7 SEOUL

CASE STUDY

SEOUL SOUTH KOREA

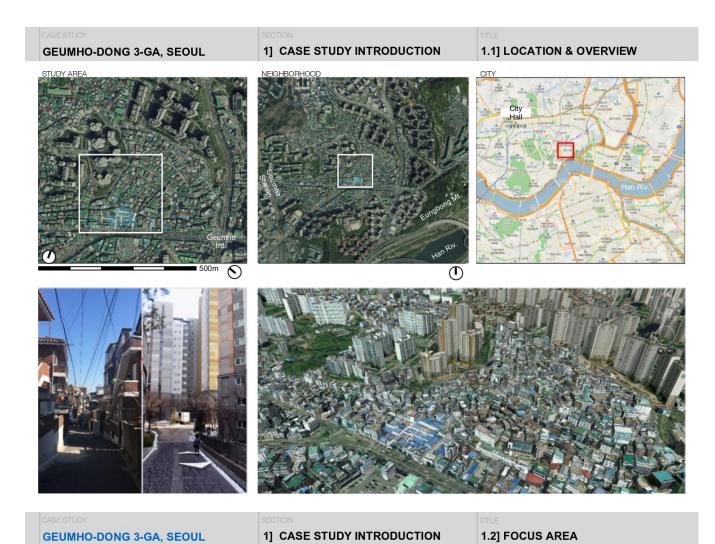
- 1. INTRODUCTION
 2. CHARACTER
 3. BACKGROUND
 4. ZONING ANALYSIS
 5. APPENDIX

TEAM

Soyeon Kim Yiyi Jiang

DATE 03/2021





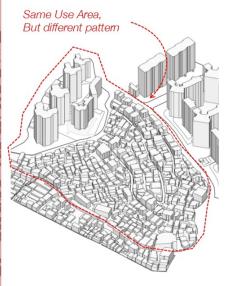
2.1] URBAN PATTERN

GEUMHO-DONG 3-GA, SEOUL

2] CHARACTER







Contrast of Urban Pattern between apartments and low-rise housings

• Despite the same land use (General Residential Area 2), Seoul City allows significantly different types of housing: Apartment Complexes & Low-rise Buildings

GEUMHO-DONG 3-GA, SEOUL

2] CHARACTER

2.2] BUILDING TYPOLOGIES



3

Low-rise housings

ω

Market place









General Residential Area 2 (or 3)

- High-rise housings: 10-15 stories
- Buildings are new
- Large footprints-large lots



General Residential Area 2 (or 1)

- Mid-/Low-rise housings: 3-7 stories
- Buildings are old
- Buildings are built by themselves, no uniform style





Neighboring Commercial Area

- Low-rise buildings: 2-4 stories
- Buildings are old
- Ground floor is occupied by local retail, restaurants, banks, etc.

focus area

In Marketplace

Between

GEUMHO-DONG 3-GA, SEOUL

2] CHARACTER

2.3] BETWEENNESS



Apartments & Low-rise housings

- Streets are wide: 6-9 meters
- Two-way streets
- Newly built
- Clean





In Low-rise housings

• No connections/interaction

- Streets are narrow: 2–6 meters
- · One-way streets
- · Bikes and motorbikes park at the sides

Between Low-rise housings & Marketplace



- Spontaneously mixedNo boundaries
- · Similar to low rise building streets

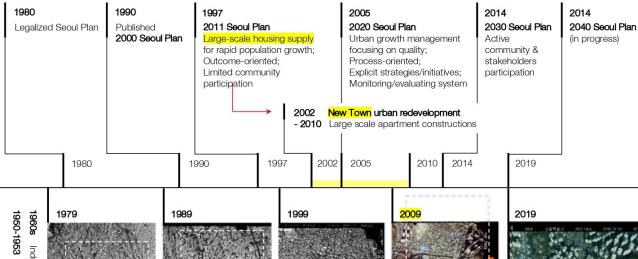


GEUMHO-DONG 3-GA, SEOUL

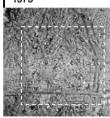
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3] BACKGROUND

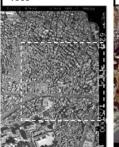
3.1] RELEVANT HISTORY



1960s Industrialization & Economic growth1950-1953 Korean War



GEUMHO-DONG 3-GA is naturally generated settlement by the refugees of Korean War in 1950s. It had an complicated urban pattern with small blocks and narrow streets rather than grid-pattern.

