# Transitional Spaces as Lever for Social Sustainability in Dense Housing Projects

dr. arch. Bart Janssens

arch. Victoria Taranu, Näomi Schuermans, prof. dr. ir. arch. Griet Verbeeck

Faculty of Architecture and Arts, Hasselt University, Belgium <a href="mailto:bart.janssens@uhasselt.be">bart.janssens@uhasselt.be</a>

# Introduction

- Topic
  - ... Social sustainability in Dense Housing Projects (DHPs)
- Findings > Incentives
  - $\dots$  necessity of building with higher densities  $\dots$  to tackle urban sprawl & land scarcity
  - ... DHPs often perceived as a step back ... due to historical individualistic building/living
  - ... Social sustainability as crucial aspect in DHPs ...
  - ... successfully integrated in European communal housing projects
  - ... promising role of transitional spaces ...

semi-public spaces that connect multiple private dwellings with the public spaces (e.g. courtyards, galleries)



# Introduction

- Problem statement ... narrow approach to 'sustainability':
- > Social sustainability is not yet seen as a crucial aspect in DHPs
- > lack of focus on implementing/integrating measures for Social sustainability
- conflicts > dragging legacy for support base of DHPs
- Objectives ... counter this legacy by:
- > studying how transitional spaces can act as a lever for social sustainability in DHPs
- developing promising perspectives for transitional spaces enhancing social sustainability
- > formulating design principles for architect-designers
- Methodology
- > literature review > components for Social sustainability
- empirical research (case study ... interviews, research by design)
- Limitations
- > Single case study, within the context of Flanders; small size of the sample ...

### Content

- Introduction
- Social sustainability of the transitional spaces a theoretical framework, not included in this presentation

Housing situation in Flanders, the potential of high density housing, social sustainability, communal housing, and transitional spaces

 Transitional spaces in Dense Housing Projects -Case study,

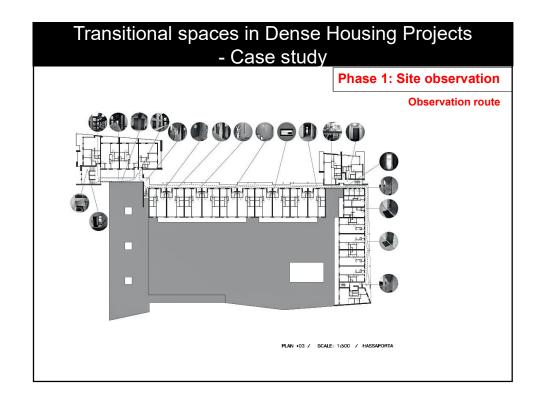
Identification of the case, Phase 1: Site observation, Phase 2: Exploring best-practices on the transitional space, Phase 3: Inhabitants' stories, Phase 4: Design proposals

 Outcome: Design principles for social sustainability in the transitional space,

Five design principles

Reflection









# Transitional spaces in Dense Housing Projects - Case study Phase 1: Site observation Some observations Visual relation with the courtyard Windows towards the external gallery

# Transitional spaces in Dense Housing Projects - Case study

- 'Seestadt Aspern' in Vienna (Austria), by Wimmer und partner;
- 'R-50 Cohousing' in Berlin (Germany), by Ifau & Jesko Fezer + Heide & von Beckerath;
- 'Torghalle' in Katrineholm (Sweden), by JAJA architects;
- 'Stadstuinen' in Rotterdam (The Netherlands), by KCAP;
- 'Koekoekspreeuw' in Amersfoort (The Netherlands), by KCAP;
- 'Coming out' in Grenoble (France), by Maison Edouard Francois.

