

RESEARCH ARTICLE

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For the greater good: modern China's struggle on housing shortage

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Abstract

The examination of housing shortages in China presents a fascinating subject that is rarely directly addressed. This topic not only captures our interest due to the irony in a communist country but also in light of the profound transformation of Chinese society, evolving from an agrarian civilization to a modern industrialized state. The objective of this essay is to establish a comprehensive framework that encompasses economic, social, and architectural narratives as an integrated whole. This essay delves into the historical trajectory of housing shortages in modern China, tracing the evolution of this issue within Chinese society since the founding of the communist regime in 1949. Given China's unique industrial and residential policy framework, housing provision is intrinsically linked to state-owned factories and residential certification, commonly referred to as hukou. As the political and economic foundations have shifted over time, so too has the root cause of housing shortages. In addition to general historical and theoretical research, we have undertaken an in-depth examination of Lanxi City, one of the industrial clusters established in China. The case study of Lanxi City involves a series of visits and interviews conducted within local factories and communities. Our analysis identifies two distinct phases in this evolution: the "fundamentalist communist era" and the transitional period toward a market economy. Each of these eras can be further subdivided into four distinct phases, providing a more nuanced perspective. Our findings reveal that various housing distribution mechanisms have contributed to the issue of housing shortages. During the first era, housing shortages were primarily a result of hukou restrictions, industrial disparities, sluggish construction processes, and corporate profit considerations. In the latter phase, spanning the 1980s and 1990s, housing shortages were exacerbated by escalating costs and a slow rate of housing unit replenishment. As the new millennium unfolded, real estate bubbles compounded the housing crisis, with older neighborhoods ill-suited for modern living. Our interviews and visits complemented our literature research, offering valuable insights into the systemic exploitation of specific groups in pursuit of broader goals, hence the title. This paper underscores the housing shortage in China as a consequence of economic disparities between urban and rural regions, as well as between the prosperous East coast and the underdeveloped West hinterland.

Keywords Welfare injustice, Socialist movement, Residential policy, Systemic discrimination

Introduction

"The most precious thing in life, I think, is food in your mouth, and the third most precious is a roof over your head," says the British actor Rowan Atkinson (otherwise known as "Mr. Bean"), who of course determined that the second most precious entitlement is the freedom of speech.¹ The first and the third came too short and perished too fast across human civilization, yet housing has

¹ The Christian Institute, "Rowan Atkinson on free speech," YouTube video, May 31, 2023. Accessed on June 7, 2023. <https://www.youtube.com/watch?v=xUezfuy8Qpc>

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been the most essential, persistent, tangible issue that has haunted humans throughout history. It has been a great interest of mine to study the mechanism and history of housing shortage. As I'm writing this paper, a group of students has been protesting for quite a while at Piazza Leonardo da Vinci. The rather strong contrast between their tents and the most iconic establishment of Politecnico di Milano is a result of rising housing costs in the glamorous city. From Vitruvius to Alberti, from Palladio to Gottfried Semper, we saw housing sublimed from the question of security and justice to that of art. The industrial revolution seemed to escalate housing issues from both the perspective of quantity and quality. Now we are witnessing the greatest wave of urbanization in human history.

Marvelous advancement indeed; however, housing shortage is still visible in many corners of this planet, especially for China, where its vast population undoubtedly magnified such burden. This research strives to investigate the housing shortage in China from the communist era to the present day when a market economy replaced planned production, be it food, housing, or ideas. The history of housing will be studied and divided into two phases: Fundamentalist communism and socialism with Chinese characteristics. The housing distribution system will be analyzed in terms of its beneficiaries and driving forces. This research will feature a series of case studies to present the housing issue from personal viewpoints. We can see that housing shortage is a long-lasting problem in modern China, as in many other developed societies. What has changed, though, is the distribution mechanism in different stages. Journal articles and books from different times are consulted, and interviews were set up with those who experienced the great transition of the 1990s. Neither plans nor prices could resolve the problem; tempting promises aside, what we see in the end of the day is the fundamental dilemma of governance and infinite gravity toward two utopias.

Sheltering hundreds of millions

As one of the most populated countries, China faces housing challenges second to none. Modern Chinese history begins with the People's Republic in 1949, as the authorities solemnly claimed the end of the century of humiliation: the collapse of the ancient empire, invasion by other countries, and bloodshed in civil wars—events that devastated every Chinese family, leading to the loss of food and home. Sheltering his subjects is regarded as one of the most significant tasks of a Chinese emperor. Thousands of years of agricultural practices have shaped Chinese minds with an obsession with real estate property. In Confucian rituals, having a farm and home is not only the dream of many ordinary people but also the

promise of the rulers.² It is certainly not a coincidence that every Chinese dynasty ended with riots and uprisings formed by homeless farmers who had practically nothing more to lose—except for chains and shackles, if we approach this from the perspective of Marxism.

And so did the Chinese communists. The establishment of the People's Republic of China enabled the Chinese Communist Party to carry out programs of modernization, transforming the agricultural civilization into an industrial one. Like any former regime on this landmass, the government's legitimacy is founded upon the general satisfaction of its subjects. Such "generality" by 1949, however, is defined by overwhelmingly outnumbering villagers instead of the urban dwellers, who only consisted of 11% out of five hundred million people.³ Rural reform is thus the foremost agenda for Chinese modernization. Radicals in the 1910s criticized traditional thoughts, which are credited as the reason that weakened China for the past centuries. Understandably desperate, the New Cultural Revolution opened the window for foreign ideas. Almost at the same time as the Bolshevik revolution erupted across Russia, Japanese rural reformist ideas entered China, promoting an organic self-governing country economy.⁴ Interestingly, this idea originated before the common era in China but was later marginalized due to the official adoption of Confucianism.⁵ Born out of a quintessential Chinese village, Mao Zedong adored the self-governing introverted nature in this proposal,⁶ giving that he did surge the anti-governmental and quasi-anarchist Cultural Revolution in the 1960s.

Yet when his party seized power, Mao soon found out that organic agriculture is one thing, arming the nation with industrial power is quite another. Here we see the beginning of the first phase of the housing shortage in China. Between urban and rural, the party allocated the majority of the country's manpower and resources to develop the former. On the other hand, like many communist countries at the time, China dedicated only a

² Although Bray has not deliberately addressed the property right issues, she did mention the consequences of the mis-management, more to see at: Francesca Bray, "Instructive and nourishing landscapes: natural resources, people and the state in late imperial China," in *Technology, gender and history in imperial China: great transformations reconsidered* (London; New York: Routledge, 2013): 72–74.

³ National Bureau of Statistics of China, "Population and Composition," in *China Statistics Yearbook 2022*. Spring, 2023. Accessed on May 22, 2023. <http://www.stats.gov.cn/sj/ndsj/2022/indexch.htm> (Chinese).

⁴ Ou Ning, "Social Change and Rediscovering Rural Reconstruction in China," in *New Worlds from Below: Informal life politics and grassroots action in twenty-first-century Northeast Asia*, ed. Tessa Morris-Suzuki and Eon Jeong Soh (Australia: ANU Press, 2017): 40.

⁵ *Ibid.*, 41.

⁶ *Ibid.*, 40.

marginal amount (9% in 1953)⁷ of the national investment to housing construction.⁸ Private sectors rarely participated in housing providing at this stage, as the ambiguous property right usually caused owners to worry if their houses would be confiscated someday in the future⁹: Why bother repairing the war damage or refurbishing them at all? Owing to the lack of public and private funding, housing issues escalated when modern China was following the Soviet pattern to set up industrial clusters on its land. By 1955, the migration toward industrial cities had reached a concerning point; the government decided to stem this trend by restricting population flow.¹⁰ In such a way, urban housing stress could be relieved to a degree, and agricultural production was secured with sufficient labour.

The first five-year plan was more or less victorious in terms of the factories built up, though housing for the modern Chinese people remained a distant goal. Meanwhile, the degradation of Sino-Soviet relationship caused a changing domestic political environment in China. The Great Leap Forward could be seen as Mao's strategy to accelerate the country's progress in the race with its Northern neighbor toward communist attainment. The formation of collective farming, or people's commune,¹¹ in 1958 is a part of the overall tightening of population control—another example is the abolishment of the City Construction Department.¹² The hukou policy was also promulgated in this year; this residence control system divided the population into virtually two categories: Rural and non-rural (otherwise known as urban and collective, such as military), with varied entitlement to social welfare benefits.

Great Leap Forward put millions of people into the steel-production campaign. In 1958, the urban population in China increased by 41.3%, with the number of industrial workers almost three-folded.¹³ The speed of housing construction could not outpace that of the “unnatural” population surge in cities,¹⁴ not to mention that 3000 houses collapsed overnight in Beijing after a

summer rainstorm only four years ago.¹⁵ The 1955 investigation indicated that half of the urban housing in the 166 Chinese cities was, in fact, uninhabitable due to poor maintenance.¹⁶ Housing stock was estimated only 10% higher than that of 1949 while the urban population had doubled, causing a decrease in per capita living quality.¹⁷ Calling for more and better housing? Diverting precious resources from building up the military (for a potential major war) is not only ill-considered but a crime. Marginalization and even demonization of housing projects are features of the first phase of the Chinese housing shortage, from 1949 to the eve of Open and Reform somewhat three decades later.

