



Gender Analysis of Urban Public Rental Housing Guidelines in Korea

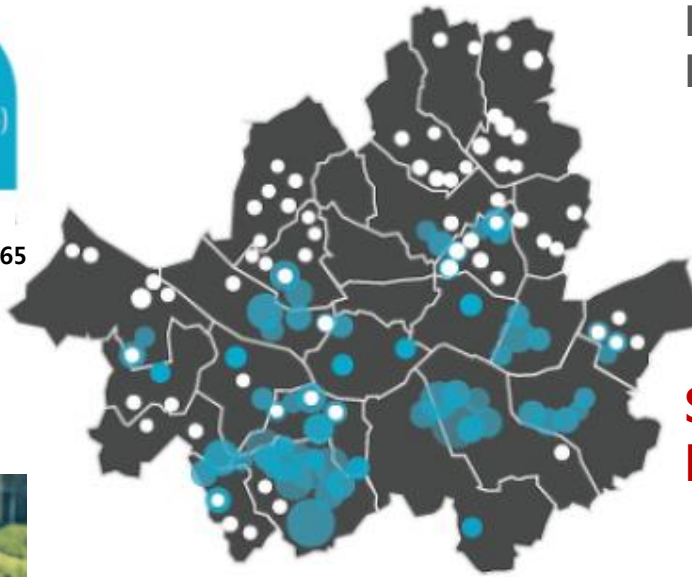
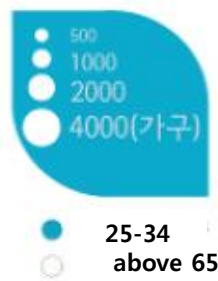
Sun-Young Rieh
University of Seoul



Background

- Ageing and urbanization as global trends
- Female population is more than male in Korea as of 2015
- Life span of female is much longer than male (6year longer than male)
- Female earns much less than male (65% of male)
- Majority of female has part-time job(45% of female earns 2/3 of average wage)
- Female owns less car and depends on public transportation
- Dominant dwelling location of female single household is different from male single house hold

Why Gender Innovation in Public Housing?

