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
bart.janssens@uhasselt.be

Introduction

• Topic
  ... Social sustainability in Dense Housing Projects (DHPs)

• Findings > Incentives
  ... necessity of building with higher densities ... 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

Identification of the case

Phase 1: Site observation

Observation route
Transitional spaces in Dense Housing Projects
- Case study

Phase 1: Site observation
Some observations

Unclear circulation signage

Width of the gallery

Some observations

Transitional spaces in Dense Housing Projects
- Case study

Phase 1: Site observation
Some observations

Personalisation of the private landings
Transitional spaces in Dense Housing Projects - Case study

Phase 1: Site observation

Some observations

Visual relation with the courtyard

Windows towards the external gallery

Phase 2: Best-practises

- ‘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.

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.

[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.

[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] MAINTENANCE
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’.
[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.

[1] THE EXTERNAL GALLERY AS AN OUTSIDE/INSIDE SPACE
Transitional spaces in Dense Housing Projects - Case study

Phase 4: Design proposals
Incremental & fundamental


Transitional spaces in Dense Housing Projects - Case study

Phase 4: Design proposals
Incremental & fundamental

Transitional spaces in Dense Housing Projects - Case study

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 also **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.
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.

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