

# Un-gated and Integrated Work Unit Communities in Post-socialist Urban China: A Case Study from Beijing

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**Abstract:** Much like other post-socialist cities, Chinese cities experienced dramatic changes after economic reform. The *danwei*, or state-owned work unit, was once a fundamental building block of Chinese cities. In addition to being the basic form of economic and social organization, *danwei* communities defined Chinese urban development before reform, taking the form of gated, walled-off combined factory and residential areas. This paper focuses on spatial changes at the neighborhood scale in *danwei*, by selecting the *Tongrentang* pharmaceutical factory in Beijing, China during the time period between 1973 and 2006 as a case study. Through archival material and interviews, this paper describes how the community changed from gated, boring, solidified and strictly constrained work units to un-gated, vibrant, mixed-use and flexible urban neighborhoods. This case study in urban China provides implications for planning professionals and policy makers. By properly redeveloping these brownfields, traditional *danwei* communities may change to become un-gated, livable, accessible, integrated, and sustainable in the post-socialist era. The implication for current transition theory is that despite the similarity to Central and East European countries, urban China has a local context and unique spatial changes that should be embraced in future transition studies.

**Keywords:** Post-socialist Cities; *Danwei* Community; Spatial Change; Transition Theory;

Work Unit; Beijing

## Introduction

Since the 1990s, transitioning post-socialist cities have received worldwide attention, due to their radically changing spatial structure. . Not only has this occurred in China, but a similar phenomenon has also emerged in Central and Eastern European (later abbreviate as CEE in this paper) cities. As large-scale traditional industry declined, many CEE cities saw residential suburbanization, inner city renewal and gentrification, residential segregation, rising housing prices, and the growth of gated or guarded communities (Sailer-Fliege, 1999; Hirt & Stanilov, 2007; Isolde Brade, 2009). These post-socialist cities seemed to follow the same path as many western cities, leading some scholars to develop *convergence theory*, comparing the experience of post-socialist cities with western models to explain the spatial changes (Burawoy, 1994). This theory highlights similarities in the changes between different transition countries, and predicts they will follow the same path of becoming modernized and westernized as developed countries.

However, not all socialist countries have followed this path. It is predicated on the path of political and economic change—radical reform or velvet transformation (Burdack & Rudolph 2001; Brade, Herfert, & Wiest, 2009). Post-socialist cities experienced more diverse changes during the transition from a planned to a market economy, particularly in China. Many rapidly changing Chinese cities do not completely follow the path of western development. Understanding urban China's spatial changes and alternate paths of development may enrich transition theory globally, and provide valuable information for policy-makers and urban planners.. Chinese cities may share some common attributes with post-socialist CEE cities, but have still maintained Chinese characteristics. Small-scale, community-based case studies are necessary in order to uncover the unique features of transitional urban China in the context of current transition theory based on CEE countries.

While most research on spatial change in post-socialist cities work at a regional or municipal scale, this paper uses a neighborhood scale in order to uncover the mechanism for spatial change within a local context. From this perspective, *Danwei*, or work units, emerge as an important point of reference in understanding transitional changes in Chinese cities. They represent the basic urban and

social building blocks of pre-reform cities at the neighborhood scale. The integration of previously closed-off, isolated *danwei* communities and their subsequent transition into mixed-use, livable spatial forms is the focus of this paper.

A *danwei* is a special organizational unit incorporating factories, social service institutions, governmental agencies, and residential compounds. They were the fundamental social and economic management structure in cities during China's planned economy period (Walder, 1986; Lu, 1989). In China, political, economic and social institutions changed dramatically with the advent of Chairman Deng Xiaoping's Economic Reform in 1978. In conjunction with the fiscal decentralization of central power, land and real estate markets were gradually established in the 1990s, triggering a new round of rapid urban growth. Under these circumstances, *danwei* communities were forced to change because they were the basic building block of pre-socialist cities,

Current studies on *danwei* mainly consider the economic and sociological issues of their impact on the reform of state-owned companies and working class families. One school of thought believes *danwei* are still in transition, and suggests that working class residents depend even more on the resources from their work unit today than during the planned economy period (Logan and Bian, 1993). On the other hand, another group of scholars note the many difficult transitions *danwei* communities have faced as they adapt and evolve into modern, sometimes closed residential districts (or in Chinese, "xiaoqu") (Lu, 2005).

, Many Chinese employees still currently work in a *danwei* of some kind, even though many traditional *danwei* have fallen bankrupt or have changed into other types of institutional arrangements. While the existing studies on China's domestic transition period focus mainly on politics and sociology, more attention should be paid to these communities' spatial changes and their profound influence on traditional working class neighborhoods (Chai & Zhang, 2009). Undisputedly, the residual impact of centralized planning still lingers in *danwei* communities. Most references to the topic of transition still focus on CEE cities, leaving an opening to explore the transition path of Chinese cities.

This paper uncovers community spatial restructuring in the context of transitional urban China,

and how urban forms of post-socialist neighborhoods are based on traditional *danwei* elements. It depicts how the transition from a planned to a market economy influenced *danwei* communities to evolve. In response to institutional changes marked by this shift, the removal of gates and other spatial reforms brought openness, land use and neighborhood amenities. . By using a case study of one *danwei*, a pharmaceutical factory in Beijing, the paper explores why these changes happened and what their influence on the original working class residents were. . The implication of this paper is to not only enrich current transition theory in China beyond the usual discussion of CEE countries, but to also understand the importance of how and why of urban form changes at the neighborhood scale.

This manuscript is organized into five sections. The next section includes a literature review on post-socialist city transitions in CEE countries, community changes, and *danwei* studies. Section three presents the data and methodology for interviews and surveys. Section four describes how the *danwei* community, a brownfield site, transitioned from a gated, spatially isolated and monofunctional mode of production, to an open and livable urban community integrated with its surrounding urban areas. Section five compares this case to other cases in CEE countries, and provides some implication for neighborhood planning in China during the transition period.

## **Literature Review**

Work-units organized by a central government not only appear in China, but are also widely spread across socialist and formerly socialist countries. In light of this, we may find some clues for *danwei* community changes and their impact on cities from the experience of CEE countries. As the Iron Curtain lifted, the rise and fall of these working-class communities directly influenced the restructuring of urban space. However, what happened under the Bamboo Curtain may not be a simple copy of its counterpart in CEE cities; it reveals unique features to globally enrich future transition theory.

This section will review references focused on three issues: 1) How did post-socialist cities change and how does the current theory depict the process? 2) How did working class communities

change in CEE cities? 3) How are *danwei* communities spatially organized and will they change in a different manner when compared to other CEE cities?

