

論文の内容の要旨

論文題目: Study on the Spatial Characteristics of Housing Development and Their Effects during the Initial Period of Full Marketization Housing Supply
(市場開放初動期における住宅開発の空間的特性とその効果に関する研究)

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Introduction

The 50 years of public housing supply was halted in 1998, all house are to be supplied since then by private sector, signifying a paradigm shift of China housing system. On the other hand, with huge amount of population, decades-old housing distress, and relatively strong economy, Shanghai has immense demands for housing consumption, and thus, the housing reform together with economy growth leads directly to housing market boom, and Shanghai has witnessed unprecedented sharp market increase during 1998-2005.

Development shock gives rise to huge land occupation and redevelopment and substantial urban building increase. The total scale, quality, price and location of development all alter the central city environment and achieve suburban growth. Redevelopment enforces relocation of the medium-low income from central city, whereas the disparity of housing price, size and location induces voluntary displacement of different incomes. Shanghai was experiencing enormous population and space changes.

Since housing development works as catalyst to such changes, housing total price, housing size, development amount and grade are employed to infer population shift, while land occupation, lot size, FAR, and housing unit price are taken to examine urban space change. The effects of both shifts are combined to analyze their impact on urban Shanghai.

In addition, public and private land grant supply a great many development plots, large scaled urban construction aimed to global standing propels urban redevelopment, and urban planning shapes types, volume and distribution of development. Thereby, roles of land grant manner, redevelopment, and development control are also explored in the shifts of population, land and environment. Finally, policies on housing, land, and urban planning are reviewed altogether.

Purpose

The study has been started in a bid to infer the flow of home-buying population and the physical urban Shanghai changes, and combine the changes of population and urban space to identify the urban growth trend of major regions of Shanghai by comparing with master plan goals.

To identify the effects of development on population and space, firstly it is necessary to identify what happened to the development itself, then based on the development outcomes, to identify what happened to population and space? Further, what is the relationship between those changes? Whether those changes are consistent with master plan? What the comprehensive consequence, in long or short term, on urban Shanghai growth? Moreover, to prevent and address similar issues in future, it is also imperative to make clear what are the causes of those development changes, what are the relevance between policies and planning with respect to those causes, how to improve accordingly policies of housing, land and urban planning?

Summary of Chapters

Chapter 1 makes an introduction to the background of housing market in Shanghai, including the goals of economy and urban growth, population and land supply, institutional shifts of economy and politics, the growth of industry, urban network and transit, the growth of housing industry and redevelopment. The major issues in the development, population and space of Shanghai are described, such as high housing price, land supply limits, crowding of space and population. The practical and academic value of the study is argued. The major questions and objectives are put forward. The housing dealt with in the dissertation is defined, regions are subdivided, and the major indicators and their study methodology are presented.

Chapter 2 reviews several theories of demography and urban planning on population and development. It starts with review of theories on residential mobility and suburbanization, and their induced social space shifts in western cities. Counterparts of urban China and Shanghai on population are summarized. Then theories of developments' spatial effect with respect to economy, assessment, and locations are presented. Finally, the limitations of western theories and the distinctions of urban China and Shanghai are approached.

Chapter 3 is a brief review of China housing reform, including establishment, evolution, reform, abolishment as well as their effects of China public housing system in national level and Shanghai municipal level, emphasis is put on the policy implication and market impacts by the halt of public housing system in 1998 and privatization efforts of public housing proceeding at the same time. The mechanism is explored of housing reform impacts on population and space, and its consequences are estimated theoretically.

Chapter 4 is the analysis of housing market structure. It deals with Shanghai housing market structure and its characteristics first, market is divided into 3 tiers of new housings sale, exit housing sale, housing lease, and housing type compositions of each are presented. Growths of the 3 market are analyzed and divided into 3 periods by that of new housing market. The growths of the 3 market are compared, their correlations are summarized. Mechanisms and roles of the 3 markets on the shifts of population and space in shanghai are estimated.

Chapter 5 is an analysis of population amount shift. It expounds firstly the relation between residential mobility and housing development, demonstrating the feasibility of examination of population by virtue of housing. Shanghai's population goals are stated and

evaluated. Factors concerning changes of population amount and its space distribution are briefly discussed theoretically, with concentration on the relation between development and population quantity variation. Population amount and density of the whole Shanghai and each region are studied and compared, the relevant roles of the 3 markets are analyzed in terms of transfer amount and price, and population shifts tendency is extracted that is compared with population goals to evaluate the roles of development.