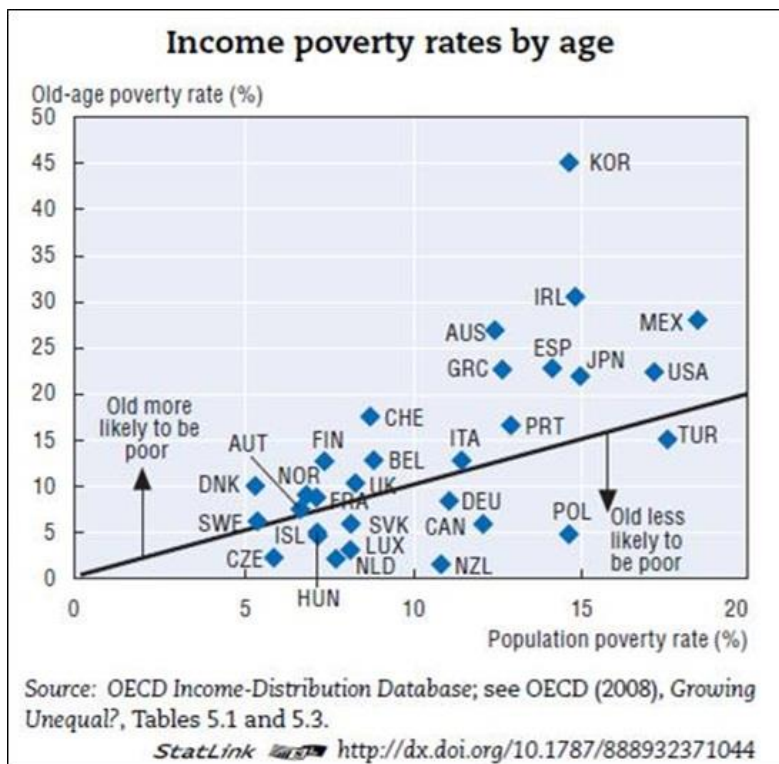


Distribution of single household in Seoul

Supply and quality of affordable housing is critical for female

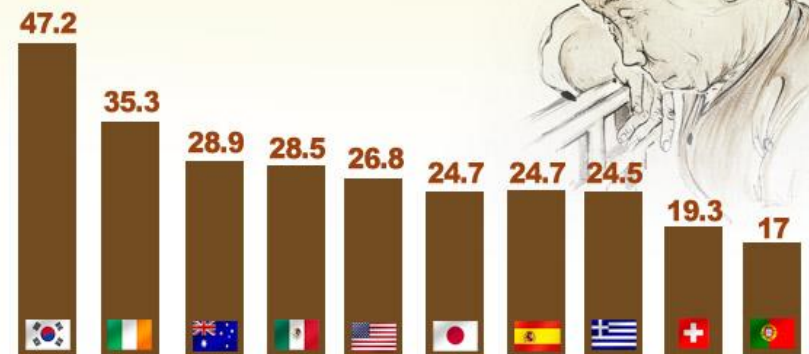


- Poverty of single female households is the result of unstable social position of female.
- Checking the standard of public housing in terms of gender is critical for upgrading general condition of well being.



- **Poverty rate of house holder**
female 21% : male 7%
- **Poverty rate of senior**
female 45.9%: male 40.1%

OECD countries poverty rate of female above 65 years old



Objectives of the Research

- To provide appropriate physical setting for everyday life for female :