### *Spatial changes in post-socialist cities and challenges to convergence theory*

In the period of planned economies, socialist cities were mainly made up of working class communities (in China, *danwei* communities). The socialist city is an aggregate of such individual communities. It is usually depicted as a compact urban form with a homogenous land use consisting of large-scale industrial complexes and residential areas (French & Hamilton, 1979; French, 1995; Smith, 1996). The layout of socialist cities is highly standardized and systematic, with strict planning under central control (Sagan, 2001). For example, giant administrative buildings and grandiose squares for political gathering usually occupy the city center, symbolizing the supremacy of socialist state power. A series of work units lay within the immediate surroundings. At the periphery, there are large-scale, multi-storied apartment buildings, stoic in their impassivity and indifference (Fisher, 1962; Kwok, 1981; Sailer-Fliege, 1999).

However, after market reforms, dramatic physical and social transformations occurred within most socialist cities. The bankruptcy and reorganization of former state-owned work units caused a decline of traditional working class communities, a condition post-socialist cities must adapt to, (Sailer-Fliege, 1999; Kotus, 2006). Four factors are influencing changes in post-socialist cities. 1) The traditional near-suburban industrial areas face decaying work units and shrinking state funding. This is compounded by new foreign investments in private organizations, often resulting in the emergence of new CBD areas which concentrate offices for financial and commercial activity. 2) Some former working class communities in prime locations experience gentrification. This causes rents to rise, forcing out non-skilled workers, completing their fall from vaunted to vanquished. 3) The tie between jobs and housing breaks with the shift from state-owned to private enterprise, which increases commuting distances and urban traffic. 4) More and more local businesses appear after the state-enforced supply quotas are lifted. New forms of businesses such as 24-hour drug stores, super

markets, malls, and shopping centers become popular (Sailer-Fliege, 1998).

In light of similarities to western cities, modernization theory, or subsequently named convergence theory, was proposed to explain the process of transition (Burawoy, 1994). This theory argues that socialist CEE cities will follow the same exact path as western cities, by reshaping themselves to eventually catch up to western cities (Sztompka, 2006). But recently, convergence theory has been questioned because it suggests urban development has a predictable, linear trajectory, neglecting the influence of globalization and the diversity of local contexts. Simultaneously, recent reflections on transition theory argue that too much emphasis has been placed on political and social changes after the collapse of socialist states (Elster, Offe, & Preuss, 1998; Sztompka, 2006), while overlooking the accompanying spatial changes (Zaniewski, 1989).

Recent literature challenges the convergence theory by arguing for multiple trajectories toward modernization, shifting to emphasize the diversity of city transition paths based on regional policy and cultural differences (Burdack & Rudolph, 2001; Brade, Herfert, & Wiest, 2009). Correspondingly, in order to further understand the diversity of transition paths in post-socialist cities, local-scale, community-based, context-specific, first-hand case studies are urgently needed.

### *Collapse and isolated trends of working class communities in CEE countries*

Recognizing that *danwei* communities are an export from the Soviet Union, it is useful to trace the changes of working class communities in CEE countries after the collapse of the Soviet Union in the 1990s. The first advocate for establishing working class communities in the Soviet Union was Bogdanov (1923) as part of a program to reform proletariat cultural organization patterns in 1918. It aimed to educate and organize the working class residents, even after working hours, with collective living, bringing culture in step with industry (Bogdanov, 1923). Under Stalin, an increasing amount of working class communities were established near industrial complexes all over the USSR, partially to minimize commuting distances. Eventually, the main function of these working class communities became distribution of rationed goods and organization of employees' lives according to production

needs (Bray, 2005).

However, the working class communities underwent serious decline after the collapse of the USSR in 1990. As most state-owned factories went bankrupt in CEE countries, wealthier families left traditional working class communities to seek better living environments. Those able to, left, and only very low-income families stayed while maintenance of neighborhood facilities grounded to a halt (Kovács, 1999). Although the trend of decay was somewhat disproportionate, almost all of these working class communities in the CEE experienced significant decline during the transition period (Berey, 1997).

The central location of traditional working class communities was exploited by developers through redevelopment projects due to the rapid rise of housing prices (Sailer-Fliege, 1999). In most cases, new housing was not affordable for the original working class families, driving less-skilled laborers out of their homes (Kovács 1999). Furthermore, newly built communities continue to isolate themselves with walls as their socialist factory predecessors had done, aggravating urban segregation (Sailer-Fliege, 1999). These new gated communities are especially prevalent in Moscow, Warsaw and Sofia, and remain detached from the city proper (Sztompka, 2006; Brade, Herfert, & Wiest, 2009).

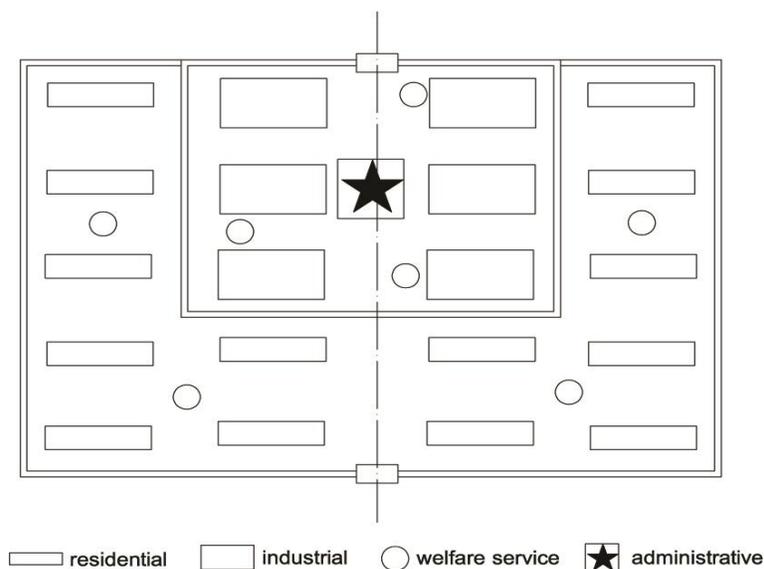
### *The origin and diversified future of danwei communities in Chinese cities*

An export from the Soviet Union after the foundation of the People's Republic of China, *danwei* was introduced as an ideal urban form to promote industrialization and consolidate proletarian interests. It became widely spread under the instruction of Russian planning professionals in the first five year plan (Lu, 1989; Li, 1993). Shortly after, most industrial plants, official institutions, social undertakings, universities and stores in urban China fell under these state or collectively owned *danwei* organizations (Bray, 2005).

As the basic building block of society in urban China during the planned-economy period (Bray, 2005), *Danwei* were not only companies providing employment opportunities, but also welfare institutions providing a wide range of services including everyday meals, child-care, medical care, and

housing; a system which can be described as taking care of people “from cradle to grave” (Walder, 1986). Through this lens, *danwei* can be defined as a unique spatial terrain which is state or collectively owned, maintains some degree of self-government, and includes social facilities such as housing, hospitals, and schools (Lu, 1989; Li, 1993).

