# THE TRANSITIONAL SPACE
# IN HIGH DENSITY RESIDENTIAL
# PROJECTS, AS A LEVER FOR
# SOCIAL SUSTAINABILITY

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Naömi Schuermans

# ABSTRACT

The aim of this thesis is to investigate and identify the role of the transitional space within the social sustainability of high-density residential projects. Therefor this thesis focuses on the question: *"How can we use the transitional space as a lever for social sustainability in residential housing ?"*.

This thesis consists of a literature review and an empirical research. Because this thesis was created to support a final masters project within the studio of New economies, situated in Hasselt, a case-study in Hasselt was chosen for the empirical research part. Through a case study in Hasselt, examples of best practices and interviews with the inhabitants of the case-study, new design proposals of the case-study are formed to enhance the social sustainability within this specific project. And to ultimately create some design principles for architects to implement into the transitional spaces of their projects, to enhance the social sustainability. These design principles are then tested within the final master project.

As Belgium is in search of new housing typologies to compensate the demographic changes and the land scarcity, living closer together becomes more important. Living closer to each other, with a higher density, can create advantages but also some disadvantages. And to convince people to live closer to each other, pleasant spaces to live in are very important. This creating of spaces that are pleasant to live in, can shortly be described as the social sustainability of a project. As today this term is not yet very known communal housing projects seem to have integrated this aspect in a very effective way. To go further into detail, the transitional space could even be implemented as a reconciler in conflicts on inhabitants of high-density projects. Today these spaces are mostly being used as solely a passageway, although they have so much potential to enhance the social sustainability of the overall project. This could be achieved by keeping in mind: privacy, flexibility, multifunctionality, identification, personalisation, etc..

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# CHAPTER 0

# 1. **INTRODUCTION**

this very moment Flanders is facing some problems associated with the housing stock and e built environment of Flanders. We are looking at a future full of a scattered built environment :isting of detached houses. And with the current climate changes we are looking for more istainable ways of living instead of consuming even more land. On the other hand our families e changing in structure, and the typical housing typology of Flanders is not matching with is changes. So today we as designers are looking into new alternative housing typologies for is changing generation. The key in the search for these new typologies will be the social istainability of them; we need to think of living and housing in the long run. In this thesis we ll look at communal housing as a viable solution for these problems. The typology of communal iusing is not a new idea, in fact it has been used many times through-out the history in chitecture, but this idea of social sustainability is new for most of the examples.

the modernist period we can see a couple of high-density housing projects that have failed :cause architects ignored the social factor in their projects. They try to design buildings and rce the ideal usage of these buildings onto the future inhabitants without even engaging them their desires in their designs. This does not mean that designers cannot design a good icial sustainable building but that they have to be more realistic in their projects and need to ink in a future perspective with the future inhabitants. This we can see in the example of the uitt-Igoe building, which is commonly seen as a symbol of architectural failure in the modernist a. Although most of the people think this is because of the architects who were unable to sign qualitative spaces for the poor, the aspects that lay at the base of the failure are more despread (Bristol, 1991).

this thesis we explore the social sustainability in high-density housing projects, and the function the transitional spaces in relation to the social sustainability. In this research we will try to rm an opinion on the need of high-density housing projects in Flanders today and what the ture can be for these typologies. In this typology of high-density housing we can see an aspect at is named "the transitional space", although this sounds as an unknown term, we daily see lot of different transitional spaces. It can shortly be defined as the semi-public spaces that nnect the multiple private dwellings with the public spaces. This space can play a big role the social sustainability of a high-density housing project, because this is at the moment e space where neighbours meet each other the most. In this thesis we want to research the nction this transitional space can have, in enhancing the social sustainability of a high-density iusing project. The thesis consists of a literature review, an actual research part in the form of case-study in the context of Flanders and a design proposal in the form of my master project.

*Figure 1-4: The destruction of Pruitt-Igoe, Saint-Louis (1972), Retrieved from (Politecture, 2011)*

# 3.   PROBLEM STATEMENT

s shortly mentioned before, we are facing some problems in Flanders regarding the way of ing and building. Today we are reaching the ends of our land usage, but with our population owly growing natural or from immigration, we are in need of more housing (Ruimte Vlaanderen, 016). But on the other hand, seeking for a solution in social sustainability today is not as easy s it sounds, today we cannot find any guidelines regarding how to implement social sustainability a housing project. In the following parts these different problems will be discussed shortly to eate a base on which this research is founded.
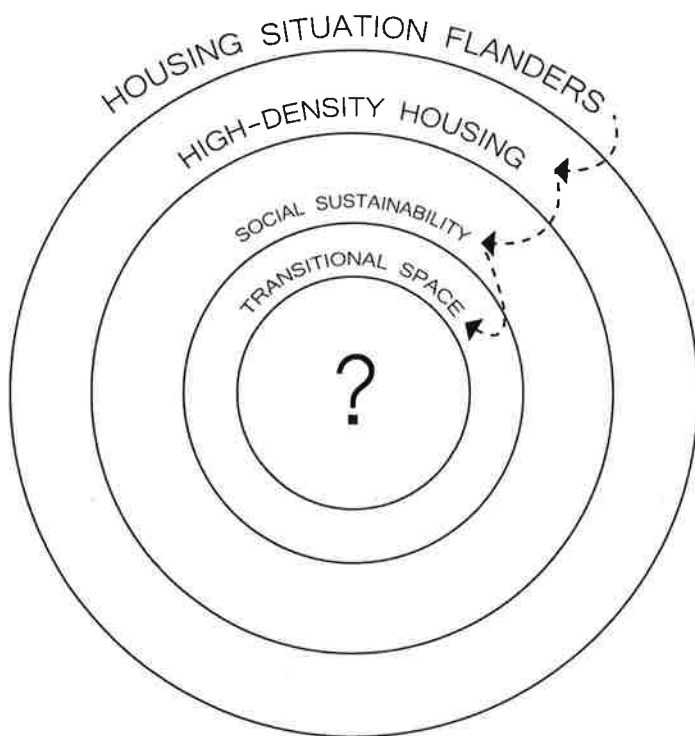


*Figure 5: Structure scheme of the content of the thesis (own scheme, 2018)*

# 1.    Housing situation in Flanders

Since the industrial revolution Flanders has been building up more and more land, until today we reach the point where we are at the end of our land usage (Ruimte Vlaanderen, 2016). Flanders is known for its widespread and scattered building landscape, where mostly every family has its own private detached house accompanied by our private car which we need to go to work (Statistiek Algemene Directie, 2017). The amount of detached houses in Flanders today takes up 28,80% of our total amount of buildings in Flanders (CIB Vlaaderen, 2015). And with all of us living widespread across the area of Flanders but still working in the cities, our car has become very important to each and everyone of us. Facing the problems with climate change we know today, this over-usage of our car is adding on to this problem. Urban sprawl and commuting with cars contribute to environmental issues, more dense housing such as multi-family housing might be a solution to address these issues.

But also the changing demographics in Flanders is making us to rethink our current housing typologies. On the one hand we are noticing a growing population, natural or by immigration, on the other we can state that our family structures are evolving. We can see more and more: single-households, smaller households, newly assembled families, etc. (AG Stadsplanning Antwerpen, 2014). The building typology or the way of building and living we have developed throughout the years in Flanders does not fit these changes anymore. And further building up our landscape is not the answer either. So today we are searching for an answer and a new typology of housing in Flanders, which answers to this changing demographic, and thus needs to be more flexible. This is a task, which will become very important for designers, in the next years for Flanders, with the upcoming Betonstop in 2050 (Ruimte Vlaanderen, 2016).

# 2.    Living with high-density

order to stop the urban sprawl and the further land use we need to build more dense. Multiple esigners and researchers are stating condensing is the one solution for Flanders. But seeing the pology of high-density housing as the one viable solution for this housing problematic, comes ith a couple of advantages but also disadvantages. Of course condensing the way we live lowers ur footprint, which is one of the most well-known advantages of high-density buildings. We in leave more space unbuilt and create more open space for possible recreational usage. Note at when we start building up our cities with only high-rise buildings, which is the most known pology for people when discussing high density, we are creating crammed space in between gh-rise buildings, which creates a not so social sustainable environment. We need to think about nart configurations of high density, which fits its context (Cheng, 2010).

ut if high density seems such a viable solution for our housing problematic in Flanders, then hy are we not all living in apartments? And that is where a part of the problem begins, people day are not living in more condensed housing typologies. At least 75% of the Flemish people e in possession of a private house, which is in most of the case a big detached house with ; own yard. The inhabitants of Flanders still see their own house as a way to show their social atus to the rest of the world. People still look at renting a house or living together with others, ; a way of living for the social lower classes (Sterken, 2006).

n the other hand accompanying this dense housing is also an appropriate way of transportation. sage of the car will be much less if we live closer together and closer to where we work hich will be better for our environment (Cheng, 2010). This will also ask for new ways of inking about transportation and possibly thinking about shared or public transportation. Today ıblic transportation is not as efficient as it should be, this because of our widespread way of ʻing, this makes it economically not possible to have an efficient public transportation network Van Broeck, 2014).

'e can state that today there still needs to be a change of mentality in the way that people ok at these dense housing typologies. People need to be convinced to think that dense housing the solution for the housing problematic in Flanders and that this solution is a pleasant one r everyone.

# 3.    Social sustainability

Where today, sustainability is a well-known concept when it comes to architecture, in the most cases we only see a focus on the environmental or economic part of it. We all have a very great base of knowledge about environmental sustainability, but we cannot say the same about social sustainability. In the case for urban planning there has already been great researches about social sustainability on the scale of the city, for example Jan Gehl and his life between buildings (Gehl, 2011). Also on the neighbourhood scale there have been multiple researches, for example the research about future communities done by Social Life (Bacon, et al., 2012). But for the scale of the building it is still a new concept. In this thesis the focus will lay on the building scale instead of the urban scale or neighbourhood scale. This is important, as the indicators for social sustainability are different for the urban scale, the neighbourhood scale and the building scale.

And even when we look at the studies already done on the urban or neighbourhood scale, we can see that we already have a great knowledge about how to design qualitative social spaces for people but still it is difficult to rightly implement these concepts into our everyday designs. The problem lays in the fact that we do not have a theorization or standardisation for this concept as we have for the environmental sustainability. For the environmental sustainability we know all types of tools to adapt this concept in our architecture design, but for social sustainability we do not have a framework. And with a knowledge database that is that big, it is very difficult to use this into our designs. (Bacon, et al., 2012) And thus it is even more important to create a good framework for social sustainability on the building scale.

On the other hand, in the light of the changing demographics, we see that our cities become more and more diverse. We live amongst people with all kinds of nationalities and cultures, with all different standards and needs. And these from one place to another makes the context of a project very important. Because of this continuously changing context it is very hard to predict what is needed in a project. Thus this makes it very hard to create a standardisation for social sustainability and for designers to interpret it (Bacon, et al., 2012).

But not taking social sustainability into account, might contribute to the failure of the project altogether as stated previously with the Pruitt-Igoe project (Bristol, 1991). Neglecting the social aspect of a building can lead up to high financial costs when a building is forced to make changes to improve the social quality of a building on the long run. By looking back at this project we can also see that this problematic is not new and that we can learn a lot from these "failed" projects.

