Residential Segregation in a Vertical City

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"Platform for Leading Edge Urban Studies Symposium- The Inclusive City"
Urban Research Plaza, Osaka City University, 1-3 February 2019

Outline

- Literature on residential segregation

- Issues of residential segregation research

- Residential segregation in a vertical compact city

- The impact of increased mobility on residential segregation

Residential Segregation

- A concern with a long history

- Regraded as connected to or as the cause of many other social problems

- Lack of interaction with people of other socio-economic status impacts on sense of belonging, social integration

- Residential segregation creates problems in other social arenas – segregation of jobs, education, leisure activities

Residential Segregation

- Economic development does not reduce residential segregation but rather makes it worse.

- Globalisation exacerbates social segregation in many cities – leads to social / spatial polarization.

- Triggers social mix policy (particularly in Europe) to combat spatial segregation

- The policy outcomes are mixed

Issues of residential segregation research

- Most research based on North American context
- Low density "horizontal" city, a long history of ethnic segregation, exodus of the middle class to the suburb, urban sprawl
- In Europe and Asia, the spatial and social context are different.
- No extensive suburbanization – city center is the favour area of residence.
- No extensive ethnic segregation
- Compact and vertical urban form
- Methodological concern of static spatial measurement
- Theoretical concern of whether "residence" is still that significant?

Context of Hong Kong

- Hong Kong is a high density city
- Hong Kong is also socially segregated – high income disparity
- Well developed and the biggest public rental housing sector in the world
- Cater the lower middle class.
- An assisted homeownership scheme that caters for the middle class.
- Half of the population live in state developed housing
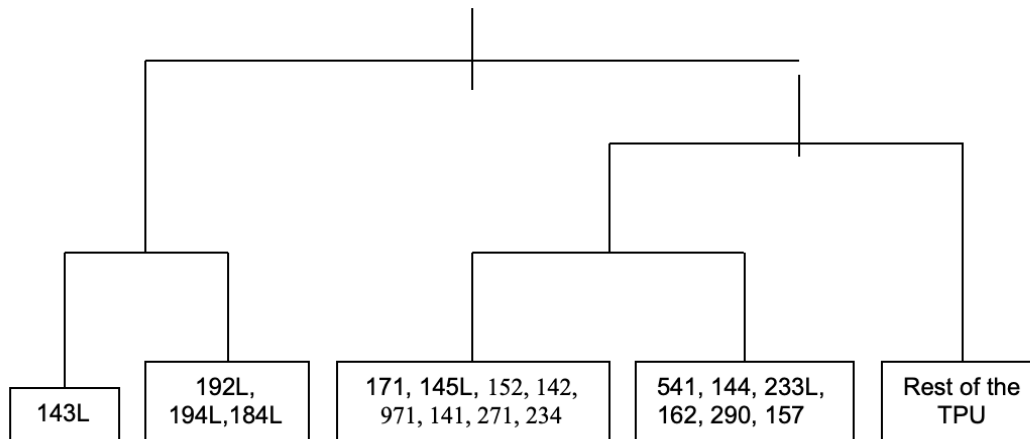- Good and extensive public transport syste m

How segregated is Hong Kong?

- Hong Kong has the biggest income disparity in the developed world
- Gini coefficient of income distribution - 0.533 (2006) – 0.537 (2016)
- Economic restructuring – rapidly transformed to service economy but also led to polarization of occupation
- Increased gap between high pay and low pay workers
- Real estate boom widens the gap in wealth
- Yet there is no apparent existence of urban ghettos

How segregated is Hong Kong?

- Forrest, La Grange and Yip, 2004
- Census data of 1996 to examine spatial segregation
- Concentration of the very rich and upper middle class
- The big public housing sector
- Large scale private middle class housing estates
- Mitigating effect

| 143L | 192L, 194L,184L | 171, 145L, 152, 142, 971, 141, 271, 234 | 541, 144, 233L, 162, 290, 157 | Rest of the TPU |

How segregated is Hong Kong?