This paper highlights *danwei* as basic communities rather than a form of social or political organization. Spatially, the standard *danwei* community includes an industrial or commercial work unit and its surrounding, enclosed residential area (Chai & Zhang, 2009). The typical layout pattern of *danwei* communities is enclosed, highly organized and thoroughly planned, and usually has two layers of walls (Fig.1). The core area within the walls includes an administrative building located at the center of the factory, symbolizing absolute power over the whole territory; with several manufacturing mills and service facilities arrayed in an orderly fashion surrounding it, symbolizing how all production and day-to-day functions fundamentally serve the supreme power (Bray, 2005). Outside of the first set of walls, enclosing the production core, are apartments for employees and their families, and community facilities operated by the *danwei* such as dining halls, grocery stores, day cares, clinics and schools (Lu, 1989; Li, 1993). The advantage to this layout model is that housing, work, and daily service facilities are located near each other, reducing travel times and traffic (Li and Li, 2000).



**Fig.1.** the closeness and highly ordered *Danwei* community with core area and surrounding residential

area

(Source: Draw by the authors.)

However, in the market economy period, the disadvantages of *danwei* community layouts have gradually become a problem for both residents and planners (Lu, 2005). First, the close proximity of industrial and residential areas causes exposure to air pollution, threatening the health of *danwei* residents. Second, the zoning scale of *danwei* communities is too large to encourage mixed-use land, the lack of which usually results in mundane and unfriendly landscapes. Third, *danwei* communities are usually walled and access strictly controlled, blocking traffic and increasing traffic jams during rush hour. Therefore, because of their ubiquity and lasting impact, changing *danwei* communities are an important aspect of the restructuring process in China's urban form during the transition period. Despite the disadvantages, *danwei* form remains important to this day and the lingering impact of *danwei* still constrains the mobility of Chinese urban residents (Li & Siu, 2001; Huang, 2005).

There are two competing hypotheses for predicting the future of *danwei* communities in urban China. The disappearance hypothesis argues that due to deep structural reforms, *danwei* communities will disappear and be replaced by new urban communities based around common living areas (Peng, 1997). The residual impact hypothesis, on the other hand, suggests that although the traditional *danwei* institution no longer exists, their lingering impact will remain in the new era (Lu, 1999). Especially as social welfare continues to shrink and housing prices continue to rise, many employees are seeking jobs in traditional state-owned *danwei* despite the low wages. Because the two parallel hypotheses have so far remained on a theoretical level, once again, neighborhood scale case studies will be able to provide sound evidence.

Generally speaking, *danwei* communities have been and still are an important element of urban China, and are invaluable to understanding the restructuring process of transitional Chinese cities. Although the example of working class communities in other socialist countries experiencing transition shows a pattern of decline leaving a long-lasting influence on urban space, it may not be sufficient to conclude that Chinese cities will follow the path suggested by convergence theory,

marked by decaying traditional industry, booming Central Business District areas, unaffordable housing prices and long distance commutes. Because socialist state power did not collapse in China, *danwei* communities have experienced a more diversified transformation process and have wrought a multi-disciplinary influence on Chinese cities in the transition period. The following sections will focus on the unique features of the changes to *danwei* communities and their influence on urban China, with a critical eye on CEE examples and convergence theory.

## **Data and Methods**

### *Case Study and Investigation*

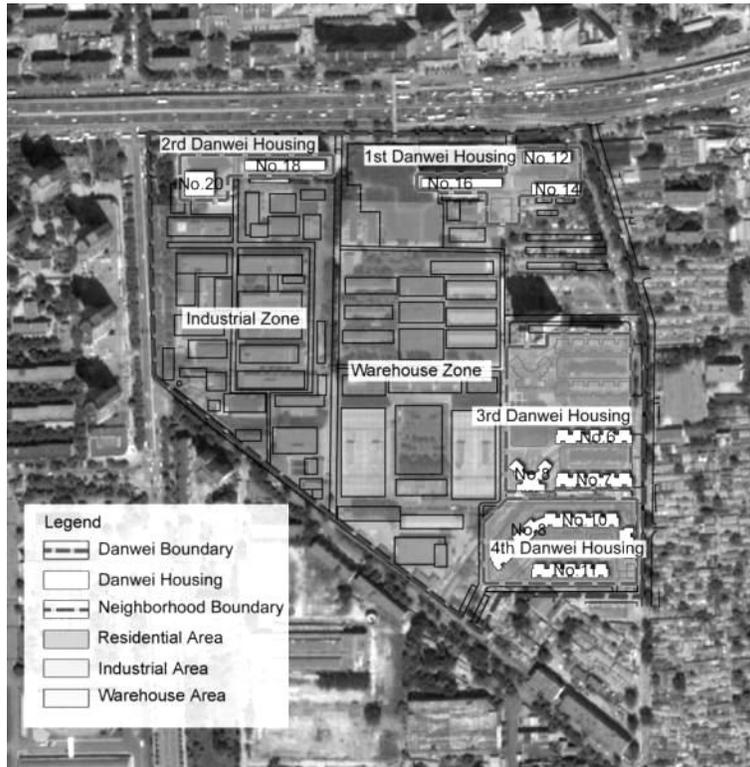
Beijing, as the capital of China, provides a good typical case to study *danwei*. The city is home to a variety of *danwei*, covering all administrative levels from central and municipal to district and local. Beijing also comprises all conceivable types and sizes of *danwei*.

This paper uses *Tongrentang Chinese herbs* pharmaceutical factory as a typical mid-sized example of a *danwei* community<sup>1</sup>. *Tongrentang*, a national brand, has had a long history of making Chinese traditional herbs since the Qing Dynasty. It is well regarded as having successfully transformed in the 1950s from a family industry to a state-owned enterprise,, and as a successfully reformed state-owned work unit in the Economic Reform. After modernizing production, it contributed to the economic growth of Beijing all through the 1990s. And in the new millennium, it moved its core production lines to an industrial park in the new town of Yizhuang, gradually transitioning its original location to entirely residential and tertiary services according to the Beijing City Master Plan of 2004.

As a traditional *danwei* community, the core factory of *Tongrentang* is surrounded by an array of residential apartments. It is located near the 3<sup>rd</sup> south ring road, and covers about 20 hectares. Although its industrial area and residential area are separated physically, they share most of the same service facilities and amenities (Fig.2).

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<sup>1</sup> The *Tongrentang* South 3<sup>rd</sup> Road campus used to be a famous Work Unit prototype in both newspapers and books of the architecture and planning fields in the 1980s.



**Fig.2.** Location and layout of *Tongrentang Danwei* community in Beijing

The history of the *danwei* community can be divided into four stages responding to the trajectory of transition in China. First, the initial construction and production stage: from 1973 to 1978. At the end of the Cultural Revolution, *Tongrentang* was allocated a parcel of land in the south suburb of Beijing. Second, the zoning and promoting production stage: from 1979 to 1985 it recovered production lines and expanded according to a new construction plan. Third, the intensive production and updating stage: from 1986 to 1992 it rectified its development strategy to market conditions. And finally, the production transfer stage: after 1993 the core production lines were relocated to a suburban industrial park and the residential and service functions were strengthened.