The next phase sees another switch of ideas. The new Chinese leadership strived to restore its credibility by compensating for the stagnation and even setback of life quality during the Cultural Revolution. One of the ways is to upgrade the national living standard and subsidize living costs¹⁸—of those in cities, of course. In 1979, the party boosted national funds for housing construction in response to the fact that 35.8% of urban housing had insufficient living area (the national standard was set to be 3.6 square meters).¹⁹ Rising standards of living quality had its side effects of rising construction cost; more apartment units were required to have their independent lavatory and kitchen. In 1982, a study shows that the construction cost of a communal housing unit increased by 136% compared to ten years ago.²⁰ Besides the expansion of the national housing program, the market economy was introduced to allocate housing stocks throughout the entire 1980s. In 1980, the Chinese State Council announced the wish to commercialize housing,²¹ encouraging supplementary construction from private sectors. It was calculated that new apartments only fulfilled 46% of the total demand of the year.²² Two years later, people's commune was abolished, and market mechanisms were experimented in four Chinese cities.²³ With some inspiring results, market sale of housing units became universally accepted in 1986.²⁴

The 1990s began with loosening of hukou policy—the government reckoned that a new round of urbanization

⁷ Yok-Shiu F. Lee 1988, “The Urban Housing Problem in China,” *The China Quarterly* (London); *the China Quarterly* 115 (115): 388. <https://doi.org/10.1017/S0305741000027491>.

⁸ Kang Chao 1966, *Industrialization and Urban Housing in Communist China*. Berkeley: Committee on the Economy of China, Social Science Research Council, 388-389.

⁹ Ibid, 391.

¹⁰ Ibid, 384.

¹¹ Ibid.

¹² Yok-Shiu F. Lee, “The Urban Housing Problem in China,” 390.

¹³ Kang Chao, *Industrialization and Urban Housing in Communist China*, 384–385.

¹⁴ Ibid, 385.

¹⁵ Ibid, 387.

¹⁶ Ibid.

¹⁷ Ibid, 388.

¹⁸ Yok-Shiu F. Lee, “The Urban Housing Problem in China,” 392 & 394.

¹⁹ Ibid, 388.

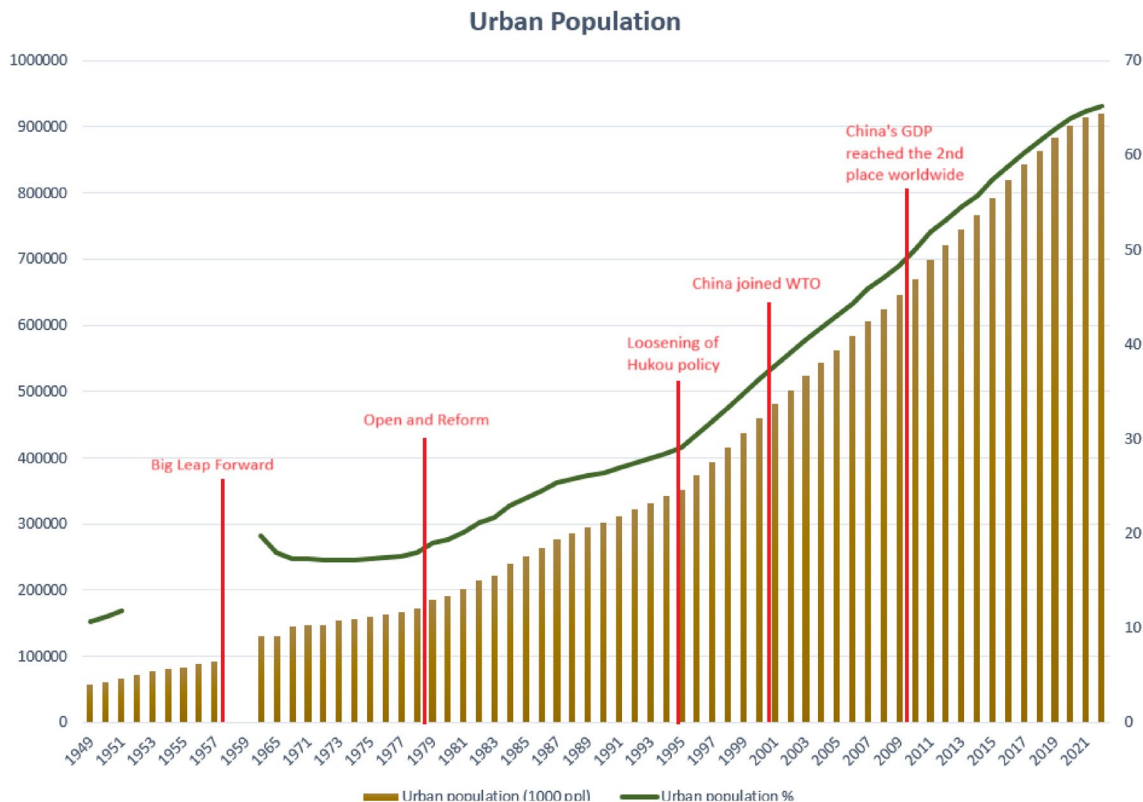
²⁰ Ibid, 396.

²¹ Ibid, 402.

²² Ibid, 400.

²³ Ibid, 402.

²⁴ Ibid, 403.

Table 1 China's urban population since 1949

Zhang, Feihao. *China's urban population and overview*. February 15, 2023

had a thirst for labour. In cities, the office of housing reform was set up in 1992 to oversee the commercialization of formerly state-owned properties.²⁵ The ownership was gradually transferred to individuals; by 1995, the proportion of government- and corporate-owned housing units dropped to 50% of the total stock.²⁶ Three years later, welfare housing provision in China was terminated for good.²⁷ At the same time, the opening of second-hand home sales in 2001 and the booming Chinese economy after its official admission into the WTO in the same year marked the domination of market mechanisms in the Chinese housing market.²⁸

Housing shortage persists, unfortunately, but with a totally different set of mechanisms in hand. The East coast region of China flourished in the first wave of international trade since the 1980s, with central and West

regions lagging behind. Laborers are lured to big metropolises like Beijing, Shanghai, Shenzhen, and Guangzhou despite the negligence of their welfare benefits. Booming urban economies are often coupled with real estate bubbles: a reflection of demand–supply relations and a way to manipulate local GDP.²⁹ A bubbling housing market in big cities plagued newcomers' life quality when an apartment became ridiculously unaffordable. Presales and falsifying unit areas also contribute to housing shortage. For lagging cities, though not haunted by skyrocketing housing prices, they are nevertheless troubled with population egression. Buying a house is not as tough as looking for a local matching job. The total abandonment of the hukou policy allows Chinese citizens to reside in any place within their country's legislative boundary—in theory. Now, big cities seemingly reached the upper limit of accommodation. The Chinese government of the new millennium brought forth the Great West Development and Village Revitalization campaign to smooth out the

²⁵ Junhua Chen, Fei Guo, and Ying Wu, 2011, "Chinese Urbanization and Urban Housing Growth since the Mid-1990s," *Journal of Housing and the Built Environment* 26 (2): 222.

²⁶ Ibid.

²⁷ Ibid, 225.

²⁸ Ibid, 227.

²⁹ Xiaoliang Chen, Sanxi Li, and Yanbin Chen, 2018, "Redesigning the Incentive Mechanism of Local Governments and Long-term Mechanism of Housing Price Control," *China Industrial Economics*, 11: 82 (Chinese).

uneven economic landscape and reconcile urban–rural tension. Labour-intensive and pollutive factories were motivated to move westward by increasing operational costs on the East coast, and welcomed by tax reduction and considerably more ambiguous practice of environmental protection in the west hinterlands (Table 1).

Those of silenced and sacrificed

It is necessary to define the term “housing shortage”: Not only should we consider the numeric gap between supply and demand, but the quality of housing also requires a closer look. A home with heating, water, and a roof is no better if being placed further than jobs could reach. Both quality and quantity are considered in this research. With a brief glimpse of the history of housing shortage in China, we can now break down some factors that contributed to the issue—which should also be divided into two separate categories and aligned with the distinct historic conditions. In the first phase, which is now fairly addressed as “the age of fundamentalist communism,” we see at least four driving factors: Rejection of the private sector, promotion of heavy and military industry, differential welfare benefits, and ideological obstacles.

Unlike its East European socialist counterparts, China discouraged private investment in housing construction³⁰: partly due to the path dependence of the Chinese Communist Party during its early years of rural revolution. Land reforms featured the confiscation of land from large owners and the following distribution to peasants. Such a leftist movement was welcomed by the poor but feared by the rich, who also constituted a remarkable portion of the urban population. Damage from the Second World War and Civil War was rarely fixed³¹: Spending money on something that might be taken away was never a rational decision. The growing intolerance toward private businesses was the party’s program to restructure or rehabilitate the country to receive Soviet aid. A planned economy demanded the integration of all small elements into the national economic machine. There was not only the fear of being absorbed into such a rigid framework that prevented private investors from providing housing but also the threats of property loss themselves in a socialist “philanthropic” way.

In exchange, the country established some preliminary heavy and defense industries. This determination was perhaps intensified by the Korean War, where the Chinese army had to confront the world’s most fearsome and mechanized armed force at the time. Most resources were

designated for factory building; housing developments were ironically—yet understandably—set aside. Clusters of industries were planned and nurtured: a few core factories were supported by their secondary manufacturers and suppliers. These clusters of factories required labor in an exponential manner. Especially the steel industry, which consumed the most of them. Yong labours—also known as the “baby-boomers”—reached the age of new marriage, thus resulting in a high birth rate.³² Meanwhile, people who settled down in the cities could bring their families with them,³³ so the sudden increase in urban population in the 1950s outpaced the construction of housing units that could ever be provided.