# .   The transitional space

hen designing in high density, transitional spaces are eventually added into the composition,
 space that defines the transition from private to public space and vice versa. The problem
th these spaces today, is that they are merely seen as a space of transition, as just a pass
ıy. This while the transitional space connects the public with the private. In the context of
cial sustainability and community housing, these places can be crucial to create a sense of
mmunity within a building. These are the places where you meet a neighbour, and if they are
ell designed, can encourage lingering and improve the social interaction between the inhabitants.
 that way it can be important to keep in mind the transitional space when designing a project,
 they can enhance the social sustainability and act as a mediator between neighbours. When
e do not keep this into account, and see these transitional spaces as merely a transition space,
ople are probably not lingering in these spaces. They want to leave as fast as possible, which
n ultimately lower the social sustainability of the overall project.

# C.   OBJECTIVE

e can state that Flanders is facing some problems, in the form of land usage, an upcoming
owing population and a not sustainable housing typology. With this research I hope to define
viable proposal for this question we are facing in Flanders today: "How are we going to build
the upcoming years, keeping in mind our growing and diversified population, without putting
ore pressure on our land-usage? And how can we persuade people into living in this newly
iplemented typology in Flanders?". In this thesis we will focus on the social sustainability in the
insitional spaces, as a lever for people to be more attracted to high-density communal housing.
ith this thesis I hope to show, in the form of design proposals, designers and the inhabitants
Flanders what could be a new interesting way of living. Because for these designs to work
e also need to convince the inhabitants of Flanders of the possibilities and possible advantages
immunal housing carries.

# D.   RESEARCH QUESTIONS

The aim of this research will be to explore how the transitional space, in multi-family housing, can play a role in the enhancement of the overall social sustainability. This will be researched in three chapters whereas the first one will be done by literature review and the second one through a case-study in the context of Flanders. The last chapter will contain my master project, which will be seen as a pilot project on social sustainability in the transitional space of communal housing. Each chapter contains its own research questions, which will be described below. The main research question of this thesis can be described as:

*"How can we use the transitional space as a lever for social sustainability in residential housing?"*

Research questions – CHAPTER 1: Literature review

- What is the housing situation in Flanders today and what are the prospects?
- What is dense housing and in what way is dense housing needed in Flanders?
- How can communal housing give an answer to the need for high density housing in Flanders?
- What are the indicators for social sustainability and how can these be used in transitional spaces of dense housing projects?
- Which aspects of the social sustainability can be taken into account in the design of dense housing projects?
- What is the definition of a transitional space?
- What are the typologies of transitional spaces in dense housing projects?
- Which tangible and intangible features can we keep in mind when designing for social sustainability within the transitional spaces?

What kind of transitional spaces can we find in this project?

How is the transitional space used today?

How is the social contact between the inhabitants of the project?

Can the transitional space be used to enhance the social sustainability?

How does the architectural design of the building focus or not focus on the social sustainability?

Could we adapt the existing situation of the transitional space today to create a greater social sustainability?

How could the transitional space have been designed otherwise to create a greater social sustainability?

What could have been the impact of a cooperative designing strategy?

What could be some design principles for projects like Hassaporta to create a socially-sustainable transitional space?

How can we integrate these design principles into the design?

In what way can a working and living environment implement social sustainability within the transitional space?

Can the transitional space work as a reconciler between a working and living environment?

What kind of working environment enhances the social sustainability?

What kind of complementary aspects can we find between the working and housing typology?

# E.  METHODOLOGY

The research for this thesis will be done in three chapters, where the first one will be done through a literature review, the second one a case-study in the context of Flanders and the third one will be my masterproject which will test the outcomes of the first two chapters. In this way each chapter will have its own research methodology. The first chapter will be done through literature review as a base for my empirical research.

In the empirical research there will be a case-study based on the insights from the literature review. This case-study can be seen as one of the typical high-density housing projects that are implemented in the urban fabric today. In this chapter we will try to create an opinion on the social sustainability of these typologies in their transitional spaces. This empirical research consists of four phases:

1 )     Site observation:
In this phase I will do an observation of the existing situation. This site observation will mainly be done through a photo reportage. In this phase I will classify the different typologies of transitional phases in the case-study, and eventually chose one to further investigate.

2 )     Examples of best practices:
Once I have chosen one specific typology within the case-study, I will do a literature review on examples of best practices on this specific typology of the transitional space.

3 )     Inhabitants' stories:
These interviews will regard the social sustainability in the transitional spaces of the project. If the designers did not kept this aspect in mind, I will try to find out if there would be a need for this within the project. The method for this phase is semi-structured interviews that will be done in two phases, one before and one after, showing them the examples of best practices. During this second phase in the interviews, I will use the information gathered throughout the best practices, in a way that the inhabitants have good examples to reflect on. These interviews will be done through conversations and will be documented as audio-recordings. These interviews will be analysed through verbatim transcriptions of the recordings and thematic coding.

4 )     Design proposals:
After the interviews I hope to have retrieved some insights in how to change the existing project into a more social sustainable project. In this last phase I will give a design proposal to enhance the social sustainability within the transitional space and how it could have been implemented better if we would rethink the building. This design proposal will consist of altered situation sketches based on pictures of the building today.

will conclude these four phases with some design principles for architects to implement social ustainability within the transitional spaces of their projects.

the last chapter my master project will be discussed. This project can be seen as pilot project show the inhabitants of Flanders and designers how we can design social sustainable projects rough the transitional spaces. WIthin this last chapter I will discuss the programme within my oject an the function of the transitional spaces related to the social sustainability of the overall oject.

LITERATURE REVIEW

Housing situation in Flanders

The potential of high-density

Social sustainability

Communal housing

Transitional space

PRELIMINARY FINDINGS

CASE-STUDY

Casestudy Hassaporta

Phase 1: Site Observation

Phase 2: Examples of Best practices

Phase 3: Inhabitants' stories

Phase 4: Design proposal

CONCLUSION
Design principles

PILOT-PROJECT

New Economies - Hasselt

Assignement description

MACRO - Masterplan

MESO - Masterplan Water frontyard

MICRO - The Moviehouse

REFLECTION

*Figure 6: Structure scheme of the methodology (own scheme, 2017)*

The following part of the thesis will consist of a literature review, where we will first take a more detailed look into the situation of Flanders today, to understand better the reason for the search of a new typology in Flanders. Later on we will discuss in the same order: the potentials and disadvantages of high-density, social sustainability, communal housing and the transitional spaces. By doing the research in this order we evenly zoom in until we reach the scale of the building, even more zoomed in, the transitional spaces. This literature review is needed to create a base of knowledge of the topic, so that in the second part we can apply this knowledge on the case-study of the second chapter.

Literature review

# CHAPTER 1

# HOUSING SITUATION IN FLANDERS

stated before we are at the end of our land usage in Flanders, when we look into the statistics the housing stock in Flanders we can see that the greatest part consists of detached houses. be more specific, detached houses take 28,80%, semi-detached take 18,62%, Row houses e 22,42% and apartments take 24,50% of the total amount of buildings in Flanders (Figure ) (CIB Vlaaderen, 2015). From these statistics we can conclude that detached houses, ich are widespread and scattered across the built landscape of Flanders, dominate the housing ology in Flanders. This while a detached house uses 20% more energy for heating than an artment (Ruimte Vlaanderen, 2016). Today we have already used up to 33% of our land, eryday we consume 6 hectares of open space. If we keep on building at the same pace we ll have used 41,5% of our open space by 2050 (Figure 8) (Ruimte Vlaanderen, 2016).

day designers in Flanders are already focussing on this widespread housing phenomenon, as is described as a not sustainable housing tradition because of this overconsumption of open ace. With creating this tradition we supported the use of individual cars throughout the years. cept the fact that we all like to have our own car as some sort of statute to the outside world, en we live that far apart from the place where we work, we are in need of cars. Today we e the historically biggest amount of traffic jams per employee, with an average of 121 km in e evening per day (Vlaams verkeerscentrum, 2017), which is one of the causes for the air to polluted. The usage of our public transportation infrastructure is constantly lowering, in 1960 ere were 230 million train travellers, in 2000 we only counted 150 million train travellers. This cause a private car is more and more needed to bridge the distance between our work and use. And as stated before it is impossible to create an economical efficient public transportation twork when we live that widespread (Van Broeck, 2014). This problematic of the widespread using typology in Flanders can be linked to the urban sprawl.

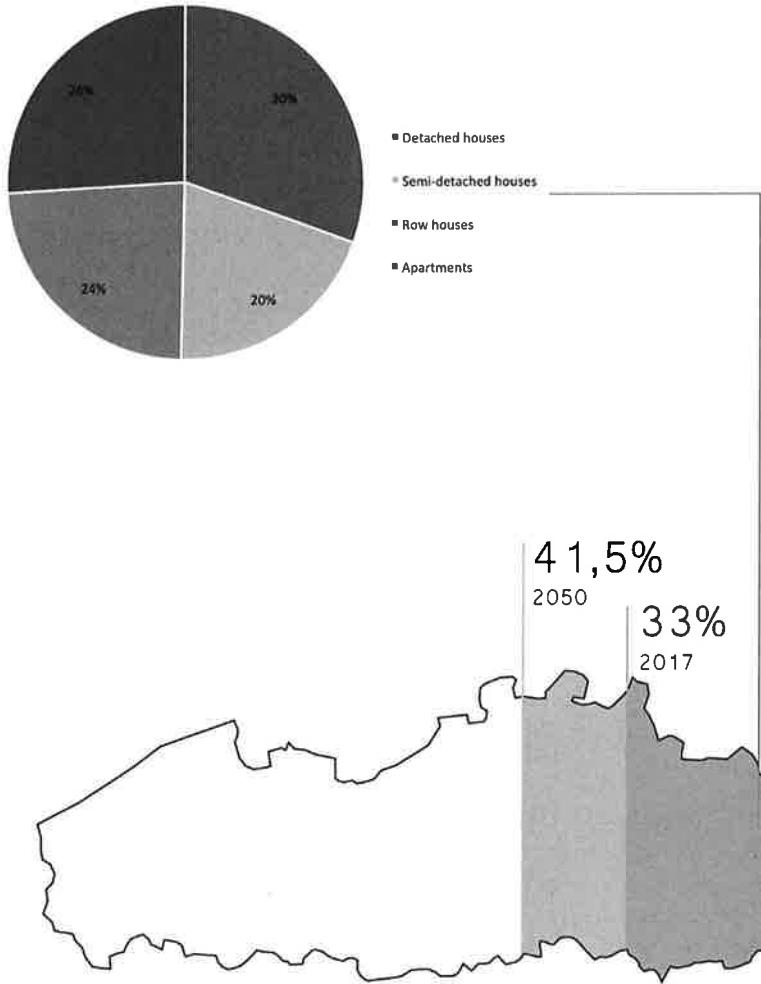Detached houses
Semi-detached houses
Row houses
Apartments

30%
24%
20%

41,5%
2050

33%
2017

*Figure 7-8: Amount of housing typologies in Flanders (own illustration, 2017)*
*Land usage in Flanders (own illustration, 2017)*

# History of urbanization in Flanders

'ith the industrial revolution, industries started to settle in Flanders. This made Flanders from a
:lf-sustainable area to a now industrial area where everybody worked in industries. Because of
:ople working in these industries they also started to settle around these industries. Because
ese are mostly situated in urban context, most of the cities became saturated. This created not
) healthy environments for people to live, which made the authorities and the owners of the
dustries to create an infrastructure network, of railroads, for their workers to live more inlands.
) people started to live more widespread and the urban sprawl began (Beenaerts, 2014).

nother influential aspect of this housing typology in Flanders is the period after the Second
'orld War. After this war, Belgium was almost untouched by the war and because of Belgium
tting foreign troops stay at their land during the war, it was compensated with a great amount
 US dollars. This created an economical boost for Belgium compared to the other countries
ter the war (Heynen, 2010). They could invest more into industries, and thus they started
;ing new industry technologies like the assembly line, which created a more efficient way of
orking, and thus ultimately also more supply. To compensate this new amount of supply they
ere in need of more demand, which they created by wage increases. Flanders was in a stage
 healthy welfare and people started consuming more and more following the example of the
merican lifestyle. We all got our own private car and all lived more land inwards in a detached
)use (Kesteloot, 2003).

 the years after the Second World War the authorities kept stimulating urban sprawl and this
ay of living by creating the law "De wet de Taeye" in 1948. With this law the authorities gave
e Flemish people a bonus for building or buying a new house (Kesteloot, 2003). On the
her hand they let people loan money from the banks, for their investment of a new house, for
e full 100%. Before, people only got 60-70% from the banks. In that way people were more
nvinced to build or buy a new house because they could just loan the complete amount of
oney they needed (Beenaerts, 2014). These aspects all led to the fragmentized landscape of
anders we know today. Which is characterized by the linear divestment consisting of detached,
:mi-detached and row houses, along long concrete roads that divide the landscape. From a
rds perspective we can overlook this scattered landscape where it is very hard to distinguish
e city centres from the countryside (Figure 9) (Beenaerts, 2014).