There were four residential areas providing housing for employee families as part of the Work Unit campus: the No.1 residential area was first built in 1976 after the main production zone was almost completed (Fig.6). It had two five-floor brick-structured buildings and about 300 apartment

units. Although the living condition was poor according to contemporary standards, it was designed to be allocated only to the cadres' families as reward of their loyalty in starting from scratch at the *Tongrentang* campus. The No.2 residential area had three 20-floor high-rise tower buildings, which were built from 1985 to 1993. Larger in both unit and size, it provided decent housing for large working class families. The No.3 residential area had two six-floor good-quality buildings that were built in 1996, and the allocation was just one year before the bench-mark year of 1998 when the central government officially terminated housing allocation of State-owned enterprises. Similar to the No.1 residential, these apartments were mostly divided among the cadres as good place to retire. Due to the Housing Management Division's policies, some residents in the No.1 and No.2 residential areas have the priority to exchange their housing into the newly built apartment as a way of improving living conditions for the silver employees. The No.4 residential area had only one 25-floor tower building built in 2001, which was actually part of a commercial real estate project. Different from the others, this building was sold rather than allocated to employees, only at a price lower than the market value. Thus, it is not surprising that the residents in the last building are wealthier families.

### *Data Collection*

Data was collected from the local planning archives and construction records from the Housing Management Division of *Tongrentang*. Two rounds of face to face and in-depth interviews were also conducted. The first stage trial-pilot interview collected 60 samples stratified from the four residential areas. In every residential area, 15 samples were randomly chosen (tagging group A1, A2, A3 and A4, see Table 1). The authors knocked on the doors in one neighborhood from apartment building unit 1-1, and asked if anyone in the household would like to participate in the interview. If residents declined or nobody answered, the authors moved to the next door. This process continued until 15 samples were gathered within each residential area. The 20 minute interviews were structured to acquire personal information, job type, history about factory, neighborhood satisfaction, and whether they would like to be interviewed again.

Next, in the second in-depth interview, we chose ten samples out of the 60 interviewees in the first stage (tagging group C). The second stage samples were selected according to their willingness to continue participating in the interview process, while also trying to pick up various interviews among different departments, administrative levels, and residential areas. Thus, a potential interviewee was skipped if there were already more than three in the same occupation, department or residential area (Table.1). The interviewees in the second stage include seven *danwei* employees from various occupations and administrative levels and three new non-*danwei* residents (Table.1).

**Table.1.** The attributes and information of the interviewees

First Round Sample Number	Second Round Sample Number	Occupation and Division	Gender	Age	First Year at the <i>Danwei</i>	Residential Area inside Community
A1-01		Team Leader of the Logistics Office	M	50	1976	No.1 residential area
A1-02		Staff in the Basic Construction Division	M	52	1976	No.1 residential area
A1-03		Teacher at the Child Care Center	F	51	1985	No.1 residential area
A1-04		Staff in the Quality Control Division	F	57	1976	No.1, No.4 residential area and moved out
A1-05		Director of the Publicity Division	F	53	1976	No.1 and No.3 residential area
A1-06		Chairman of the Labor Union	M	66	1964	No.1, No.3 and No.4 residential area
A1-07		Staff in the Procurement Division	M	52	1976	No.1 residential area and moved out
A1-08	C-02	Chief of Security	M	70	1964	No.1 residential area
A1-09		Chief of the Logistics Office	M	53	1976	No.1 and No.3 residential area
A1-10		Accountant in the Finance Department	F	53	1974	No.1 and No.3 residential area
A1-11		Director of Manufacturing	F	57	1976	No.1 residential area
A1-12	C-01	Director of the Basic Construction Division	M	61	1962	No.1 and No.3 residential area
A1-13		Team Leader in the Packaging Workshop	M	52	1976	No.1 residential area
A1-14		Team Leader in the Rare Materials Division	M	55	1976	No.1, No.4 residential area and moved out
A1-15		Chief of the Dining Hall	M	65	1964	No.1 and moved out

A2-01		Staff in the Basic Construction Division	M	44	1982	No.2, No.4 residential area and moved out
A2-02		Worker in the Mechanized - Packaging Workshop	F	50	1978	No.2 residential area
A2-03		Worker in the General Production Workshop	F	48	1978	No.2 residential area
A2-04	C-03	Worker in the Medicinal Workshop	F	68	1957	No.2 and No.3 residential area
A2-05		Salesman	M	48	1985	No.2 residential area and moved out
A2-06		Machinist in the Granule Workshop	M	42	1985	No.2 residential area and moved out
A2-06		Pharmacist in the R&D Department	M	46	1986	No.2 residential area and moved out
A2-07		Staff in the Housing Management Division	F	39	1987	No.2 residential area and moved out
A2-08		Infirmity Nurse	F	48	1978	No.2 residential area
A2-09		Driver in the Logistic Office	M	52	1978	No.2 residential area
A2-10		Staff in the Housing Management Division	M	43	1988	No.2 residential area
A2-11		Safety Supervisor	M	53	1978	No.2 residential area
A2-12		Accountant in the Basic Construction Division	F	43	1985	No.2 and No.4 residential area
A2-13		Staff in the Housing Management Division	F	38	1988	No.2 and No.4 residential area
A2-14		Worker in the Regent Workshop	F	49	1978	No.2 residential area
A2-15		Public Affairs Secretary	M	37	1988	No.2 residential area
A3-01	C-04	Worker in the Granule Workshop	F	48	1979	No.3 residential area
A3-02		Saleswoman at the Herbal Medicine Hospital	F	45	1982	No.3 residential area
A3-03		Engineer in the Purification Workshop	M	40	1987	No.3 residential area
A3-04		Researcher in the R&D Department	F	41	1988	No. and No.4 3 residential area
A3-05		Manager of the Herbal Restaurant	M	44	1986	No.3 residential area
A3-06		Worker in the Granule Workshop	F	46	1985	No.3 residential area
A3-07		Vice President of the Factory	M	39	1988	No.3 residential area and moved out
A3-08		Staff in the Housing Management Division	F	43	1987	No.3 residential area
A3-09		Team Leader in the Packaging Workshop	F	43	1988	No.3 residential area and moved out
A3-10		Director of the Production Department	M	49	1982	No.3 residential area
A3-11	C-11	Mr. Zhao (Wireless	M	63	2003(move in)	No.3 residential