### **Phase 2: Best-practises**

	Winner und gester
LOCATION:	Ausria - Verra
STATUS:	Cimpled (2015)
HOUSING TYPOLOGY:	High-density housing - Communal housing
TRANSITIONAL SPACE TYPOLOGY.	Cremal gallery
FUNCTIONS:	48 phase unia - Exertal communal building - selecturisting
	Private units: 45m2 Circhural circlor: / Circhural Ancions: /
FLEXBILITY:	The pairs were designed view meet in a high evel of wil- kinning that leaves mile space for fearbilly. Only the centre of the houses is made of lead bearing, with, with miles that the real of the house can be configured the pleased. Houses can also be combined to create bigger houses.
	Building group (Beugluppe)
SOCIAL COHERENCE/ INTERACTION:	The evernal gatiery at linked with the private units shrugh big windows and the semi-private husboll appares. This evernal gating viet in evide social interaction between the introblems. The semi-private visible spaces can be cumbined for children or play with each other.
IDENTIFICATION:	The semi-private rounds spaces are free for personalization, where personalized rounds spaces cleave a great level of identification within the building. Zhoming rounds building there is not much identification.
	There is one continued solutione, from there the events gallery can be accessed. The private houses are accessed through the events gallery.
ATTRACTIVENESS:	Secause of the high level of flexibility on the or- and our- side, the appartment can be changed individually
PRIVACY.	The level of privacy is very low because of the big windows directly new to the eventsi palery.
	(Wimmer and genner, 2017)

All external galleries of selected projects are evaluated through the same matrix of components for social sustainability, retrieved from the literature review

### Phase 3: Inhabitants' stories

Interviews & thematic coding

Emerging themes

### [1] FLEXIBILITY

Inhabitants are in need of a flexible system to protect them of **natural hazards**. Also for **privacy reasons**, flexibility can be an opportunity.

### [2] MULTIFUNCTIONAL USE

The external gallery is mostly used as a passageway, but not solely. Often children use this space as a playground, so it is seen as an **extension of the private dwelling**.

[3] NATURAL/ENVIRONMENTAL IMPACT The use of the gallery is **influenced by natural hazards and changing seasons**.

# Transitional spaces in Dense Housing Projects - Case study

Phase 3: Inhabitants' stories

Interviews & thematic coding
Emerging themes

### [4] A NEED FOR SOCIAL CONTACT

The inhabitants have a need for social contact with their neighbors. They miss a space to meet as a community would do, or just for casual meetings.

CODES ORGANISING THEMES GLOBAL THEME

### [5] MAINTAINING PRIVACY

Besides a need for social contact, respondents attach a lot of **importance to a certain level of privacy**. Today the internal composition of the private dwellings contradicts with this level of privacy since the bedrooms are oriented towards the gallery.

### [6] MAINTANANCE

Choosing for a more communal 'place' ultimately would also bring more maintenance that could be the cause for some conflicts. In order to prevent conflicts, a clear management system is key.

### [7] MATERIALITY

Today the inhabitants have some complaints about the usage of the concrete within the external gallery, as it becomes much too slippery in the winter. **Materiality can create or break a pleasant 'place'**.

Phase 3: Inhabitants' stories

Interviews & thematic coding

Emerging themes

[8] NEED FOR A ROLE IN THE DESIGN PROCESS

Buyers would have liked to have **a say within the design process**. Renters care less.

### [9] MIX OF GENERATIONS

Where elderly do **search for social contact**, the younger generations do not have any time for this. Yet, they would appreciate initiatives for having parties or events organized by and for the neighbours.

[10] LIMITATIONS OF THE ARCHITECTURAL DESIGN

The respondents do acknowledge some limitations, such as the external gallery being too narrow. Inhabitants miss identification of their dwelling, so they have tried to personalize it. As there is no clearly identified space for this, inhabitants of dwellings with a private landing personalize it to create a more pleasant and liveable environment.

# Transitional spaces in Dense Housing Projects - Case study

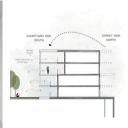
Phase 4: Design proposals

Incremental & fundamental

### [1] THE EXTERNAL GALLERY AS AN OUTSIDE/INSIDE SPACE







Phase 4: Design proposals

Incremental & fundamental

[2] THE EXTERNAL GALLERY AS A COMMUNAL MEETING SPACE







# Transitional spaces in Dense Housing Projects - Case study

Phase 4: Design proposals

Incremental & fundamental

[3] THE EXTERNAL GALLERY AS A MEDIATOR BETWEEN GENERATIONS
[4] THE EXTERNAL GALLERY AND THE RELATION TO THE PRIVATE HOUSE