Before the official restraining of population flow from rural areas to cities, people moved to cities for profoundly more vivid entertainment, higher pay rates, better healthcare, and most importantly, an assigned housing unit from the government or a state corporation. The attraction centered at cities was coupled with the repulsion in rural China, where people were encouraged to leave to save state subsidies. After the Great Leap Forward, the collectivization in the villages forced people to flee from public pressure, which then counted as the main reason for rural emigration.³⁴ The gap in welfare benefits between urban and rural China persisted until the 1990s when the hukou policy began to fade into history. Rigid residence control forbade villagers—which was, in fact, the majority of the entire population—from enjoying socialist welfare. While certainly unfair, this system enabled the exploitation of the absolute surplus of the village in favor of industrial production—in other words, subsidizing cities at the cost of the rural economy.

When China decided to marginalize housing construction, Russia was doing exactly the opposite. After the death of Stalin, the Soviet Union prioritized the construction of separate housing units over heavy industry.³⁵ In 1957, when the Soviet Union launched the first artificial satellite Sputnik, Khrushchev announced a massive housing campaign to shelter every Soviet person.³⁶ The reforms carried out by Khrushchev was negatively evaluated in the Chinese eyes, especially those of Mao’s. Ironically, just a year ago, Mao himself delivered his speech on *Ten Major Relationships*, which stressed the importance

³² Ibid, 385.

³³ Ibid, 384.

³⁴ Ibid.

³⁵ Christine Varga-Harris, “Moving Toward Utopia: Soviet Housing in the Atomic Age,” in *Divided Dreamworlds? The Cultural Cold War in East and West*, edited by Peter Romijn, Giles Scott-Smith, and Joes Segal (Amsterdam: Amsterdam University Press, 2012): 135.

³⁶ Ibid, 134.

³⁰ Kang Chao, *Industrialization and Urban Housing in Communist China*, 390–391.

³¹ Ibid, 387.

of balance between the light and heavy industry.³⁷ The Sino-Soviet split changed the domestic political environment in the way that a Chinese comrade shall not repeat what Soviets have been doing. And the exacerbated geopolitical situation around China forced the government to abolish its previous promises that investments on civilian constructions shall increase. When political tension reached its peak in the 60s, calling for more housing construction required tremendous bravery and honesty—something ordinary people had learned to conceal. Instead of building up the motherland, more and better housing units represented regression in the strength of will and ideological purity.

In the second phase, or “the age of socialism with Chinese characteristics,” housing shortage was caused by mixed forces. Lack of funds and increased complexity in construction had a negative impact on housing construction. Relaxation of residence limitations boosted urban housing demand. Also in this process, the systematic discrimination of the hukou policy was another impediment between many rural people and a home in the city. The legacy from the planned economy corrupted the housing market to an extent, and the pursuit of personal interest fueled dissatisfaction with housing supply.

Rising living standards considerably slowed down the replenishment of housing stocks. Public lavatories and kitchens in staff living quarters were deemed obsolete and inappropriate. To dignify its people with higher living quality, the government set the minimal per capita living area to be four square meters in 1982 (units less than this were qualified as “congested”).³⁸ In the late 1970s, more housing units were built with separate showers and kitchens, placing more emphasis on privacy.³⁹ Shanghai, by far one of the largest industrial cities in China, was bargaining—by lowering the congestive standard to less than three square meters,⁴⁰ the Shanghai government avoided the tough choice between more housing and more factories; the city could therefore save a significant amount of money from mandatory intervention. Under the big umbrella of national housing expenditure, construction



Fig. 1 Mao Zedong and Nikita Khrushchev. Mao and Khrushchev hugging in front of camera. August, 1958. Image courtesy of National archive of China



Fig. 2 The Great Leap Forward propaganda. Great Leap Forward Poster. Unknown date of publish. Image courtesy of National archive of China



Fig. 3 People's Commune (1958). People dining at the People's Commune. 1958. Image courtesy of Province of Zhejiang archive

³⁷ “Our current task is still readjusting the portion of the investment on heavy industry, agriculture, and light industry. We should develop more of agriculture and light industry... In today's world, we must have this (atomic bomb) if we don't want to be bullied by others. How do we do this? The reliable way is to lower the military and government budget to an appropriate portion and increase funds for civilian construction. Only when economy develops faster, our defence can acquire larger improvement.” Zedong Mao, in *On Ten Major Relationships*, digital archive, Marxist.org, Accessed on February 14, 2024. <https://www.marxists.org/chinese/maozedong/marxist.org-chinese-mao-19560425.htm> (Chinese).

³⁸ Yok-Shiu F. Lee, “The Urban Housing Problem in China,” 389.

³⁹ Ibid, 394.

⁴⁰ Ibid, 389.

funds had to compete with other expenses. In 1974, the state decided to subsidize one-third of the rent for urban



Fig. 4 *Fenghuang factory in 1960s.* Factory of Fenghuang Huagong Factory. Unknown date of photography. Image courtesy of Fenghuang Chemical Corporation, Ltd



Fig. 5 The words are translated as “no bikes from other cities.” Zhang, Feihao. Banning non-local bikes on Nanjing Yangtze Bridge. September 18, 2023

dwellers,⁴¹ cutting out a big chunk of the budget. Due to the long-term underinvestment in housing projects, people had to live in apartments built decades ago, and the physical deterioration consumed another huge chunk of the budget. However promising, the rise in national standards could not be met in many cases—or met with a great delay (Figs. 1, 2, 3, 4, 5).

The 1990s saw a new wave of cityward migration, mostly observed in the relatively developed East coast of China. To accommodate the desired labor, cities like

Shanghai issued special temporary residence permits⁴² – with curtailed welfare entitlements. The offspring of village residents were not given priority in instances like job arrangement, and even rice was priced differently (by a variation of two-fold) according to one’s domain of residence, or hukou.⁴³ People with urban residence, on the other hand, enjoyed one-tenth of the market rent per month⁴⁴; and in some cities, the rent was only nominal as it constituted no more than 2.3% of monthly income.⁴⁵ As early as 1982, the Chinese government started to experiment with ownership transfer: the residents of housing units, provided by state corporations or the state itself, could be purchased at one-third of the construction cost, with the other two-thirds subsidized by the workplace and government.⁴⁶ By the 1990s, those “privileged” ones were not therefore troubled by housing shortages, unlike the vast majority of the Chinese population, including my parents, who struggled to find a place in the city. Interestingly, the socialist state subsidized the housing unit per area instead of the resident’s income level.⁴⁷ A larger apartment would receive a higher payback. When the real estate bubbles heated up in the 2000s, those who already had one (and possibly more) apartments harvested a disproportionate interest. Cheating in the public housing sector was not uncommon, and people with real demands had to compete with the “resourceful” ones when applying for cheap housing units⁴⁸ (Table 2⁴⁹, Table 3⁵⁰).

As time passed, the formerly privileged found themselves in an awkward position. Their allocated housing

⁴² Junhua Chen, et al., “Chinese Urbanization and Urban Housing Growth since the Mid-1990s,” 220.

⁴³ Interview conducted by Feihao Zhang.

⁴⁴ Ibid.

⁴⁵ Yok-Shiu F. Lee, “The Urban Housing Problem in China,” 392.

⁴⁶ Ibid, 402.

⁴⁷ Ibid, 399.

⁴⁸ Junhua Chen, et al., “Chinese Urbanization and Urban Housing Growth since the Mid-1990s,” 227.

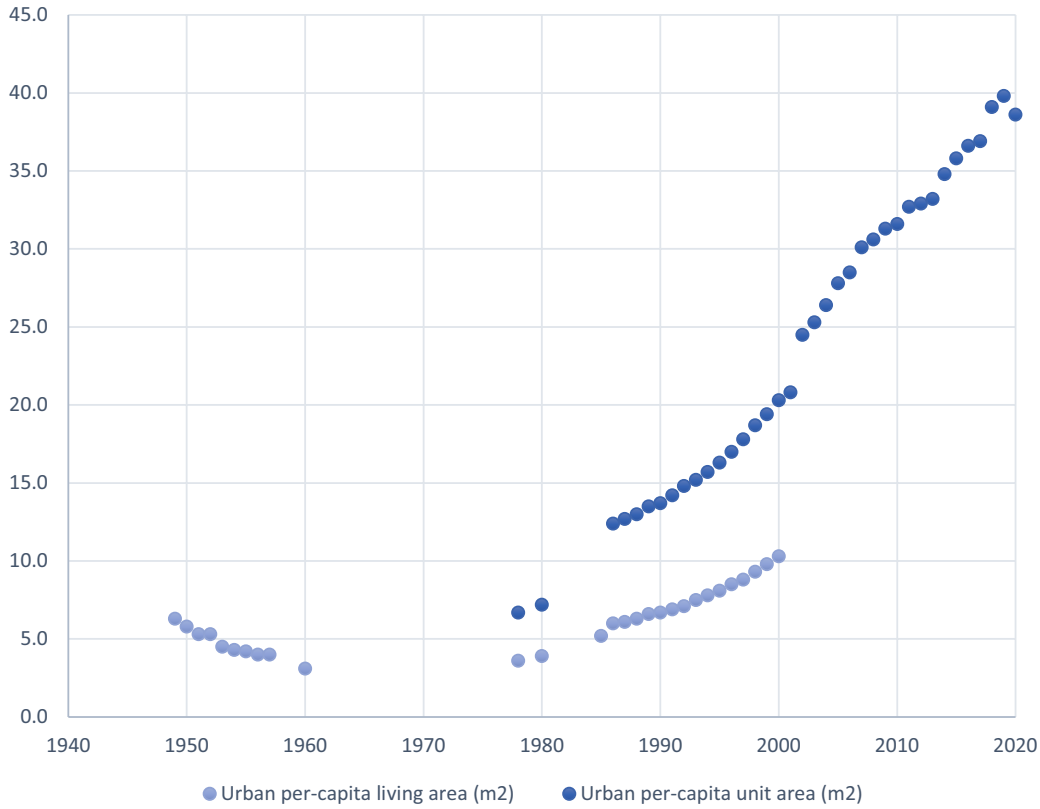
⁴⁹ It should be noted that the per-capita living area is different from per-capita unit area; the former does not account for publicly shared space, such as staircase, hallway, and basement. Note that the data used in this analysis came from yearbook published by National Bureau of Statistics, which were attempted and employed different metrics from 2000 to 2004. As an example of discrepancies in area measurement in commercial housing, the calculation on floor area appears to mask the true shortage of housing space.