		Equipment Factory)				area
A3-12		Ms. Wang (Hongshi Oil Paint Factory)	F	54	2004(move in)	No.3 residential area
A3-12		Mr. Li (National Swimming Team)	M	48	2003(move in)	No.3 residential area
A4-01	C-05	Worker in the Granule Workshop	F	47	1989	No.4 residential area
A4-02		Manager in the Herbal Medicine Hospital	M	52	1985	No.4 residential area
A4-03		Director of the Yizhuang Branch	M	46	1989	No.4 residential area
A4-04		Chief Secretary in Liquid and Table Branch	M	51	1988	No.4 residential area
A4-05	C-06	Team Leader of the Sedimentation Workshop	M	55	1980	No.4 residential area
A4-06		Manager in the Marketing Department	F	44	1992	No.4 residential area
A4-07	C-07	Director of the Liquid Medicament Branch Factory	M	65	1965	No.4 residential area
A4-08		Doctor at the Herbal Medicine Hospital	F	47	1996	No.4 residential area
A4-09		Project Manager of the Yizhuang Branch	M	49	1992	No.4 residential area
A4-09		Staff in the Housing Management Division	F	41	1992	No.4 residential area
A4-10		Vice President of Sales	M	37	1995	No.4 residential area
A4-11		Mr. Liu (Terrazzo Factory)	M	33	2005(move in)	No.4 residential area
A4-12	C-12	Mrs. Li (Manager of a restaurant)	F	35	2005(move in)	No.4 residential area
A4-13		Mrs. Zhang (No.18 High School Teacher)	F	36	2005(move in)	No.4 residential area
A4-14		Ms. Xue (Model of Ruili)	F	22	2006(move in)	No.4 residential area
A4-15	C-13	Mr. Ye (Freelance Journalist )	M	27	2006(move in)	No.4 residential area

The second-round interviews were semi-structured. Each one lasted about 40 minutes, and was recorded, transcribed, and coded. They covered the following topics: 1) Personal and family attributes, including employment and income status; 2) Information about apartments, including ownership rights, area, rooms, facilities and neighborhood environment; 3) Commuting information and accessibility to public services and amenities, such as schools, hospitals and stores; 4) Residential history of the household, including satisfaction of their current living environment and willingness to

move again. .

Based on the local planning archives and construction records, a current map of the *Tongrentang Danwei* community was created. By tracing back the spatial changes over time according to the interview records, maps in historical periods were prepared for further discussions. The interviewees provided rich and vivid details on the spatial changes over time from multiple perspectives, which could not be observed by simply scrutinizing the planning or construction archives. For example, the functional change of a building from an old style *Danwei* grocery to an attractive convenient store was referred to by many interviewees but was not mentioned in the archives. In addition to describing the spatial changes, the interview records also provided abundant information on the interviewees' feelings and reflections about these changes. These were coded and attached to locations on the maps for the discussion below.

## **Empirical Evidence**

### *The Gate Removal Trend and Collapse of Walls*

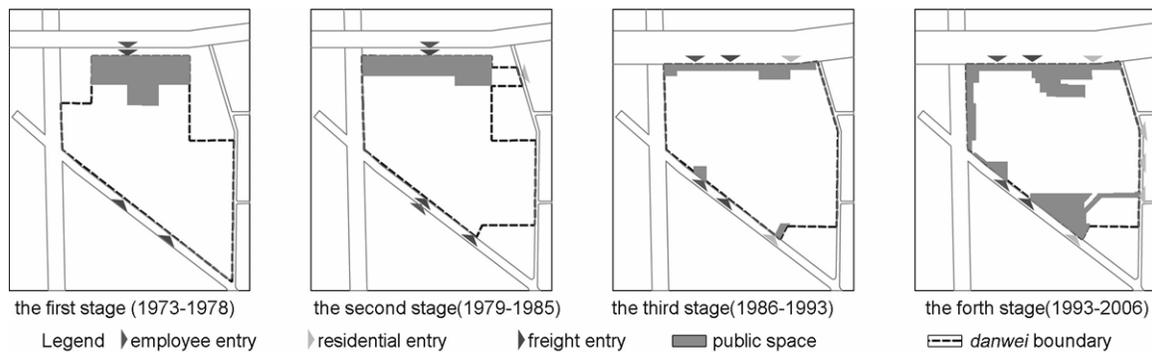
The traditional *danwei* community from the planned economy period is usually portrayed as a guarded and walled Bolshevik fortress used to consolidate the proletarian regime (Bogdanov, 1923). To some extent, it resembles gated communities in contemporary Western cities (Yang, 1993). The isolation of *danwei* communities often receives sharp criticism from Western planners for being a huge block which hinders regional transportation and causes traffic jams (Kwok, 1981).

Unlike the changes of working class communities in CEE cities (Glasze, 2003), the case of *Tongrentang* shows an integrated example. During the planned economy period, walls and gates were important tools to ensure security and supervise workers by preventing strangers from entering (Lu, 2005). But later, *danwei* residents complained that entry and exit through limited gates was inconvenient.

In consideration of these issues, the number of entrances has increased since the early 1980's, and entry-exit security and controls have been loosened. Throughout the *danwei*'s four stages, the number

of entrances rose from three to nine (Fig.3). The proportion of public space also expanded. In terms of spatial pattern, the large public space for political gathering in front of the main building gradually broke down and became several small, green fields along the boundary, making these open spaces more accessible to residents nearby (Fig.3).

Factory managers increased the number of gates as a way to optimize traffic and logistics, increasing the efficiency of the production core. They also removed the brick walls and replaced them with more approachable wood or iron fences as part of an attempt at public outreach and brand marketing.



**Fig.3.** Increase in entries and public spaces to *Tongrentang Danwei*

Many residents responded that getting around is much less time-consuming after adding the new entrances:

*“...previously, my husband and daughter had to walk approximately 30 minutes through my Danwei and the main entry in order to get to the bus stop. It was simply ridiculous, because the bus stop would have been just beyond our apartment if there wasn’t a wall! Now, it’s better after (they added) a new entry and it only takes three minutes to get to the bus...”*

(Interviewee #C-04, a worker from granule workshop)”

This trend of wall removal and integration reveals the end of isolation for *danwei* communities, and starkly contrasts to similar communities in CEE countries (Brade, 2009). In many CEE cases, high-income families invest in guard services for their community, as a reaction to public safety issues

and social instability. Thus, gated-communities began to emerge in many CEE case studies, such as in Warsaw (Kovács, 1999), Prague (Sailer-Fliege, 1997) and Sofia (Hirt & Stanilov, 2007). This might not be surprising considering that Chinese cities did not experience grievous community decay and social segregation after economic reform; most of the traditional *danwei* communities were actually assimilated into, rather than isolated from the surrounding urban area.

