTRAL RIVER TRANSFORMATION, NINGBO		
84		
TREAD LIGHTLY: RED RIBBON PARK, QINHUANGDAO		
94		
REGENERATE SURGICALLY: BEACH RESTORATION, QINHUANGDAO		
100		
TRANSFORMING A WORKING LANDSCAPE: QINHUANGDAO FOREST PARK, QINHUANGDAO		
106		
THE ACTIVIST EDUCATOR		
Frederick R. Steiner		
116		
LET NATURE DO HER WORK: THE ADAPTATION PALETTES OF QIAOYUAN WETLAND PARK, TIANJIN		
124		
GATHER PEOPLE: BRIDGED GARDENS, TIANJIN		
132		
GATHER PEOPLE: LONG SLEEVE SKYWALK, XUZHOU		

---

136

**GATHER PEOPLE:  
DUJIANGYAN SQUARE,  
CHENGDU**

140

**GATHER PEOPLE:  
CHINATOWN PARK, BOSTON**

144

**MYTHS AND STRATEGIES OF  
ECOLOGICAL PLANNING**

**Kristina Hill**

152

**A GREEN SPONGE FOR  
A WATER-RESILIENT CITY:  
QUNLI STORM WATER  
PARK, HARBIN**

164

**LANDSCAPE  
AS A LIVING SYSTEM:  
HOUTAN PARK, SHANGHAI**

184

**CHINA'S WATER RESOURCES  
AND HOUTAN PARK**

**Peter G. Rowe**

192

**REINVENT THE GOOD EARTH:  
NATIONAL ECOLOGICAL  
SECURITY PATTERN PLAN,  
CHINA**

200

**(R)EVOLUTIONARY  
ECOLOGICAL  
INFRASTRUCTURES**

**Kelly Shannon**

---

212

**LET LANDSCAPE LEAD  
URBANISM: GROWTH PLAN-  
NING FOR BEIJING, BEIJING**

222

**BEGIN WITH ECOLOGICAL  
INFRASTRUCTURE: WULIJIE  
ECO-CITY, WULIJIE**

226

**RECOVER THE MOTHER RIVER:  
SANLIHE GREENWAY, QIAN'AN**

234

**ACTIVATE A RESILIENT RIVER:  
MINNEAPOLIS WATERFRONT  
DESIGN CONCEPT,  
MINNEAPOLIS**

242

**MAKE ARCHITECTURE INTO  
LANDSCAPE: LOW-CARBON  
APARTMENT, BEIJING**

246

**MAKE LANDSCAPE INTO  
ARCHITECTURE: HALLELUJAH  
CONCERT HALL, ZHANGJIAJIE**

---

250

**Afterword  
THE PERSISTENT PROMISE OF  
ECOLOGICAL PLANNING**

**Charles Waldheim**

254

**Authors**

254

**Project Credits**

256

**Illustration Credits**



## FOREWORD

# KONGJIAN YU'S CHALLENGE

PETER WALKER

Among the many remarkable qualities of Kongjian Yu's professional practice, three may be of particular interest to landscape architects around the world. First is the tremendous range of projects that his firm, Turenscape, has undertaken since Yu earned his Doctorate of Design degree from Harvard in 1995. Second is the range of intellectual influence the practice exercises within the context of the hypergrowth experienced in China over the past two decades. Third, and most important, this pragmatic practice has been able to test many ideas that are still largely theories in the Western world.

In the United States in the late 1920s, the profession's impatience produced a separation of planning from landscape architecture. This split divided the original Olmstedian concept in two, robbing landscape designers of political power and scope and eventually allowing planning to become largely non-spatial. A further separation of civil engineering from landscape design occurred just after World War II. There have been indications of similar tendencies in China; for example, design and physical planning degrees are distinct in the major Chinese universities. Still, they remain closely allied and located within the same school, where students and faculty are in daily contact. We can only hope that China will resist these potential schisms. Certainly, by word and by example, Yu is defining a wider and more comprehensive profession.

The relationship between landscape design and regional planning is undergoing major reconsideration in both Europe and the United States, where land planning is for the most part professionally separated from landscape design and taught from a perceived separate basis. The exceptions are the ecologically based planning of Ian McHarg at the University of Pennsylvania and the methodologically based teaching of Carl Steinitz at Harvard. In the last generation followers of these approaches have attempted to reconcile them with design. Real progress is being made.

China has produced a number of combined landscape and planning offices, often university-based, that work at scales ranging from the regional to the individual site. As one would expect, many of the products at both scales tend to be derivative and of only average quality. But Yu's work, even while extending across this same wide range of activities, has attained an extremely high and elegant level in both conception and execution. In China, he has been able to lead the profession away from planning primarily determined by economic and engineering considerations to ecologically based plans that proceed through scales of development to built landscapes of the highest conceptual and built beauty—a dream we in the West

have rarely achieved. It is as if the schism that divided the Olmstedian vision has been washed away, freeing the spread of landscape architecture into the widest range of scales.

Yu's physical design style incorporates agriculture as both a major scaling device and a metaphor. He also frequently integrates sculptural references in ways reminiscent of André Le Nôtre's huge Baroque seventeenth-century gardens, which were also based on agricultural images. The juxtaposition of sculpture within crop-inspired fields allows the design control of spaces from small to gigantic, a neat trick that brings the current nostalgia for "nature" into a controllable visible composition. One can hardly wait for these bold and brilliant steps to be realized spatially in the major city and regional plans that Yu has proposed.

Yu's work has shown that the most broad and general concepts can be brought down to real physical levels and that these excellent built examples can then spatially inform future planning directions. These demonstrations are having a distinct effect on the profession worldwide, but particularly in China, where they can be seen, experienced, and taught. China today may be the only economic and social climate where this is possible. Furthermore, Yu has demonstrated how mutually supportive the ends of the spectrum—the site and the region—can be.

As a tireless and brave advocate for this interconnected approach, Yu has succeeded partly by directing his efforts at mayors, who make up the pool of China's future national leaders. Whether or not the fragmented professional can be reassembled as a whole, the interrelationship of planning and design can be made clear to students, future public and private clients, and allied professionals. The fact that Turenscape is associated with Peking University allows Yu to speak directly to both the public and academia. His efforts will almost certainly affect planning and design for years to come.

Of course, not all practitioners will be able to offer the range of services that Yu provides, although the proponents of landscape urbanism suggest they should. Still, sympathetic collaborations between professionals and consultants can certainly cover this ground, and the work of Turenscape demonstrates the great value in keeping interrelated activities together. One would hope that these superb demonstrations at this range of scales will strengthen and encourage our more theoretical, comprehensive efforts in the West. Yu has, through his brilliant work, presented both an example and a challenge to us all.

## INTRODUCTION

# ECOLOGY, WITH PLEASURE

WILLIAM S. SAUNDERS

I have no doubt that Kongjian Yu is a major (if not *the* major) progressive force in contemporary landscape architecture. He addresses the greatest need of our time: transforming human interaction with the Earth from something suicidally indifferent to natural forces into something that responds to those forces with respect and cooperation. Deliberately or through simple disregard, we have tried to impose human needs and wishes on nature, and she is having her revenge in storms, floods, drought, and sterility. At the very moment when we have achieved dominance over all species save the microbial, when we have conquered the planet's distances and obstacles with our communication and transportation technologies, when more than half of us live in cities that minimize our experience of land, animals, weather, and geography—at this very moment we have learned that we must turn back, forgo, yield, and cooperate. We have the opportunity to shift civilization away from two centuries of ignorant self-destruction in the hope that our children's children will see some restoration of dynamic equilibrium. Both concretely and metaphorically, we must sustain civilization by stewarding what we receive—living things, water, the energies of the sun and the wind—not just by imposing what we create.