They are the source of their families, communities and economies in supportive living environment.

- To upgrade general condition of well being:

Poor housing condition affects more for female and standard for public housing is more critical for female as they are tentative majority of the residents.

Hypothesis for research

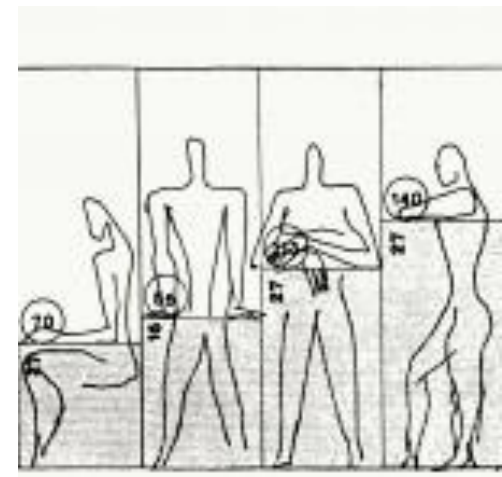
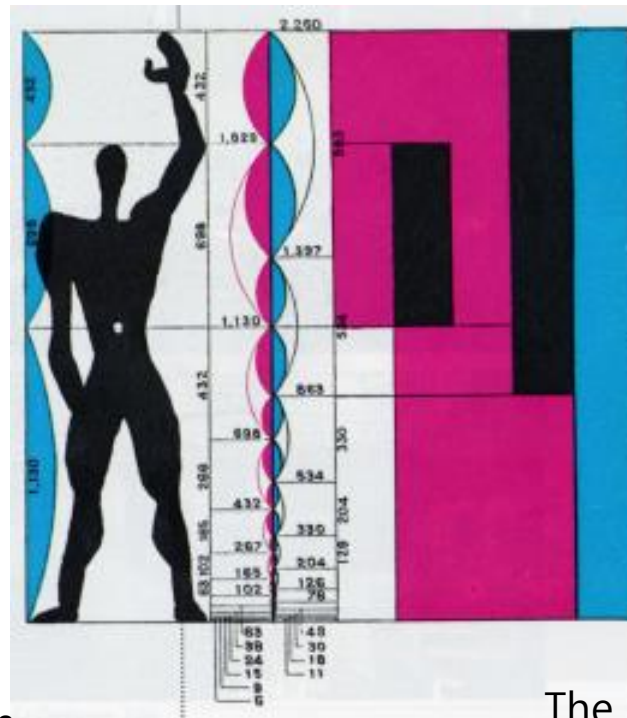
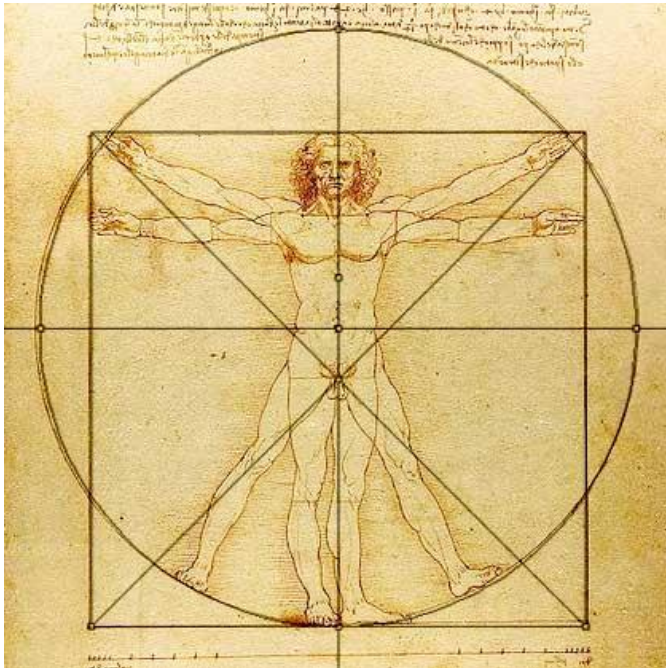
- Differentiated women's need for environment is hardly embedded in the public housing guideline in Korea.
- Rethinking standard and reference model through the guideline for public housing can reveal the distorted perception of the gender.

