

Beijing and Shanghai: Places of Change and Contradiction



The Gate of Heavenly Peace stands at the end of the redeveloped Qianmen Street in Beijing.

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Christine Saum

Dazhalan, in the Qianmen district south of Beijing's Tiananmen Square, has been described as a *hutong* (lane) with a "heady jumble of shops," including some of the oldest stores in the city. So it was puzzling when the taxi driver stopped in the middle of the street and waved vaguely at a construction site nearby. Through a gap in the fence we could see a broad new street lined with modern, mixed-use buildings whose design reflected

the architectural characteristics of old Beijing. A lone trolley car waited in the middle of the street to take visitors to the designer shops that would be opening in a few weeks. This is the Beijing we had come to see: a place that is changing so fast that a feature described in a guidebook may no longer exist, or if it does, the subway line to reach it may be so new that it doesn't appear on any map.

When the 2007–2008 class of Loeb Fellows from Harvard University's Graduate School of Design met for the first time in May 2007 to discuss options for the study trip that would conclude

a year at Harvard the following spring, we quickly agreed on a number of criteria. We were looking for a place where change was happening now; a place where a visit five years before or hence would be a different experience; a place dealing with significant environmental, transportation, and housing challenges; a place looking for ways to preserve some of its past while moving into the future; and a place where it was possible to see the role that outside designers and consultants were playing. Most of all, the Loeb Fellows were looking for a place where they could be inspired by the leadership and vision they would experience. China quickly moved to the top of the list of places to be considered.

What we found in our visits to Shanghai and Beijing in May 2008 were places full of contradictions. With our guides Yan Huang (LF 2003), director of the Beijing Municipal Planning Commission, and Lin Wang (LF 2009), deputy director of Historical Areas, Urban Design, and Urban Sculpture for the Shanghai Urban Planning Bureau, we saw a nation whose environmental woes are well known, but whose vision of a green future at times put the United States to shame. It was a fascinating insight into a nation experiencing staggering rates of urbanization as thousands move from the countryside to the cities every day, and whose challenges in providing the housing and infrastructure to accommodate those new citizens are unparalleled in human history.

Making No Little Plans in Shanghai

In 1990, Shanghai had a population of 13 million. Across the Huangpu River from the Bund, the Pudong area was mostly farmland. Today, the city has a population of 18.45 million, and it is expected to reach 25 million by 2020. Traditional neighborhoods are disappearing and being replaced with high-rise apartment buildings. The GDP of the Pudong alone is the size of a small country. And then there's the automobile. According to recent news reports, in 2002 there were 142,801 private cars in Shanghai; in 2006 there were more than 600,000; and in 2010 the number is projected to be 1.5 million. That requires a lot of change in the built environment.

Big growth calls for big plans, and Daniel Burnham would not have been disappointed with Shanghai's vision for the future. Wu Jiang, deputy director of the Shanghai Urban Planning Bureau, described the plan: nine new cities of between



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300,000 and 500,000 people; 60 new towns of between 50,000 and 100,000; and 600 new agriculture-based villages, all to be located in outer areas of the city's existing 660 square kilometer boundaries. These new cities will provide housing for new residents and relieve overcrowding in the central city, where half of the current population lives. Building enough housing for a population the size of the city of Omaha every year for the next eleven years is ambitious, but the plan aims to transform Shanghai, already the largest city in China, into both a world economic and financial center and a livable city.

Transportation is the key to this economic engine. The big moves are impressive enough—a new international airport that already serves about 35 million passengers annually and is expected to reach 80 million by 2015, and a new deepwater shipping port that quickly became the world's busiest by tonnage. But the creation of enough public transportation to offset increased car ownership will be essential to maintaining livability. By building a system of expressways with ten spokes and three ring roads, and 17 new subway lines, the city hopes to accomplish its "15-30-60" goals: key points in the city should be connected to expressways that are reachable within 15 minutes; the new satellite cities should be reachable from downtown within 30 minutes; and any two points within the city should be reachable within 60 minutes. In addition, a 350 km/hour high-speed rail will link Shanghai to the neighboring city of Hangzhou and to Beijing.

The Pudong section of Shanghai is now the commercial center of the city.



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The automobile infrastructure in Shanghai must keep up with rapidly increasing demands.

Another essential element of Shanghai's livability strategy is its plan for a series of parks and greenways. The city traditionally has had very little in the way of public open space, so the plan envisions many small parks, with no household more than 500 meters from a place where family members can exercise or take their children to play. According to Dr. Wu, the city has already increased the amount of landscaped space from $\frac{1}{4}$ square meters per person to 12 square meters per person since 1990, and as a result the average temperature has dropped 5 percent.