No reader of this book has likely experienced those realities as vividly and directly as Kongjian Yu. He was a farming boy among peasant farmers in rural China, practicing millennia-old ways of tuning nature to agriculture and agriculture to nature—adapting to excesses and shortages of water, to severities of climate, and to the survival needs of flora and fauna. Then, during his college years, when his life as a thinker was blossoming, a blitzkrieg of modernization hit his village. The land was stripped of trees and native plants; the rivers and streams were canalized; the fish died off; and water became something to import and export through pipes, not something to finesse in whatever local conditions one faced.

For us and for Yu, restoring successful ancient practices cannot be the end of the story. One

complication is that a sense of successful cooperation between people and nature is inseparable from a sense of the beauty, pleasure, and inspiration inherent in that harmony. It was never simply a matter of a well-functioning machine. Neither is any restoration a retreat to innocence: Yu was trained as a scientist, a botanist, a geneticist. His understanding of what grasses will thrive in what conditions is founded as much in the newest research as in his boyhood memories. Nor is he a radical environmentalist trying to treat humans as no more valuable than other living things. For him the memory of sitting in the evening under the great canopy of an ancient tree is inseparable from the human fellowship that tree supported, as his village gathered there to hear stories about ancestors and mythological beasts. And despite the fact that his parents (having had landlord ancestors and themselves owning land until the Communist takeover in 1949) were ostracized for being “above” the peasants during the Cultural Revolution, Yu, also later humiliated in Beijing for being a “country bumpkin,” feels a caring communistic loyalty to “the common people.”

How does all this add up? Although Yu's driving motivation is to reestablish a healthy relationship between nature and civilization, he has several others operating simultaneously and in parallel: to create beauty and art, to enrich the quality of everyday local lives, to design spaces that attract and promote social interactions, to preserve cultural history, to make the land “productive” (of crops, wildlife habitat, clean water, etc.), and to educate people about what makes landscapes supportive of life. This is a big agenda—some might say too big. Yu is a hugely ambitious man with seemingly endless energy. He works in many directions at the same time.

One can and should celebrate him for having so many ambitions—for having an omnivorous appetite—and yet it is for this that his work needs to be critically scrutinized. Is it possible to achieve so many goals without creating a sense of fragmentation or confusion or

incompatibility? Are his parks a set of discrete elements that do not add up to more than the sum of their parts? How can a corn field feel and be connected to a contiguous avant-garde sculptural metal arbor? What place does the painted steel structure of an abandoned industrial building have in a landscape of native grasses and man-made wetlands? Is there an awkward incongruity between the beauty of a field of delicately colored rippling grasses and the dry pedagogy of a sign in its midst that explains how that grass absorbs toxins?

We are not used to this diversity of focus and ambition: We know that Peter Walker will provide us with refined artistry and exquisite sensations, and that suffices. Richard Haag at Gasworks Park in Seattle and Latz + Partner at Landschaftspark Duisburg-Nord in Germany represent abandoned industrial structures with undiluted focus. Laurie Olin's Bryant Park in New York has more to do with gathering people than with calling attention to its beautiful groves of trees. Perhaps Michael Van Valkenburgh most shares Yu's multiplicity of goals, at least the aesthetic, social, and ecological, and one might have the same concern about his Teardrop and Brooklyn Bridge parks in New York: Do things come together gracefully or is there too much fragmentation? Of course looming in the background is Olmsted, especially at Central Park, which achieves the same diverse aims invisibly and seamlessly. Perhaps our era's need to reclaim post-industrial sites and address ecological messes would make suppressing those elements into some new continuous whole disingenuous; we cannot be that innocent.

Let me be clear: The variously motivated elements of Yu's parks often do come together very well. Red Ribbon Park in Qinhuangdao, China, is the best example: Its core is the red fiberglass bench that winds through woods along a kilometer of riverside. The bench is delightful to the eyes and the mind: bold, vibrant, playful, unexpected, and beautiful (its sinuous curves deriving more from Chinese



calligraphy than from Frank Gehry). It is especially engaging because it leads to areas that are hard to see. Thus it forms a path one feels urged to follow, an enchanting road a bit like that in *The Wizard of Oz*. And on this magic ribbon lots of people sit, forming little groups in the nooks of its curves. When I was there, some were lying asleep; many played card games; several played wind instruments; children ran on the path or the ribbon. As Yu says, the design gesture is minimal: The ribbon sits lightly on the land, and the rest of the park is fairly wild. So at once we have the social, the artistic, and the sustainable. The artistry *may* help draw people to the park. Its delightful curves do form a bench. Its attempt to protect natural processes is at one with the simplicity of its formal gesture. So, for me, this project is Yu's most integrated and successful.

Compare and contrast it with one of his largest and most ambitious parks, Houtan in Shanghai. Again paths along waters create an alluring journey. But here much larger ambitions complicate the experience. A sign explains how the park cleanses the polluted river water. Many diverse plant groups are organized into often beautiful colorful bands: grasses, sunflowers, corn, cattails, and much more. It is almost encyclopedic in its range. Its long bamboo boardwalks are elegant, well-made, and finely detailed; its large sculptural rhomboid rusting steel "arbors" feel boldly contemporary (in the manner of Zaha Hadid). Yet all these elements create a series of somewhat unrelated moments, each engaging and attractive but discrete. And the very largeness of the park makes one's attention start to wane. It is not as intimate and friendly as Red Ribbon Park. The walk along the whole length of the park feels a bit too protracted under hot summer sun. There is nowhere to sit under the steel arbors. Yu recognizes that the core of the project is its demonstration of how polluted water can be cleansed by plants and by gravity-enabled filtration and aeration. But this project leaves unanswered the question of how well such remediating measures (which ideally would exist at much larger scales) can be well integrated with a goal of fostering social pleasure.

The Rice Campus at Shenyang also raises questions about the difficulty of simultaneously addressing human and ecological needs. There the effort is to support the idea that agricultural land use can and should be integral with our urbanized lives. Why should we waste such large areas of land and water and chemicals to produce giant campus and park lawns? Rice paddies and wheat fields can be as or

more beautiful while being productive and low-maintenance. Birds can nest among the crops; students can learn how the sustenance they take for granted comes to be. All true. And the agricultural fields are beautiful, especially swaying in the wind. Yet here the result is a bit socially inert—the long, straight gridded walkways among the fields are uniform and uninviting for human gathering, despite Yu's creation of little sitting squares here and there. There is a reason people don't congregate in corn fields.

So here again, as with Yu's pursuing many ambitious goals at once, is a limitation born of a virtue. For Yu, and for traditional Chinese culture, it is a sin to waste land. Every arable space should help feed people and more broadly ensure survival, as it was in Yu's boyhood village. What shocked Yu's father about Beijing was not its tall buildings but its fruitless land. Now thinkers preoccupied with sustainability are vigorously promoting the ideas of local food and urban agriculture. As a real farmer, Yu knows that the productivity of this agriculture, however, is secondary to its aesthetic and recreational services.

Early in my study of Yu's work, I thought that it suffered, along with much contemporary landscape architecture, from delusions about how much it could achieve ecologically. For example, Michael Van Valkenburgh Associates places a cattail marsh where the land collects water before releasing it into a lake on the Wellesley College campus in Massachusetts. Thus, runoff water that has gathered salt, fertilizers, and gasoline-motor byproducts from a portion of the campus enters the lake with fewer of those impurities. Does Van Valkenburgh therefore become the lake's savior and the transformer of Wellesley into a sustainable landscape? Far from it. There is way too much else to be done to achieve that goal. And of course this applies to the cleansing of a tiny fraction of the river water at Houtan Park. Now it may be that clients and landscape architects are willing to inflate their achievements in smaller-than-regional landscapes. But I was wrong about Yu: He knows that he is not doing more than producing instructive models for the massive change that must come in the future and that is far from obtainable now. "The message is more important than the results," he told me. "The point is to establish the right direction."