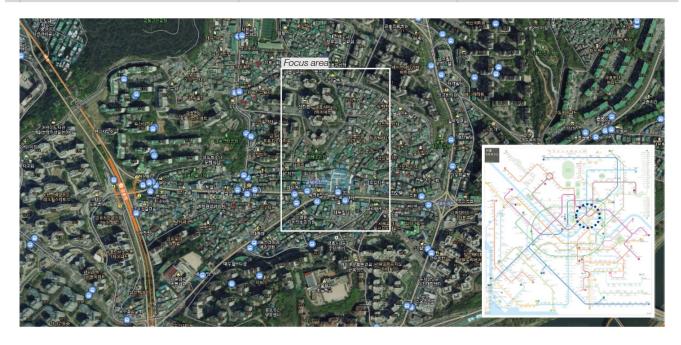




In GEUMHO-DONG 3-GA, New Town development was planned in 2011 but cancelled in 2013. The remaining areas have not been invested for about 10 years.



3] BACKGROUND



Good location, worth investing. High real-estate value

- 10-minute walk to the subway station (Geumho Station, Line 3), bus stops easy access to public transit
- Around 30 minutes to the city center (City Hall) or central business districts (Gangnam, Jongro) by public transit
 - to Gangnam, 27 min by subway / to City Hall, 35 min by subway

GEUMHO-DONG 3-GA, SEOUL

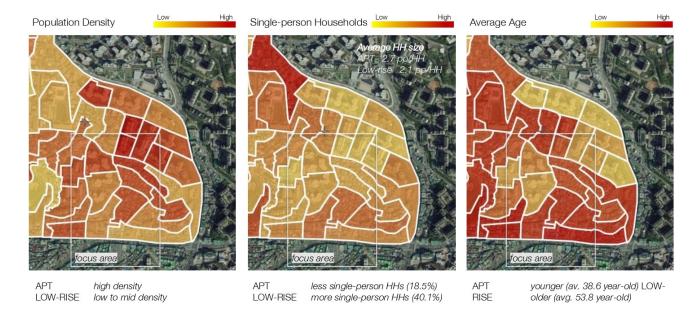
SECTION

SECTION

3.3] DEMOGRAPHICS

Zoning Reflected on Demographics - Does zoning create disparities?

- · Relatively denser population in low-rise neighborhoods
- · More people who live alone, and much older in low-rise neighborhoods than apartment complexes
- · Geumho-dong 3-ga seems socially mixed as a whole, but significant disparities exist among different zoning districts.



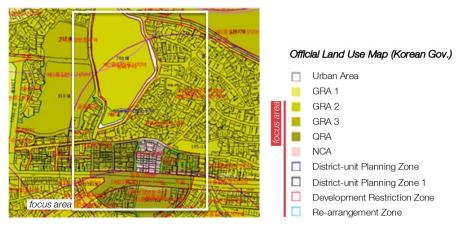
Reference: Statistics Korea. SGIS. https://sgis.kostat.go.kr/view/map/interactiveMap#

Land Use / Urban Planning in Korea

- · Land use framework at National Level
- · Comprehensive plan for Metropolitan Areas (focusing on metropolitan cities, e.g., Seoul, Busan, Daegu, Gwangju, etc.)
- Master plan for Community Areas (3-5 big communities in a city)



	SECTION	TITLE
GEUMHO-DONG 3-GA, SEOUL	4] ZONING ANALYSIS	4.1] ZONING MAP



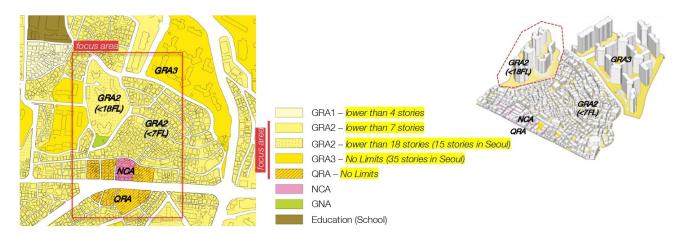
	etc.		
RESIDENTIAL	ERA	Exclusive Residential	ERA1: independent housing ERA2: multi-unit housing
	GRA	General Residential	GRA1: low-floor housing GRA2: mid-floor housing GRA3: mid- & high-floor housing
	QRA	Quasi-residential	Residential + Commercial + Business
COMMERCIAL	CCA	Central Commercial	Center/Subcenter of a metropolis
	GCA	General Commercial	General commercial + business
	NCA	Neighboring Commercial	Supplying the daily necessities and services in the neighboring area
	CiCA	Circulative Commercial	Increasing the circulation function in the city and between the areas
INDUSTRIAL EI / GI / QI Exclusive Industrial / General Industrial / Quasi-industrial		/ Quasi-industrial	
GREEN	GC/GP/GN	Green Conservation / Green Production	/ Green Natural

