

## Transitional Spatial Structures and Housing Development in Peripheral Shanghai

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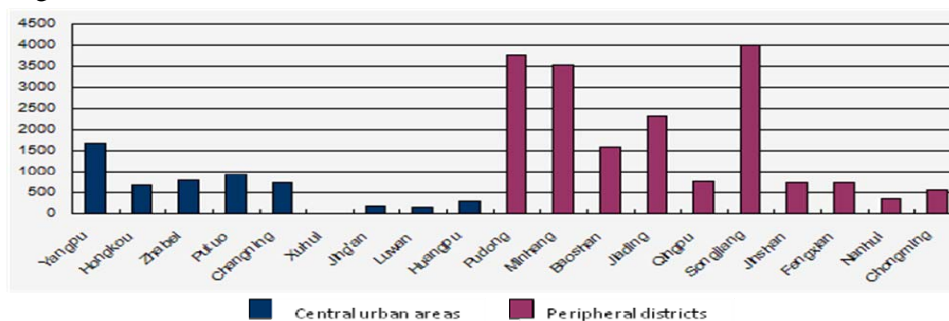
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**ABSTRACT:** Housing construction has been subjected to tremendous transformation since housing reform and land use reform at the end of 1990s within the context of globalization. Meanwhile, residents are stratified from work-units into differentiated neighborhoods which change the peripheral spatial structure dramatically. By examining the persistence of intervention from state on urban housing development, the research argues that housing development from supply-side are still playing a crucial role in shaping spatial structure in peripheral Shanghai. Thus, interrelated spatial factors such as new urban structure, land use and public transportation would also be taken into consideration in variable housing development which will influence the peri-urban spatial structure correspondingly.

**KEYWORDS:** socio-spatial differentiation and polarization, residential spatial structure, housing, Shanghai peripheral areas, spatial planning

### 1 Introduction

Cities under globalization are undergoing enormous changes. World cities either in free market economies or in welfare states are experiencing urban expansion as a result of both alleviating increasing population burden and active relocation of upper class for better environmental source within free market. With the influence of globalization, Chinese cities especially mega-cities such as Beijing, Shanghai and Guangzhou have witnessed dramatic urban expansion likewise as they can't afford housing demand of increasing population from central city, rural areas and other provinces. According to the Priority Projects in Shanghai Master Plan (1999-2020), urban peripheral areas would be the focus of urban construction especially the housing construction for easing housing/population burden and stimulating regional development [Fig.1].



**Figure 1** Housing Projects in different district, Shanghai (2006)

Source: Shanghai statistical yearbook, 2006

### 2 Polarized spatial structure at present

Admittedly, overall statistic of per capita living space [Fig. 2] showed slightly decline from 3.9m<sup>2</sup> to 3.7m<sup>2</sup> between 1949 and 1960, it rose steadily afterwards. With the adoption of housing commercialization, the per capita living space climbed from 5.2m<sup>2</sup> in 1985 to 8.8m<sup>2</sup> in 1997 dramatically and reached 16.9m<sup>2</sup> in

2008. Rapidly increasing housing construction and improvement of living conditions indicate success of releasing housing burden the past decades. Nevertheless, Shanghai peripheral development experienced uneven housing distribution and unwanted socio-spatial polarization.

**2.1 Uneven housing distribution**

Unlike the revitalization of residential space in central city, housing structure at urban peripheries has experienced most dramatic diversifying transformation with interrelated impacts of housing reform and market mechanism in post-socialist context [Fig.3] (Logan et al., 1999; Li, 2000; Wang, 2005). Work-units which used to be the dominant housing provision during socialist era have been replaced by large quantities of mushrooming commercial housing projects (type 2) into which residents were stratified not only in the light of their income inequality but according to their socio-economic status inherited from socialist era (Wu, 2001; Logan et al, 1999). Huge planned residential settlements for medium-low income groups; upper-end housing projects within medium scale which imply the creation of a privileged housing class in Shanghai’s real estate market in comparison with the situation before 1949; revitalized new Linong as a heritage of traditional housing styles and compensated settlements for passive relocations are also market-oriented housing. Meanwhile, the system of state work-units (type 3) continues to play a role in the organization of urban space in the post reform period. Affordable housing and low-rent housing driven by state which acts as social housing for low-income groups accommodate parts of residents who used to live in former work-units. New staff dwellings for both municipals and work places also evolve from former work-units. Apart from the new constructed housing projects, dilapidated houses (type 1) accounted for a considerable market share: shacks which are forced to the peripheries; urban villages which originated from rural residential villages become preferable relocation choice of floating population.