- Yip, 2012
- Census data of 2006 and 2011 to examine spatial segregation
- Concentration of the very rich has increased
- Concentration of the poor has decreased
- Confirms the mitigating factors of
- The big public housing sector – mix of middle and lower middle income households
- Town planning system (big private sector developments)– favours income mix in middle class housing estates.

Hong Kong: Spatial Segregation (Poor)

2006

2011

Hong Kong: Spatial Segregation (Rich)

2006

2011

Modeling Spatial Segregation
Yip and Huang 2015

Table 4 Segregation of High Income Households 2011

	Model 4a		Model 4b	
	Coefficient	S.E.	Coefficient	S.E.
(Intercept)	0.9943**	0.0007	0.9969**	0.0007
Total Households (Log)	-0.0003**	0.0001	-0.0002**	0.0001
% of persons with primary education or below	0.0040*	0.0017	-0.0016	0.0016
% of persons with university degree or above	0.0075**	0.0011	0.0091**	0.0010
Population density (million/km2)	0.0078**	0.0013	0.0142**	0.0013
% of HOS	-0.0033**	0.0005	-0.0002	0.0005
% of public rental	-0.0047**	0.0004	-0.0024**	0.0005
% of Bldg older than 20 Yrs			-0.0002	0.0002
Mean bldg. height (storeys)			-0.0001**	0.0000
No. of big Estate			-0.0007**	0.0001
N	1155		882	
R^2	0.252		0.449	

Source: Analysis of Census microdata by the authors

Note: Population density = Population count / area, HOS = Assisted Homeownership Scheme; + $p<.10$, * $p<.05$, ** $p<.01$.

Modeling Spatial Segregation
Yip and Huang 2015

Table 3 Segregation of Low Income Households 2011

	Model 3a		Model 3b	
	Coefficient	S.E.	Coefficient	S.E.
(Intercept)	0.9947**	0.0006	0.9973**	0.0007
Total Households (Log)	-0.0002**	0.0001	-0.0002**	0.0001
% of persons with primary education or below	0.0045**	0.0015	-0.0012	0.0014
% of persons with university degree or above	0.0041**	0.0010	0.0060**	0.0009
Population density (million/km2)	0.0085**	0.0012	0.0135**	0.0011
% of HOS	-0.0035**	0.0004	-0.0002	0.0004
% of public rental	-0.0045**	0.0003	-0.0025**	0.0004
% of Bldg older than 20 Yrs			-0.0001	0.0002
Mean bldg. height (storeys)			-0.0001**	0.0000
No. of big Estate			-0.0008**	0.0001
N	1050		956	
R^2	0.281		0.438	

Source: Analysis of Census microdata by the authors

Note: Population density = Population count / area size, HOS = Assisted Homeownership
Scheme;   + $p<.10$, * $p<.05$, ** $p<.01$.

How segregated is Hong Kong?