Methods*

*Londa Schiebinger, Triple Helix 2014 1:9

Gendered innovations: harnessing the creative power of sex and gender analysis to discover new ideas and develop new technologies

- Analyzing factors intersecting with sex and gender
- Rethinking Standards and Reference Models
- Rethinking Language and Visual Representations



Vitruvian Man, Leonardo Da Vinci

The Modulor, Le Corbusier

Frames of Analysis*

* Rieh, Son, Chang, Gender Analysis of 2030 Seoul Plan, 2013



Urban Public Rental Housing Guidelines in Korea



SH CORPORATION

We will help you build the place you have been dreaming of.

A place where you dream is better tomorrow than today.
A place where you feel the love of families and neighbors.
A place you can call home, the epicenter of your happiness.

Introduction of SH Corporation
Promotion status of projects
Future project strategy

HOME
SITE MAP
KOREAN

Introduction of SH Corporation
CEO'S MESSAGE
PROMISES
CORPORATE OVERVIEW
HISTORY
CORPORATE PHILOSOPHY
CVRH
CUSTOMER CHARTER
CORPORATE COMMUNITY INVOLVEMENT

Promotion status of projects
LAND DEVELOPMENT
HANDLED RESIDENCES UNITS OF PUBLIC RESIDENCE LEASE
REDEVELOPMENT / RECONSTRUCTION
REMODELING
THE MAINTENANCE PROJECT OF URBAN AREAS
NEWTOWN
SUPPLY OF MASS ENERGY

Future project strategy
DEVELOPMENT OF YONGSAN URBAN TOWNAL BUSINESS DISTRICT
THE 2ND EASTERN LOGISTICS DISTRICT
MOONHUB CITY DEVELOPMENT
URBAN ENVIRONMENTAL MAINTENANCE PROJECT IN 4 DISTRICTS OF SEWON
THE HAN RIVER FLOATING ISLAND

SH(Seoul Housing Corporation)



LH

Russia

LH(Korea Land & Housing Corporation)

Korea Land & Housing Corporation

LH was established to spearhead the improvement of the quality of life and development of the national economy through the realization of stable housing for the country's citizens and the efficient utilization of the national land

Sitemap KOREAN

About LH IR Core Businesses Social Responsibility

SH아파트 외부환경디자인 가이드라인 연구

2011

•SH guideline for outdoor design

SH공사 도시연구소

•City of Seoul Green design public housing design guideline

「세계 녹색 경쟁력 선도 도시 구현을 위한」 그린디자인 서울 민간건축물 공동주택 설계 가이드라인



주 택 본 부
건축기획과

주택기술기론-2014-2

설 계 지 침 (건축)

2014. 7

•LH Public housing design guideline(building)