⁵⁰ We estimated the actual home area (per-capita living area) based on the old statistics and its relationship with per-capita unit area. It is noteworthy that the earliest recorded per-capita unit area dates back to 1978, at 6.7 m², compared to 3.6 m² for per-capita living area. This disparity continued to widen in subsequent years, reaching at 20.3 m² to 10.3 m² in 2000, when the National Bureau of Statistics ceased reporting per-capita living area and switched to per-capita unit area for later reports. Given the abrupt increases observed in 2002 and 2018, our estimation primarily relies on the trend from 1985 to 2000, where it is more stable. Therefore, our estimation can be considered conservative.

⁴¹ Ibid, 392.

Table 2 The evolution of China's urban per-capita areas for dwelling

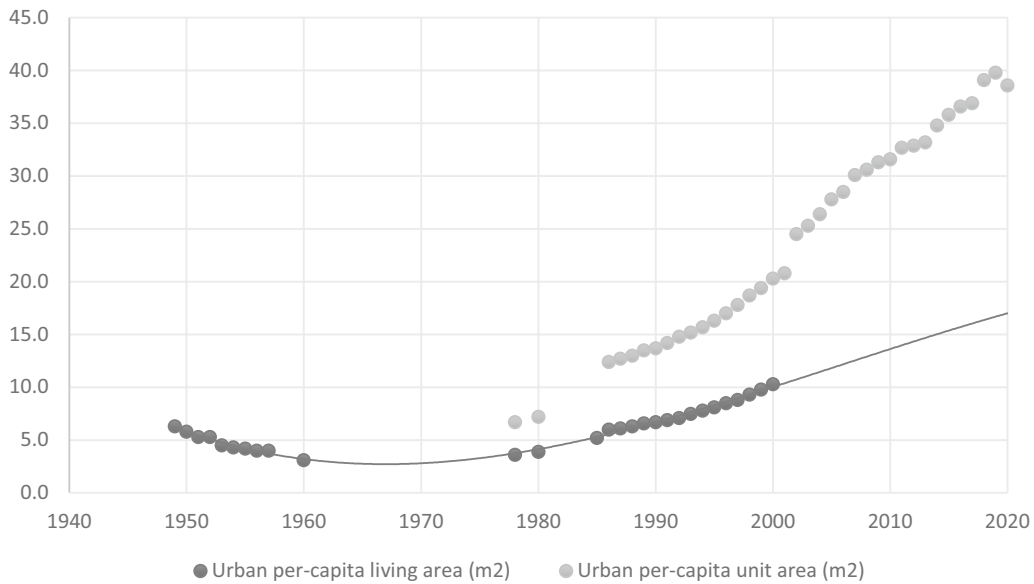
Urban Per-capita Area(s)



Zhang, Feihao. *Urban per-capita areas*. February 15, 2023

Table 3 Estimated urban living area based on historical records

Estimated Urban Living Area



Zhang, Feihao. *Estimation of actual living area*. February 15, 2023

had aged and lagged behind contemporary living standards—the newest of which were constructed in the 1980s. Now, they were far from attractive in the housing market and were surrounded by newer and newer apartments, hollowed out from the decent urban life like enclaves. The new apartments, though, were debated for another set of controversies, such as the falsification of basic parameters: the shared public stairwells, hallways, and lobbies was added to one's apartment size. The buyer would understandably be quite disappointed and start to reminisce about the communist era when apartment size was only measured by the perimeters of the internal walls.⁵¹ The government also saw the rising real estate prices as an opportunity for more tax revenue. The land belonged to the government, so higher housing prices were equivalent to a larger leverage for local governments to recover the cost of massive infrastructure investment. It is never too far-fetched to mention that local officials would bet their promotion and career on the local GDP. All market participants' interests—except for those of buyers—aligned with inflating the real estate bubble.

We shall also look at the structural challenge of the Chinese economy. As an extremely export-oriented economy, China heavily relies on exporting its products while maintaining a strict control over the exchange rate and implementing a contractionary policy in its domestic market.⁵² The combination of high interest rates and increasing monetary liquidity has led to banks often finding themselves with precarious balance sheets.⁵³ To compensate for these losses, banks and companies had to invest their capitals in high-return assets, primarily real-estates, due to the lack of a developed financial markets.⁵⁴ Thus, the Chinese housing market, rather than the commodity market, became the outlet for inflation resulting from the structural issues in country's economy.⁵⁵

The central government also has deepened worries that the “surrealistic” housing prices in the cities might compromise the country's economic potential. With decades of failed attempts, the new national plans emphasized relocating industrial clusters to the West and disseminating job opportunities in the vast periphery around cities. The anti-agglomeration guideline is yet to be observed for its effectiveness but shall be revisited from time to time. In the next chapter, we will move on to the case



Fig. 6 *Fenghuang Chemical Factory*. Main gate of Fenghuang Huagong Factory. Unknown date of photography. Image courtesy of Fenghuang Chemical Corporation, Ltd



Fig. 7 Photo of *Fenghuang Chemical Factory* workers (a) and the products (b). Products of Fenghuang Huagong Factory. Unknown date of photography. Image courtesy of Fenghuang Chemical Corporation, Ltd. Soaps produced at Fenghuang Huagong Factory. Unknown date of photography. Image courtesy of Fenghuang Chemical Corporation, Ltd

studies found in Lanxi City, East China, from 1958 to the present day.

The rise and decay of collective housing in Lanxi, Zhejiang

Zhejiang Province has been one of China's industrial hubs since the nineteenth century, owing to its proximity to Western influences. Despite the turmoil caused by wars, Zhejiang, along with the broader East China region, remained one of China's most developed areas. This made it an ideal location for industrial development after the founding of the People's Republic in 1949, and Lanxi City was no exception (Figs. 6, 7, 8).

In June 1956, the State Council approved the construction of eight hydropower stations, including the Xin'anjiang Hydropower Station, as a part of the first

⁵¹ Kang Chao, *Industrialization and Urban Housing in Communist China*, 386.

⁵² Lijian Sun and Shengxing Zhang, "An Externally Dependent Economy and Real Estate Bubbles," in *Linking Market for Growth*, ed. Ross Garnaut and Ligang Song (Australia: ANU E Press, 2007): 346, 349.

⁵³ *Ibid.*, 351.

⁵⁴ *Ibid.*, 345–346.

⁵⁵ *Ibid.*, 351.



Fig. 8 The former planning of the Smelter. Ling, Yuying. Ling, Yuying. The former planning of the smelter. June 10, 2023

services from housing to entertainment. Its architecture, structure, machinery stood for the advanced technology at that time.⁵⁸ On January 13, 2017, the government of Zhejiang Province enlisted the site as the seventh batch of cultural relics units of the province.⁵⁹ The Lanjiang Smelter serves as a tangible relic, encapsulating the city's collective memory and unique industrial development during a critical period in history.

In the mid-to-late 1980s, the smelter became the city's economic powerhouse, contributing nearly 25% of its total tax revenue and becoming a top-tier enterprise nationally. It is estimated that in Lanxi City, there was at least one person out of every three families that works in the smelter. In 2000, the per capita income of employees exceeded ¥10,000, while the national per capita income was ¥6280.⁶⁰ For Lanxi people, having a family member working at the smelter was a symbol of social status and prosperity.

The workers' living quarter of the smelter are conveniently located adjacent to the factory, offering a range of amenities. The apartments were built from the 1960s to the 1980s. There are three-story and six-story buildings



Fig. 9 Community school (a) and lavatory (b). Tong, Sujun and Yurong Ling. Community school in the smelter community. June 9, 2023. Tong, Sujun and Yurong Ling. Public lavatory in the smelter community. June 9, 2023

“Five-Year Plan.”⁵⁶ To support the Xin'anjiang Hydro-power Station, the Lanjiang Smelter was built in March 1958 and began production in the early 1970s.⁵⁷ It stands as one of East China's largest factories and was the only chartered one in Zhejiang Province, supported by Soviet experts in architectural design and construction. It represents the typical large industrial complex in the early days of the communist China: a factory surrounded by a neighborhood that provides workers with all essential

and one-story shed for bikes. There are in total of 32 buildings on a construction area of about 5054.16 square meters for 88 households. There are hospitals, cafeterias,

⁵⁶ Zhihui Zhang 2019, “Soviet Experts and the Construction of the Xin'anjiang Hydropower Station,” *Studies in the History and Natural Science* 38 (4): 387. (Chinese).

⁵⁷ Lanxi government, “Industrial remains,” web entry, Lanxi government website, unknown publish date, accessed on June 8, 2023. http://www.lanxi.gov.cn/art/2021/4/21/art_1229500440_59233071.html (Chinese).

⁵⁸ Hongzheng Ju and Yangmei Fang, “Woshi ‘shengbao’ weiju quansheng diyi,” archive document, *The Jinghua Daily*. February 12, 2017. Accessed on June 8, 2023. (Chinese).

⁵⁹ Zhejiang Province, “Zhejiang sheng guanyu huading Fangjiazhou yizhideng 123chu shengji wenwu baohudanwei baohufanwei he jianshe kongzhididai de pifu,” web entry, Zhejiang government website, January 31, 2019. Accessed on June 8, 2023. https://www.zj.gov.cn/art/2019/1/31/art_1229017138_64708.html (Chinese).