Figure 9: Birds perspective of the fragmentized landscape of Flanders, Retrieved from (Vlaams Bouw-meester, 2018)Land usage in Flanders (own figure, 2017)

history took place, today we still live within this fragmentized landscape we call Flanders. nd we keep on building in the way we know the best, the detached house on the countryside. feels like this has become a tradition that will be very hard to get rid of. Today parents still iy their children a small piece of land to make sure their children can build the house of their eams within the next couple of years (Camp, 2017). The mentality of people in Flanders is iportant, Flemish people still dream of a big detached house on the countryside with a personal ir that can bring them to their work in the city. Multi-family housing typologies are seen as a reat to the status, because it is still seen as a typology for the lower classes. Our house has :come an object of status to the rest of the world, we like to differentiate us from the others rough our house. So we personalize our house as much as we can (Sterken, 2006). Which so brings us to the fact that a mix match of different styles exists in the current housing stock. is already gave Belgium the name of ugliest country on earth (Beenaerts, 2014). But this so shows us how important the personalisation of a house is for the Flemish people.

it today the tide is turning, we are in search of implementing new housing typologies in Flanders id another reason for this search is the change in demographics. Our population is slowly owing naturally and through immigration, which means that there will be a need of housing the future. And when designing these new houses we need to keep in mind the end of our ace usage but also the diversity of our population.

# 2. A change in demographics

In Flanders the population is expected to grow from 6,4 million people in 2013 to 7,2 million by 2060 (Ruimte Vlaanderen, 2016). This change in demographics can have its cause in migration or just through natural causes. The natural side of it can be linked to an aging population, the growing amount of single people, newly assembled families and so on (AG Stadsplanning Antwerpen, 2014). By 2060 the amount of households in Flanders is expected to increase with 19% compared to the amount of households today (Ruimte Vlaanderen, 2016).

Because of these changing family structures, people are in need of a more flexible way of living and a more flexible housing stock. For example a house where they can change the configuration if a family member leaves the house. Today we can see that our housing stock is not evenly responding to the demographic changes and thus the need for more contemporary housing typologies (Becker, et al., 2015). Even our Flemish "bouwmeester" is favouring these new flexible ways of living for a changing family. He is stating that we need to design family-friendly apartments with collective spaces where communal activities can take place. (Vermeersch, 2016).

On the other hand we have the immigration, which is currently a very big topic. But keeping this inflow of very different and diverse cultures in mind, we will need to design differently. The needs, standards and cultures of these people are very diverse and we will need to keep this in mind when designing (Ruimte Vlaanderen, 2016). Because of this social diversity it could be important to know who our future inhabitants are at the beginning of a project (Camp, 2017).

# G. THE POTENTIAL OF HIGH DENSITY HOUSING

When looking into the aspect of sustainability on the environmental side, we can see that Flanders today has a not sustainable housing typology. As discussed before, there was no good history of urban planning in Flanders, which is why we live how we live today (Beenaerts, 2014). We live in private detached houses scattered over the surface we call Flanders, we can state that this type of housing has a negative environmental impact and we need to research different types of housing. The question here is if dense housing could be a solution for this problem in Flanders.

# 1. Dense housing

Given the change in demographic trends, we know we are facing an upcoming need of housing. On the other hand we have to use our land more efficiently because we are reaching the borders of our land usage. Seeking a solution in high density can possibly be a viable answer to this problem. To understand a bit more what we understand by talking about dense housing, we will discuss some basic knowledge in the next subchapter.

## 1.1 Basics of high density

When talking about high density we can talk on a qualitative and a quantitative layer. Most of us are aware of the quantitative layer, which could be represented in the amount of units per hectare, UPH. A dense project corresponds to a high UPH and vice versa. In (Figure 10) we can already consider different UPH values with accommodating different morphologies of high density.
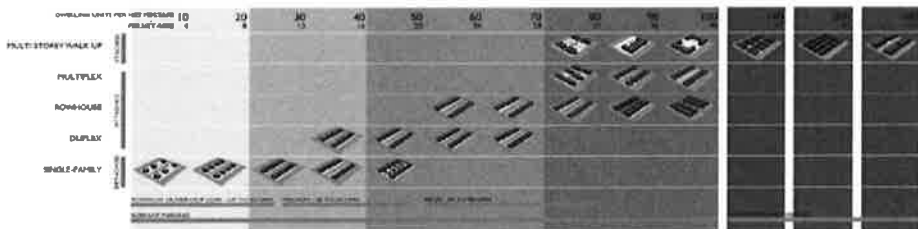


*Figure 10: Architectural morphologies and corresponding UPH's, Retrieved from (Janssens, 2014)*

is quantitative aspect of high density housing plays an important role. Different morphologies ver up different amounts of space and buildings with the same value for density can have total different morphology. When creating a tower we create mostly a very high density with minimal of land coverage, which creates a lot more open space. Which will mostly be used parking or other public services for the tower, like a communal garden for example. But on e other hand a low-rise high density building with a middle courtyard, could have more land verage but the inner courtyard instantly gets a function as communal area. This instead of the en space that is left because of the tower, which maybe never gets a real function. A good lance between the context and the right morphology could be very important (Cheng, 2010).

ese different types of morphologies can be categorised into three categories of high-density: jh-rise, medium-rise and low-rise (Cheng, 2010). These three categories in reality will pend on the context that one is considering. For example, High-rise towers will be built ss likely in a city like Hasselt but rather in cities like Dubai. In cities like Dubai the already veloped building stock consists already of a lot of high-rise so new developments will mostly low this trend (Cheng, 2010). So for this research we will focus more on the scale of low d medium-rise density.

is quantitative approach of density has some advantages and disadvantages that needs nsideration. It is widely known that building with a higher density serves a more rational use land, and leaves more open space. But some other positive influences are (Bâldea, 2012) lanssens, 2014):

A more efficient use of transportation and fossil fuels, because of people living closer to each other and to the city centres or the places where they work
More usage of the public transportation network
Shorter distances motivating people to walk
Living closer together creates a cross-pollination of creativity and knowledge
Shorter distances for infrastructure and pipelines creating less build and maintenance costs
Living closer to facilities and services
Enhancement of the social interaction between people

But building in high density can also come with some negative impacts such as(Bâldea, 2012) (Janssens, 2014):

- Only focussing on profit and economic value can create stressed social environments
- Lack of intimacy and privacy
- A diverse population but inflexible programmes can lead to social stress and ultimately leaving the projects
- No personalisation, uniformity
- Heat-islands effects in cities
- No solar access
- Living closer together can cause psychological issues and stress, because of some people being forced into unwanted social contacts

On the contrary we can consider the qualitative high density or the perceived density. This depends on the perception of an individual of the amount of people in an area (Bâldea & Dumitrescu, 2013). What feels like a lower density to me can feel like an overcrowded space to another individual. This can depend on ones cultural background or on the way they are used to live (Janssens, 2014). This perceived density could be influenced by architecture through the colour of a room or the size of a window. Studies have shown that when there is a visible relation to the outside of a building or an open green space, that the space will be perceived less dense. Another important factor, which can also be applied to the transitional spaces later on, is the width of a street. Studies have shown that the width of a street has a serious impact on the perceived density of a place. Creating wider passages lowers the feeling of overcrowding.

# .2 Morphologies of high density

he morphology of different high-density projects can be defined by the way the individual wellings are stacked or linked with one another (Leupen & Mooij, 2011). This morphology ays a great role on the urban tissue and as stated before, for the context of Flanders we e only focussing on the low- and medium-rise buildings. In these categories we can differ a ouple of morphologies, which can be described, after the work of Bernard Leupen, (Figure 11). Leupen & Mooij, 2011):

**CLUSTERED LOW-RISE**  **MAT**  **INFILL**

**URBAN VILLA**  **SLAB**  **BLOCK**
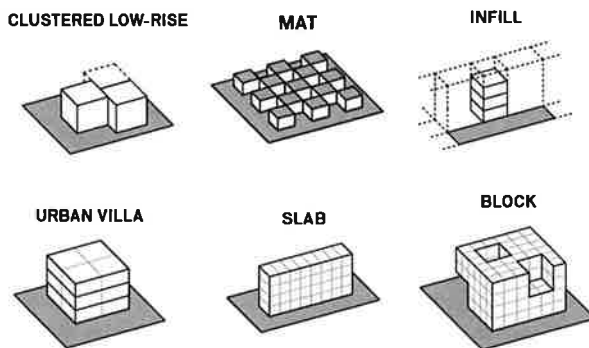
*Figure 11: Leupen & Mooij, Morphology of high-density (2011), Retrieved from (Leupen & Mooij, 2011)*

he first type exists of multiple private dwellings connected with each other and focussing on e exterior of the "cluster". The entrance of the dwellings usually happens privately but can so be communal. The same can be said about the "mat", only here private yards are more ommon. The "infill" can be seen as a row house with multiple dwellings inside of it. The ultiple dwellings are accessed by a common staircase, because of a lower UPH an elevator unnecessary. With the "urban villa" the dwellings can be stacked vertically but also linked orizontally by a common staircase connected to a corridor or atrium. The higher the UPH the gher the need for an elevator. The "urban villa" can still be implemented in a more rural area ecause of the still lower UPH. The "slab" could have the same accessibility as the urban villa, ut is much more condensed than the urban villa. The "block" has an even higher UPH than the ab (Leupen & Mooij, 2011). Important is the scale of the city where the project is going to e implemented, so that the scale of the "block" can match to the scale of the city (Bâldea & umitrescu, 2013). In the context of Flanders The first four types are the ones typically used hen discussing high-density.