Dr. Wu also pointed out that all this infrastructure for roads and parks needs to be built now, before the city is further developed and the opportunity to set aside land for parks and transportation rights of way is lost. The Loeb Fellows, however, were at a loss to understand how the government planned to pay for all this. After all, we kept hearing that China, in spite of its growth, is still a poor country.

One answer came later, during a seminar hosted by the Peking University–Lincoln Institute Center for Urban Development and Land Policy in Beijing. At a panel discussion among U.S. and Chinese scholars, John Mikesell, a visiting professor from the University of Indiana at Bloomington, explained that this new infrastructure was being paid by fees from developers when they acquire the right to develop land, all of which

remains under the ownership of the state. What is less clear is whether future lease payments will support the upkeep for this infrastructure.

Transforming Housing and Neighborhoods

Until fairly recently, housing in China was owned by and rented from the state or state-owned enterprises at rates significantly lower than the cost of maintaining it. Most housing stock was comprised of traditional neighborhoods known in Shanghai as *lilong*, or lane neighborhoods, a low-rise housing type that evolved as a blend of the European row house and the Chinese courtyard house. These neighborhoods provided physical security and a strong sense of community, but living conditions in the *lilong* were often crowded and the houses in poor repair. Housing reform in the mid-1990s allowed many Chinese to purchase the unit they already occupied, but did not address the problem of substandard housing and housing shortages.

During a tour of *lilong* with locally based historian Patrick Conley, the Loeb Fellows were invited into a traditional Shanghai home. While the underlying building typology could be used as a model for high-density, low-rise housing, it was easy to understand why renovating entire neighborhoods of these individually owned homes is not the solution to Shanghai's housing crisis. Those who want to stay in the *lilong* are primarily the elderly, because younger Chinese are eager for housing with modern amenities. As a result, many of the *lilong* are being demolished to make way for new development, and residents are relocating to new high-rise apartments, often outside the city center.

However, few lower- and middle-class Chinese can afford even subsidized housing units (see Duda, Zhang, and Dong 2005), so the Loeb Fellows wondered how those who were displaced could afford new housing. According to Boston architect Ben Thompson, whose Xintiandi mixed-use development replaced one of these neighborhoods but retained much of its architectural character and details, it is the developers who are footing the bill. When redevelopment occurs, developers are required to compensate residents at a rate equivalent to the value of their current square footage in the new development. This money can then be used to acquire a new home. According to city officials, however, this system has not been successful in providing housing for the poorest 20 percent of the city's residents, so the government is exploring strategies for housing that segment of society.

Preservation versus Reconstruction

Unique structures and cultural icons are benefiting from creative adaptive reuse, often involving arts uses, as a result of increased government funding for historic preservation. Shanghai's former slaughterhouse, for example, has been reborn as 1933 (the year it was built) Old Millfun, a creative "lifestyle center." It is an Art Deco marvel with austere concrete chutes and sluices crisscrossing a central atrium space, making it look like something out of a sci-fi movie. In Beijing, the ornate polychrome eaves and lintels of Imperial Palace buildings within the Forbidden City all received fresh coats of paint in anticipation of the Olympics. But it is the dense fabric of small-scale domestic and commercial structures that gives a city its unique character, and the fate of those neighborhoods in Shanghai and Beijing is much less certain.

In the United States, preservation efforts are guided by the Secretary of the Interior's Standards for Rehabilitating Historic Buildings. Failure to comply with these standards makes a project ineligible for various federal tax credits created to promote preservation. The standards state that preservation should begin by preserving those elements that are essential to maintaining the building's historic character. If necessary, repairs should be carried out with the least possible amount of intervention. Only if preservation and repair are impossible should character-defining elements be replaced with new materials.

In China, however, what constitutes preservation is open to interpretation. In Shanghai, there are 12 historic districts, comprising 25-30 percent of the old city, and 2,138 buildings have protected status. Beijing has 25 historic districts, and approximately 35 percent of the city is protected. But in the Dazhalan project cited above, preservation means tearing down original urban fabric and replacing it with new structures designed by internationally recognized architects in the character of what was there 50 or 60 years ago. Preservation of traditional courtyard-house neighborhoods sometimes involves demolishing the existing houses and reconstructing them with modern materials. Inevitably, something is lost in the translation.

The preservation of historic neighborhoods is problematic, however. To western eyes, the narrow lanes and tile roofs represent a vision of China that many Chinese themselves are eager to leave behind. Houses that date back to before the 1949 revolution are a reminder of a feudal society, and

long years of deferred maintenance by local housing authorities have resulted in often slum-like living conditions. But ultimately the biggest threat to the hutong of Beijing and the lilong of Shanghai may be the underlying government ownership of the land. The payments received from developers for long-term ground leases and development rights are an important source of income for local governments.