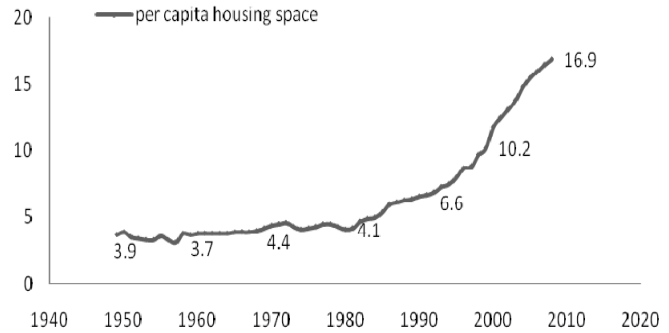


Figure 2 per capita housing space in Shanghai (unit: m²)  
Source: Shanghai Statistic Yearbook, 1950-2009

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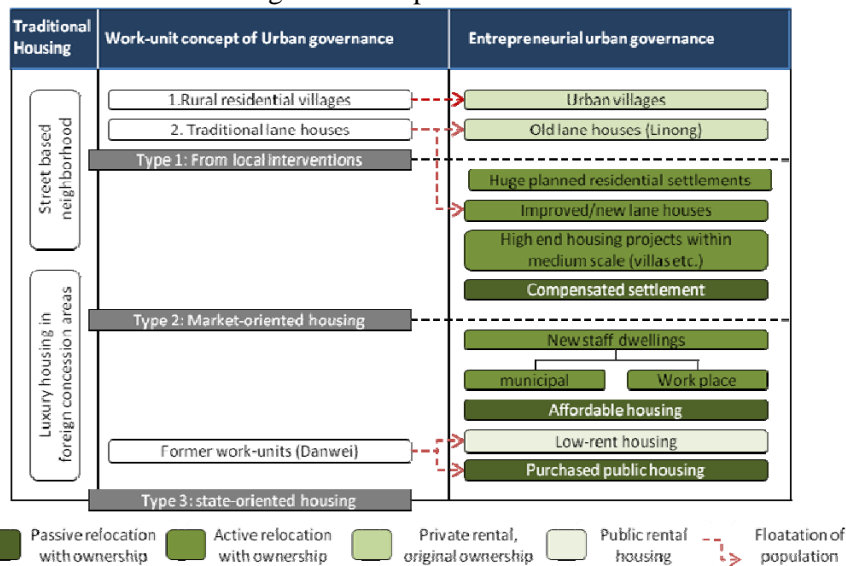
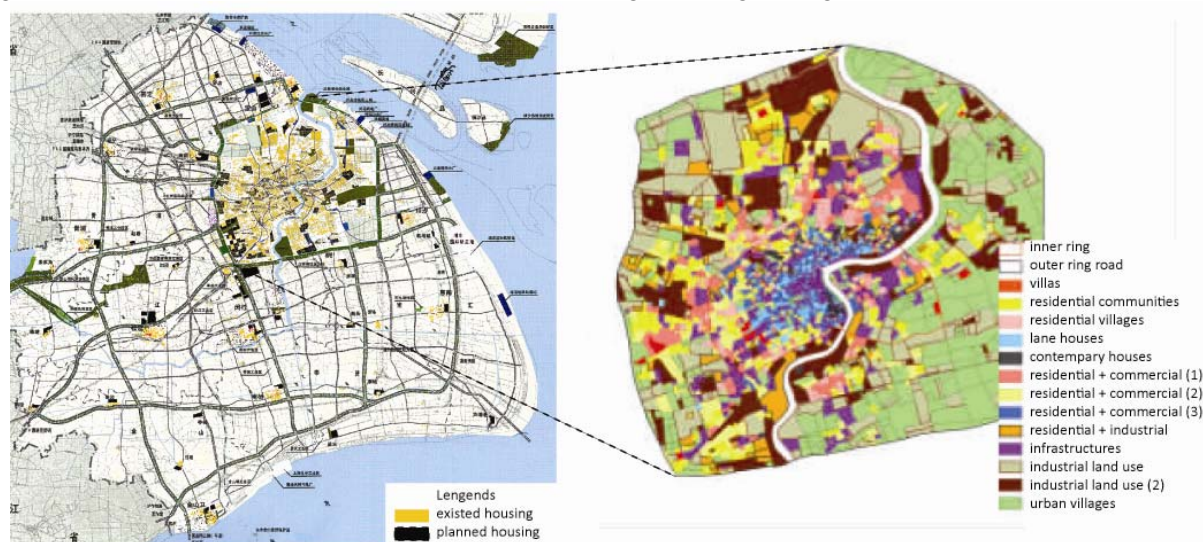