주택기술기론-2014-26

설 계 지 침 (주택단지계획)

2014. 6

•LH housing district design guideline

Challenges

Gender Analysis of Urban public housing

- Is community service accessible from every female resident?
 - Is it coordinated for female house holders lifestyle?
 - Is it safe enough for female residents?
 - Is it supportive for family care?
 - Is community service integrated for everyday use?
-
- Providing differentiated plan for female considering lifestyle
 - Providing natural surveillance for public space
 - Providing universal design to support entire life cycle for female
 - Providing flexible space to support diverse lifestyle
 - Integrated community service accessible for everyday use

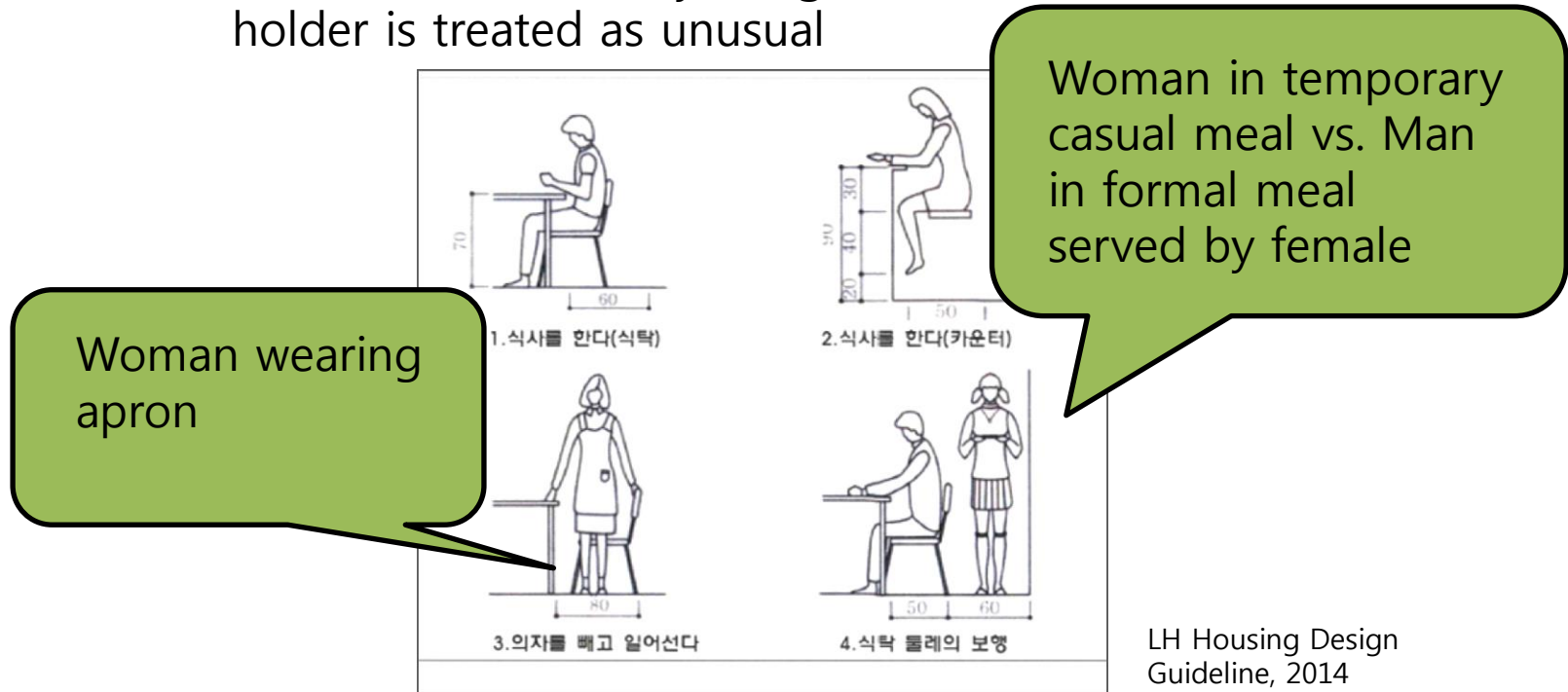
Frame of gender analysis

- **Perception of gender:**
Stereo typed gender division/ Myth of family
- **Safety issue:**
outdoor / indoor
- **Integration of community service**