## 1.3 Need for future-proof high density housing

With the upcoming demographic changes we can see that there will be different family structures and nationalities living amongst each other. We do not longer have a typical traditional client where we need to build houses for, therefore we need to find a new building typology where all these new family structures and nationalities fit in and as stated by Bâldea the key for this new typology will be the search for flexibility (Bâldea, 2012). When looking into the statistics of Flanders we see that the family structure is constantly changing throughout the years. The following chart is a representation of all the different types of households in Flanders (Figure 12).

| Huishoudenstype | 1970 | 1981 | 1991 | 2001 |
|---|---|---|---|---|
| *Niet-familiale huishoudens* | *21,8* | *26,0* | *31,5* | *36,6* |
| alleenstaanden | 18,8 | 23,2 | 28,5 | 31,8 |
| overige | 3,0 | 2,8 | 3,0 | 4,8 |
| *Huishoudens met 1 kern* | *76,4* | *72,6* | *67,7* | *62,6* |
| echtparen zonder kind(eren) | 24,3 | 23,5 | 21,9 | 21,3 |
| echtparen met kind(eren) | 39,9 | 38,6 | 34,3 | 27,8 |
| vader met kind(eren) | 1,1 | 1,1 | 1,2 | 1,4 |
| moeder met kind(eren) | 4,1 | 4,8 | 6,2 | 7,2 |
| echtpaar zonder kind(eren) + andere(n) | 1,9 | 1,3 | 1,0 | 0,7 |
| echtpaar met kind(eren) + andere(n) | 3,8 | 2,2 | 1,4 | 1,0 |
| vader met kind(eren) + andere(n) | 0,4 | 0,3 | 0,6 | 1,6 |
| moeder met kind(eren) + andere(n) | 0,9 | 0,8 | 1,1 | 1,6 |
| *Huishoudens met meerdere kernen* | *1,8* | *0,3* | *0,8* | *0,8* |
| *Huishoudens van onbepaalde samenstelling* | *0,0* | *1,1* | *0,0* | *0,0* |
| *TOTAAL* | *100* | *100* | *100* | *100* |

*Figure 12: Household typologies in Flanders from 1970 to 2001, Retrieved from (Boulanger, et al., 2009).*

When looking at these numbers we can notice a growing share of single people in the total population, from 21,8% in 1970 to 36,6% in 2001. Today these people need to live in houses that are designed for traditional 4 people or two people families, which are too big for them. Besides the singles we can see that the most typical family type "parents and children" is rapidly decreasing from 39,9% in 1970 to 27,8% in 2001 (Boulanger, et al., 2009). The exact reason why these family structures are changing is not known and complex, but acknowledging these changes today is very important when designing dwellings. Because of these constantly changing structures we are in need of a flexible and dynamic building that answers to the needs and demands of its inhabitants. We are also facing an aging population which is also an important factor to keep in mind when designing, especially the transitional spaces. These groups of elderly people mostly live in their own world of their private house, besides that social interaction is very hard. And so the risk of social isolation becomes very high (Becker, et al., 2015). These people are in need of a social cohesion or a feeling of belonging somewhere and being connected to a bigger group (Camp, 2017).

s seen before in the Pruitt-Igoe project, most of the contemporary architecture projects today e not built for long-term adaptation, are not future proof, which makes them more likely to fail )cially. There is the risk that these buildings need to be demolished because they do not answer ese changing social needs (Bristol, 1991). The problem with these projects is that they just )py the same plan vertically, which gives no flexibility for changing family structures (Bâldea, )12). Answering to these constantly changing demographic statistics will be the challenge for chitecture today.

> *"The key to sustainable future high density architectures lies in generating built environments capable of adapting to changes." (Bâldea, 2012)*

) implement new typologies of high-density for Flanders, we possibly have to look at flexible ogramme structures in order to answer these changing family structures. On the other hand, as e discussed before, living with high density gives us the opportunity of living closer to facilities nd services. A possible perspective for the future can be mixed function buildings. These are, ; stated by our Flemish "bouwmeester", buildings where working and living come together. By )mbining these two we can lower our footprint even more because of the smaller distances to ur working environment. An important factor, when combining these two, is also recreational nd public spaces to have a balance between working and living. We should also look at these orking environments as small-scale working places, soft or hard industry should never be mixed ith housing. These small-scale working places can have the appearance of a bike-repair shop, sewing atelier, etc. Thereby these also have a positive influence on the living environment by eating services for the inhabitants (de Visscher, 2016). This will play a role in the following napters of multi-family housing and social sustainability.

## 2.      High density housing In Flanders Today

In Flanders people are still getting used to the idea of high-density housing, which is visible in the housing stock today. This consists, as discussed before, mainly out of detached or semi-detached houses. In a research done by CIB Flanders, in 2015 the amount of apartments included 24,5% to the total amount of housing stock in Flanders. Looking at the amount of apartments in 1992, we see an amount of 16,17%. This means that we are slowly building and living more in apartments. Today big developers are buying empty row houses to demolish them and build big apartment blocks instead, which has a big influence on the amount of apartments in the Flemish housing stock (CIB Vlaaderen, 2015). This leads to apartments with a focus on profit and not particularly on creating qualitative living environments. The most of these buildings can fit in the category of the "infill", because of the old structures being demolished and new dwellings being stacked between existing structures. When comparing some of these statistics to the context of Europe we can see that Belgium has a much lower amount than Europe, where apartments account for 21% to 45%. But even then the size of an apartment building in Belgium is much smaller than the ones in Europe, only 9% of the apartment buildings have 10 or more private dwellings in it, therefore a lower density (Vanneste, Thomas, & Goossens, 2007).

# H.   SOCIAL SUSTAINABILITY

Today architecture is more and more driven by sustainability, which is mostly known by the environmental aspect of it. Although when we take sustainability into account we see it consists of three pillars: environmental, social and economic. Until a couple of years ago we thought we could reach an overall sustainability in a project by focussing on the environmental part of sustainability, today we see the social part is equally important.

As stated before, the Pruitt-Igoe project is one of the projects that is commonly known as an example of architectural failure. Without going into deep on this specific case we can see that the architects played with different typologies and arrangements when designing the housing units, ultimately the government chose for multiple high-rise buildings because they wanted to keep the costs per unit at a minimum. For the programme of the building blocks they tried to be as innovative as can be, by integrating skip-stop elevators they tried to create different communities inside the buildings where the hallways should have become meeting places for the inhabitants ( Bristol, 1991 ). So already in this project, architects were playing with the transitional spaces, like hallways, to create spaces with a higher quality. But still the architects had to face the constant financial pressure of keeping the costs at a minimum, which led to poor qualities of different building aspects. Besides the fact that the ideas of the architects were not used to their full potentials we can also see that racial segregation, lack of maintenance, vandalism and micro-criminality derived from poverty and unemployment were a big part of the cause why this project failed ( Bristol, 1991 ).

As we have seen with the case with the demolition of the Pruitt-Igoe project, not focussing on the social sustainability could have an even higher impact on the environmental sustainability. Since ultimately the 33 buildings were demolished ( Figure 1-4 ).

> *"However, managing the long-term costs and consequences of decline and failure in new settlements is an issue of public value and political accountability. The financial costs of failure are high, but the social costs are higher." ( Bacon, et al, 2012 )*

# Basics of social sustainability

nce the well-known Brundtland Report in 1987, sustainability has become a main subject in chitecture. This theory focuses on creating better living environments which answers the needs generations here and now, but also keeping safe those of the future and somewhere else. We conclude too fast that one concept can work for a bigger crowd, cfr. top-down approaches. e have to look further than the needs of a smaller group today and here (Vallance, Perkins, Dixon, 2011).

e already have a great knowledge about the aspect of social sustainability and on how to create od liveable spaces for people. Yet, due to multiple contributions of researchers and designers, aos has been created (Vallance, Perkins, & Dixon, 2011). Nevertheless a recurring fact in all ese researches is that we are in search of human well-being and liveability. Here sustainability n be divided into three pillars: environmental, social and economic. All three are evenly portant and cannot be seen apart from one another (Eizenberg & Jabareen, 2017). Finding e right balance between the three pillars is important, as it is impossible to find a solution that perfect for all tree pillars, because of the contradictions that might occur between the different lars (Vallance, Perkins, & Dixon, 2011). Because of the three pillars being interwoven with ich other, human well-being is directly connected to a sustainable environment. For example, a od air-quality leads to a better living environment and thus a better well-being (Khan, 2016). at is why when we are talking about social sustainability in the next sections, many aspects ll be intangible. In contrast with the pillar of environmental sustainability, which will mostly have me tangible aspects, as they can mostly be measured.

espite the fact that social sustainability, until recently, was not as known as the environmental stainability, it now can be seen as the backbone of sustainability keeping all three together. r example, Mexico city tried to reduce pollution from cars by creating a ban for each car once week. Because of this people bought an extra car to overcome this one day a week, mostly ese cars were cheap and even more polluting. Ultimately the amount of pollution was double high as before the car ban. In this case, and in many others, the population had a great pact on efforts of being more sustainable (Khan, 2016). This was an example on the urban ale of social sustainability. Up to now social sustainability has been taken more into account urban scale than on the building or neighbourhood scale.

n the other hand, it is very difficult to design taking into account social sustainability because its dynamic character and the chance of changing throughout time. A lot of factors that can fine the social sustainability in a project also depends on gender, age, race, etc. So there are lot of uncertainties to deal with (Eizenberg & Jabareen, 2017). Creating a success-ensured mework is almost impossible because of the multiple intangible factors that are too dynamic to easure (Eizenberg & Jabareen, 2017). Still, some researchers tried to create a framework for cial sustainability. An interesting, and worth of discussing, framework is the one from Dixon, rkins and Harvey (Vallance, Perkins, & Dixon, 2011).

## 1.1 Framework for social sustainability according to Dixon, Perkins and Harvey

The framework that was created by these three researches gives us a way of looking at social sustainability, not only for the components that make social sustainability, but also the connecting factor such as the environmental sustainability and the traditions of people. This framework is split in three categories: Development, Maintenance and Bridge (Figure 13). All three categories need to be taken in account when design social sustainability. And as stated by these three; it's more a matter of understanding before designing (Vallance, Perkins, & Dixon, 2011):

Sustainable Development

Bio-physical    Social    Economic

Development    Maintenance    Bridge

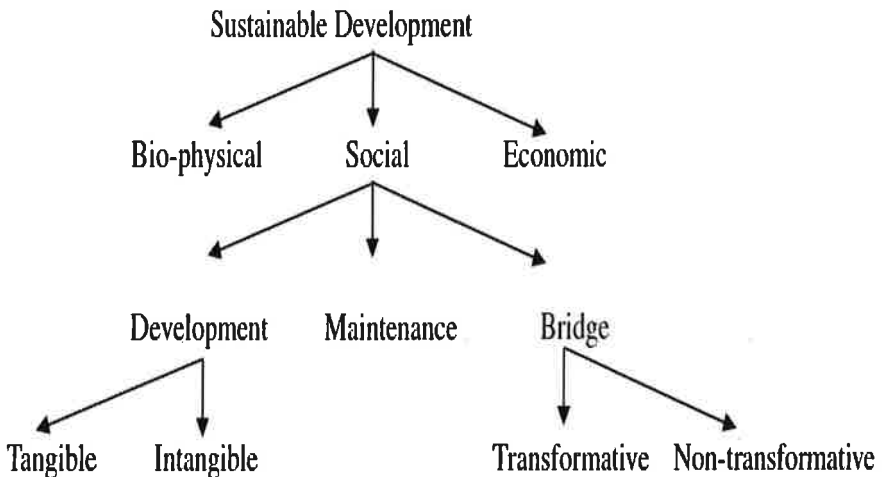Tangible   Intangible    Transformative  Non-transformative

*Figure 13: Vallance, Perkins & Dixon, framework for social sustainability (2011) Retrieved from (Vallance, Perkins, & Dixon, 2011)*

## Bridge":

is category makes the connection between people and the environment. As stated before ese two will always be linked to one another, only implementing high-technologies to enhance e environmental sustainability and hoping things work out is not enough. The bridge can be plemented by two methods, a transformative and a non-transformative method. The transformative ethod is based on changing people's mind and teaching them to think about our climate and the vironment. By changing people's mind about our climate or at least to make them think about can already have a lot of influences on the actual environment. The non-transformative side es to find solutions in technologies, which need to be clear and comprehendible for people to e them properly. When people do not understand well how to use these expensive installations, ery effort for a sustainable living environment gets lost. The two principles together create a urative "bridge" between the people aspect and the environment, as technologies are important it also the people behind them who use them (Vallance, Perkins, & Dixon, 2011).