Yu's anti-ornamental, anti-aesthete rhetoric is extreme, and in some ways he does not really believe it. He rightly rails against the dominant practices of contemporary Chinese city beautifiers: Fill places like highway median strips with

flowering annuals and elaborately trimmed bushes, and you have done all that is needed; never mind the high costs and endless maintenance. He rightly condemns the use of decorative "beauty" as a means of establishing social worth (as in Chinese foot binding) in post-rural/agricultural civilization. And seen with farmers' eyes, the Versailles gardens are disgustingly decadent, a royal rooster's preening. Yu has told me: "Beauty comes from the satisfaction of need. Culture is adaptation to nature. The sustainable solution becomes culture." The trouble is that our needs are for more than survival. Culture can be a life-sustaining temporary release from nature. Yu may be disappointed in me for having found the Humble Administrator's Garden at Suzhou the most precious place I saw in China. Yes, its "rockery" seems a gaudy extravagance. But its "useless" and totally artificial plantings, paths, ponds, and pavilions are overwhelmingly beautiful precisely because they put us in a state of harmony, rest, and peacefulness that the natural struggle for survival offers rarely and in morsels. Yes, there is nobility in the farmer's struggle for survival. But to label other kinds of culture merely ornamental is to lapse into puritanical moralism.

In truth, Yu doesn't really buy that kind of thinking. Why would he bother to have sculptural structures and brightly painted industrial artifacts in his parks? Why else would the "messiness" of his grasses come across as not only virtuously low-maintenance but also exuberantly profuse, carefully ensured to be abundant?

Learning about Gilles Clément's ideas of "le jardin en mouvement" (garden in movement), planned to run wild and about recent German landscape architects who believe that the only human intervention needed to create a park is to cut a path, I asked Yu why he did not make his work simply the preservation of wilderness, the ultimate natural ecology, leaving no carbon footprint, and by definition maintenance-free. He gave two answers: That would leave the work of landscape architecture even more invisible than it is now (bad for getting work); and wilderness fails to address human needs. So, in fact, Yu is no ecological purist, no simple nature worshiper. Sustainable farming, which is in essence working out a feasible balance of using and yielding to nature's supra-human ways, is the core of his path as a landscape architect. He should just admit that he is as captivated by "useless" beauty as the rest of us.

JOHN BEARDSLEY

# POPULAR AESTHETICS, PUBLIC HISTORY

When Kongjian Yu pitches a project to party officials or municipal administrators, his presentation is self-consciously freighted with revolutionary rhetoric.<sup>1</sup> Dismissing both traditional Chinese gardens and ornamental urban horticulture as expressions of “little foot” aesthetics, akin to the ancient practice of binding and making smaller the feet of upper-class girls to secure them high-ranking husbands, he trumpets instead the virtues of “big foot” aesthetics, rooted in the productive landscapes and cultural practices of ordinary people. Pictures of the young Mao and healthy peasant women appear in his PowerPoint presentations, against a backdrop of Chinese flags and cheering workers. With humor and even a bit of irony—to an American observer at least—he claims rather broadly that “little foot” aesthetics are responsible not only for banal urban planning schemes but also for widespread environmental degradation: They have privileged the ornamental over the functional, the urban over the rural, with the consequences that people no longer know how to live in an environmentally secure and sustainable way. Drought, flood, habitat loss, and pollution are the outcomes.

His argument is loaded, and much more complicated than he allows; environmental devastation in China has been caused as much by decades of reckless industrialization and metastatic urbanization as by effete aesthetics. Nevertheless, and although criticism of current urban design and environmental management policies is explicit in his presentations, he has begun to

win some converts among public administrators to his positions, which he advances through lectures, books, articles, television programs, and teaching. He lectures regularly to the Mayors’ Forum of the national Ministry of Housing and Urban-Rural Development; he estimates he has spoken to this executive training group two or three times a year since 1997, with about fifty mayors in attendance each time. He developed his ideas into a book, *A Path to Urban Landscape: Talks to Mayors* in 2003.<sup>2</sup> The book has been widely distributed in China, in part by Yu himself; it is now in its thirteenth printing, with over 16,000 copies in circulation. Yu has presented his ideas on television—he estimates he has been on the air thirty times in the past decade, ten of those on Chinese Central Television. He has written numerous other books, articles, and conference papers; he is also the chief editor of the periodical *Landscape Architecture China*. He and his firm, Turenscape, count an increasing number of cities among their clients, including Beijing, Shanghai, Tianjin, Shenyang, Zhongshan, and Chengdu; Yu has also served on urban planning committees for Beijing, Hangzhou, Suzhou, and Zhongshan, and on provincial planning committees for Qinghai and Shandong.<sup>3</sup>

On a visual level, there is a great deal of evidence in contemporary Chinese cities to support Yu’s claims, especially about the failures of urban design. The typical urban landscape in contemporary China, as he points out, is expensive, ornamental, and high-maintenance.

Almost everywhere you look, regimented rows of trees alternate with tightly pruned shrubs almost invariably interspersed with clipped hedges and beds of brightly hued flowers and ornamental plants. Highway margins, urban streets, public squares look relentlessly uniform.

In contrast, Yu offers a vision of beauty rooted in notions of productivity, both agricultural and ecological: crop fields and rice paddies, wetlands and farm ponds, rivers and forests. These are landscapes that produce food, clean water, and habitats that can provide both cultural and ecological services. Against the tidy and the ornamental, he celebrates the messy and the rustic: “the beauty of weeds,” as he puts it, both in conversation and in the title of one of his books.<sup>4</sup> Vernacular, productive landscapes are crucial to his notions of ecological and cultural survival, which he attempts to address at all scales in his work. I leave it to others to assess his strategies at national and regional levels; my focus is the expression of vernacular, or “messy,” aesthetics in the urban context, where in some respects they are most incongruous—and even, in the Chinese context, revolutionary.

Ironically, Yu may owe some of his affection for the vernacular landscape to his experiences during the Cultural Revolution. Born in Zhejiang Province in 1963 into a family who lost their lands and seed-oil mills in the wake of the Communist takeover in 1949, some of his first memories are of their house being ransacked for jewelry and furniture, and of the family being herded through the streets to public confessions. He recalls his parents being obliged to provide free labor to the village as street cleaners; he was even kept out of middle school for a year as part of his family’s punishment for being property owners. But summers, he recounts, were spent working on the community’s collective farm, planting and harvesting rice, tending vegetables, and caring for water buffaloes, work that also occupied him during his year out of school. He insists this is in large measure where his attachment to vernacular and productive landscapes was formed—an attachment based not as much on the appearances of these landscapes as on their functions or, more accurately, on the close analogy between appearances and functions.



Poster of Mao Zedong during the Cultural Revolution. Yu, with just a hint of irony, suggests a Maoist return to the ways of “the people” in managing landscapes.



Typical Beijing median strip with ornamental plants requiring extensive maintenance: Yu considers this wasteful and superficial beautification.