⁶⁰ National Bureau of Statistics of China, “Statistical report on National economic and Social Development: Year of 2000,” government online archive, The State Council website. February 28, 2001. Accessed on June 9, 2023. https://www.gov.cn/gongbao/content/2001/content_60684.htm (Chinese).



Fig. 10 Community Kindergarten (a) and bike shed (b). Tong, Sujun and Yurong Ling. Kindergarten in the selmter community. June 9, 2023. Tong, Sujun and Yurong Ling. Former bike shed outside the apartments. June 9, 2023

schools, kindergartens, movie theaters (demolished), farms (demolished) and bathing centers (demolished) in the complex—effectively creating a self-contained miniaturized city within Lanxi. With convenient living, varied infrastructure, and good security, it is a local boutique community that everyone yearns for. However, the smelter has over 6,800 employees at its peak, not all of them could be assigned to a unit here (Figs. 9, 10).

Interviews with residents revealed that workers paid approximately ¥400 annually in rent, equivalent to one month's salary. Water and electricity bills were generously subsidized, with water costs as low as 6 cents per ton, significantly below market rates. Additional benefits included food stamps, cloth stamps, and boiled water stamps, all issued by the enterprise. Healthcare and kindergarten services were free, and even access to movies was part of the package.

In the 1960s, the first attempts at collective housing were made at the smelter. For instance, Building #1 featured three floors, with each floor accommodating four households. Two households shared the living room, kitchen, and toilet on each side of the central staircase. As a result, two households had living spaces totaling less than 50 square meters combined.

We interviewed Mrs. Liu who lived there. She was employed by the smelter and has lived in this dormitory since 1960. The unit was equipped with basic furniture. During the China's housing reform since the early 1980s, Liu purchased the property with the offer of ¥10,000. Now Liu rents the next unit with at a cost of ¥1000 a year so she currently lives in a larger apartment as it was originally occupied by two households. Due to the fact that the building is a brick-concrete structure, it is difficult to transform the internal structure without harming the load-bearing integrity. In contrast, the commercial apartment *Luolan City* that locates right next to the smelter community has a similar area, but with a rent ten-fold compared to Mrs. Liu's payment

a year. The 1960s apartment at the smelter community is not popular these days (Figs. 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34).

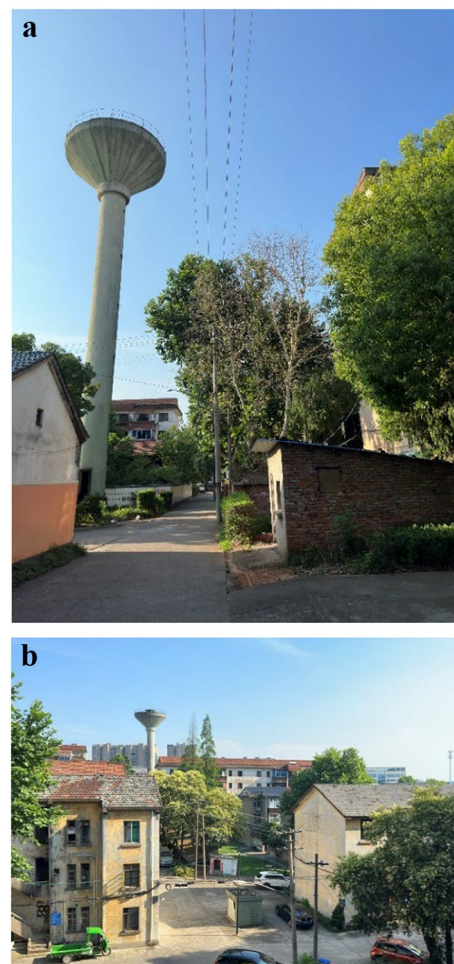


Fig. 11 Water tower (a). Facade of 1960s (b). Tong, Sujun and Yurong Ling. The water tower in the smelter community. June 9, 2023



Fig. 12 Kitchen (a), toilet (b), hallway (c) of 1960s. Tong, Sujun and Yurong Ling. Interior of apartments built from the 1960s. June 9, 2023

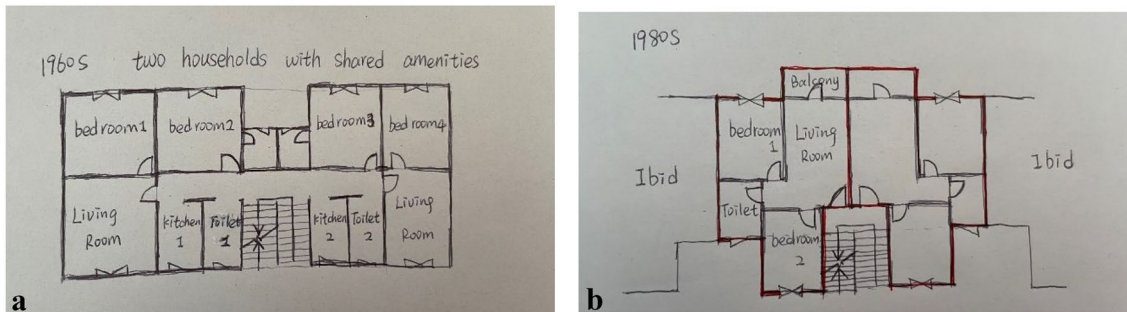


Fig. 13 Floor plan of the 1960s (a) and 1980s (b). Ling, Yuying. Sketch of the floor plan of the 1960s' apartments. June 10, 2023. Ling, Yuying. Sketch of the floor plan of the 1980s' apartments. June 10, 2023

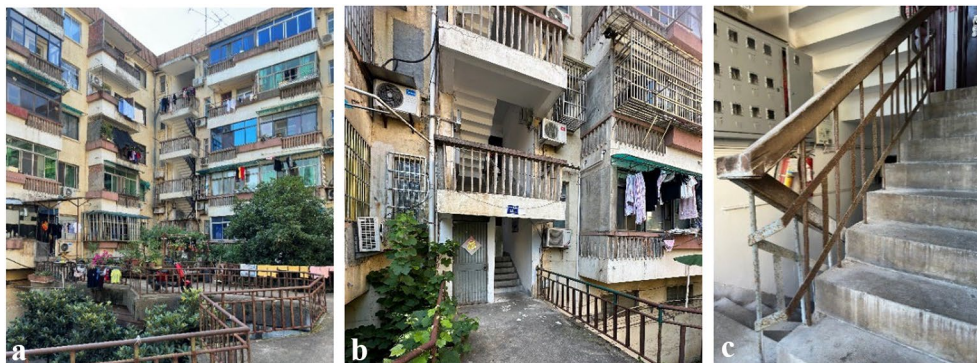


Fig. 14 Photos of 1980s building: exterior (a), entrance (b), staircase (c). Tong, Sujun and Yurong Ling. The apartment built from the 1980s. June 9, 2023

In contrast, the 1980s saw the construction of larger, more modern apartments for smelter employees. Building #9, for example, featured six floors, with each floor containing three identical layouts. Unlike the 1960s apartments, each household had its own living room, toilet, and balcony, offering an area of 50–60 square meters per unit.

During the visit, we found that there was considerable amount of unplanned (which is also unauthorized) constructions in the community. For example, Residents extended ground floors and enclosed balconies, effectively annexing public spaces to create additional living space. The main reason is that the 50 square



Fig. 15 Unplanned extension: balcony (a), filling (b), ground level (c). Tong, Sujun and Yurong Ling. Exterior of the 1980s' apartments. June 9, 2023



Fig. 16 Masterplan of Hongmei Village. Ling, Yuying. Masterplan of Hongmei Village. June 10, 2023



Fig. 17 Community school (a) and middle school (b). Tong, Sujun and Yurong Ling. Schools built around Hongmei Village. June 9, 2023



Fig. 18 Community kindergarten (a) and Hospital (b). Tong, Sujun and Yurong Ling. Kindergarten and hospital built around Hongmei Village. June 9, 2023



Fig. 19 Facade of Hongmei Village in 1980s. Tong, Sujun and Yurong Ling. Typical apartments in Hongmei Village. June 9, 2023

meters apartment was found increasingly small to meet the new demand.