## Maintenance":

ere needs to be an understanding of what people want to maintain can differ from what people ed. This category tries to maintain the existing and already working structure in the daily-life of ople (Eizenberg & Jabareen, 2017). Some places or traditions people like to have maintained cause it's a part of their daily-life. For example the use of a private car can be a fact that ople like to see maintained instead of recognizing the environmental impact of it. Instead of rcing car-limitations on people, it can be better to understand what is the base of their need private car. By knowing this we can formulate a better motivation on why to ban the car /allance, Perkins, & Dixon, 2011).

## Development":

e can only project environmental sustainability on people when the basic needs of people e fulfilled. These needs can be seen as tangible (water, air, food, housing,...) and intangible ducation, employment, justice,...). These need to be answered first for people willing to talk out environmental sustainability, otherwise situations like the example of Mexico can occur. The eds of the generation, today and here, need to be answered but this needs to be done by also specting the needs of a future generation somewhere else (Vallance, Perkins, & Dixon, 2011).

So to conclude this framework of Vallance, Perkins & Dixon, we can state that there is always a close connection between the environmental sustainability and the social sustainability. All the tree aspects, that they claim to be important for social sustainability, play with the idea of the link between social and environmental. The bridge literally wants to create a bridge between the two by explaining the link between the understanding of people about the environmental sustainability and the usage of the technologies of the environmental sustainability. We can not only implement expensive technologies and not recognise the users behind it. First we can try to change the mentality of people, before implementing technologies. And hen we implement technologies, they need to be comprehendible so that the users will use them in the right way. Only then the environmental sustainability will be fulfilled. Also by understanding why people maintain some of their habits, like the car usage, can help us to change these habits. It can help us to create better motivations for the people to leave their car and to use the public transport more often. In contrary of the habits of the people, we also see that there is a clear difference in what people want and in what they need. Environment sustainability measures can be very expensive and technically less comprehendible, so for people wanting to talk about these measures we have to first fulfil all the aspects that they need into their life. This can clearly differ from what a person wants in their life. Also interesting is the way that Vallance, Perkins & Dixon create a difference between intangible and tangible aspects. Not all things about social sustainability we can touch or fit into a box, some of them are more complex to grasp. But clearly not only the tangible aspects are important, social sustainability can be implemented into a project by understanding the need for intangible aspects such as feeling save in a project.

# 2.    Components for social sustainability

though social sustainability has a dynamic character in time, and it is very broad to create comprehensive theory, we can define some tangible or intangible components that have an impact on the social sustainability of a project. Only using these components as a checklist for ocial sustainability would be false, this will also depend on the spatial or socio-cultural context a project. But they form a framework to talk about social sustainability (Janssens, 2014). he following components and their explanations are based on the following sources: (Janssens, 014) (Bacon, et al, 2012) (Khan, 2016) (Eizenberg & Jabareen, 2017)

| COMPONENTS | TANGIBLE | INTANGIBLE |
|---|---|---|
| Health, well-being, comfort: | Access to basic needs: Food, water, clothing, sanitary, electricity, etc. | Healthcare, childcare, social health, quality of life, etc. |
| Safety & security: | Level of privacy, blinds, fencing, spatial requirement, etc. | Feeling safe in a community |
| Equity: | Universal design | Fairness, equality, same rights, human rights, justice, etc. |
| Social coherence: | Community-owned functions: shops, laundry-room, food production, neighbourhood budgets, etc. | Involvement, community services, community groups, neighbourhood walking groups, running clubs, etc. |
| Social interaction: | Meeting places for the community, club houses, etc. | Events, community meetings, small talk, etc. |
| Maintenance of socio-cultural patterns: | Vernacular architecture | Acknowledging Traditions, existing daily-life, etc. |
| Participation: | | During the design and building process, creation of a community-board, Online groups (Facebook), community engagement, community meetings, etc. |

| | | |
|---|---|---|
| Education, training and employment: | Spatial requirements for childcare and school, flexible working environments, etc. | School, childcare, working at home, etc. |
| Flexibility: | Flexible spatial plan, expandability, adaptability, etc. | |
| Identification & diversity: | Spatial identification, recognition, personalisation, etc. | Cultural diversity, mix of family-structures, etc. |
| Availability & accessibility: | Division of private and semi-public or public space, etc. | A clear communication of accessibility... |
| Attractiveness: | Spatial attractive places, Good architecture, recreation, amenities... | |

*Figure 14: The components for social sustainability (own chart, 2017)*

We can divide these into tangible and intangible components, where some intangible components are a bit more difficult to grasp and implement into projects. But we cannot only focus on the tangible or spatial components, the liveability of a project needs to be kept in mind, we need to design places where people actually want to live (Vallance, Perkins, & Dixon, 2011), which is a very diverse, dynamic and intangible aspect.

An important recurring factor is the idea and feeling of a community, the creation of a community within a building. People want to feel a sense of belonging (Camp, 2017). A community is based on equity, equality, democracy, participation and the respect for basic human rights. Creating set goals with a group of like-minded people, while recognising the influence on the environment, our climate and earth (Eizenberg & Jabareen, 2017). Equity can be important for the maintenance of a community, when everybody is equal and has the same justice, people are more likely to maintain their environment, inequality can even be a risk for the environmental sustainability. When lower income families cannot afford expensive technologies to enhance the environmental sustainability, they can feel unequal or left out. Creating communities where everybody is seen as an equal, can overcome these situations by using joint purchases for example. Inequality can ultimately form a risk for the sustainability of a community (Eizenberg & Jabareen, 2017).

# I.   COMMUNAL HOUSING

After the research on the social sustainability, it became clear that we are not only searching for the creation of high-density housing in Flanders in the form of multi-family housing projects, but also the creation of a sustainable community within a building. There are a lot of aspects between social sustainability and communal housing that meet-up. Maybe working with communal housing projects can solve the social sustainability problems for multi-family housing projects? In a recent study from Matexi (Matexi, 2015) it became clear that Flemish people attach importance to the neighbourhood they live in. One out of four even thinks their neighbourhood is more important than their own home. And 61% find social contact the most important in a neighbourhood, they like a neighbourhood where they know their neighbours and have a good social contact with them. Then why are we not already all living in communities where the neighbourhood inside a building plays a very big role? This chapter tries to clarify what living in a communal housing project is and how it contributes to creating social sustainability within a building. Communal housing here can be seen as an overall title for all the housing typologies where people share one or more functions or spaces (Ruimte vlaanderen, 2015). A definition of communal housing that strokes with the previous chapter and the research in total, is:

> "In a residential community the inhabitants have chosen voluntarily to live in mutual involvement, on a base of equity, self-management, respect for the desired degree of privacy. Multiple individuals and/or households have common spaces and facilities, and manage these together." (Jonckheere, Kums, & Maes, 2010)

# Communal housing typologies

ommunal housing is seen as the title for all the living conditions where people have chosen to
e together and share one or more functions or spaces (Camp, 2017). When talking about
mmunal housing everybody goes straight to cohousing, because this is a well-known communal
using typology. And although it's well-known not everybody knows the real definition of a
housing project. But communal housing is so much more than only co-housing, in the following
rt we will differentiate the different communal housing typologies form one another. These
oologies can be differentiated from one another by the functions or spaces that are shared
thin in the community.

### Central living:

Groups, often family, buy a piece of land together that they use to build a couple of houses on. The houses stand individually from one another but they can have a common garden or small common shed (Camp, 2017).

### Coliving:

This typology assembles a lot with cohousing, but here the focus is more on the private unit. Rarely there is a shared kitchen or dinner room. But they do have access to a range of shared facilities (Camp, 2017).

### Living-working projects:

In these projects the inhabitants also have the opportunity to have a working space outside their private unit. Besides the working space they also have shared facilities (Camp, 2017).

### A community house:

This typology has a more temporary character and is mostly used in the context of student housing (Deberdt, et al, 2015). The composition of the inhabitants is constantly changing (Jonckheere, Kums, & Maes, 2010). The inhabitants usually have a private bedroom but share a kitchen, a living room and a bathroom (Camp, 2017).

### Cohousing:

People have their own private living unit with all the basic facilities but they also have access to a wide range of shared facilities. In a cohouse there is also always a shared kitchen and dinner room, here people can cook for each other (Deberdt, et al, 2015).

### A living group:

Because of the inhabitants being older than the ones in a community house, this typology is a bit more sustainable (Camp, 2017). This can even be used by seniors but will mostly be used by young working people They mostly have a private bedroom but all the rest is common like in the case of the community house (Jonckheere, Kums, & Maes, 2010).

### A living community:

The degree of shared space is very high, and the size of the private unit is kept at a minimum (Jonckheere, Kums, & Maes, 2010). These kind of communal houses mostly contain a idealistic factor, such as religion, ecology etc. All inhabitants have the same conviction and the household is mostly a common task (Camp, 2017).

# Participation and ownership in communal housing

ommunal housing is seen as the title for all the living conditions where people have chosen to
e together and share one or more functions or spaces (Camp, 2017). When talking about
ommunal housing everybody goes straight to cohousing, because this is a well-known communal
using typology. And although it's well-known not everybody knows the real definition of a
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irt we will differentiate the different communal housing typologies form one another. These
oologies can be differentiated from one another by the functions or spaces that are shared
thin in the community.

## BUILDINGGROUP MODEL":

is model, originated in Germany, focuses on the joint design and construction of a project by
e future inhabitants (Architectuurwijzer vzw, 2017). All the inhabitants join their financial forces
purchase a piece of land or an existing building. A good organisation and clear rules within this
oup is key, they best choose a project manager who takes the lead. It can also be important
surround themselves with experts like architects, engineers, developers etc. (Dušek, Doudová,
Kope囗, 2015). In this model each future inhabitant can implement his own desires but also
broad selection of communal functions, based on the need of the inhabitants, can be realised.
ometimes the private areas can even be minimalized because of the need for communal areas.
ter construction the building group becomes an association of owners (Architectuurwijzer vzw,
017). This association will be very important for the maintenance of the project and more
ecific the communal areas. Within this model everybody will have their own private property they
vested in. But because people join their financial forces in the beginning it is often more easy
buy bigger lots or buildings, instead of when someone needs to invest on their own. On the
her hand you can choose your own neighbours at the beginning of the project, mostly these
e friends or family. But these can also be total strangers who ultimately can become friends
Dušek, Doudová, & Kope囗, 2015).

## "INVESTORS MODEL":

In contrast to the developments without any links with the future inhabitants this model focuses on the needs of these inhabitants. It still is based on a model where investors construct a project, but they keep in mind who they build for. In different stages of the design and the construction, they meet with these future inhabitants to keep track of their findings. This model also focuses on communal spaces for a big part of the project. Afterwards these investors can rent out their projects to the concerned group. A negative outcome of this model is that the inhabitants do not have their own private property and there is a chance of their rental prices increasing. In contrast of that, these inhabitants do not have to invest at the beginning of the project themselves (Architectuurwijzer vzw, 2017).

## "COOPERATIVE MODEL":

People can join together to form a cooperative where each person become a shareholder of the cooperative (Hugentobler, Hofer, & Simmendinger, 2016). The cooperative takes the lead in developing the project, they do not lay the focus on making as much profit as possible but the only thing they try to achieve is just building communal houses for the people interested in it. This model lays in-between the building groups and the investors model (Architectuurwijzer vzw, 2017). Because the cooperative doesn't lay the focus on generating profit to ultimately sell the project, the rental costs are 26% lower than normal rental housing projects. Most cooperative members have share in the cooperative based on the size of their apartments. This makes it also possible to move inside a building block to another apartment when needed (Hugentobler, Hofer, & Simmendinger, 2016). This model makes it possible for people with lower incomes to create a housing project with their needs incorporated, which otherwise would never have been possible (Architectuurwijzer vzw, 2017).