As an adult, Yu has pursued a decades-long challenge to transmit this vernacular language to design. As the only one of six hundred in his county’s secondary school to pass university entrance exams, he was admitted to Beijing Forestry University in 1980. Because his examination score was higher than that required for forestry, he was invited to enroll in the landscape gardening program, which he recalls as the only university program in the field at the time in China. There, he learned the precepts of traditional Chinese garden design and horticulture, “but no ecology.” He went on to earn a Master’s degree in landscape architecture in 1987, learning qualitative and quantitative landscape analysis and large-scale planning methods, especially through an introduction to the ideas of landscape architect and geographer Ervin H. Zube (1931–2002) and regional planner and Harvard professor Carl Steinitz.<sup>5</sup> Yu deepened his exposure to these ideas while studying for his 1995 Doctor of Design degree at the Graduate School of Design at Harvard.



Yu's distinctive design language was fully developed after his return to China. The emergence of his approach is clearly evident in his first major project, Zhongshan Shipyard Park (2001). In 1997, the mayor of Zhongshan heard Yu speak at a Mayors' Forum and invited him to work on a master plan for the city. Soon after, a shipyard in the city was shut down, and Turenscape was asked to submit designs for a competition to reclaim the 10 hectare (25 acre) site as a park. The abandoned shipyard had derelict concrete and steel buildings, cracked pavements, industrial debris, and a few mature *Ficus* trees along the river. These trees were threatened because hydraulic engineers wanted to widen the river to improve flow during flood conditions.

Yu was able to persuade officials to retain as many of the "best" features of the site as possible: The mature trees were preserved by relocating a new water channel behind them; steel skeletons of buildings were retained as landmarks and used to house some of the park facilities, including rest rooms and concessions. The old water towers became beacons: One was stripped to its steel bones and painted red, the other was encased in glass and is lit at night. New urban plazas were created at the northern and southern park entrances, which provide pedestrian links to the city. From either end, visitors pass over water and through dense vegetation, which forms a welcome buffer to crowded and noisy urban surroundings; they are then released into the more open space of the park's interior.

Within the park, circulation is organized along a serpentine path around the circumference and along straight lines that intersect through the middle, one of which features a section of recycled railroad track introduced to the site. Stepped terraces along the boat basin at the heart of the park bring people close to the water, which fluctuates 1 meter (3 feet) with the tide. None of these design moves is particularly vernacular or "messy." Indeed, the internal arrangement of intersecting lines and grids within the park recalls the work of Peter Walker, which was shaped by exposure to the seriality of American minimalist sculpture of the 1970s. Indeed, the experience of the park is of a series of distinct visual and perceptual incidents carefully orchestrated and composed.



Steel structure of a former industrial building at Zhongshan Shipyard Park, 2001, incorporated into the Turenscape design. Yu works to preserve ordinary older cultural artifacts by recycling them.



Zhongshan Shipyard Park entrance zone of thick vegetation creates a welcome buffer to crowded and noisy urban surroundings.

Yet the park's aesthetics are strikingly different from its context. Yu says that Zhongshan, in the Pearl River Delta in southern China, was one of the country's first cities to deploy ornamental landscaping on a large scale. It lies in a region that boasted China's first tourist landscapes: its first golf courses, spas, and five-star resorts. Shipyard Park represents a break with these nouveau traditions in several respects. It features extensive stretches of familiar grasses and water plants, including reeds, papyrus, water lilies, sweetflag (*Acorus calamus* Linn), angel wings (*Caladium hortulanum*), and bamboo, many of which are common to the edges of rice paddies and fish ponds in the region and are apt to be viewed in China and the West with some scorn as invasive. Vernacular culture and the "people's" aesthetics are expressed in more than the beauty of weeds, however; they are also signified in the reuse of the shipyard's structures.

Yu was familiar with previous examples of industrial heritage preservation in park design in the United States and Europe, including Richard Haag's Gasworks Park in Seattle and Latz + Partner's Landschaftspark Duisburg-Nord in Germany, but there were no precedents for this approach in China. (Indeed, Yu would go on to draft a convention on the preservation of industrial structures for the national Ministry of Culture's department of cultural heritage.<sup>6</sup>) Broad public appeal is reinforced through the fact that this landscape (like all of Yu's parks) can be entered free. At least until recently, admission to many public landscapes in China required payment of a nominal entrance fee, which is still the case for most historic sites. Yu proposed that the Shipyard Park be free, a proposal to which the city assented, so the park was one of the first in China to be designed without fences.



Rectilinear paths and hedges are reminiscent of the landscape architecture of Peter Walker.



The red cube at Zhongshan Shipyard Park has multiple layers and perspectives. It recalls the precise size and shape of the structures that once served as worker housing on this site.

The evocation of industrial history is also evident in some of the most distinctive features of the park: the sculptural elements added at significant spots in the plan. Foremost among these is a red cube that straddles

one of the principal paths through the site. Although this cube might again suggest analogies in Western eyes to minimalist sculpture—the primary geometric structures of artists like Donald Judd, for instance—Yu insists it has a local inflection. It is the precise size and shape of dormitory structures that once dotted the site and that served as worker housing; made of recycled steel, it is painted a distinctive Mao-era red. Nearby, intersecting lines of hedges produce rooms of the same size also designed to evoke these dormitories (but intended for current occupation by lovers who have few other places to go, Yu says).

Combined with the preserved industrial structures and the recycled rail lines, these allusions to the dormitories that once dotted the site evoke the era of the Great Leap Forward. Yu is at pains to point out that memory is not the same as appreciation; he has his own reasons to be ambivalent about the Mao era, and he acknowledges the widespread famine precipitated by forced conscription of peasants into the industrial economy. At the red cube, one encounters an explanatory text composed by Yu, which includes a quotation that he was told was a phrase of Lenin that he remembers memorizing as a child: “to forget is to forsake.” Yu says the phrase might be more accurately translated as “to forget is to betray.” What he seems determined not to betray in this project are the hardships of his parents’ generation, the agricultural roots of their culture, and the struggles they endured during the Great Leap Forward and the Cultural Revolution. There are some complex cultural negotiations going on here: Yu is struggling to create something in an internationally identifiable contemporary design idiom that also has local relevance. Without being accusatory, he is trying quietly to recall a troubled and not-so-distant past that seems to be rapidly disappearing from awareness. Official memorials to the Great Leap Forward and the Cultural Revolution are not permitted in China; Yu is transforming political history into popular history and thus restoring to public memory a suggestion of events that still hold great sway over a large segment of the population.

For all its contemporaneity, and for all Yu's loyalty to “big foot” aesthetics, his work reveals some very traditional strategies from “little foot” Chinese gardens.

These include variations on traditional gates and thresholds; the creation of layered views; and the use of such devices as bridges reflected in lakes and pavilions that seem to hover over water (although he draws the line at the weirdly eroded stones [“rockery”] common to Chinese gardens, which arouse his disdain). At Shipyard Park, a preserved gantry serves as a gate at one entrance to the park; elsewhere, a pavilion floats over the middle of the boat basin. The red cube alone combines several of these devices: It is a gate; it includes bridges; it is a pavilion in the water; and it creates layered views—to it, through it, and from it. While these strategies are generally used in Chinese gardens to make a small space seem larger, here, their function is reversed: They tie together a large space. Their deployment is yet another part of Kongjian Yu’s delicate cultural negotiations: He is attempting to render commonplaces—whether of plant material or industrial history—in a refined language so they have both credibility as design as well as wide public appeal.