As a new industrial city, Lanxi's development requires a lot of labor, but the speed of house construction at this time was lagging behind the population boom in the city. During the housing reforms in the 1980s, Lanxi City slowly switched to market economy—exemplified by commercial housing projects. A new housing pattern was thus formed: state corporations purchase land from the government, invest in the construction of housing units; then an employee can buy a unit at a lower price than the market. According to the statistics, from 1991 to 2010, the gross area of commercial housing developed in Lanxi City reached 11 million square meters. As of 2017, the per capita living area in Lanxi City is nearly 47 square

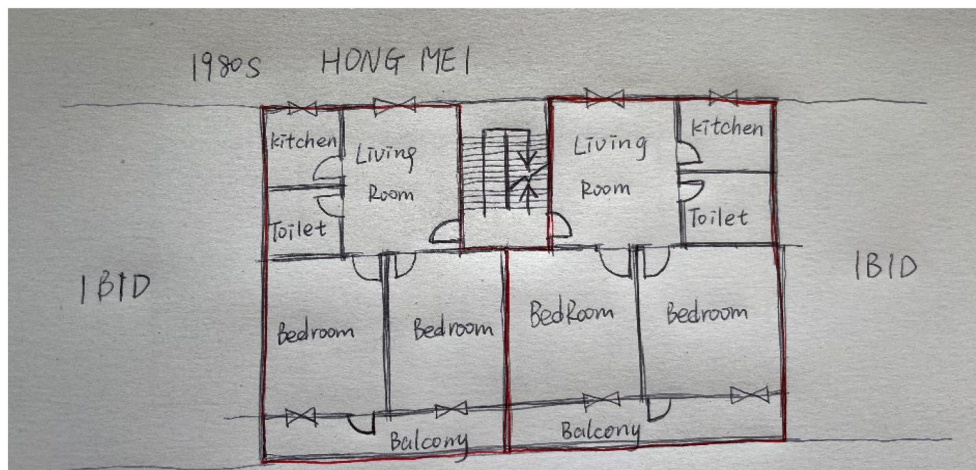


Fig. 20 Floor plan. Ling, Yuying. Sketch of Hongmei Village apartment floor plan. June 10, 2023



Fig. 21 Door (a), toilet (b), living Room (c). Tong, Sujun and Yurong Ling. Interior of a Hongmei Village apartment. June 9, 2023



Fig. 22 Dining room (a), kitchen (b), garden on the balcony (c). Tong, Sujun and Yurong Ling. Living facilities of an apartment in Hongmei Village. June 9, 2023



Fig. 23 *Fenghuang Village*. Ling, Yuying. Warehouse and dormitory in Fenghuang Village. June 10, 2023

meters, while the national average area is 40.8 square meters.⁶¹

Hongmei Village was one of the largest residential communities built in the first wave of commercial housing in Lanxi (around the 1980s). Led by the Housing and Construction Committee of Lanxi City, many state-owned enterprises, including the smelter, raised funds to purchase land and built 18 houses for a total of 615 residents. The shareholders then split the property: building #8 is owned by the smelter and building #9 belongs to a plastic factory. The employees could buy one from the enterprise at a price around ¥7000. As of 2000, the housing price in this community was ¥40,000 per unit. In 2023, the price has inflated to ¥600,000 for a unit.

⁶¹ Lanxi News, “40nain zhufang bianqian jianzheng baixing xingfushenghuo,” web article, Lanxi News website. November 9, 2018. Accessed June 8, 2023. http://47.96.164.84/ljdbold/html/2018-11/09/content_616868.htm (Chinese).

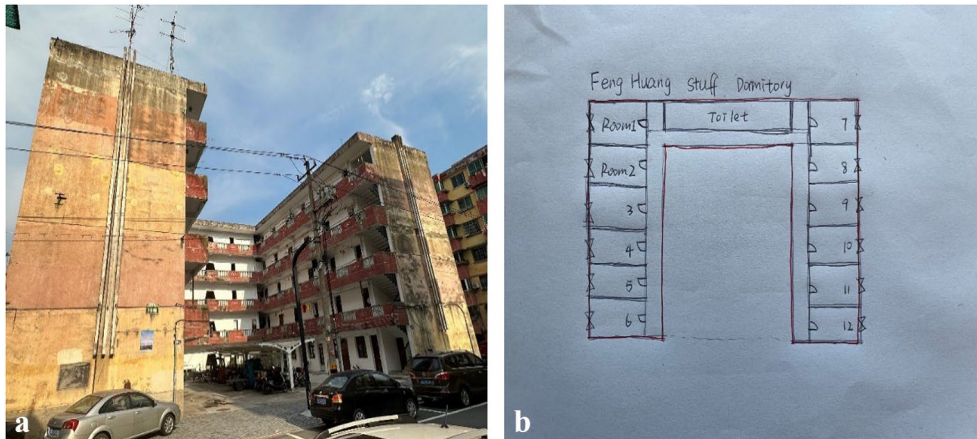


Fig. 24 Façade (a) and Floor Plan (b). Tong, Sujun and Yurong Ling. Exterior of Fenghuang Village dormitory. June 9, 2023. Ling, Yuying. Sketch of Fenghuang Village dormitory floor plan. June 10, 2023



Fig. 25 Inside of Dormitory. Tong, Sujun and Yurong Ling. A typical room in Fenghuang Village dormitory. June 9, 2023

It is worth mentioning that only formal employees can enjoy the low-price purchase, and the so-called formal employees are in fact residents with urban hukou. The

people with rural hukou who flooded into the cities could not obtain a formal contract and hence only working as temporary employees. They are not entitled to the housing discount. Unfortunately, in the end of the day, even formal employees were waiting for their units that were still under construction.

Different from the units built in the 1960s which needed to be close to the factory and support a collective life. In 1980s Hongmei Village, the location of the buildings was not based on the distance to workplace. Surrounding the complex, there are many services like education, health care, etc. Interestingly, there are more commercial functions emerged. The buildings are six-storeys high, and one building is divided in three identical replicas. There is independent staircase in each of them, and two units spread around the staircase. The inner area of each unit is 50 to 60 square meters. The interior of the apartment is moderately decorated

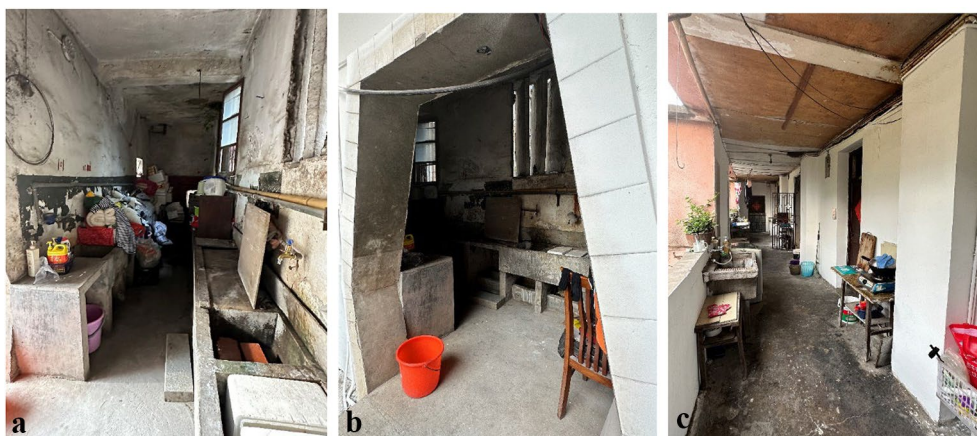


Fig. 26 Shared Laundry room (a), lavatory (b), and exposed kitchen (c). Tong, Sujun and Yurong Ling. Living facilities in the dormitory. June 9, 2023



Fig. 27 Unplanned extension: corridor (a), entrance (b), and laundry space (c). Tong, Sujun and Yurong Ling. Exterior of the former warehouses. June 9, 2023

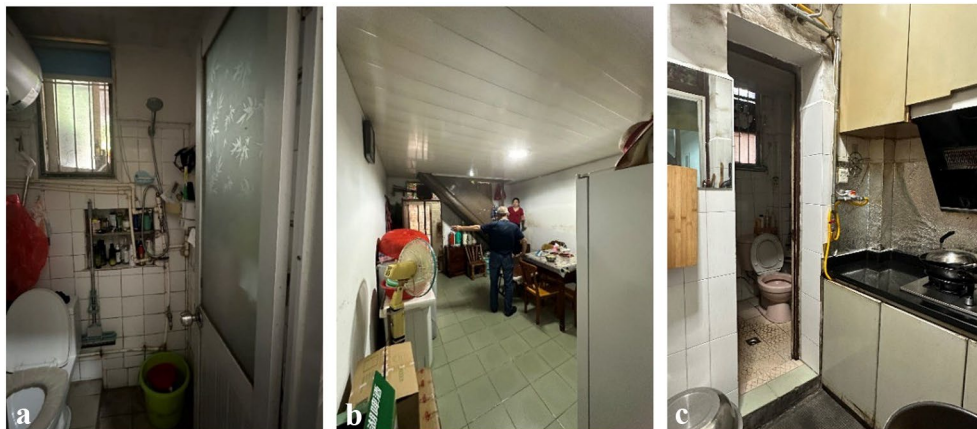


Fig. 28 Toilet (a), living room (b), kitchen (c). Tong, Sujun and Yurong Ling. Interior of the former warehouses. June 9, 2023

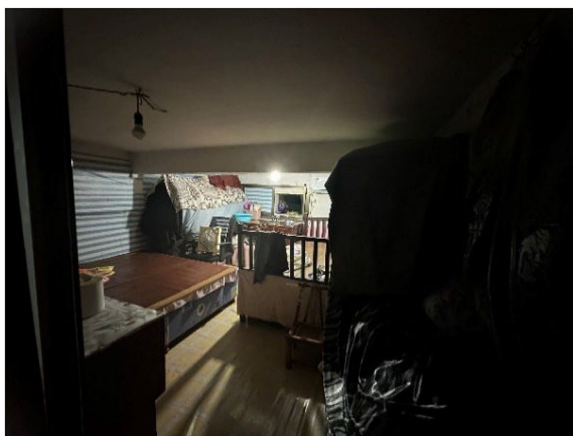


Fig. 29 1.5 m high “attic”. Tong, Sujun and Yurong Ling. bedroom in one of the converted warehouses. June 9, 2023

with a uniform fashion of green-painted walls, window frames, and fine-grained flooring.

Fenghuang village is another typical residence built in the 1980s. It was constructed by the *Lanxi Chemical Factory* (later reorganized and renamed as *Fenghuang Chemical Company Ltd.*) in the 1980s. There sits a five-story apartment building. Although it was built in the 1980s, there are still a lot of shared facilities for each floor such as the lavatory and laundry room. The company was not as big as the smelter, and its fund was limited for employee housing compared to the former.