Instead of creating high-density housing projects like big development investors do today, it could be more useful to create buildings through a cooperative or a building group model. Certainly when keeping in mind the social sustainability of a project, it could be more effective to integrate the future inhabitants of a project in the first phases of a design. By doing this, the designers can work with the exact needs of the future inhabitants.

# Advantages and disadvantages of communal housing

ith the aspect of social sustainability we are searching for ways of creating a community within
 building, in this thesis we will opt for communal housing as a viable answer to this question.
ecause communal housing mostly means living together in higher densities, it comes with some
atial opportunities. It can lower our footprint and thus create opportunities for the environmental
istainability. On the other hand it also has a couple of social benefits, elderly having more social
ntact or neighbours helping each other out because they know each other well. It also creates
 face to the outside world: "us against the rest of the world" (Ruimte vlaanderen, 2015). In
e following part we will look into some of the benefits of communal housing:

### "Creating a social support base":

The creation of a social network amongst neighbours does not only take
away the problem of loneliness with elderly people, it also create a
support base neighbours know they can trust on one another, and that
they can ask neighbours for help (Camp, 2017). For example when we
need a babysitter we can more easily rely on our neighbours to watch
our children (Jonckheere, Kums, & Maes, 2010).

### "Shorter distances & better time-usage":

Most of the people living together in communal housing become friends to
one another, visiting friends gets easier because of the shorter distances
between each other. In some communal housing typologies like co-
housing, a shared kitchen is a basic shared function. Here the inhabitants
can spend less time on preparing dinner because they can cook for each
other on a scheduled basis (Jonckheere, Kums, & Maes, 2010).

### "Shared services or amenities":

Communal housing makes it easier and more profitable to implement shared
services or amenities. Infrastructure, for these amenities, can be bought and
maintained with a community budget. This makes it cheaper in purchase and
makes amenities accessible for everyone (Camp, 2017).

Formerly we knew what working tools our neighbours had because we borrowed them so often, today with communal housing we buy our tools together with our neighbours. In times of circular economies, this system is much wanted, nobody "owns" the tools individually but everybody has a "share" of these tools. In that way overconsumption and wastes are being avoided (Camp, 2017). Later on in this thesis a summary of possible shared spaces or amenities in communal housing project will be provided.

### "A better quality of life & health":

Communal housing often gets described as the more healthier way of living. It can create a better quality of life and health. Multiple researches on the quality of life and health in certain cities, conclude that communal housing or living in communities played a big role. One specific case that show us the benefits of living in a community, is the case of "the Roseto-effect". In this city in America people lived healthier and longer than cities nearby. Instead of the other cities, Roseto was known for its strong community where families where close and the citizens had strong relationships with each other. Even at one point when teenagers started leaving the village and live the "American way of live", the death rate increased (Egolf, et al, 1992). Of course we need to consider other factors too when researching the life and health quality of people, but this case shows us that communities have a part in this story.

### "Mix of generations, genders, nationalities, cultures,...":

A research done by Matexi shows us that 70% of the Belgian people like to live amongst other generations (Matexi, 2015). Living in a communal project also means living together with other people from different nationalities, ages, genders, etc. We create a social mix of individuals living together (Ruimte Vlaanderen, 2016). Because of the self-management, people need to talk to each other and they learn to, figuratively and literally, speak the same language. Also children benefit from this, they learn in an early stage of their live to play and work in group (Jonckheere, Kums, & Maes, 2010).

### "Improvement of a broader area":

Communal housing, depending of its size, can hold a variety of functions and amenities. These can also improve a broader area where the project is situated in. They can even be used to help abandoned cities to revive. (Becker, et al, 2015)

ADVANTAGES

### "Influences on each other":

As previously stated, it's relatively easy to make small changes in people's life to enhance the environmental sustainability. For example, switching the light out when leaving a room. Rather than enforcing big alternative changes, such as providing a system of recycling greywater for the toilets (Vallance, Perkins & Dixon, 2011). When people live together they can have a great degree of influence on each other, also on someone's footprint even if these are just small changes (Jonckheere, Kums, & Maes, 2010).

### "Safety through neighbours":

In communal housing a safe feeling can depend on the degree of knowing our neighbours, this instead of fences and door locks (Jonckheere, Kums & Maes, 2010). Everybody is watching everybody, a stranger can directly be defined in these communities and will be watched even more carefully.

### "Condensed living to enhance the environmental sustainability and equality":

Living closer to each other lowers our footprint, which has a positive impact on the environmental sustainability (Bâldea, 2012). Our private area can become smaller, more affordable and more energy efficient because of a lot of functions being common. Because these functions are not being included in our private homes, our living environment can be perceived bigger and still affordable (Jonckheere, Kums & Maes, 2010). Lower-income families cannot afford most of the amenities that are suggested with a communal housing project. But by making these communal the individual costs per house become more affordable, even for these lower-income classes. In that way people can become more equals (Becker, et al 2015).

### "Better usage of the existing housing stock":

Communal housing is build much more flexible than traditional housing typologies, answering to changing family structure and demographic changes. Because of this elderly and empty nesters can move to communal housing projects which makes it possible to use their under occupied houses more efficiently (Jonckheere, Kums & Maes, 2010). Yet, thinking that we should replace every house with a communal one is somewhat utopic. Communal housing is not for everyone, and single housing typologies can still exist if they are being used more efficiently (Becker, et al, 2015).

### "New transportation methods":

Living in a community can even have impact on the way we move from one point to another. Besides public transportation, a shared car policy can be an option. The inhabitants can buy cars together and use them together following a time schedule (Camp, 2017). This can help the problematic of the daily traffic jams in Flanders a bit more, it will not be the solution but it can be a beginning of a change in attitude (Van Broeck, 2014).

### "Participation during the production and design phase":

When the inhabitants can be included in the design and construction phase of the project, costs of a developer can be saved (Jonckheere, Kums & Maes, 2010).

Of course we cannot only talk about the positive outcome of communal housing, everything has two sides and thus some disadvantages have to be considered.

## "Managing takes a lot of time":

Living in a community means also managing and maintaining the project communally. In most of the cases they start-up a maintenance group, that works through meetings on a regularly basis. This costs some extra time within the normal day schedule of a family, which can be perceived as time-consuming and thus negative (Jonckheere, Kums & Maes, 2010).

## "Confrontation between generations genders, nationalities, cultures,...":

Although people are growing to be more open for a mix of cultures, generations, genders and so on, it can still create some conflicts. Different people have different values, living together can put these different values against each other. The same problems we know today in detached houses can still occur in communal housing projects; discussions about territory, behaviour against one another or each others children, nuisance of pets,... . (Jonckheere, Kums & Maes, 2010).

## "Negative social cohesion":

Even if this aspect is one of the key points of communal housing, it can still be a factor for people to not join or not feel good in these projects. Sometimes a community can be very closed for the rest of the world, which makes it not easy for new people to integrate. On the other hand, sometimes a project has no social cohesion. Everybody starts living their own life and ignore the community life, this can also be perceived as unpleasant for some people (Jonckheere, Kums & Maes, 2010).

## "Long construction times":

Creating a cooperative communal project can sometimes take a lot of time., because of all the different insights of the cooperative. Everybody can state their opinion of the project during meetings with the designers. These meetings can take a lot of time and can sometimes involve a delay in the project (Jonckheere, Kums & Maes, 2010).

Reflecting back to social sustainability we can see that a couple of the previously stated components resemble to the benefits of communal housing:

COMMUNAL HOUSING

SOCIAL SUSTAINABILITY

COMMUNAL HOUSING

−

+

"Lower amount of privacy"

Health, Well-being, Comfort

"A better quality of life & health"

Safety & Security

"Safety through neighbours"

Equity

"Condensed living to enhance environmental sustainability and equality"

"Negative social cohesion"

Social Coherence

"creating a social support base"

Social Interaction

"Shared services or amenities"

Maintenance of Social-cultural patterns

"Influences on each other"

"Managing takes a lot of time"

Participation

"participation during the production and design phase"

"Long construction times"

Education, Training and Employement

"Confrontation between generations, genders, nationalities, cultures,..."

Flexibility

"Better usage of the existing housing stock"

Identification & Diversity

"Mix of generations, genders, nationalities, cultures,..."

"Diversity stimulates knowledge and creativity"

Availability & Accessibility

"New transportation methods"

"Shorter distances & betters time-usage"

Attractiveness
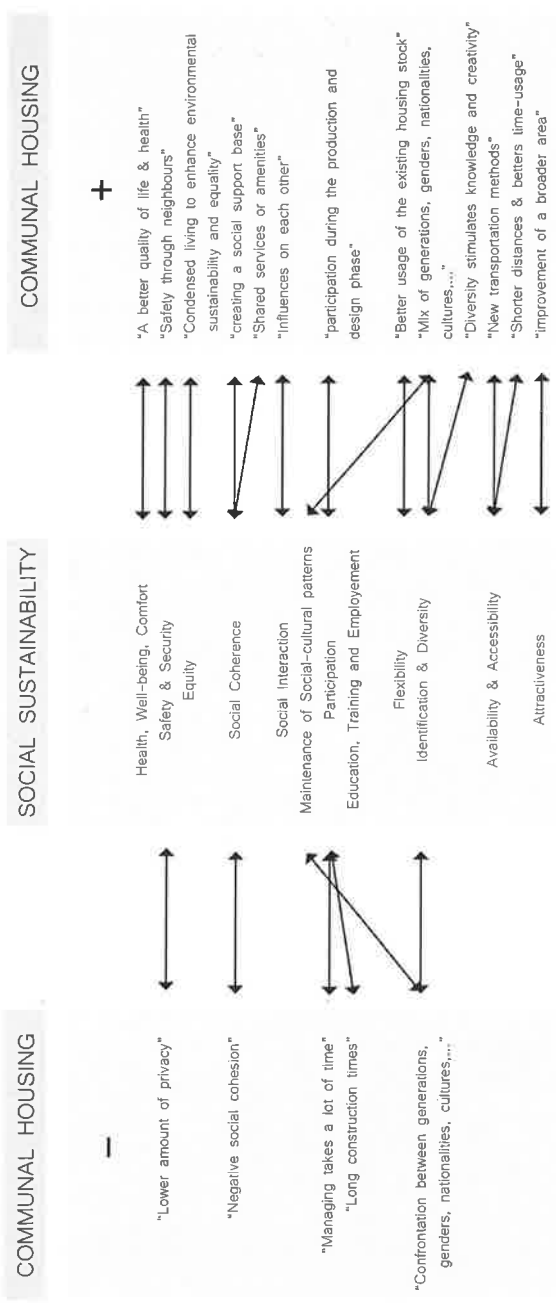
"improvement of a broader area"

Figure 15: Connection between the positive and negative aspects of communal housing and the components of social sustainability (own scheme, 2017)
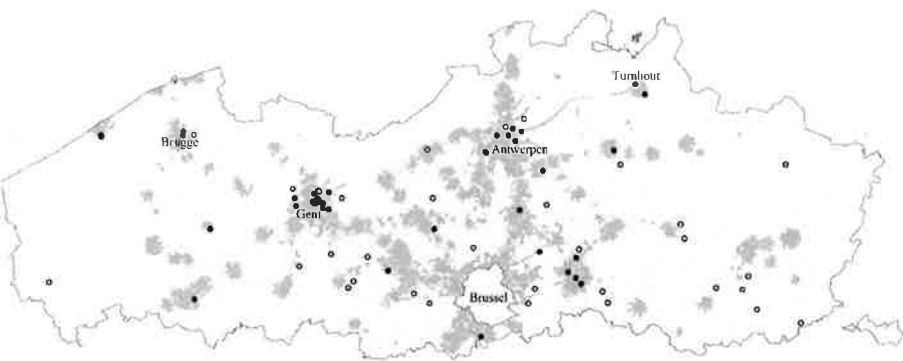
Figure 16: Vervoort & Loris, Location of communal housing projects in Flanders, Retrieved from (Vervoort & Loris, 2017)

# 4.     Obstacles in Flanders for communal housing

In Flanders, people are thinking more and more about living together with other people but until today there are not a lot of communal projects present. When looking at a map of Flanders we can even see that, without community houses, there are 26 projects of communal housing (Figure 16) (Vervoort & Loris, 2017). This while in the period of January 2017 to June 2017, 10.308 residential buildings got a building permit (Belgian Federal Government, 2017).