If Shipyard Park can broadly be described as addressing cultural heritage preservation, many of Turenscape’s recent projects are efforts at ecological restoration. A number repair riparian systems: In Qian’an, for instance, a city about three hours east of Beijing, a badly degraded tributary of the Luan River became the Sanlihe Greenway (2010). Because of ground water depletion, the river had dried up and become a garbage dump and sewage drain for factories and households. A channel was cut from the river to the tributary to restore flow, and wetlands and ponds were created—for visual effects, for fishing and other recreation, and to improve water quality. The corridor runs about 13 kilometers (8 miles) through the city, punctuated at regular intervals by watchtowers, fishing piers, bridges, and plazas, bounded on either side by foot and bike trails. Its most remarkable effect might be the masses of flowers that blossom through the warmer months, from coreopsis in the spring to native chrysanthemums in the autumn; the latter turn the edges of the stream a brilliant yellow and fill the air with their scent.

A more celebrated project occupies about 20 hectares (49 acres) along the Tanghe River in the nearby coastal

city of Qinhuangdao. Called Red Ribbon Park, the project transformed an inaccessible site that had become an unauthorized garbage dump into a recreational amenity along 2 kilometers (1.3 miles) of river. It was, Yu says, an effort to achieve maximal return with minimal intervention. Existing vegetation was retained, including mature willows and poplar seedlings, fortified with Turenscape’s usual palette of marsh grasses, forbs, and additional wetland trees. The site is traversed by three simple linear paths: a boardwalk along the river, a paved path at the upland edge, and a third path in between, 500 meters (550 yards) of which are activated by a single red fiberglass bench that snakes through the trees and grasses. Sixty centimeters (24 inches) high and ranging in width from 30 to 150 centimeters (11 to 59 inches), it accommodates multiple uses, from sitting to lounging, games to music, adult socializing to children’s play. The red ribbon is punctuated by holes for vegetation, mostly grasses, and has lights embedded in its top and sides. Although it evokes the curved forms of much contemporary architecture, it more strongly resembles the curvilinearity of Chinese calligraphy. Its color is again deployed to evoke “red culture,” which Yu says is strong in the area: Mao took vacations here and composed a poem that refers to the city in the summer of 1954.<sup>7</sup> Whatever the inspiration, the bench certainly achieves maximal impact with minimal means: Both inexpensive to produce and simple in form, it effectively draws people into the landscape and stitches the site together. In good weather, dozens of people gather along its length. Children run beside it; elderly people play cards and music; couples recline. Although this kind of sociability is endemic to Chinese parks, inasmuch as there are few other recreational opportunities, the Red Ribbon—vivid, playful, and elegant—particularly attracts activity. It has proved to be almost *too* popular—the site visibly suffers from overuse. Now Turenscape has been commissioned to develop similar plans for the restoration of the opposite riverbank.

The firm has also completed a beachfront restoration project in Qinhuangdao (2008). Behind an old breakwater, the project created nesting islands for shore birds; past a now-closed estuary nearby, a boardwalk was built, and this continues along a stretch of accessible





Sanlihe Greenway in Qian'an, 2010. Its most remarkable aspect might be the masses of flowers that blossom through the warmer months.

beach. Within the estuary, the design replaced marsh grasses and near-shore plants and provides signage to inform people about habitat protection. It also includes a bird museum that looks out on a meadow with small seasonal ponds for birds and amphibians. In all, it seems a modest accomplishment relative to some of Turenscape's other efforts, perhaps because it lacks the signature artistic elements of the Red Ribbon Park or the Zhongshan Shipyard Park. But this may be as it should be. The beachfront is several kilometers from the city center; it was intended to provide habitat for shore birds as much as public access to the ocean. As with so many projects around the globe that aim to restore ecological functions and services, design becomes less visible—and arguably less important.

In Tianjin, a port city 200 kilometers (125 miles) east of Beijing, Turenscape achieved ecological functioning with an arresting design in the Qiaoyuan Wetland Park project: “The Adaptation Palettes” (2008). This project features created wetlands and occupies a 22 hectare (54 acre) site that was a training ground and shooting range for the Chinese military and, more recently, an unauthorized landfill. The park is the centerpiece of a developing residential area on the edge of the city; it is framed to the south and east by housing and by a curving elevated highway on the west and north. Qiaoyuan Park is divided into three zones. Elevated walkways suspended between rubble walls overlook a series of small urban gardens along the two edges of the park closest to the housing. Existing lakes form a middle zone; the created wetlands occupy the remaining

area between the lakes and the highway. Debris from the site was used to create small hills to protect the wetlands from the highway; they are forested with upland species tolerant of poor soils and saline conditions, including black pine and Kaido crab apple (*Malus micromalus* Makino).

The wetlands themselves are inspired by local plant communities adapted to the moisture, salinity, and soil pH values characteristic of varying maritime conditions. They are organized around ponds of different types: some deep, some shallow, some seasonal, and some “inverted”—that is, located on top of small hills. In plan, they have a lucid cellular pattern; on site, the pattern is barely discernible since the ponds are dispersed within fields of marsh grasses punctuated by trees. Rainwater is collected on site to fill them; because the water table is so close to the surface and the ground water is salty, the deeper ones are brackish. Walkways crisscross the site among the ponds; at their intersections are groves of locust trees. From these paths, boardwalks reach through reeds to docks in the deeper ponds.

The park exhibits a striking range of visual and experiential qualities: It is strongly architectonic along its urban edge, with stacked planting modules and red metal bridges and stairs; these give way to less constrained conditions in the wetlands, where wolf grass and willow trees bend in the coastal winds. Its rambling pathways provide opportunities for exploration; its docks provide hidden places for family picnics. This is not an entirely native landscape, but it is a familiar one, with commonplace local plants in characteristically “messy” arrangements—that is, dispersed according to slope, soil moisture, and salinity.

The most compelling of Turenscape's restoration projects, however, might be the designed water treatment wetlands at Shanghai Houtan Park, adjacent to the 2010 World Exposition site. The project was the indirect outcome of an invitational competition for the park for the Expo grounds themselves: Turenscape was one of two finalists, but they did not receive the commission and were subsequently asked to design

a contiguous piece. It occupies a 14 hectare (35 acre) linear site that runs 1.7 kilometers (1 mile) along the Huangpu River, upstream from the Expo. A former shipyard and steel works, the site is adjacent to temporary parking lots slated for eventual mixed-use development but too distant from the main attractions to be seen and used by most Expo-goers.

Once the redevelopment is complete, the park might seem more like a vital piece of its riverfront context; today it appears marooned in an urban wasteland. Indeed, it might almost seem a fragment of wilderness, but the original premise of the park was the inverse. It was to create a showcase for ecological services and productive landscapes more generally: Turenscape devised water treatment wetlands that also function as social space, produce several cycles of food crops each year, and provide habitat for wildlife, especially birds. It was to be educational and beautiful. Big in area and ambitions, the project was rapid in execution: It went from design to completed construction between 2007 and 2010.

The park's narrative begins at the upriver end of the site, where a large tank contains silted and polluted water pumped from the river at high tide. The water is fed by gravity into an elongated channel and trickles down the surface of a roughly-textured rock wall; it then seeps into the soil under dense rows of trees and aquatic plants and emerges into the first of a sequence of ponds that drops 2 meters (7 feet) over the length of the park. This overture to the park sets the tone for all of it: lushly planted, botanically diverse, and beautifully detailed (the stone work here is especially fine). Over the length of the park, each pond is lined with vegetation to remove pollutants from the water; each is separated from the next by gravel dams that provide filtration. In several places, water is aerated in gravel beds. The system treats 2,400 cubic meters (530,000 gallons) of water per day; it takes the water a week to arrive in an open-air cistern at the downstream end of the site—from which it is then pumped into the fountains and pools of the Expo grounds.<sup>8</sup> Yu takes great pride in the fact that his park produces clean water, while the Expo Park consumes it—and that his park was less costly per hectare.