In the later 1980s when the factory moved to another site, it sold its former warehouse to the employees—it was then separated into smaller compartments and modified into individual houses. The floor height of the houses are 4 m with the ground floor used as a living room (with a height of 2.5 m), and the second floor is

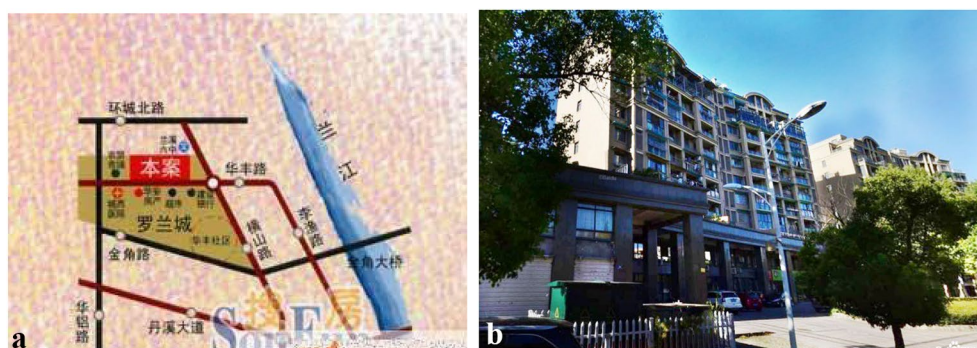


Fig. 30 Poster plan (a) and façade of Luolan city, 2000 (b). The planned community of "Luolan city." Unknown date of publish. Image courtesy of Luolan city Developer. Tong, Sujun and Yurong Ling. The main gate at "Luolan city" community. June 9, 2023

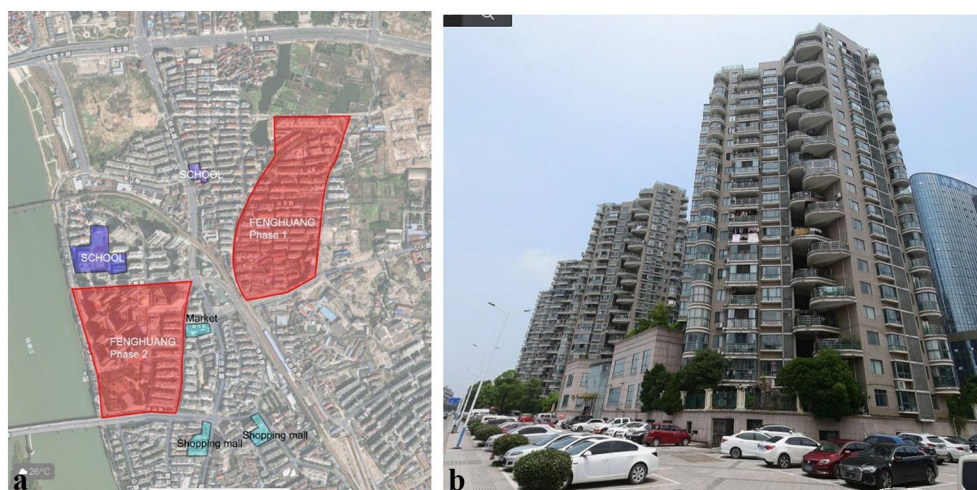


Fig. 31 Map (a) and façade (b) of Shantianyujing city, 2000. Ling, Yuying. "Shantianyujing city" and former Fenghuang factory community. June 10, 2023. Photographed by Sujun Tong and Yurong Ling. The facade of "Shantianyujing city." June 9, 2023

used either as a bedroom or storage. Because the warehouse was partitioned by residents themselves, the floor height varies from unit to unit, and each family has its unique position for staircase.

In the new millennium, the former glory of the large factories began to fade. Many either faced bankruptcy or were restructured under private ownership. Consequently, their land was sold to developers, leading to the demolition of old factory structures to make way for new commercial housing projects. The smelter was no exception to this trend. The forementioned *Luolan city* was built on top of the land formerly owned by the smelter. It was expected to reappropriate the public service of the smelter community—unlike the masterplan in the early 2000s, only a small portion was actualized on North of the smelter community. On the other hand, *Shantian yujing city*, another commercial housing complex was built on the property which used

to belong to *Fenghuang Chemical Company*. If the housing shortage was caused mainly by the political factors, this transformation underscored the economic dynamics of the issue in the new century. In major cities, housing supply lagged behind job opportunities, while smaller cities like Lanxi grappled with commercial redevelopment challenges and a limited job market. Lanxi was, after all, a lower-tiered city compared to Shanghai, the giant only three hundred kilometers away (Fig. 35).

Socialism with Chinese characteristics

Building a socialist economy with Chinese characteristics was a slogan advocated in the early days of the Open and Reform policy. However, in recent years, the socialist aspect of this model has come under increasing doubts, while the notion of Chinese characteristics is only more affirmed. The issue of housing shortage is a global phenomenon, yet China

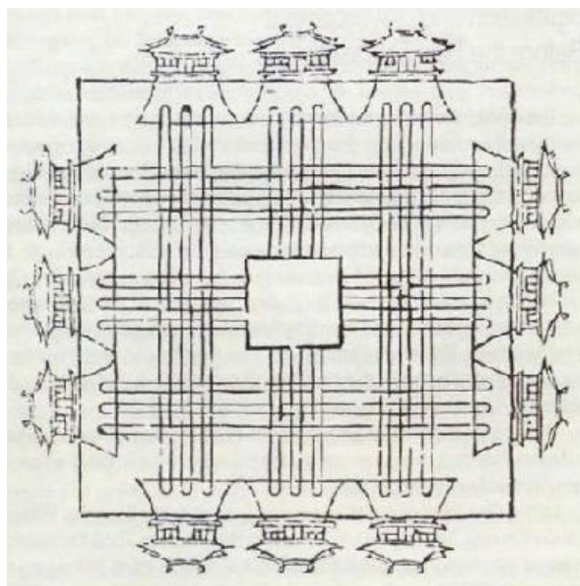


Fig. 32 Ideal city. Wang Cheng (Zhou) Plan of an ideal capital. In *The Six Ancient Capitals of China* (Vancouver: Chinese Cultural Center, 1986), 14

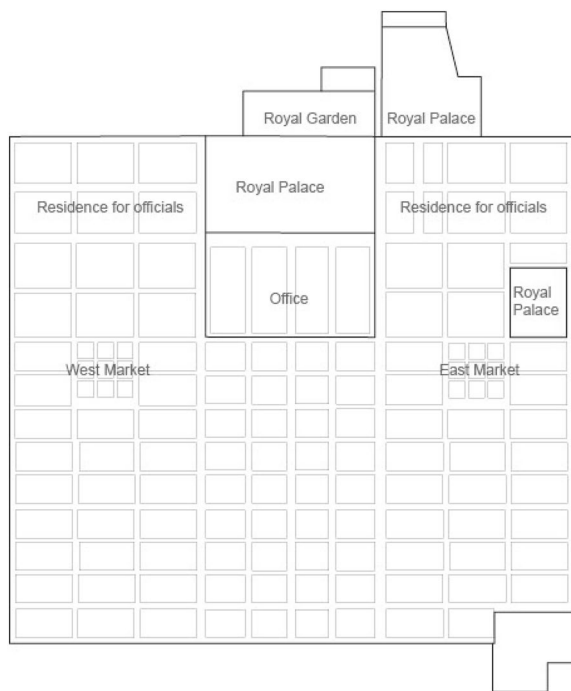


Fig. 33 The urban layout of Chang'an. Zhang, Feihao. The urban layout of Chang'an. March 23, 2020

presents unique contributing factors to this problem. To gain a better understanding of this phenomenon, we must broaden our focus beyond Lanxi City.



Fig. 34 Tents outside of Building 1, Piazza Leonardo da Vinci. Ling, Yuying. Tents outside of Building 1, Politecnico di Milano. May 27, 2023

Firstly, we need to examine the role of Chinese tradition and values in urban planning. The Confucian state has historically been structured around a hierarchical system, with the emperor at the pinnacle, followed by *shi* (government officials and scholars), *nong* (farmers), *gong* (craftsmen), and *shang* (merchants) in a descending order. Although the social status of merchants has significantly increased since the collapse of the Qing dynasty, it still does not rival that of government employees. This hierarchical structure has had a profound influence on Chinese urban planning, dating back to ancient times and continuing to the present day. The urban hierarchy directly reflects this ideology, as evidenced by the placement of the imperial palace in the center of early city layouts.

This model was adhered to by Chinese dynasties for centuries, and Chang'an, the capital of the Tang dynasty, was no exception. With some degree of modification, the core of the capital consisted of its palaces in the north, surrounded by residences of aristocrats and highly ranked officials. The significance hierarchy dropped as distance increased, radiating outward. Blocks of ordinary people were not close to the palace, and this spatial layout persisted even after the monarchy was abolished in Chinese history.

In 1928, the nationalist government initiated urban renovations in Nanjing, the newly inaugurated capital. Major constructions included roads and modern buildings. Boulevards were introduced for the first time in China, and they were built after demolishing existing homes. Families of government officials were accommodated in modern apartments within close proximity to the urban center.⁶² While the low-cost rowhouses were

⁶² Jie Tan and Meng Lin Wang, 2012, "Strategies of China Ancient Capitals Planning in Ritual Society," in *Applied Mechanics and Materials*, 174–177: 1596.