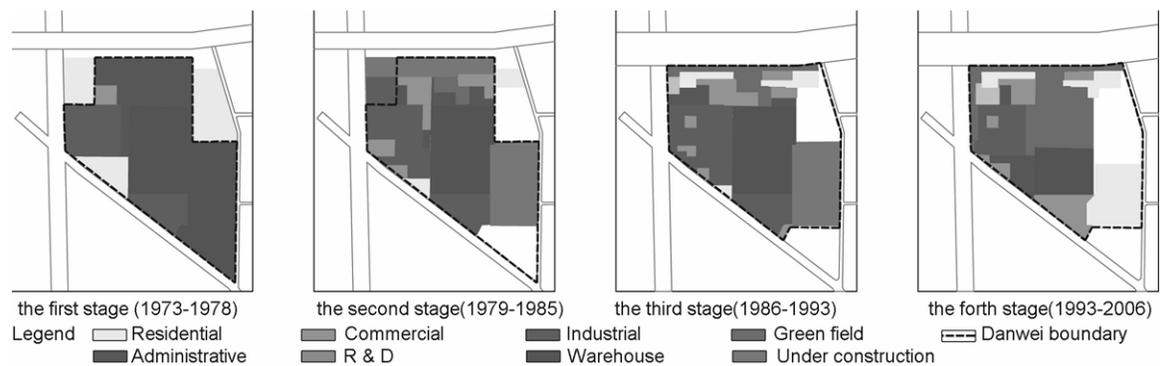
### *Fragmentation, Diversification and Functional Shift of Land Use*

In the planned economy period, industrial land uses were given priority in site planning and usually covered a large proportion of *danwei* land area (French, 1995). Thus, suburban areas of socialist cities are usually covered by large-scale industrial zones (Sailer-Fliege, 1999). Presently, although many case studies in CEE countries investigate the trend of de-industrialization and the rise of tertiary industry during the transition period (Musil, 1993), few studies explore the details of what happens inside the *Danwei* community. Only recently has the alleged spatiality (In Chinese, *kong jian xing*) of Chinese *danwei* received special interest (Bray, 2005; Lu, 2005).

Just like most transitional cities, Beijing is undergoing a shift in its industrial structure. In the case of *Tongrentang*, traditional industrial and warehouse land usage has shrunk and tertiary and residential land usage has grown. The land used for warehousing (-36.7%), administration (-15.3%) and industry (-7.1%) is decreasing, while the land for green fields (+25.8%), residential (+18.0%), commercial (+13.4%) and R&D (1.9%) is increasing through the four stages. The change in land use indicates that the *danwei* community changed from a single production machine to a multi-functional urban area.

Accompanying major functional change, *Tongrentang* land use became more spatially fragmented and increasingly mixed-use. Large, homogenous industrial and warehouse land parcels were divided into smaller parcels, diversifying land use (Fig.4). In the planned economy period, *Tongrentang* site planning (as portrayed in Fig. 1) strictly followed the Russian model in the first stage: administrative land located in the center, symbolizing the leadership of the Party, is surrounded

by large-scale industrial and warehouse areas (Fig.4, the first stage).



**Fig.4.** Mixed-use and fragmentation of land use structure in *Tongrentang Danwei* community

Then the *Tongrentang Danwei* experienced a trend of diversification in land use during the second and the third stage, when newer land usage types began to appear in order to satisfy modern functions such as R&D, marketing and logistics. By the end of the final stage in 2006, industrial land occupied a small proportion of total land area and left large spaces for new green fields (Fig.4, the fourth stage). The trend of industrial withdrawal follows the major Beijing planning objectives of shifting from secondary to tertiary industry (*Tui Er Jin San*) and building a city green belt, as laid out in the 2004 Beijing Master Plan.

Resident interviews show a complicated response to the change in land use, as a retired team leader expressed:

*“Frankly speaking, the environment is much better than before. (There are) more green spaces, which has been good for our health. ...But, they cancelled lots of workshops, and our working class good old days have disappeared??... (Interviewee #C-06, a retired team leader of medicament workshop)”*

*Tongrentang* seems to be experiencing a similar process of fragmentation in the transition period like other post-socialist working class neighborhoods. For example, in the old working-class quarter of Wilda in Poznań, Poland, private investors took advantage of the area’s central location to build new housing and commercial projects after 1993. These infill developments increased the neighborhood

density, and reinforced spatial fragmentation and social segregation. In this case, while the plots with potential were redeveloped into modernized and vital areas, other parts of the neighborhood were left dilapidated and obsolescent (Kotus, 2006).

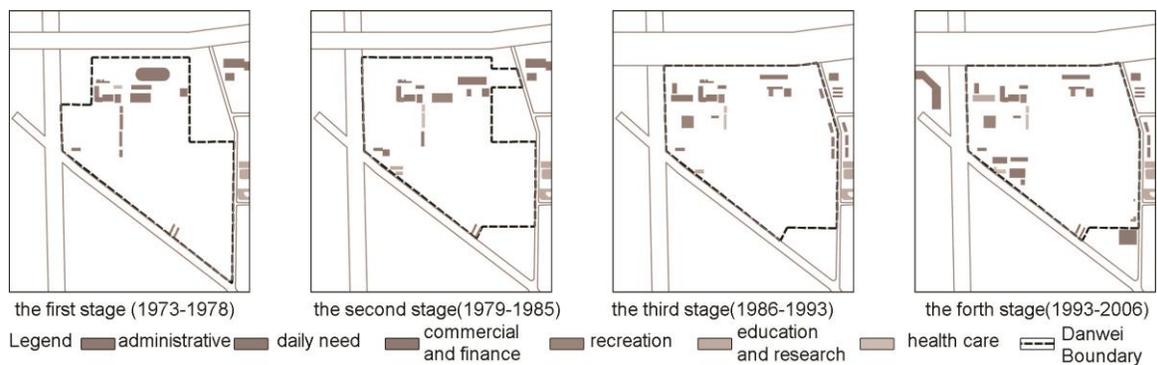
Though *Tongrentang*'s transition appears similar to the trend of fragmentation, their driving forces and transformational mechanisms are very different. In the case of *Tongrentang*, the rearrangement did not happen at the cost of greater social stratification as in other infill redevelopment cases in CEE countries (Sailer-Fliege, 1999; Brade, Herfert, & Wiest, 2009). In contrast, with the new investment in commercial and other public-service land, the life quality of former working class families improved rather than declined. It is called fragmentation only because the large, single plots changed into small and mixed-use ones, and did not result in blighted working class neighborhoods left to suffer the cost of social isolation.

### *Diversification and Commercialization of Neighborhood Facilities*

The predecessor of *danwei* communities during the Stalin era in Russia was designed with a variety of public facilities to act as a *social condenser* and strengthen collective spirit in everyday life (Bogdanov, 1923). These public facilities took many forms including kitchens, dining halls, bathrooms, clinics, kindergartens, grocery stores and theaters, which meant employees never had to leave and the work unit could concentrate and groom proletarian culture (Bjorklund, 1986). In urban China, the planned economy period is characterized by frequent product shortages. During this period, *danwei* communities played an important role in distributing daily needs according to a quota system, while guaranteeing the normal operation of everyday life through welfare facilities (Walder, 1986).