The park's functions also include flood control. Turenscape removed a concrete sea wall from the river edge and replaced it with two levees, one along the riverbank that provides protection from twenty-year floods, and a second, higher one on the inland edge of the site meant to protect against one-thousand-year floods. The wide swale in between is the spine of the park. As at Zhongshan, remnant features of the site were conserved: An existing patch of riparian forest was preserved and extended; a skeletal steel mill was painted red and reused for small pavilions occupied by Expo functions (serving as restaurants and tea houses after the Expo). An old dock was redesigned as a fishing pier and shade structure, while salvaged and recycled brick and stone were used for paths in the park.

Circulation is organized along three linear paths. Stepping stones create a walk along the riverbank, passing through groves of large trees; a paved path lies on top of the higher inland levee, forming a more visible promenade; and a boardwalk runs down the center of the park, through reeds and along the edges of the ponds. This is by far the most inviting, even enchanting way through the park, cantilevered over the water in some spots, disappearing into the reeds or grasses at others, providing the opportunity for close observation of the park's various aquatic and terrestrial ecosystems. There are several forks along this central spine, some of which lead to Turenscape's now signature red fiberglass benches; along the boardwalk, handsome Corten steel shade structures fold up from similar sheets in the path. These compose an angular, rusty ribbon that answers nicely to the linear red benches nearby; they constitute another reminder of the site's industrial history—they are evocative of the sheet steel once manufactured nearby and of the rusty remnants found abandoned there.

Plant material is orchestrated into zones, from submerged and emergent aquatic plants like eelgrass, cattails, lotus, lilies, and rice to grasses, forbs, woody shrubs, and trees such as cypress, London plane, willow, camphor tree, and Chinese tallow tree. These plantings look "natural," but they are carefully managed: In the water, for instance, submerged concrete walls separate beds of different species to keep them from invading each



other. On the adjacent slopes, grasses are interspersed with agricultural plants intended to produce three crops per year: rape seeds in the spring; rice, corn, sunflowers, and sweet potatoes in the summer; and buckwheat in the winter. Fruit orchards are planted along the riverbank paths. The presence of agriculture in this project is arguably as much aesthetic and educational as it is productive. Extensive stands of rice and sunflowers are plainly beautiful, but they provide food as well: The sunflower seeds are eaten both by birds and the park's human visitors. Much of the remaining produce—fruit, corn, buckwheat—is distributed among local farmers hired to maintain the park. All this is to say that the park provides multiple social and ecological services. It generates not just clean water, but also biomass, food, and habitat for wildlife, especially birds (already grebes, gallinules, various herons, rails, kingfishers, and shrikes have been observed in the park). And it makes all these services highly visible, to both artistic and didactic ends.

None of these projects, as exemplary as they might be, begins to measure up to the scale of China's environmental problems. In a country where 70 percent of surface water and more than half of urban ground water is thought to be polluted, where 10 million hectares of arable land are contaminated by heavy metals and pesticide residues, where over 20 percent of fresh water wetlands and over 50 percent of coastal wetlands have been lost in the past fifty years, and where hundreds of species of plants and animals are threatened, cleaning 2,400 cubic meters (530,000 gallons) of water a day, creating one wetland, or restoring one estuary has a negligible impact.<sup>9</sup>

But Turenscape's spaces are pleasures in themselves, antidotes to China's relentlessly overbuilt urban environments. They are driven by a notion that the idioms and materials of remnant agricultural and wild landscapes are beautiful in themselves, and that evocations of popular history can have wide resonance. Moreover, they offer instruction in ecological restoration: They are emblematic of the strategies addressed by the firm at a national and regional planning scale. Indeed, many of Turenscape's projects have a modular character, suggesting they can be replicated at a larger size: Individual elements like shade structures are repeated

at regular intervals in Shanghai, for instance, while particular combinations of elements—towers, plazas, lakes, meadows—are reiterated at Qian'an.

At whatever scale, Turenscape's projects are an expression of the fact that Yu is quintessentially an optimistic soul with an unwavering conviction that design can contribute to cultural and ecological survival. He titled a book about his work *The Art of Survival*.<sup>10</sup> He makes his art from the effort to preserve cultural resources, notably vernacular ones, to honor productive traditions like agriculture, to restore degraded environments, and to provide habitable landscapes for humans and wildlife. Both cultural and ecological survival are at issue in his work.

For all Yu's ambition and accomplishments, the fate of his projects is not at all certain. They may or may not survive as he initially intended them. Many are plagued by maintenance problems caused by a misunderstanding of his aims. At the Zhongshan Shipyard Park, for instance, bougainvillea that should grow freely is brutally trimmed into hedges; shrubs are pruned into globes. In several instances, municipal authorities have made unilateral design changes: A pavilion that was meant to be open at Zhongshan was enclosed to create a museum; at the Red Ribbon Park, local officials have decided the grasslands need more trees, so they have dug planting pits at regular intervals while adding free-standing stones (of the sort Yu prefers to avoid) and speakers that broadcast music. Some are compromised by continued urban growth. In Qinhuangdao, the Red Ribbon Park has been severed by new bridge construction; the park suffers from overuse, with vegetation trampled, soil compacted, and desire lines creating shortcuts through the grasses. Still others are being transformed by natural processes. At the Tianjin wetlands park, locust trees are invading the grasslands, migrating away from the pathway intersections where they were planted, leaving the designers with the choice of letting them migrate around the site at will or forcibly maintaining the pattern. Yu's "messy" aesthetics certainly militate for the former.

Yu's approach might be challenging in any context. But in the West, there is a precedent for his messy



Red Ribbon Park, 2006, scene of rich social life among nearby residents.

aesthetics in the traditions of the wild garden, which date back at least to William Robinson. Moreover, there are contemporary designers with whom he shares some notions of nurtured wildness—Gilles Clément, for instance, who allowed plants to migrate through his “jardin en mouvement” (garden in movement) at the Parc André Citroën in Paris and who elevated an island of wild nature at the Parc Henri Matisse in Lille. In recent years, it has become far more common in the West for designers to evoke wild landscapes, to use unmown grasses, and to seek low-maintenance regimes. Hargreaves Associates recreated a salt marsh at Chrissy Field, their waterfront park on the site of an old airfield in San Francisco, and EDAW (now subsumed into AECOM) reintroduced woody riparian plants and wetland grasses along with short- and tall-grass prairie species into their restoration of Westerly Creek, formerly buried under runways at the old Stapleton Airport in Denver. These strategies are prone to misunderstanding: In 2006, neighbors of Westerly Creek, wanting a more familiar park-like landscape, spread bluegrass seed among the native grasses nearest to their homes, with disastrous consequences. The native grasses were choked out by the bluegrass, which itself failed to thrive in the absence of irrigation, and the whole area had to be dug up and replanted.<sup>11</sup> But in China, Yu is swimming against a stronger current still—he is shifting practice in a way that is not yet fully appreciated even by those who commission and maintain his landscapes.



Qiaoyuan Wetland Park and Bridged Gardens, 2008. Elevated walkways suspended between rubble walls overlook a series of small urban gardens along the two edges of the park closest to the housing.



One of several educational and recreational docks at wetland ponds, Qiaoyuan Wetland Park, providing hidden places for family picnics.



Branching paths, central riparian stream, arbor/sculpture, and preserved industrial building skeleton, Houtan Park, 2010. Stepping stones create a walk along the riverbank, passing through groves of large trees; a paved path lies on top of the higher inland levee, forming a more visible promenade; and a boardwalk runs down the center of the park, through reeds and along the edges of the ponds.