- Yip and Huang 2015
- To identify the determinants of spatial mix
- Employs a sophisticated disaggregated index of segregation
- Smaller census tracts of Census 2011 data
- Modelling on social and spatial attributes
- Proportion of public housing – significant only when density variables are not present
- Size of the population mitigate segregation
- Yet Population density increase segregation
- Height of building (proxy for building density) mitigate segregation
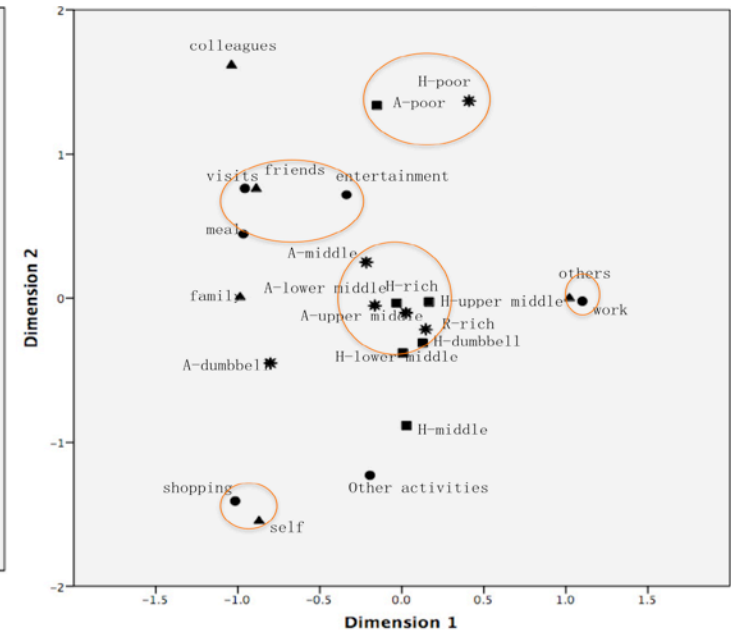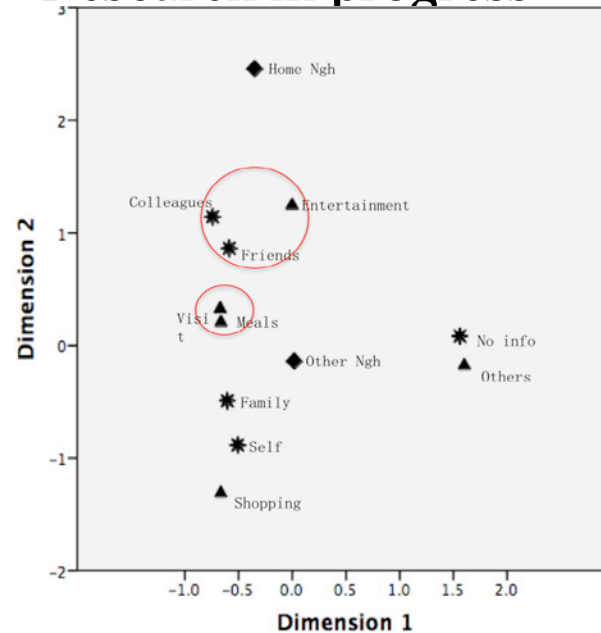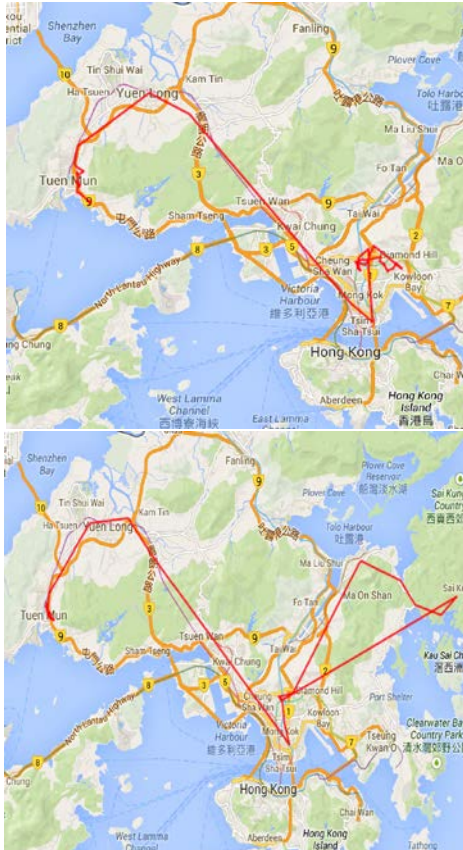- Existence of large private housing estates mitigate segregation

Problems with current segregation study

- Static view of residence

- Static View Undermines The Dynamisms Of The "Flow"

- Increased Mobility – Redefine Social Relationships

- Improved Private And Public Transport

- Less Time In The Neighbourhood – the influence of residence

- Reduce Frequency And Intensity Of Interaction

- New Paradigm Of Mobilities

- People-based Rather Than A Place-based Approach

New approach in studying segregation

- Examine people's daily mobility and interaction
- How people mix, how people interact
- What level of sense of community by degree of mobility
- Research in progress

Thank You