1. Perception of gender:

- Stereo typed gender division
- Visual representation is gender biased
- Double income family/ Single female house holder is treated as unusual

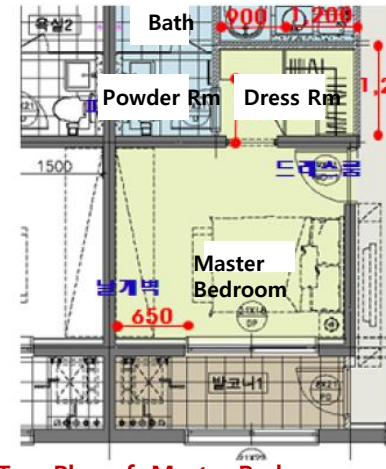
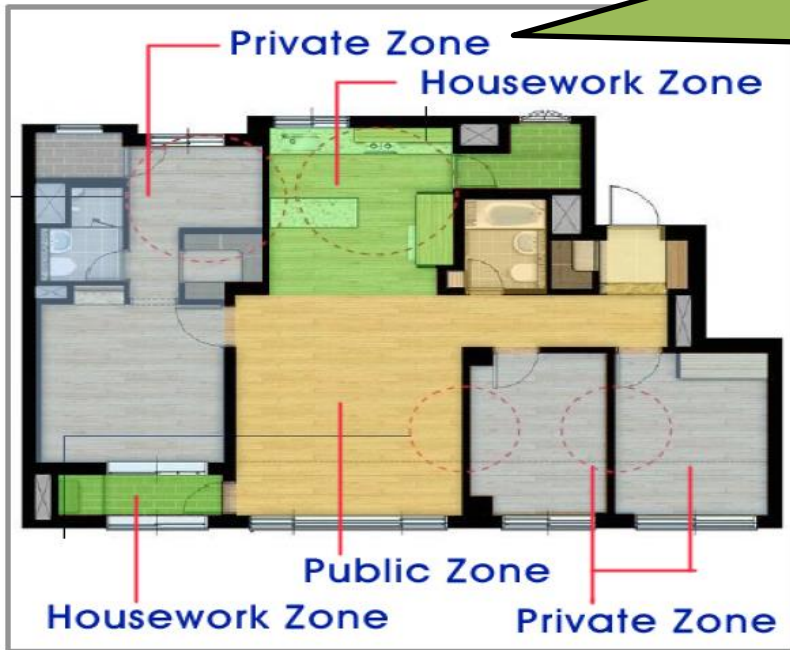


LH Housing Design
Guideline, 2014

- **Gender Innovation**
 - House labor equally represented
 - Gender neutral use of terminology
 - Visual representation needs to be gender neutral

1. Perception of gender:

Fixed master bedroom zone with designated bath type for couple:
No flexibility for single mom or co-housing



Typ. Plan of Master Bedroom

- Myth of family and marriage
- Copy of middle class private housing
- Not suitable for single female occupant in low income public housing

• Gender Innovation

- Providing different plan for single female householder considering life style
- Providing universal design supporting entire life cycle in affordable housing
- Providing flexible design for diverse life style

- Provision of alpha room

Alpha room?

Undefined extra space usable for multi-purpose room based on house hold's lifestyle

Exclusive option for middle class housing unit needs to be generalized for multi-purpose space in affordable housing to meet the need of female(esp. Low income family)