Path among high grasses, Houtan Park. The plantings look “natural,” but they are carefully managed.

It remains to be seen how deep and how wide the enthusiasm in China for Yu’s unkempt aesthetics is—and will be. The evidence on the ground thus far suggests they are a popular success at least. Many of his projects are heavily used, even in unfavorable weather: People do their morning exercises in the mist at Zhongshan, watch birds in the rain at Shanghai Houtan, and play musical instruments and picnic as the wind whips through the grasses at Tianjin wetlands.

The larger question prompted by Yu’s work is whether he is fighting a rear-guard action in a war already lost, or if his optimism is valid. A lot is at stake, in China as elsewhere in the world: the survival of cultural landscapes, which in China are typically agricultural, encompassing crop lands, rice paddies, and fish ponds; the improvement of water quality and availability; the repair of despoiled landscapes; and the protection of biodiversity, which is as imperiled in China as anywhere in the world, given the nation’s extreme pace of urbanization and habitat fragmentation. Although hugely ambitious, Yu’s “art of survival” is, on the ground, a modest riposte to immoderate problems. But he can take satisfaction from the fact that he has not forgotten—he has not betrayed—either the multiple cultural traditions or the extreme environmental challenges to which he and his nation are heir.

**1** I attended such a presentation in Shunde, near Guangzhou, on October 13, 2010, and received a copy of the PowerPoint presentation.

**2** Kongjian Yu and Dihua Li, *A Path to Urban Landscape: Talks to Mayors* (Beijing: China Architecture & Building Press, 2003). Published only in Chinese as 城市景观之路：与市长们交流.

**3** Biographical material along with copies of many of Yu’s books, articles, and conference papers in English and Chinese, through 2008, are available in the contemporary landscape design collection at Dumbarton Oaks, Washington, D.C. I had access to this material in preparing this essay, supplemented by numerous conversations and site visits with Yu in October 2010. Although Yu can be tireless in advancing his own work, most of his claims are borne out by the documentation he provides.

**4** Kongjian Yu and Wei Pang, *The Culture Being Ignored and the Beauty of Weeds—The Regenerative Design of an Industrial Site: The Zhongshan Shipyard Park* (Beijing: China Architecture & Building Press, 2003). Published only in Chinese as 足下文化与野草之美：中山岐江公园.

**5** For an essay on Zube’s role in landscape architecture, see [http://nrs.fs.fed.us/pubs/jrnl/2002/nc\\_2002\\_Gobster\\_001.pdf](http://nrs.fs.fed.us/pubs/jrnl/2002/nc_2002_Gobster_001.pdf); on Steinitz, see <http://ncgia.ucsb.edu/projects/scdg/docs/cv/Steinitz-cv.pdf>.

**6** Yu was the instigator and the chief author of the “Wuxi Proposal,” announced by the China Administration of Cultural Heritage and adopted on April 18, 2006. It was the first official document in China to declare that industrial structures should be given the same consideration in preservation planning as other forms of cultural heritage. The initial proposal was published in *Landscape Design* 4 (2006), pp. 70–71.

**7** Mao’s poem, which would be widely known to anyone of Yu’s generation or older, is titled “Beidaihe: to the tune of Lang Tao Sha.” It was translated for me as follows by Duncan Campbell of the Chinese Studies program at the Australian National University:

A rainstorm sweeps down on this northern land,  
White breakers rise towards the heavens.  
No fishing boats off Qinhuangdao  
Are seen on the boundless ocean.

Where are they now gone?  
Two thousand-odd years ago  
Cracking his whip, Emperor Wu of Wei  
Rode eastward to Mount Stepping Stone;  
his poem survives.

Today the autumn wind still sighs,  
But this human world has been transformed!

**8** Statistics on the amount of water treated at Shanghai Houtan Park were given to me by Kongjian Yu; they are also reported in the publication *2010 Shanghai Expo—The Houtan Park*, where they are given as 1.9 million liters (500,000 gallons) and 2.18 million tonnes (2,400 US tons). *2010 Shanghai Expo—The Houtan Park* (Beijing: China Architecture & Building Press, 2010), pp. 11–12.

**9** Data on surface and ground water contamination in China is found at [www.worldwatch.org/node/4622](http://www.worldwatch.org/node/4622); on soil contamination at [www.gov.cn/english/2006-07/18/content\\_339294.htm](http://www.gov.cn/english/2006-07/18/content_339294.htm) and on wetland loss and concomitant biodiversity loss in Shuqing An, Harbin Li, Baohua Guan, Changfang Zhou, Zhongsheng Wang, Zifa Deng, Yingbiao Zhi, Yuhong Liu, Chi Xu, Shubo Fang, Jinhui Jiang and Hongli Li, “China’s Natural Wetlands: Past Problems, Current Status, and Future Challenges,” *Ambio* 36:4 (June 2007), p. 337, available at <http://etmd.nal.usda.gov/bitstream/10113/2653/1/IND43943743.pdf>.

**10** Kongjian Yu and Mary Padua, eds., *The Art of Survival: Recovering Landscape Architecture* (Mulgrave, Victoria: Images Publishing, and Beijing: China Architecture & Building Press, 2006).

**11** The story of “ecocide” at Westerly Creek was related to me by a former student, Jessica Canfield; it was told to her by Jayne Kopperl, a Denver landscape architect who worked on the project.

# VALUE THE ORDINARY: ZHONGSHAN SHIPYARD PARK

ZHONGSHAN, GUANGDONG PROVINCE, CHINA, 2001

At the beginning of the new millennium, China changed dramatically. Urbanization accelerated, state-owned factories went bankrupt, and millions of workers lost their jobs. Together with other old buildings and the vernacular landscape, old factories that occupied central urban space were demolished for new development, less because their land had high value than because they were considered outmoded and ugly. At the same time, city governments had become rich, largely thanks to the preceding years' open economic policy. China's "City Beautiful Movement" heated up, mixing European Baroque and traditional Chinese imperial aesthetics.<sup>1</sup> Vernacular landscapes were replaced with landscapes of ornamental horticulture and rockery copied from Chinese classical gardens, along with deliberately odd-shaped buildings and structures. The Cultural Revolution was a sensitive, undiscussed topic. Parks were still gated gardens with entrance fees, maintained as places for holidays and special events.

When Kongjian Yu returned from the United States to China in 1997, he criticized the country's "City Beautiful" urban design and ornamental gardening as wasteful and called for the preservation of vernacular heritage landscapes, including the industrial.<sup>2</sup> Shipyard Park offered the first chance for him to express these values and aesthetics.<sup>3</sup>

Zhongshan Shipyard Park demonstrates the integration of ecological, social, economic, and cultural considerations and chiefly had four objectives: First, value the ordinary and even the outmoded and consider the socialist industrial heritage of the 1950s, 1960s, and 1970s to be as precious as that of ancient traditional culture; second, make the park integral to the urban landscape and open to the public, free of

customary fees for local citizens and tourists; third, establish a new aesthetic favoring untrimmed and "weedy" native, low-maintenance plants; and, fourth, design the park to aid flood control, adapting it to water level fluctuations.

Shipyard Park was built on the site of an abandoned, polluted, and dilapidated shipyard (erected in the 1950s and bankrupt by 1999) dotted with old docks, cranes, rails, water towers, and machinery. The project shows how landscape architects can turn a derelict site into an attractive and meaningful place with new functional relevance and thus contributes to urban renewal.

Since the park's lake connects through the Qijiang River to the sea, water levels fluctuate up to 1.1 meters (3½ feet) daily. A network of bridges was constructed at various elevations and integrated with terraced planting beds so that native "weeds" from the alluvial wetland could be grown and visitors could feel a hint of the ocean.

