

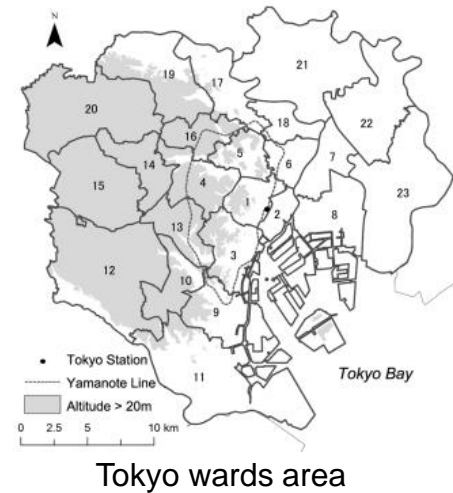
Vertical Residential Segregation in Tokyo: Analysis of Census Micro-data and Real Estate Database

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Introduction

Since the 21st century, the spatial concentration of high-income residents and the soaring prices of houses in the city center has led to the progress of residential segregation in global cities. Although Tokyo, capital city of Japan, is one of such cities, the degree of residential segregation is still low compared with Western countries (van Ham et al. 2021). On the other hand, some global cities also see the socio-economic stratification by floor of residence within high-rise condominiums (vertical residential segregation) (Graham 2015; Maloutas and Spyrellis 2016). In this study, in order to discuss the characteristics of urban inequalities of Tokyo, we investigate geographical and vertical residential segregation using census micro-data and real estate database.

Tokyo (Tokyo wards area): These are the white-collar residential districts that are spread out in sectors on the western high ground areas and the blue-collar residential districts that span the eastern low-lying areas to the southwestern outskirts where today there are many manufacturing plants. Other studies also provide evidence on the existence of a concentric ring structure in the city center based on occupational status.



Data & Method

Using census micro-data (2015), we illustrate the relationship between socioeconomic groups and their living floor of buildings in Tokyo. The local spatial patterns of residential segregation is described based on a location quotient of managerial and professional workers.

Regarding housing prices, we use "At Home Dataset" provided by At Home Co.,Ltd. (2020) and map the housing prices (2015–2019) by floors. Additionally, the link between residential segregation based on housing prices and socio-economic status of residents is examined.

Housing type in Tokyo (Census 2015)

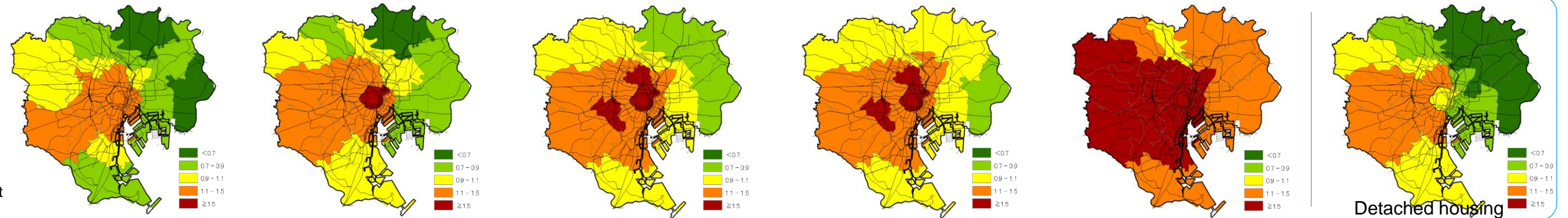
	Household	population
Detached	1,183,768 (25%)	2,991,445 (33%)
Apartment	3,426,837 (74%)	5,884,320 (66%)
1-2F	1,499,760 (32%)	2,347,103 (26%)
3-5F	1,159,496 (25%)	2,044,620 (23%)
6-10F	547,889 (12%)	1,038,606 (12%)
11-14F	141,928 (3%)	283,655 (3%)
15F-	77,764 (2%)	170,336 (2%)
Other	45,099 (1%)	95,033 (1%)

Result

The higher floors become over-represented by managerial and professional workers. As supported by the link between residential segregation and housing prices, properties with higher unit prices are concentrated in the high floors in the city center and distributed like enclaves within the city.

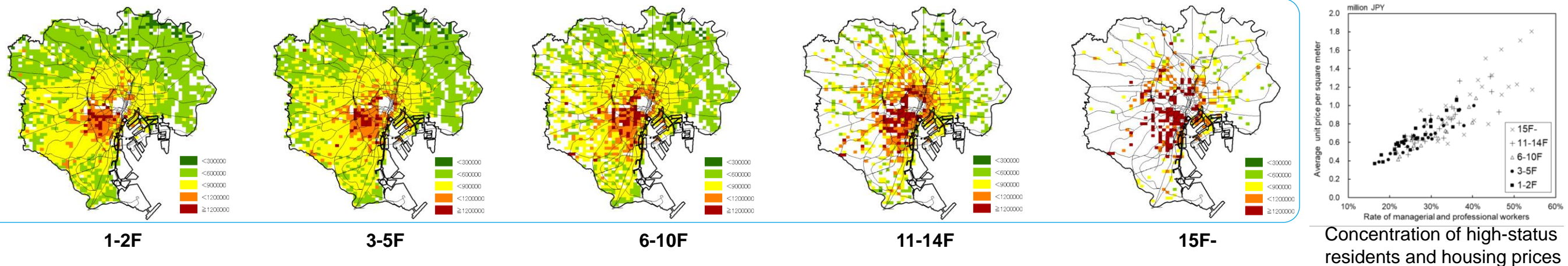
Concentration of High-status Residents

Location quotient of managerial and professional workers by their living floor of apartment



Housing Price

Average unit price per square meter by floors (JPY: Japanese yen)



Discussion

Behind the background of this trend, the price premiums on the upper floors (Danton & Himbert 2018) can be promoting the progress of vertical residential segregation. In the 2000s, quite a few high-rise residential complexes were completed not only in central area but also near the bay area. Many managers and professionals moved into that area.

From a spatial perspective, recent urban policies have developed unevenly and impacted neighborhood levels. Hirayama (2005) observed that one of the results of the urban revitalization policies was the conspicuous spatial disparities between thriving housing market in the city center and slumped market outer districts. Once the neighborhood values increase in gentrified districts, the process of gentrification is further promoted. Such demographic changes occurring alongside gentrification also have the potential to lead to the soaring prices of houses.

Conclusion

The findings indicate the socio-spatial inequality in Tokyo is formed by a combination of geographical and vertical residential segregation in terms of both socioeconomic status of residents and housing prices. Further research should focus on the comparative perspective of other global cities and metropolitan areas, by leveraging quantitative segregation measures.

References

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