Improving Environmental Quality

Any lingering doubt as to whether the air in Beijing is as bad as reported can be dispelled by a day of bicycling around the city. Like Los Angeles, Beijing is flanked by mountains that hold the polluted air over the city, like a bowl. Some sources of the problem are natural, such as the yellow dust that blows in from the Gobi desert in the spring. Others are manmade, such as exhaust from the rapidly expanding number of automobiles in the city. But

Many traditional lilong neighborhoods in Shanghai (below) are being replaced by new housing developments (page 7).



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the biggest problem is industrial pollution from the manufacturing regions of Shanxi and Shandong provinces to the southwest, whose noxious emissions are carried into Beijing by the prevailing winds.

The good news is that the central government recognizes the problem and is encouraging local governments to increase efforts to improve environmental quality on a local level. The commitment

by the Chinese to make the 2008 Olympics the “Green Olympics” resulted in buildings and a landscape that use rainwater for landscaping, heat water with solar energy, and implement other energy efficiency strategies. Shanghai’s 2010 World Expo is intended to gather best practices for livable cities from around the world. During the last several years both cities have planted millions of fully grown trees along roadways and in city parks, and many buildings are crowned with solar water heaters.

But there is always more that could be done. At the panel discussion at the Peking University–Lincoln Institute Center, Loeb Fellow Eric T. Fleisher described how Battery Park City in New York City maintains all its parks organically. In response, Professor Shiqiu Zhang of the Peking University School of Environmental Science and Engineering noted that before the development of chemical fertilizers, all gardening was done organically. “That’s how we did it here fifty years ago, but we don’t do it now.” And while Shanghai has made it extremely expensive to get a permit for a new car, Beijing has not. As a result, while rush hour traffic on the elevated highways around Shanghai is bad, the gridlock on Beijing city streets is constant. Still, one gets the sense that in contrast to the United States, where one can still find people who question whether global warming is a problem and what is causing it, the Chinese are tackling the problem head on.

Architectural Distinctions

Shanghai is to New York as Beijing is to Washington. It was difficult to avoid making the comparison. By reputation, Shanghai is chic and exciting; Beijing is provincial and a little dull. Shanghai is all about business; Beijing is all about bureaucracy. Shanghai has skyscrapers; Beijing has a height limit on buildings in the city center. But one thing Beijing has that Shanghai does not have is stunning twenty-first-century Olympic architecture and great historic and cultural monuments. Shanghai developed as a major city in the mid-nineteenth century, only after it became a treaty port where foreign governments could base their trading activities, so many of its most distinctive older buildings date from that era.

While western “starchitects” have been accused of using China as a playground for their most outrageous ideas, the Loeb Fellows generally were enthralled by the quality of the design they saw in Beijing. On a tour of the Olympic facilities with



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Loeb Fellows, 2007–2008

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Yan Huang, who oversaw much of the planning for the Olympics, doubts about much-publicized and debated venues such as the Bird's Nest and the Bubble Building were dispelled by first-hand experience. And according to Loeb Fellow Edward Lifson (2008), "Beijing Airport's new Terminal Three by the UK's Norman Foster and Partners is not only perhaps the most beautiful airport in the world, it's one of the most beautiful buildings of any kind in the world."

Qingyun Ma, principal of the Shanghainese architectural firm MADA and also dean of the University of Southern California School of Architecture, explained that architectural practice in China is dominated by architectural institutes—quasi-governmental organizations whose participation is required in any project that needs government approval. Small, innovative firms like MADA must partner with one of the institutes if they are to have any hope of winning major commissions, but then they may find that they lose control of the design process once the commission has been awarded. Up-and-coming architects in Beijing probably have the same problem, but the famous international architects who have designed many of the major new buildings in the lead-up to the Beijing Olympics are much less likely to be subject to such treatment.

Conclusion

To experience China today is to experience something both frightening and exciting. Many in the West are concerned that China is repeating many of the West's mistakes, by poisoning the air and water and by falling in love with the automobile. To a large extent, those fears are justified. The air is often foul and the traffic is awful. But there is also a sense that the Chinese people and their government care about these things and are striving for improvement, maybe more so than in the United States. Private vehicle use and factory operations were restricted during the Olympics, but some western media reports indicate that many of the worst-polluting factories are being closed permanently.

Cars may be multiplying astronomically, but Beijing and Shanghai are still incredibly bicycle friendly, with lots of dedicated bike lanes. Everywhere one hears of government plans to improve environmental quality, even while trying to lift millions of poor Chinese out of poverty. For the good of the planet, let's hope they succeed. **L**



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Shanghai has a diverse mixture of old and new housing types.

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