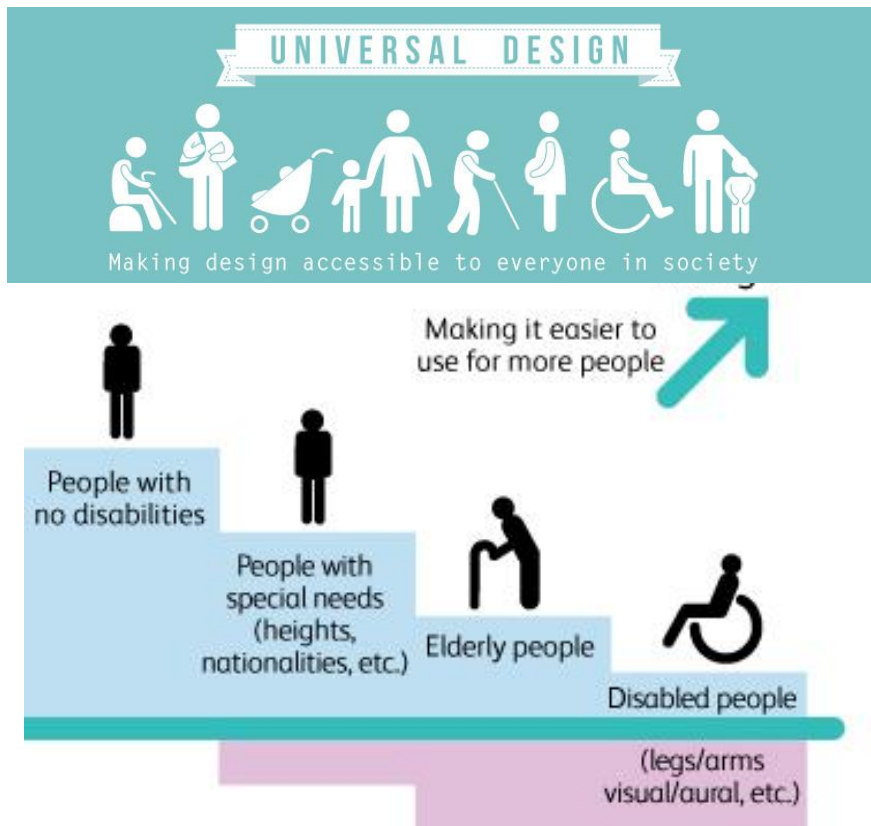
- **Flexibility of unit plan**

Different lifestyle of female (esp. low income family) needs diverse type of unit plan for part-time job, extra room for baby, room for rent, etc.

Different life-cycle of female's need can be satisfied with flexible space in terms of aging at home.



- **Universal Design for public housing**
Entire life-cycle of female requires universal design not only in the public space but also in the housing unit.



The Principles of Universal Design

The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

- 1 Equitable Use**
The design is useful and marketable to people with diverse abilities.
- 2 Flexibility in Use**
The design accommodates a wide range of individual preferences and abilities.
- 3 Simple and Intuitive Use**
Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or education level.
- 4 Perceptible Information**
The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.
- 5 Tolerance for Error**
The design minimizes hazards and the adverse consequences of accidental or unintended actions.
- 6 Low Physical Effort**
The design can be used efficiently and comfortably with a minimum of fatigue.
- 7 Size and Space for Approach and Use**
Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Center for Universal Design at NC State

2. Safety issue:

- Mandatory introduction of Piloti space
(Housing guideline, Ministry of Land, Infrastructure and transport)

Providing openness with the min. 5 m make the piloti space necessary without any safety regulation



- **Gender Innovation**
→ Conversion into activity area secured by public eye



- Designated location of public restroom(back side)
(LH Housing guideline, 2014)

- **Gender Innovation**
→ Toilet should be visible and accessible for safety issue



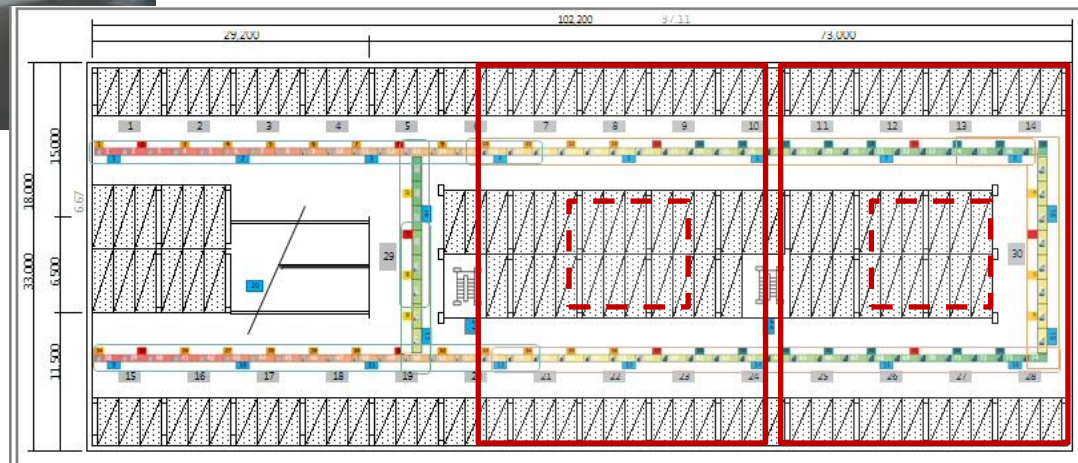
2. Safety issue:

- Mandatory integration of parking space:
Huge parking structure structurally integrated creates serious safety issue.
- * Provision of connection among underground parking



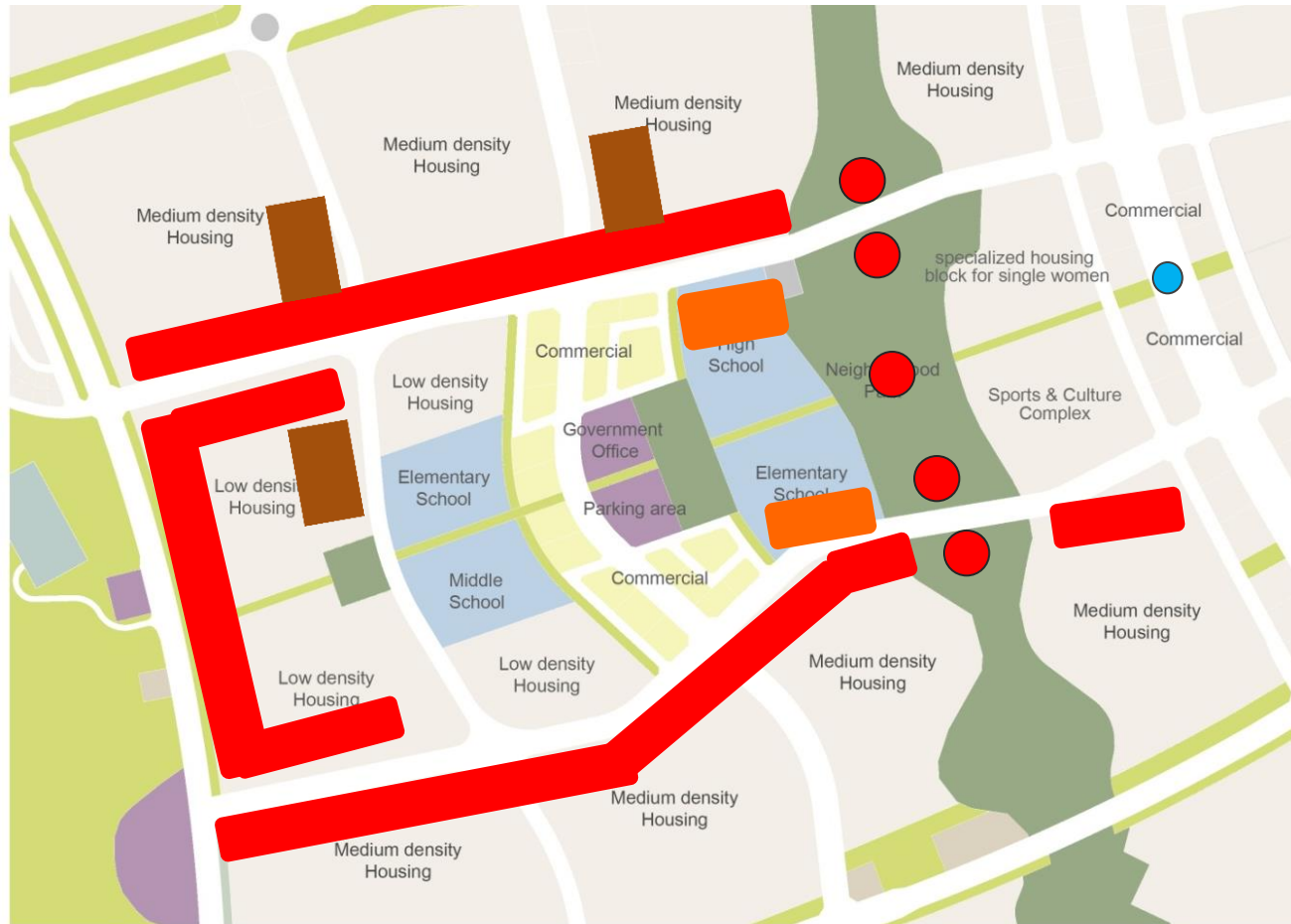
• Gender Innovation

→ Small size grouping
Introduction of Sunken Garden
and/or Skylight



2. Safety issue:

- Designated location of neighborhood commercial building(facing internal road):



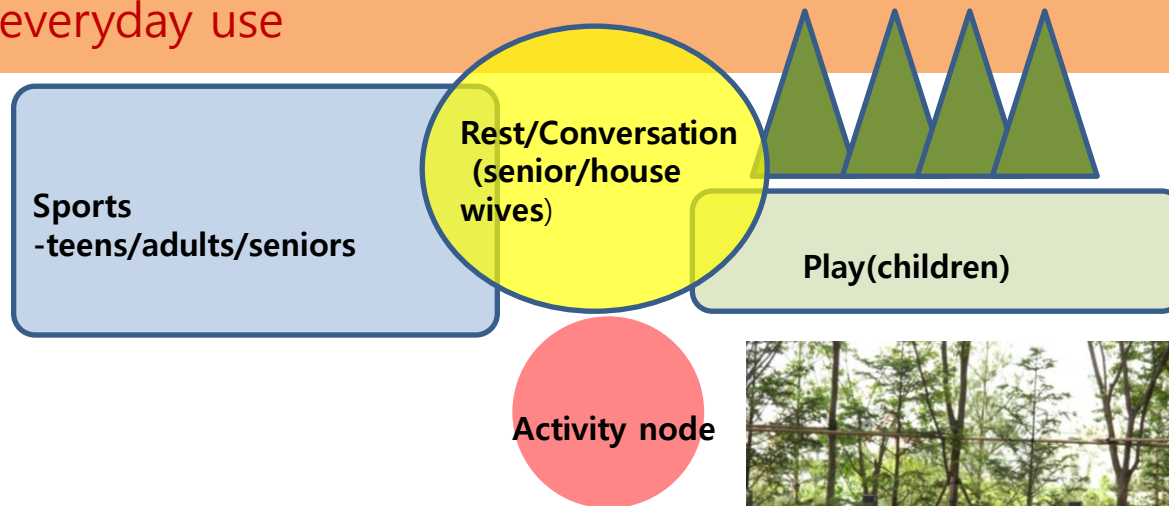
- **Gender Innovation**
→ street oriented retail should be activated for accessible location (Providing natural surveillance/ CPTED)

3. Integration of community service

- Guideline for scattering community facilities hinders precious family sharing time that enables parents' monitoring as well as protection for their kids
- Guideline for scattering community facilities hinders efficiency in running errand

- **Gender Innovation**

→ Scattered community facilities need to be integrated for everyday use



Conclusion

Awareness on the Affordable public housing guideline for female households

- **Large number of female-headed families** are vulnerable in terms of socio-economic status, leading them to live in poor surroundings.
- In terms of housing stability, costs, comfort and environment, unmarried single-person households and female-headed single-parent families are exposed to **poor housing condition**.
- Economic vulnerability and poor living conditions could cause them to be a victim of criminals and **safety** criteria in housing design guideline needs to be carefully checked.
- **Universal design** (Inclusive design)is a key issue for female especially in the aging society where poverty rate of single female senior is increasing.
- **Accessibility to community facility** is critical for low-income single-female households whose job is insecure and part-time based.
- **Flexible unit design** helps female household in various stage of their life cycle and style.

Q & A

syrieh@uos.ac.kr