4 Land Uses

4.1] ZONING MAP

GEUMHO-DONG 3-GA, SEOUL

4] ZONING ANALYSIS

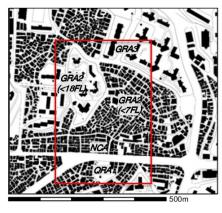


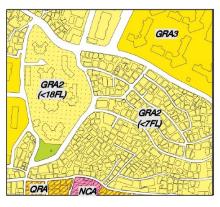
(SL	_	GRA1	Lower than 4 stories	Housings	Single family, Multi family
permissions)				Neighboring Amenities under floor area of 1000m2	Neighboring Amenities 1 Daycare, Museums, Religious institutions, Schools, Parking, etc.
	vea	GRA2	Lower than 7 stories /	Housings	Single family, Multi family
(more	tocns e		Lower than 18 stories	Neighboring Amenities under floor area of 1000m2	Neighboring Amenities 1 Religious institutions, Museums, Schools, Parking, etc.
zoning		GRA3	No Limits	Housings	Single family, Multi family
Up-zor				Neighboring Amenities	Neighboring Amenities 2 (including Neighboring Amenities 1) Retails, Hospitals, Sports, Offices under 3000m2, Storages, Gas stations, etc.
	, –	QRA	No Limits	Housings	Single family, Multi family
¥				Neighboring Amenities	Neighboring Amenities 2 (including Neighboring Amenities 1) Recreations, Hotels, Junkyards, Stock Farms, Cemetery, Logistics, etc.

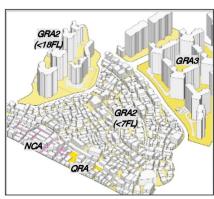
GEUMHO-DONG 3-GA, SEOUL

4] ZONING ANALYSIS

4.2] ZONING SUMMARY







SUMMARY OF ZONING REGULATIONS (See Appendix for supporting research)					NOTES:	
1	ZONING DISTRICTS	GRA2	GRA3	QRA		
2	LAND USE	Residential	Residential	Residential + Commercial + Business	See Appendix 5.1	
3	FAR	200%	250%	400%		
4	SITE COVERAGE	60%	50%	60%		
5	SETBACKS	If adjacent to other buildings or lots: 1.5m setback If adjacent to roads wider than 6m: no setback			See Appendix 5.2	
6	HEIGHT	7 or 15 of floors	7 or 15 of floors 35 of floors No limits			
OTHER NOTABLE ZONING REGULATIONS						
7	Sunlight and Setbacks	To secure sunlight, building forms are controlled by setback regulations – specific diagram is shown in Appendix.			See Appendix 5.2	
8	District-unit Planning Zone	Special zoning (plans) for selected district to improve the aesthetics and a livable environment				
9	Improvement Zone	Special zoning (plans) for selected neighborhoods that have concentrated low-income population/substandard housings			See Appendix 5.4	

GEUMHO-DONG 3-GA, SEOUL	4) ZONING ANALYSIS	4.3] ZONING EXPLANATION
	SECTION	

Use Areas

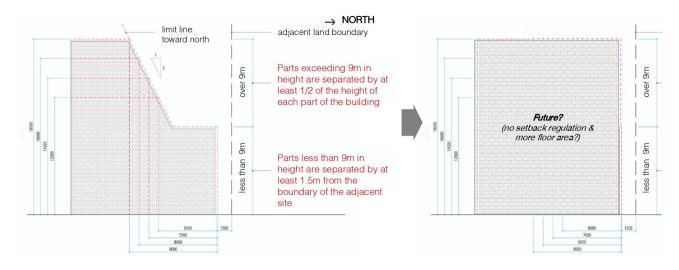
Based on THE NATIONAL LAND PLANNING AND UTILIZATION ACT