Figure 3 Housing differentiation in Shanghai peripheral areas (drawn by author)

**2.2 Polarized socio-spatial structure**

Furthermore, the transitional residential spatial structures have experienced unwanted spatial polarization due to the market-driven land value which represents a profound change in the organization of urban construction and housing provision (Shanghai master plan, 1999; Zhang, 2002). Market-oriented housing projects always gather along highways, metro junctions or around high-tech industrial parks which

with more job opportunities in the formation of finger-like. While compensated/public rental residential settlements allocate in remote suburbs with inconvenient public transportation and less job opportunities. In addition, neighborhoods even with the same political priority could still develop oppositely with different urban fabric. Simultaneously, polarized residential spatial structures have been intensified due to the competitive local governments. High-end housing projects which occupy the best public source and best view always concentrate in southern administrative centers or Pudong districts and attract more counterpart commercial housing projects and infrastructures. Conversely, the situations of low-qualified housing at the edge of northern administrative districts are deteriorating all along (Wang, 2005; Liao et al, 2008).



**Figure 3** polarized housing distribution in Shanghai  
Source: Shanghai Master Plan (1999-2020) & Liao (2008)

### 3 Housing development

Lots of scholars such as Sassen (1991), Harvey (2007) etc. insisted that residential spatial structure and segregated residential patterns were reflection of spontaneous residential relocation or occupational/income inequality within market. But disproportionate housing developments in China that excessive profit-oriented housing projects with low density for privileged groups and shortage of low-rent/affordable housing for disadvantage groups are operating parallel which indicate spatial structure is not only reflecting the market choice and relocation from demand side but also with other external and underpinned constraints (Friedmann, 2005; Wu, 2004).

Unlike the suburbanization and residential relocation which gathering upper-class residents at urban peripheries in western countries, the move of households from their previous place of residence inside either the workplace compound or municipal housing estates to commodity housing in planned residential districts in China is more complex. Series of housing transformation which is accompanied with economic and political reform could be divided into 2 periods:

1) Work-units concept of urban governance, originated from Soviet, was developed under urban-rural dual system during socialist era (1949-1978). The welfare-oriented housing distribution which integrated industrial, public service and living functions into residential districts evolved due to two main courses: firstly, Mao's socialist policies of creating "producer cities" out of the "consumer cities" (Ma, 2002) contribute to the tightly linkage between the residential place; secondly, the relatively equal income, housing and other forms of social welfare (education, medicine and facilities) made cadres and general staff lived in the same area, thus the extent of socio-spatial disparities was minimized.

2) To relieve the heavy fiscal and management burden of housing in the omnipotent government era, and to improve the poor housing quality, housing reform (1988) based on second land use reform was deployed with a gradual strategies, covering the establishment of a housing savings system, the development of a rental system, and the sale of public-sector housing (Wang & Murie, 1999). New changes emerged in the residential structure: communities combining workplace and residences became fragmented; the burden of

housing provision costs was gradually moved from the government and work units to residents; individual households were given more and more freedom to choose their residences; and private developers overtook the charge of housing construction.

#### 4 New agenda of housing development from supply-side for restructuring residential structures

Undeniably, housing development is in close relationship with urban spatial structure. Especially since housing commoditization and land release reform in 1988, profit-driven housing projects with intervention of market mechanism which have target consumers are the precondition of diversifying housing types. And they contributed to residential stratification into differentiated neighborhoods successively.

Market mechanism or tenure choice from demand side wouldn't be the determinants in influencing residential patterns although the private developers are leading the whole housing developing process. Persistence of state control is still playing crucial role in influencing urban spatial structure by intervening the housing development in terms of Hukou system, work-unit ranking and land use planning, etc (Logan, 1999; Ma, 2002; Wu, 2004).

However, the deviation between spatial plan and the spatial realities indicated that housing development in response to rapid urbanization is accompanied with external and unwanted interventions rather than the unique state control (Friedmann, 2005; Wu, 2004). The brand new housing development from supply side as a byproduct of combination post-socialist context and market mechanism is influenced by several spatial constraints or opportunities such as multi-functioned land use, infrastructure, new urban structures, priority of key projects and industrial structures, etc. It is also affected by changing housing policies, disproportional tenure change, and contradicted plans from different levels/sectors and new involved actors (developers, planners, financiers and architects). Further, urban fabric and new developing mechanism would still underpin and regulate the housing structures.

Consequently, no simple factors will work for influencing the complex residential spatial structures except for coordinating or fine-tuning the influential spatial factors and their interrelations within whole housing developing procedures.

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