One of the reasons for this phenomenon is the unfamiliarity of the people for these housing typologies. What is unknown for people, makes it unwanted (Ruimte vlaanderen, 2015). Looking at the research of Matexi (Matexi, 2015) change in mentality is already rising, but this has not yet been converted into action, we can speak of an intention-action gap.

People have to understand that by living communally they do not loose living qualities, they will at most loose some square meters of private space. But they will get so much in return: a good social security, a social support base, nearby mix of services,... (Vermeersch, 2016).

On the other hand building communal houses is very difficult because of the need for participation in a process. There needs to be a community-board of the future inhabitants to follow the design and building process. But this takes a lot of commitment and time, nobody is ready to give today. People need to be venturesome and daring to make these participation processes succeed, being surround by experts can be key in such participation processes. But it is up to the inhabitants to make the right choices, this can be experienced as stressful (Vervoort & Loris, 2017).

Another factor that makes it hard for communal projects to grow is the urban planning situation in Flanders. Our spatial planning in Flanders is described by the Flemish codes spatial planning. In this we can find regional plans where the different land use delimitations can be found. Today only in the zones for housing we can implement communal housing typologies, on others we cannot (Ruimte vlaanderen, 2015). The problem with these plans is that the most of them are out-dated. Or sometimes newly made plans even forbid the creation of communal housing in some zones (Vervoort & Loris, 2017). To ease the process of communal housing there needs to be a change in regulations, that makes it more easy for communal houses to be implemented in the existing urban tissue.

# 5.    Future of communal housing

With the upcoming demographic changes and us reaching the borders of our space usage in Flanders, we are trying to find a viable solution in new forms of high-density housing. But when we look at these projects today we can ask ourselves if these projects create an added value for the neighbourhood but also for its inhabitants? Because looking into social sustainability we saw that people are more and more looking for a community or a support base at the place where they live. As an answer to the social sustainability we looked for an answer with communal housing projects.

We already saw that a lot of Flemish people are interested in living with multiple generations and nationalities under one roof (Matexi, 2015). But still people aren't living more closely together in for example a communal housing project. This may be because of the lack of knowledge about these projects. If people do not know a lot about this typologies of housing they are maybe less likely to take the risk and get involved in such a project. Therefore a greater knowledge base about these projects can be helpful for people to make more considered choices about their housing situation (Ruimte vlaanderen, 2015).

On the other hand it is very hard for these types of projects to be realised in Flanders because of urban planning and the regulation system in Flanders. It could be a solution to create a possibly more flexible regulation system to stimulate and support these projects. The reason for this problem of a not so effective regulation system, not already being solved, can maybe lay in the fact that also authorities do not know enough of these typologies to support them. To show the possible positive outcomes of these typologies it could be helpful to create examples of best practices or the so-called "pilot-projects" (Ruimte vlaanderen, 2015). But Flanders is doing good, today we can find a government agreement about co-housing and co-living projects. This agreement states that we can find an answer to the demographical and spatial challenges we will face, in co-housing and co-living. They are also looking into more diverse housing typologies to give an answer to the more diverse family structures today. They state that there needs to be a better correspondence between supply and demand (Camp, 2017).

# l. **TRANSITIONAL SPACE**

ter scaling from the region of Flanders into high-density to social sustainability and communal using we will go even a bit further into detail on a specific place of a multi-family housing oject and even a communal housing project, the space called "the transitional space".

## . **The understanding of the transitional space**

though everybody has seen a transitional space in their lifetime, the term seems rather new for any. To understand the transitional space more clearly we have to define two terms, the inside id the outside. The inside can be seen as our shelter against natural forces, in this space our mate is engineered according to our thermal comfort needs. The outside of a building can be escribed as everything that happens on the other side of the building protective shell. In this ace the climate will have an influence on our behaviour, we will mostly adapt our clothing to e outside climate (Chun, Kwok, & Tamura, 2004). These two terms are important, as they fine the space that we call the "transitional space".

> *"Transitional space bridges the gap between solely interior and*
> *solely exterior. These spaces, in being transitional, take people*
> *from "outside" and through the overlap of nature and building,*
> *transfer individuals to a destination defined as "inside"." –*
> *(Bolos, 2009)*

ie transitional space is a place where the two environments, inside and outside, overlap with ich other. They create a space influenced by nature within the building shell. Researches have own that this intermediate space has less influence on people's thermal comfort. They adjust emselves to an outside thermal climate, while on the inside they expect a high thermal comfort thout having to behave differently. That is why this intermediate space or the transitional space ostly is experienced to have a better climate than on the real inside of a building (Nakano & inabe, 2004). This space can be seen as some sort of buffer from the inside climate to the itside climate (Chun, Kwok & Tamura, 2004).

On the other hand this "transitional space" can also be defined as the space where one makes a "transition". This transition is a change or movement from a state or an activity X to another state or activity Y (Arya, 2011). This will mostly be a transition between a private and a public space, which is why this transitional space can be defined as a semi-public space (Janssens, 2014).

This transitional space creates a connection between the built environment and the natural environment. Through history people have always been searching for a close relation with the natural environment. This search for a relation with nature is one of the reasons for the urban sprawl, which we discussed before. Even designers like Le Corbusier looked for ways to integrate nature within the built environment. This he integrated in his "radiant city", where high-rises would dominate the city (Figure 17). By creating high-rise buildings there was more open space for nature in the city. But also Ebenezer Howard with his search for "the garden cities", where he created several smaller cities linked with a bigger centre-city and all of these cities would be implemented with nature (Figure 18) (Bolos, 2009).

In the search for the connection with nature we can look at these transitional spaces not as buffers to keep natural forces outside but to create a space where nature is allowed to diffuse inside (Bolos, 2009)
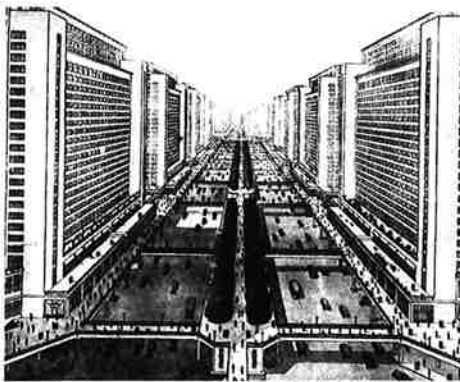


Figure 17: Le Corbusier, Ville Radieuse (1924)
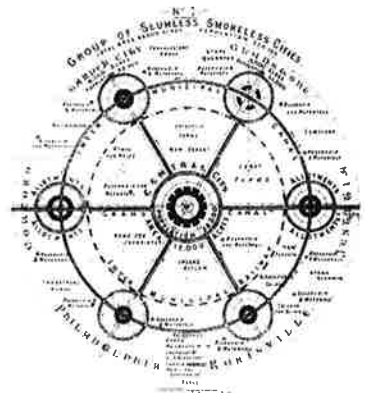Retrieved from (Archdaily, 2013)

Figure 18: Ebenezer Howard, Garden cities
(1902) Retrieved from (Scod public blog,

# Typologies in transitional spaces

ransitional spaces can be organised into three categories, defined by its placement relative to
e inside and the outside spaces. The first one lays within the building shell and has no direct
ontact with the outside of a building. The second one is placed on the outer layer of the
uilding, here the spaces stand in direct contact with the outside environment. The last one is a
pace, which defines itself totally on the outside of the building shell, it has no physical contact
ith the building itself but it creates a semi-public space in relation to the building (Chun, Kwok
 Tamura, 2004). Within these three categories we can find multiple typologies of transitional
paces. These typologies can all have different functions according to the type of transitions one
kes (Janssens, 2014). The following typologies are based on the insights from (Leupen &
ooij, 2011) (Janssens, 2014):

# 2.1 Within the building shell
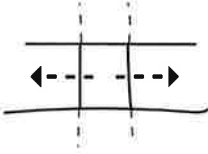


## Corridor:

This typology creates a horizontal circulation, In most of the cases these corridors are communal areas where neighbours can meet each other. The corridor defines itself on the inside of the building.
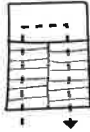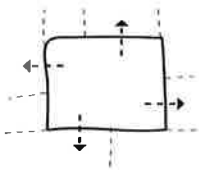


## Internal staircase:

With this typology a communal vertical circulation is created. This is in most of the cases defined on the inside of the building but in some cases it can occur that a staircase defines itself on the outside of a building.
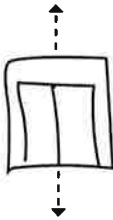


## Elevator:

The dwellings within this typology are accessed by a communal elevator. This type mostly occurs in housing blocks with a lot of floors, which are too exhausting to access with stairs.

## Atrium:



When staircases are internally merged, we create an atrium. An atrium mostly lays in the centre of a building and all private houses link to the atrium with their entrance. The atrium can define itself per story of a building but it can also be stretched out over multiple stories of a building. In that way it creates a visual connection between the multiple stories of a building.
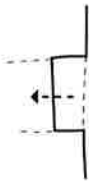


## Covered gallery:

Besides the internal circulation typologies we can also define a circulation typology, which is still within the building protective shell but is place around the building. There is a much greater visual connection with the outside of the building than with the internal staircase or corridor, but it is still protected from natures harm.

At the outside of the building shell
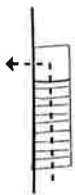
### External staircase:

This exterior staircase creates a communal vertical circulation. In most of these cases this exterior staircase is combine with an internal staircase in case of bad weather.
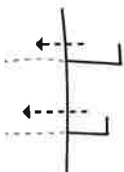
### External gallery:

In contrast with the corridor, this type forms a communal horizontal circulation at the outside of the building shell. These spaces stand in direct contact to the outside environment.

## 2.3    Detached from the building

As much as buildings define what happens on the inside it can also form the spatial environment on the outside. The following examples are transitional spaces that lay on the outside of a building but still work as a transitional space from what is private or semi-public to what is public.

### Street:
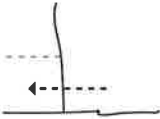
The house can singly and directly be accessed at the ground level of the house. This typology is mostly used for row houses. This typology mostly occurs as a strip in front of the buildings, mostly placed alongside a traffic street.
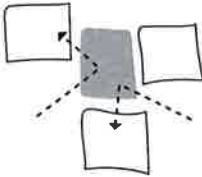
### Plaza:

As this typology is also placed on the outside of a building, this one mostly occurs as a concretised surface where semi-public and public meet.
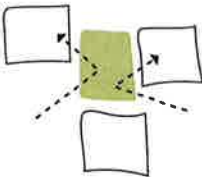
### Courtyard

Besides the concretised surface there can also be a more natural green surface, which we call a courtyard

*Figure 19-28: Typologies of transitional spaces (own illustrations, 2018)*

# 3.    Opportunities of a transitional spaces

As stated before the transitional space creates a bridge between the built environment and the natural environment. It does not create a border between the two environments it rather creates a place where the two meet and can be interwoven with each other. The interesting thing with the transitional space in high-density projects is that this place does not belong to anyone, which can create conflicts about the maintenance of these spaces. In contrast, in communal housing projects the maintenance of the project and thus also the transitional space is in hands of the community or the cooperative. In these projects the importance of these transitional spaces grows because people need to take care of it.