	1960s	1970s	1980s		1990s	2000s	
	(Public housing era)		(Transitional era)			(Commerical era)	
	The Smelter Community	Fenghuang village	The smelter community	Hongmei village	Fenghuang village	Shantian yujing city	Luolan city
Purpose of construction	Lanjiang Smelter Corporation employee housing	Fenghuang Chemical Corporation employee housing	Lanjiang Smelter Corporation employee housing	Employee housing shared by many corporations	Fenghuang Chemical Corporation employee housing modified from warehouse	Redevelopment of Fenghuang Chemical Corporation land after it moved	Lanjiang Smelter Corporation went into bankruptcy, land purchased and redeveloped privately
Unit area	15m ² (internal)	20m ² (eight ppl)	50m ² (internal)		40m ² (internal)	135m ² (internal+shared)	120m ² (internal+shared)
National average unit living area	No data		39.48m ² (1983)		77.6m ² (2000)	82.4m ² (2000)	
Private amenities	Independent bedroom with basic furniture, sharing one living room, kitchen and toilet	Twelve rooms sharing one lavatory on a floor	Independent living room, kitchen, lavatory, and balcony		Independent living room and kitchen, unplanned partition	Raw (nothing)	
Property rights	Coporation owned		Corporation & private owned		Property transfer	Private owned	
Initial price	¥400 yearly rent	Free	¥10,000 purchased		¥10,000 purchased	¥3600/m ²	¥1000/m ²
Current price	Difficult to sell, ¥1,000 yearly rent	¥200-300 monthly rent	¥8,000/m ²	0.9-1w/m ²	Difficult to sell	13,500/m ²	9,300w/m ²
National per capita income	¥511/year		¥762/year		¥2140/year	¥9371/year	
Public infrastructure	Built by corporation, freely accessible by employees	Very little infrastructure provided	Government-led infrastructure planning		Original infrastructure & Government planning		
Strategy against housing shortage	Maximize shared space to save cost		Publicly invested and discount provided to employees		Refurbishing old facility to save cost	Satisfying massive housing demand by enouraging private capitals	

Chart 1 Case study Conclusion. Ling, Yuying. Case study conclusion. June 12, 2023

built outside the city wall, away from job opportunities.⁶³ During the golden decade from 1927 to 1937, the population of Nanjing increased by 36% percent, yet statistics showed that a quarter of its population lived in marginalized shanty towns.⁶⁴ In Shanghai, a project called Rose Villa were designed and built with the concept of garden city, the very idea originated in Britain in 1902 and made its way to Japan in 1905.⁶⁵ In 1931, this concept was systematically translated to Chinese language. The Rose Villa, launched in 1933, was the product of this European idea.⁶⁶ It should be noted that unlike the original guidance of Ebernezer Howard, the Japanese translation and promotion of the book has a shifted focus: people must be provided with adequate housing to maintain social stability.⁶⁷ The Chinese version inherited this objective, thus making “garden city” a measure of social engineering – which it surely implies but with a broader scope of radical social reforms.⁶⁸ However, projects like Rose Villa in Nanjing at the time were only accessible to the

privileged few. Despite grand promises of equality for all citizens, communist officials were consistently prioritized in house allocation and other essential resources. This doesn't mean that the spatial hierarchy persisted; rather, it reflected the core belief that officials were the intellectual elite and thus valuable assets to the country, while the needs of commoners were, in practice, secondary to those of officials.

Another aspect crucial to understanding Chinese urban layout is the cultural obsession with monuments. Throughout Chinese history, every emperor had a tendency to destroy remnants of the previous regime, including its architecture, as symbols of cultural and moral corruption. It then became the responsibility of the new emperor to erect new monuments to signify a fresh start and establish harmony. Therefore, the legitimacy of the regime was closely tied to its architectural achievements. Despite the New Cultural Movement and the founding of the Republic of China, which declared a complete departure from old traditions, the impulse of rulers to assert their legitimacy through architectural means persisted. In 1928, alongside the introduction of boulevards in Nanjing, other national projects such as the National Central Museum and the Sun Yat-sen Mausoleum were also initiated. Chiang Kai-shek, the de-facto president of Kuomintang (KMT) of then,⁶⁹ was haunted by a severe crisis

⁶³ Carmen Tsui 2011, “State Capacity in City Planning: The Reconstruction of Nanjing, 1927–1937,” in *Cross-Currents: East Asian History and Culture Review*, no.1: 28–29.

⁶⁴ *Ibid.*, 25–26.

⁶⁵ Cecilia L. Chu and Calvin Z. Liang, 2019, “Tianyuan Dushi: The Garden City, Urban Planning, and Visions of Modernization in Early-Twentieth-Century China,” *Traditional Dwellings and Settlements Review* 31 (1): 43.

⁶⁶ *Ibid.*, 48.

⁶⁷ *Ibid.*, 44.

⁶⁸ *Ibid.*

⁶⁹ The Nationalist Party of the Republic of China, the ruling authority of the country at the time.

after he instructed a massive purge against communists in Shanghai in April, 1927.⁷⁰ The bold act was not only fiercely criticized by communists, but Chiang's nationalist comrades from Wuhan, the national capital in 1927.⁷¹ Chiang must find a way to resolve the disputes and secure his power. Inaugurating Nanjing as the national capital is the beginning of this campaign: Sun Yat-sen, the founding of the Republic of China, has promoted the city as the capital before.⁷² The construction of a mausoleum for the founding father and a national museum unequivocally solidified the city as the political center of the country, as Chiang now controlled both the ideology and history, representing both the future and the past. Notably, one of the boulevards, Zhongshan Road, was specifically constructed to welcome the remains of Sun Yat-sen and was named after him in his memory. Similarly, the Communist Party (CCP) initiated ten major projects for the tenth anniversary of the People's Republic, together with the infamous Great Leap Forward movement, all under the banner of the "people," such as the construction of the "Great Hall of the People." Although the ten projects were later curtailed to seven due to economic hardships,⁷³ still, we can see the continued dedication to monument constructing of the CCP from its predecessor, KMT.

The economic reforms initiated since the late 1970s have afforded local governments significantly more autonomy to implement their infrastructure programs. This has been evident nationwide, with a substantial allocation of resources, including funds, manpower, and urban space, directed towards the construction of monuments such as squares, sculptures, and an over-supply of freeways and railroads. The poetic aesthetic evident in many early-2000s Chinese urban planning prospective is a reflection of this thirst for approval from, say, "heaven," often prioritized over essential social programs like public housing.

For a greater good

Throughout the history of housing in Lanxi City, a typical industrial cluster, we can directly observe the evolution of housing shortage in Chinese society. In the initial phase, commonly referred to as the "fundamentalist communist era," housing shortages were primarily caused by hukou restrictions, slow construction processes, and corporate profitability concerns. The solution involved maximizing public functions to promote collective living, thereby

saving construction costs. However, not everyone, even among formal employees, could be assigned satisfactory housing units. Political movements and shared infrastructure mitigated inconveniences to some extent: the former diverted attention from the insufficient housing issue, while the latter reduced living costs through subsidies. Nevertheless, the welfare benefits of urban residents during this period far exceeded those of rural communities.

The second phase can be divided into a transitional period and the era of the market economy. During the social transition of the 1980s and 1990s, housing shortages were evident in rising costs and a slow rate of new housing unit replenishment. The introduction of new national standards for improved housing units further slowed construction and strained budgets. The gap between supply and demand expanded with the relaxation of residence restrictions, or hukou, with urban residents still enjoying priority status due to their exclusive access to price discounts when purchasing former dormitories. Infrastructures were no longer solely built by individual corporations but were planned by the government as a whole, which allowed developers to catch up with construction. Meanwhile, former industrial plants were either sold to private developers and demolished or repurposed for new uses. Paradoxically, the privileged individuals who already owned homes had no concerns about the high prices of commercial housing, while newcomers without access to urban welfare had to pay from their own pockets—highlighting social injustice. In the new millennium, as the Chinese economy surged, real estate bubbles led to a shortage of affordable housing, while older neighbourhoods could not meet the demands of modern living. The country's imbalanced economic landscape caused agglomeration in some cities and economic recessions in others. Addressing housing shortages required a comprehensive rearrangement of industries, from the Great West Development to Village Revitalization, aimed at narrowing the economic gap between the developed East and underdeveloped West, as well as between urban and rural areas.

The issue of housing shortage involves a broader discussion of social justice, encompassing both the quantity and quality of housing. It has persisted in human societies since the advent of settled cities, making it unlikely to be fully resolved in the near future. Perhaps the discussion within the Chinese context is more dramatic, not only due to the communist commitments but also the drastic transformations of its society over the past 74 years. In fact, we can discern questions of systemic exploitation and discrimination underlying conflicts between rural and urban China and between East and West China. Stripping away biases, we essentially face

⁷⁰ Tsui, "State Capacity in City Planning," 5.

⁷¹ Ibid.

⁷² "Nanking: A Historical Background," web article, Stanford University. Last edited and saved on August 17, 2023. Last accessed on September 4, 2023. <https://web.stanford.edu/~kcook/history.html>.

⁷³ Tao Zhu, 2011, "Building Big, with no Regret," *AA Files* (63): 108.

one question: more equality or more efficiency? This is not an attempt to oversimplify the comparison between communism and capitalism but rather to illuminate the eternal dilemma faced by any society. For decision-makers, this is far from an easy choice. The differential social welfare system and hukou contradicted Mao Zedong's beliefs, but he also recognized that China had to extract absolute surplus from its villages to develop industries—though not all industries, only those vital to national security. Equalizing total wealth may seem fair, but it often comes at the cost of efficiency due to a lack of competition. Two utopias advocate for the greater good: one asserts that everyone is equal, while the other argues that one is better when they produce more. Human societies have perennially grappled with navigating between these two gravitational forces. Housing shortage is not unique to China; it is a universal enigma that tests our conscience and our ability to create a better world for as many people as possible.

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YYL contributed interviews and photographs, FHZ contributed historical research.

Author information

FHZ studied with YYL at Politecnico di Milano in the school of Architecture Urban Planning Construction Engineering, Master of Science program.

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Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

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Competing interests

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