Regulations from the Water Management Bureau required that the river corridor at the east side of the site be expanded from 60 meters to 80 meters (197 to 262 feet) to better manage water flow. This meant that more than ten old banyan trees would have to be cut down. In order to save the mature trees, a 20-meter-wide (66 feet) parallel ditch was dug on the other side of the trees, leaving them intact.

Since remnant rusty docks and machinery were largely a nuisance for local residents, three approaches were taken to artistically and ecologically dramatize the spirit of the site using preservation, modification, and creation of new forms. Native habitats, water, and cultural elements were preserved as found; existing structures, materials, and forms were reused for new functions.

Vegetation along the old lake shore was preserved and modified, as were the rails, water towers, and dilapidated machines. New forms included a network of straight paths and green boxes (using fig trees as living walls), and a large red box that dramatizes the character of the site. Functionalism is evident in the network of paths linking key locations and exits, in the reuse of dock structures to provide tea and park services, in the light tower made from a former water tower, and in the paved areas under trees where tai chi can be practiced.

This park is environmentally friendly, educational, and full of cultural and historical meanings. It calls people to pay attention to previously neglected culture and history. It is for and about the common people, and asserts an environmental ethic that weeds are beautiful.

1 Kongjian Yu and Mary G. Padua, "China's Cosmetic Cities: Urban Fever and Superficiality," *Landscape Research* 32:2 (2007), pp. 255–272.

2 Kongjian Yu and Dihua Li, *A Path to Urban Landscape: Talks to Mayors* (Beijing: China Architecture & Building Press, 2003). Published only in Chinese as 城市景观之路：与市长们交流。

3 Kongjian Yu, "The Culture That Has Been Ignored and the Beauty of Weeds—The Shipyard Park, Zhongshan City," *New Architecture* 5 (2001), pp. 17–20; see also Kongjian Yu and Pang Wei, *The Culture Being Ignored and the Beauty of Weeds—The Regenerative Design of an Industrial Site: The Zhongshan Shipyard Park* (Beijing: China Architecture & Building Press, 2003). Published only in Chinese as 足下文化与野草之美：中山岐江公园。





**1** The master plan: Based on the existing natural and industrial landscape “canvas,” a road all around the park and a network of paths was overlaid. The paths are straight connections between the entrance and interesting spots, and this network makes the Shipyard Park a complete contrast with traditional Chinese gardens, where meandering and twisting and view breaking are guiding principles. This “urban” path network crosses the boundary between the city and the park, and makes landscape an integral part of the urban fabric.

- 1 Red box
- 2 Fog fountain square
- 3 Hedge
- 4 Column matrix
- 5 Sculpture
- 6 Yacht club
- 7 Parking lot
- 8 Boating service facilities
- 9 Terraced bridges
- 10 Bridge

- 11 Dock
- 12 Light tower (reuse of water tower)
- 13 Skeleton tower
- 14 Playground on the old boat
- 15 Tea house
- 16 Swimming pool
- 17 Pavilion (polymer tent)
- 18 Fountain
- 19 Island
- 20 Bridge/floodgate

- 21 Terraced bank planted with native grasses
- 22 Gate structure at south entrance
- 23 Water edge
- 24 Ring road
- 25 Northwest entrance





2

**2** The park in year 2010 seen from a newly built five-star hotel at the north side. Note the growth of vegetation as well as the city surrounding the park, which became the catalyst of urban development in this area.

**3** Zhongshan Shipyard Park: On the site was a lake with a muddy waterfront full of debris.

**4** The “green box” made of Ficus hedge rows are representations of and have the same spatial dimensions as the dormitories that once accommodated collective factory workers on the site. Green boxes are used to create a sense of exploration, when people walk or jog along the straight paths that cut through the boxes. They also create semi-private space for couples and groups to enjoy.



3

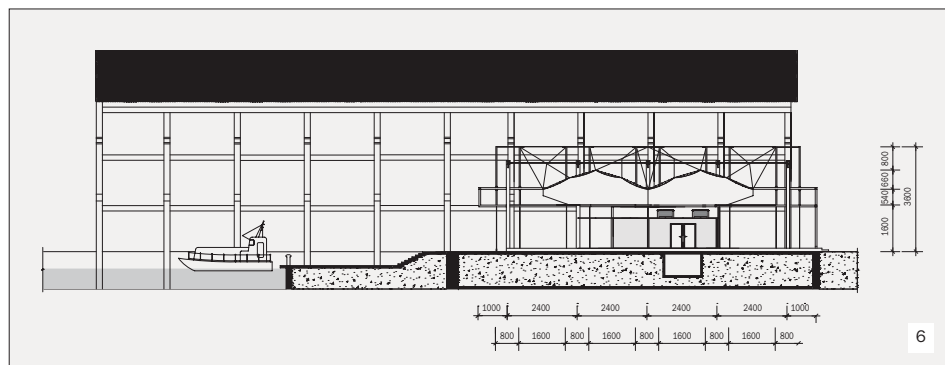


4





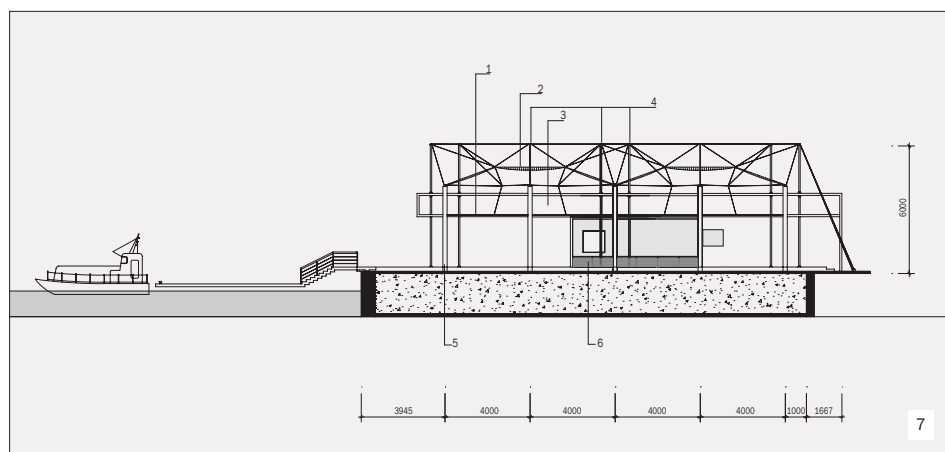
5



**5** The reuse of docks and the waterfront in 2010. New residential building and hotels surround the park, dwarfing the open space. The lake edge is a stepped frame that softens the waterfront in adapting to the fluctuating water table. Visitors make great use of the park—a daily activities space artfully enhanced.

**6** South section of the dock on the west side.

**7** East elevation of the dock on the west side.



- 1 150 mm channel with riveted joints
- 2 Tensioned cordage and longitudinal wire rope
- 3 Polymer tent
- 4 Suspended cable structure
- 5 300 mm channel
- 6 40 × 40 mm angled steel skeleton wall with curved steel plate outside and cement mortar inside





ZHONGSHAN SHIPYARD PARK





10

**8** The beauty of the rustic and the messy: Native vegetation at the waterfront is associated with a reused dock.

**9** The reuse of docks and waterfront in 2004, showing lighting design. The dock was originally built in the 1980s, and the roof was removed. Protective paint prevents it from rusting.

**10** A polymer tent serves as a pavillion.

**11** A space in the park with the rustic industrial structure and messy nature becomes the setting for daily tai chi exercises.



11