Chapter 6 works on the population distribution shift. It examines first housing stock structure, then population differentiation by the spatial changes of housing price and sizes over the 3 periods. The high end housing supply is deduced by FAR, and so does the degree of gentrification by housing type. The supply balance among various housing grades is analyzed by price, amount, and case of Pudong. In the end, the mode, mechanism of population differentiation is concluded.

Chapter 7 sums up the implications and effects of population shift in Shanghai. It begins with the analysis of effects of population suburbanization, and then puts forward measures for emerging problems. The residential differentiation and its effects of all incomes are discussed, its necessity is validated and consequence is compared with that of western cities, so the overall effects are summed up and the measure are proposed in the end.

Chapter 8 examines the effects on the space of Shanghai. It makes analysis of land use amount and land price during the 3 periods, Then of the changes of lot size and FAR of the TAL development, also changes of FAR of Non-TAL development, and point out the difference effect of land grant manners. Finally by virtue of unit housing price as well as cost changes development quality or that of cityscape is studied. All those changes are compared with that of housing price to identify the roles and their mechanism on land and space.

Chapter 9 examines the effects of redevelopment, on market, population and space. It begins with theoretical analysis of the status, characteristics and effects of redevelopment in urban construction. Then, effects on population and housing demand are derived by comparing the household amount before and after redevelopment. Finally, it examines the FAR change tendency by property floor area changes before and after redevelopment.

Chapter 10 is case study, testing forgoing conclusions on the effects of developments on population and space by the analysis and comparison of 4 cases with respect to their population, space, housing price, grade and location, development process and marketing. The population and space shift of the districts in which the cases are located are also estimated and each compared with its district planning. The strategies of developers with various strength and background during the 3 periods are summarized. The effects of housing market on price, sale, housing size, FAR and population is explored. Finally the effects of development control and the issues to be addressed are approached based on the cases.

Chapter 11 is a theoretical discussion about the identified results above and solution strategies. It consists of two sections, the first on the comprehensive effects of the shift of population and space; the second on the planning strategies for overheat development. The first section analyses first the relation of population, space and urban growth, then examines the individual and combined roles of population and space on urban growth taking economy growth as the major goal and indicator for urban growth, the mechanism and effects of

residential differentiation on downtown and suburb in terms of population and space. The second section identifies the reason of inconsistency between market and planning, evaluates the standing of planning among all development control devices, and proposes strategies from land supply and space administration aimed at housing price control, economy growth, farm land conservation, and urban space improvement.

Chapter 12 is the conclusion and recommendation. It summarizes the development-resulted population amount change, flow and distributor of different income, development scale, housing price structure, development quality and their spatial changes, the effect and significance of redevelopment, the combined effect of such population and space change are reviewed in comparison with Master Plan, assessment of housing reform and development are made. On the conclusion basis, recommendations are proposed on market regulation, rational mix residence, and equilibrium of town system. Finally, the particularity and methodology limitations are specified and future research are conceived.

Conclusions

Economically, the housing reform is quite successful beyond doubt. However, that the sudden full-scale halt of public housing supply coincides with public housing privatization is the foremost reason for housing market frenzy in short period.

Housing reforms turn out the major factor driving rapid market growth. The 3 markets differ in their roles on population distribution and space growth, but the new housing market is the only decisive factor.

The population amount shifts turns out conforming to the Master Plan while the residential differentiation does not. The population mobility are driven by housing development and percolated by many market and development factors, notably housing price, results in further residential differentiation, in the form of the gentrification in certain areas and suburbanization of the middle-and-below incomes.

Development boom results in unsustainable farm land conversion, spatial effect induced is found not completely consistent with the Master Plan, while redevelopment cause the inconsistency between the shifts of space and population with respect to the Master Plan. Farm land is depleting rapidly. Lot size of TAL development gets increasing larger which leads to its overall FAR decline. Non-TAL developments generally concentrated in central city at much high FAR. Redevelopment has greatly improved space of urban Shanghai but at the cost of higher building density in the central city and graver housing demand. Development has upgraded cityscape quality in all regions but with various degrees.

Viewed generally, the achievements of housing development in Shanghai have far-reaching and profound significances on urban Shanghai growth, whereas the issues have limited effects, and some are likely to be addressed in future. In conclusion, the housing development of Shanghai has more merits over demerits, largely facilitates the realization of the Master Plan, and therefore will greatly promote urban Shanghai growth.