*Tongrentang*, as a mid-size *danwei*, was required to provide basic living facilities for its employees in its first stage because it was a brand new factory, built up from a sparsely populated farm. In the transition period, the layout of facilities changed from a hierarchical, self-sufficient, exclusive and centralized pattern, to the present pattern that is decentralized, boundary-vague, open to the public, market driven, and a gradual integration into the surrounding urban service system through

the four stages (Fig.5). Specifically, there were four major changes: 1) A new community center replaced the main administrative office to become the real neighborhood central building. 2) Daily service facilities increased and were separated from traditional industrial facilities. 3) New amenities developed in the most attractive locations, such as fancy restaurants, cafe, fitness centers, beauty salons and night clubs. They changed the mundane life-style and fostered new cultural attitudes, especially for the younger generation. 4) Service facilities tended to disperse from central locations to the boundaries. Driven by market interests after economic reform, commercial needs pushed these facilities to cluster near *danwei* boundaries in order to attract more clients.



**Fig.5.** Commercialization and diversification of neighborhood facilities in *Tongrentang Danwei* community

(Source: drawing based on the construction archives of *Tongrentang* and the dictation of interviewees.)

Generally speaking, residents said changes in service facilities made their lives easier and expanded their freedom to make economic decisions. For example, one worker said in their interview:

*“...It was a nightmare to wait in a long queue in the narrow and smelly danwei grocery. Counting the meager food stamps, smiling to the never smiling and unconcerned sales women, ...And the response was always something like ‘Sold out!’...It is much more convenient now, after throwing away those stamps you have a lot of choices in any local store ... (Interviewee #C-03, a worker in a tablets workshop)”*

The commercialization process in the *Tongrentang* case reveals some similarities to other post-socialist cities’ changes in CEE countries (Sailer-Fliege, 1999; Rudolph & Brade, 2005). Again in the

case of Poznań in Poland, large-scale retail facilities and amusement centers appeared in the central city during the post-socialist period, changing the way of life for the residents who now go to supermarkets for one-stop shopping, grab food at McDonald's and spend their leisure time in multi-screen cinemas, displaying a westernized, or Europeanized, life style (Kotus, 2006).

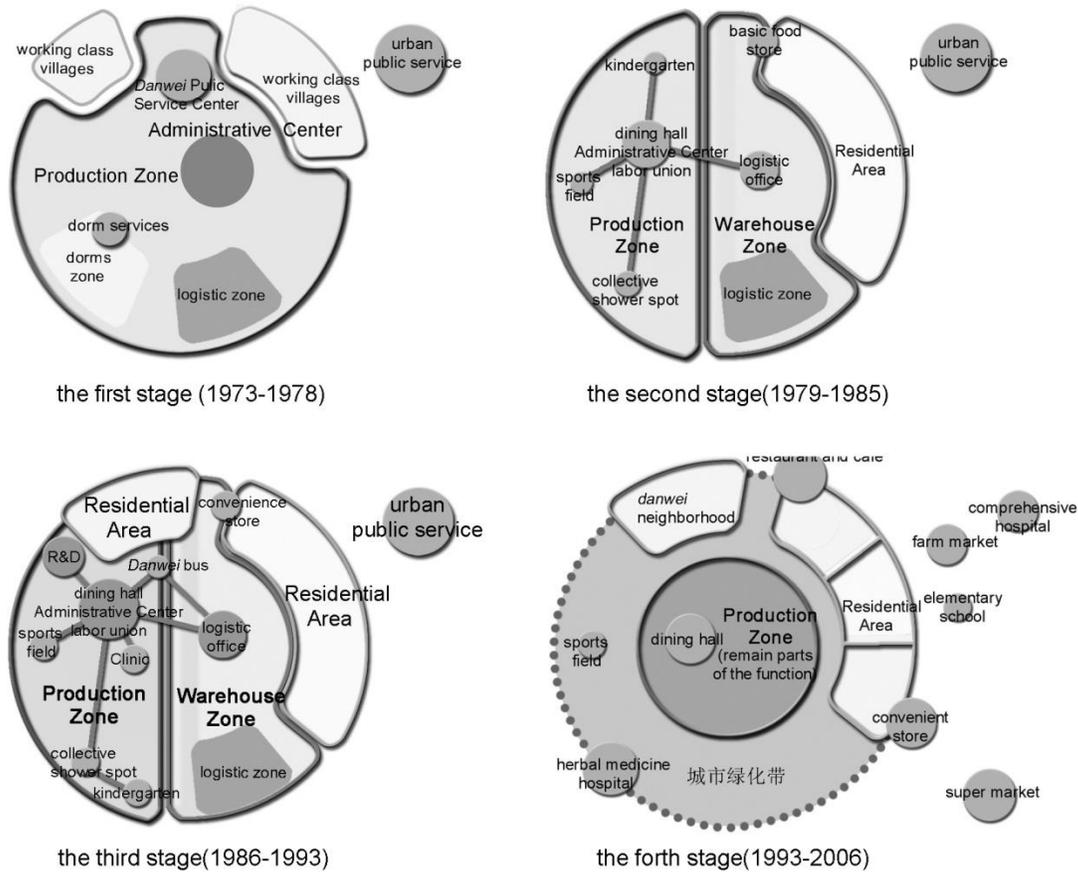
In the case of *Tongrentang*, the de-centralization of facilities likely accelerated the breaking of close-knit *danwei* community ties. Even though the everyday life of *Tongrentang* is much more convenient, it is not completely modernized or western, like some CEE countries, because of these unique facility changes. Even though shopping centers and restaurants have appeared in nearby urban spaces, local residents maintain the old way of shopping; purchasing a daily amount of supplies rather than adopt the one-stop shopping style seen in Western cities. In some aspects, like healthcare and daycare, *danwei* residents still heavily rely on *danwei*-owned facilities because they are more reliable and affordable.

## **Discussion**

Using the case study of *Tongrentang Danwei* in Beijing, this paper explored spatial changes in *danwei* communities during its shift from a planned to a market economy, and their interaction with the surrounding urban context. The Chinese example shows a somewhat different transformation path when compared to a declining working class community in CEE cities undergoing similar transitions. Spatial changes experienced in *danwei* are not as adequately explained by convergence theory as has been suggested (Sztompka, 2006). Rather, they trace a new model described as the shift from gated, homogeneous, production oriented communities to open, mixed-use and living-quality focused urban communities.