RESIDENTIAL	ITIAL ERA Exclusive Residential		Class I: independent housing
			Class II multi-unit housing
	GRA	General Residential	Class I: low-floor housing
are single			Class II: mid-floor housing
Ş	8		Class III: mid- & high-floor housing
	QRA	Quasi-residential	Residential + Commercial + Business
COMMERCIAL	CCA	Central Commercial	Center/Subcenter of a metropolis
	GCA	General Commercial	General commercial + business
	NCA	Neighboring Commercial	Supplying the daily necessities and services in the neighboring area
	CiCA	Circulative Commercial	Increasing the circulation function in the city and between the areas
INDUSTRIAL	EIA	Exclusive Industrial	Mainly the heavy chemical industry, pollutive industries, etc
	GIA	General Industrial	Allocating the industry not impeditive to the environments
	QIA	Quasi-industrial	The light industry and other industries, but need of supplementing the residential, commercial functions and business function
GREEN	GCA	Green Conservation	Conservation of natural environment, scenery, forest and green areas
	GPA	Green Production	Reservation on development for the main purpose of agricultural production
	GNA	Green Natural	Preservation for securing green area space, prevention of city's expansion, supply of future city sites, etc, in which restrictive development is allowed for only inevitable cases

CASE STUDY	SECTION	TITLE
GEUMHO-DONG 3-GA, SEOUL	4] ZONING ANALYSIS	4.3] ZONING EXPLANATION

Basic principles of setback regulation in Korea

- Based on BUILDING ACT (Article 61, Paragraph 1) and ENFORCEMENT OF BUILDING ACT (Article 86)
- Korea's sunlight/setback regulation enforces the buildings to be apart from the other buildings or roads on the north side; thus, it allows the buildings to secure indoor sunlight and makes the wedding-cake shape of buildings.
- However, the regulation is controversial now. Since the 2010s, many architects and developers have attempted to demolish the setback regulation. It is grounded on three main reasons: 1) it reduces about 30-40% of housing units in new developments, especially for small parcels under 1500m2; 2) this regulation does not meet the widely accepted norm in Korea the south-side sunlight is preferable than north-side; 3) often people in low-rise housings make illegal structures on the void created by setback regulation, so the regulation is not practically working but also contributes to the informal appearance of low-rise housings (Appendix 5.2). Because the Korean government faces the difficulties of supplying housing in the urban center, now the regulation is under consideration to be changed.



GEUMHO-DONG 3-GA, SEOUL	41 ZONING ANALYSIS	4.41 EVALUATION
CASE STUDY		

PROS	Cons
Socially mixed neighborhoods mixture of different housing types and lifestyles have opportunity to learn more about other groups Easy access to urban amenities easy access to living essentials by adjacent marketplace retails, restaurants, stores are in 10-min walk good walkability	Socially mixed but separated whole neighborhood looks socially mixed, but separation between different housing types is Inconsistency made by zoning variance Discontinuity of neighborhood communities Gentrification Risk Noise issues Disparities in living environment housing quality safety conditions sunlight access

Recommendations

- Reframe the zoning regulations for consistent neighborhoods flexible zoning?
- Improve low-rise neighborhoods' living conditions
 - subsidize the renovation/remodeling works in low-rise neighborhoods
 - enhance street environment to reduce the separation between apartments and low-rise neighborhoods
- Mediate gentrification risk by mandating affordable housing units in new developments
 - require some number or percentage of affordable housing units in newly built apartments; or
 - guarantee some units in new developments for original residents to prevent displacements
- Promote tourism to boost neighborhood's economy e.g., Tsing Tao City in China
- · Restrict open time of marketplace to reduce the noise (e.g., close before 9 pm)

5A] APPENDIX - BIBLIOGRAPHY

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Maps

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History

 $\hbox{-} \textbf{Seoul Metropolitan City.} \ \underline{\text{https://urban.seoul.go.kr/view/html/PMNU00000000000}}.$

· Seoul Plan

 $- Seoul \ Metropolitan \ City. \ \underline{https://urban.seoul.go.kr/view/html/PMNU0000000000}.$

Practicum: Residential Planning in Global Cities | Columbia GSAPP - PLANA6121 2021 | Kate Dunham