**Phase 4: Design proposals** 

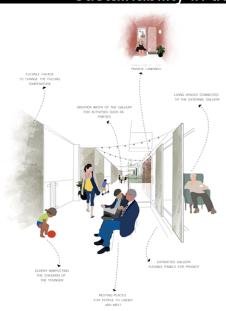
Incremental & fundamental

### [5] THE EXTERNAL GALLERY TO IDENTIFY THEMSELVES





# Outcome - Design principles for social sustainability in the transitional space

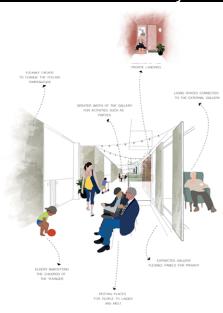


# [1] PRIVACY vs. VISUAL CONTACT AND SECURITY

Visual contact between the private units and the transitional spaces can be important to create a **greater social coherence level**.

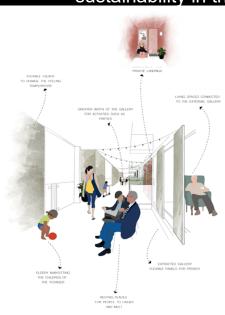
Visual contact can also give security to a project, by increasing safety through neighbours. On the other hand, it is evenly as important that the transitional space does not invade privacy.

# Outcome - Design principles for social sustainability in the transitional space



[2] CREATE AND LEAVE ROOM FOR IDENTIFICATION AND PERSONALISATION Within buildings with a bigger scale, people tend to feel absorbed by the greater mass. As a reaction to this, they start personalizing their own living environment, to outstand from the greater picture. Leaving space and possibility for people to personalize their own living environment is important for the social sustainability, as they can identify themselves through these personalizations. As a designer, not only leaving space, but already providing identification or spaces for identification is evenly, if not more, important.

# Outcome - Design principles for social sustainability in the transitional space

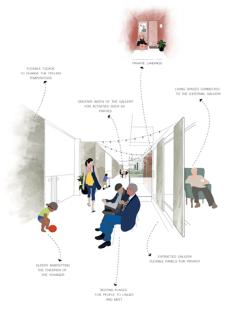


# [3] THE RIGHT DIMENSIONS FOR MULTIFUNCTIONALITY

We need to **design** the transitional space not only for the transitioning of the inhabitants, but also as a possibility **for multifunctional purposes.** 

Because in a building where no communal rooms are foreseen, a transitional space could be designed flexible enough to host spontaneous communal events, such as: parties, meetings, conversations, playing games, etc. It could really be a place for the community to meet.

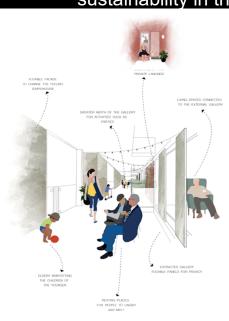
# Outcome - Design principles for social sustainability in the transitional space



### [4] COMFORT THROUGH FLEXIBILITY

People like to have a say in their living environment and even change it when needed. Therefore, **designing in more flexible aspects** could be a solution. And as seen in this case study, sometimes an outside space needs to become partially an inside space, and vice versa. And in a building where there are mixes of generations or cultures that cannot be foreseen in the design, **flexibility in privacy** can become key.

# Outcome - Design principles for social sustainability in the transitional space



# [5] ATTRACTIVENESS TO STIMULATE MULTIFUNCTIONALITY

When a transitional space is designed with a focus on the transitioning part, it occurs that these spaces are not designed to be attractive. But by making these spaces much more attractive, for example by implementing greenery or using other materials, they will stimulate other activities rather than merely transitioning. These activities, such as lingering or children playing, can create a more pleasant environment with a greater social coherence and interaction.

# Reflection

Can the transitional space act as a lever for social sustainability in DHPs, and if so how?



- Today, the transitional space is merely seen as space to go from private to public, or vice versa. However, transitional spaces hold much greater potential, i.a. regarding enhancing the social sustainability of the project.
- ➤ In order to design them to their full potentials, **five design principles for architect-designers were developed**. These can lead to inspiring, contributing and even reconciling 'places' in DHPs.



Thank you.

bart.janssens@uhasselt.be