In the case study of *Tongrentang*, spatial changes were analyzed across four stages, revealing how the *danwei* changed from a walled-in, boring, self-sufficient, strictly constrained Work Unit into an un-gated, integrated, vigorous, mixed-use, flexible urban neighborhood. Among these factors are the (un-gated and un-walled) changes to the *danwei*, breaking the traditional idea of the *danwei* as a

Bolshevik fortress. In addition, industrial areas decreased and both residential and commercial areas increased, showing a fragmentation and mixed-use pattern of land use. Various commercial facilities have emerged in the neighborhood, making the daily life of *danwei* residents more convenient (Fig.6).



**Fig.6.** Gate removal and integration of spatial form in *Tongrentang Danwei* through the four stages

This neighborhood-scale, context-related case study illuminates two aspects of urban theory. First, it provides an alternative to the common narrative of declining working class neighborhoods in CEE countries. In contrast to the CEE experience of working-class *danwei*-like communities, these communities are not inevitably destined for decay, re-development as gated residential districts (Lu, 2005) or convergence with modern, western style urban forms (Burawoy, 1994). In the *Tongrentang* case, the *danwei* experienced an integration process, changing from a 'production machine' to a

genuine urban community, finally assimilated into the surrounding urban area. This case represents how *danwei* are no longer isolated, segregated Bolshevik fortresses detached from the rest of the city, but instead have successfully integrate into their surrounding neighborhoods.

Second, in the ongoing debate over transition theory, the unique transition path of *danwei* communities in the Chinese cultural and urban context should be highly emphasized. Current studies on post-socialist changes in urban China focus on the similarities with non-Chinese examples, and take pains to find connections with western and CEE experience. However, this case shows that paths of transition are diverse. When different cities experience seemingly similar phenomena, the mechanisms and driving factors of change are entirely different. For example, *danwei* communities experienced a process of gate removal and integration, the opposite of the trend toward gated communities in CEE and Western countries. Even the seemingly similar phenomenon of land fragmentation follows a unique path in Chinese *danwei*. The expected spatial isolation and decay of traditional working-class housing areas that usually accompany infill redevelopment doesn't occur. Similarly, the emergence of supermarkets, restaurants and other commercial neighborhood facilities in *danwei* does not signify that the whole *danwei* community is following the commercialization path seen in CEE countries, nor that the resident's way of life is becoming westernized.

## **Conclusion**

The impact of *danwei* on urban China cannot be overlooked. *Danwei* were the basic building block of China's pre-reform urban spaces, and still preserve the spatial imprint, routine lifestyle and collective memory of the period. The gate-removal and integration trend in *danwei* communities have also greatly influenced the spatial changes of urban form and daily life of many people. For *danwei* residents, the changes have brought a more independent life, expanding the scope and choice of activities when compared to early *danwei* regimentation. For non-*danwei* residents the changes have brought transparency and access. They learned what went on behind the *danwei* walls, and can now enjoy their public space and facilities.

In this vein, the case study of *danwei* in this paper sheds light on the research framework in current transition studies, especially beyond the knowledge of CEE countries. The work unit has long been a hot topic in Sociology and Political Science, while most recently it has become a research interest in the Geography and Urban Planning fields. This paper approaches the work unit from a spatial perspective, combining housing, land use and community issues within the *danwei* domain and context under the transitional period. Although it has been more than three decades since the economic reform, and most scholars agree that the institution of *danwei* has dissolved, its impact still lingers in Chinese cities. Some examples include architectural style, planning approach, demographic lifestyle, and the collective memory of an old era. When considering these issues in relation to housing, land use and community, the spatial perspective in transition studies enriches the research framework and provides future research directions on the topic of transitional cities.

At the same time, the case of *danwei* also provides important policy implications for current urban planning professions. For planning strategies based on the heritage of *danwei* in transitional period, the recommendations for planners may be concluded as “Break the old, add the new, recreate the blue, and borrow the experiences”:

First, in order to create a livable neighborhood, the initial step might be breaking the old by removing gates and walls of the traditional *danwei* community. Making more spaces and facilities within the *danwei* walls accessible to the public could mitigate the unjust welfare arrangement between insiders and outsiders of *danwei*. Breaking the city walls and constructing new streets to pass through a *danwei* community will also help relieve local traffic congested by the huge blocks of *danwei*.

Second, when parts of the traditional *danwei* functions expire, it will be beneficial to add new land use types and amenities to meet the daily needs of contemporary life. For example, new parcels of commercial land could be added into the *danwei* factories, replacing dominant industrial or storage land. Also, new amenities such as fancy restaurants and cafes, modern movie theaters, comfortable shopping centers and gyms will be included in the local plan, keeping the *danwei* neighborhoods attractive, especially for the young generation. Keeping the young generation stay in will help to

maintain the vitality of the traditional *danwei* neighborhood and prevent it from aging and decline.

Third, considering the health of *danwei* residents, it is also important to regenerate brownfields and recreate the blue sky, clean air, and clear water. There is a large amount of brownfields left in industrial compounds, especially due to highly-polluting heavy industries all over Chinese cities. Thus, an environmental treatment process is necessary for urban planners before redeveloping the brownfield for the real estate market. Otherwise, the potential danger in pollution has a high likelihood to still exist and harm the health of residents.

Fourth, borrowing the experiences of neighborhood management in western cities, urban planners and local officials could introduce a property owners committee for high quality maintenance of *danwei* community. For most *danwei*, the Housing Management Division is no longer responsible to provide or maintain housing for their employees. To counter this, the property owners committee might take over the maintenance duties of the community, and prevent neighborhood decay as the counterpart in CEE cities.

Planning professionals should pay greater attention to the future of *danwei* communities. In light of the working class's life-time devotion to their *danwei*, planning professionals should make every effort to reinvigorate these places as livable and friendly communities.

The paper's insights, however, should be taken in light of its limitations. The *Tongrentang* case study only reveals one possible trend out of a variety of *danwei*'s. There are others that went bankrupt, became heavy polluted, or merged with nearby communities. The spatial patterns exhibited in such examples are likely divergent from the one studied here. Also, as much previous research has pointed out, case studies limited to capital cities leave out the vast majority of cities that might present quite a different situation (Kotus, 2006).

Future research may continue the analysis of *danwei* in two diverse directions. On one hand, it needs to construct a comprehensive study framework of *danwei* from a cross-disciplinary perspective, drawing a whole picture of *danwei*'s origin, present, and future. On the other hand, it needs to elaborate on more diversified case studies, especially in western and small cities of China, accumulating details beyond our current knowledge.

*Danwei* communities are important to study. They are a key to unlocking the restructuring of urban China during the transition period, and provide a valuable lens to inform future planning policies for working class communities. Spatial changes in *danwei* not only affect our understanding of socialist cities, but also impact the everyday life of average people. A multi-scaled, cross-disciplinary, global-viewed and evidence-driven framework should be established in post-socialist city transformation, rather than copy the research paradigm and topics of Western CEE cities. As the fate of post-socialist cities draws more and more attention, the study of Chinese *danwei* communities can enrich existing transition theory by its global implications as a positive example.

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