In the perspective of a growing diverse population in Flanders, we explore a possible solution with communal high-density housing projects. In this way people can live closer together in self-formed communities, but still sometimes conflicts can occur. The transitional space than is the link between the private dwellings where the conflicts can happen. With that perspective we can also look at the transitional space as a reconciler of conflicts (Janssens, 2014). This also could play a great role in the creation of a socially sustainable project. The transitional space can be tested as an incubator for social sustainability. These are the places where the neighbours will see each other the most often so why not make it worth their while.

# K.   PRELIMINARY FINDINGS

Even though Flanders is clearly in need of new forms of housing, with a greater density, it is evenly important to create housing environments that are socially sustainable. Social sustainability is a term that is still unknown to most people and which is very hard to define. Throughout this thesis it became clear that not only tangible but also intangible aspects are important when designing, taking into account social sustainability. These intangible aspects can make it hard for a designer to implement these aspects into a project. But overall, we could see that there is a need for a "community-feeling". The level of social coherence and the social interaction, within a project, have a great impact on the social sustainability of the project. Communal housing seems to contribute to social sustainability within high-density housing projects. In communal projects social coherence and social interaction are key aspects. For the greater half of the communal housing projects, they are led by cooperative design and building strategies. This makes it much easier to implement social sustainability within the project, because of the participation of the future inhabitants in the design and building phase of the project. Zooming in on communal and high-density housing projects, we can define the transitional spaces. These spaces are now merely seen as a transitioning zone, whilst they carry much more potential. They can act as a mediator between the different private spaces and thus between the multiple inhabitants of a project. With the transitional space as a communal mediator between the inhabitants, the social sustainability of the overall project can stand or fall with the right implementation of the aspects of social sustainability within the transitional space.

This chapter of the thesis will include my own research. Here I will do a case-study on one of the most recent city-renewal projects of Hasselt, Hassaporta. I would like to investigate if the architects of this recent project kept in mind the social sustainability of the project, and how this translates itself into the transitional space. The empirical research will be done through four phases and a conclusion. The site observation phase, of the case-study in Hasselt, will be the first phase. Here a clear classification of the different typologies of transitional spaces, within the project, will be done. Also it will give a first impression on the case-study and will already give some insights of the social sustainability in the project. The second phase consists of a literature review on some of the best practices of one specific typology of the transitional spaces, as indicated in the previous phase, and how the social sustainability is well integrated into these spaces. These best practices and the site observation will then create the base for the interviews in the next phase. During the third phase, interviews with the inhabitants will give a greater insight of the social sustainability within this specific transitional space. During these interviews, some pictures of the best practices will be presented during the interviews. In the fourth and last phase some design proposals will be given to enhance the social sustainability within the transitional space, if needed. These design proposals will be based on the insights of the previous three phases. To conclude this chapter of the thesis I will present some design guidelines for architect to implement in the transitional spaces of their projects to enhance the social sustainability.

Emperical research
# CHAPTER 2

Figure 19-28: Typologies of transitional spaces (own illustrations, 2018)

# L.   CASE-STUDY HASSAPORTA

Today the city of Hasselt is busy developing "the blue boulevard" to broaden the city centre to the area of the canal. When looking at bigger cities like Barcelona or Copenhagen or even Antwerp we see that these cities are being developed next to a bigger waterway. They see this waterways as an opportunity for more qualitative developments. Today Hasselt sees this opportunity in its own canal harbour and tries to create a new city image by the waterfront. This is the area they are now developing as "the blue boulevard", an area where shopping and housing will be merged (Eerdekens, 2016).

One of the projects within the context of "the blue boulevard" is Hassaporta. The project got its name as it is situated at the outer ring of Hasselt, here it connects the inner-city with the canal-zone. It really becomes "a port" to Hasselt, and hence the name of the project. The project profiles itself as an answer to the need for new housing typologies in Hasselt. The city tries to acknowledge the search of young people, trying to life affordably in the city, with this project. They state that within the project they have taken into account the different population groups that are in need of housing in Hasselt, this they translated into different apartment types within the project (TVL, 2011).

The city of Hasselt, the developers and many more promote this project as the new way of living in Hasselt in higher densities. They try to focus on younger people who are more willingly to live in higher densities in the city. In the current research we investigate whether the social sustainability was taken into account and what the role of the transitional space could have been. Today we can find multiple examples of project development in Flanders just like Hassaporta. In every city we see big project developers implementing projects with a higher density on the surfaces that are still left undeveloped. This growing trend of creating apartments is steered by the upcoming "betonstop". Big developers know that by 2050 they cannot use as much land as they do today for their developments, so today they are building up our cities at a fast pace with big apartment lots. Which is much better than only creating detached houses, which is negative for our land-usage and environmental sustainability. But the problem with most of these developments is that by focusing on creating as much profit as possible, in a short amount of time, they might ignore the social sustainability of their projects.

I would like to investigate this project with the perspective created through the literature review. Did the project really turn out to be a new sustainable way of living in Hasselt for the younger generation? Or are there things the designers oversaw during the process of the project? If that is the case than how can we make changes in the transitional spaces to improve social sustainability? And ultimately, what if the inhabitants had a say in the first stages of the project, how would they have changed the project to have a greater social sustainability within the transitional spaces?

*Figure 30: Hassaporta, Hasselt (own archive, 2017)*

# M.　PHASE 1 - site observation

This phase consist of a site observation of the existing situation. Through this site observation I found some of the weak points and the possibilities of social sustainability within the project. On the other hand it also made it possible to more clearly classify the typologies of transitional spaces within the building.

I did this site observation on Saturday, January 13, with a time frame of two and a half hours. The following maps (Figure 31-34) will show the route I did throughout the transitional spaces of the building, accompanied by pictures of some of the most striking aspects I notices during the observation, these aspects will be then explained shortly.
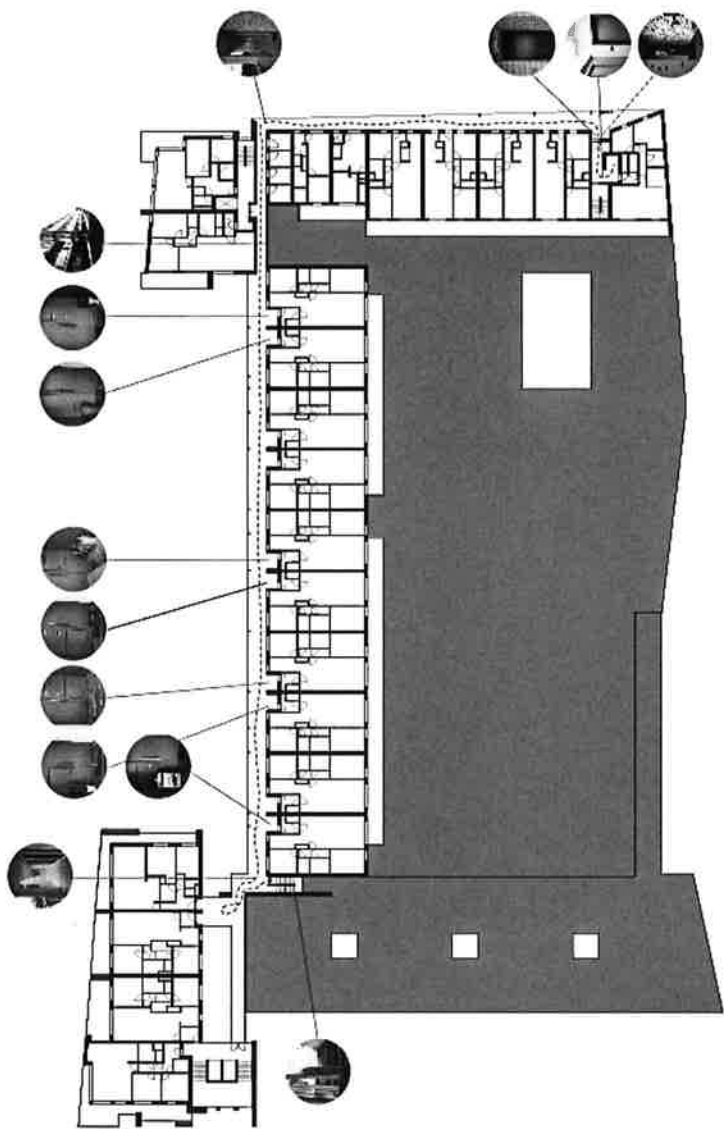
Figure 31: Hassaporta site observation route (own scheme, 2018)
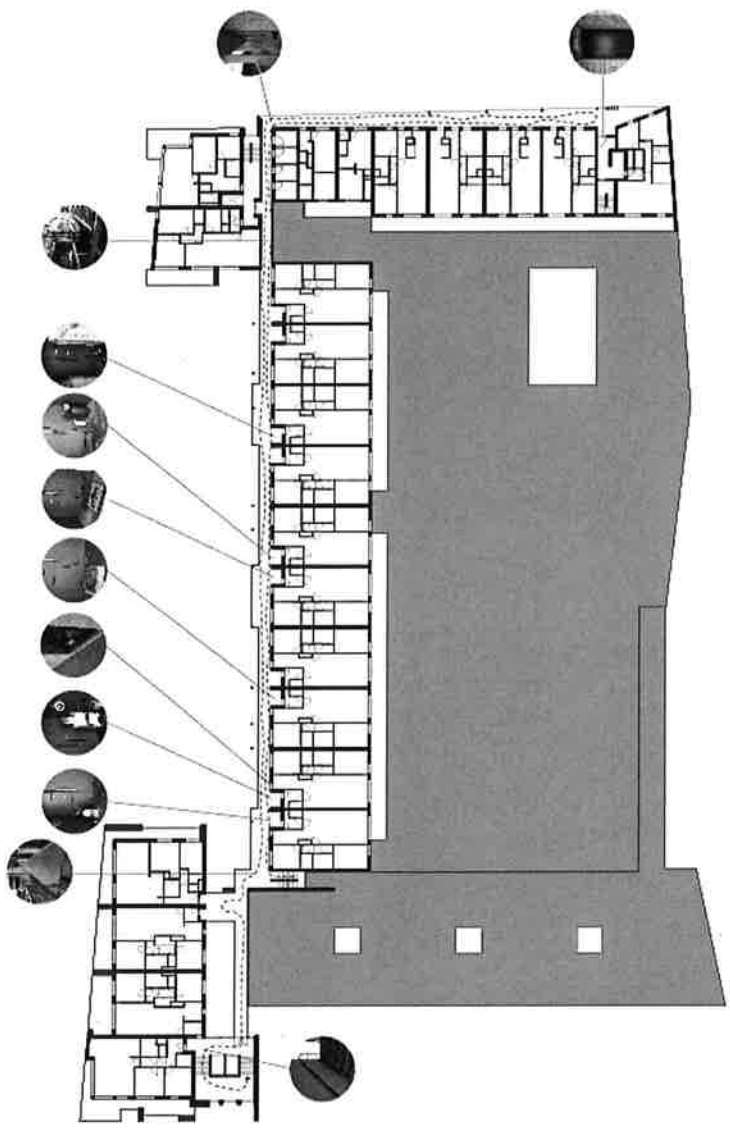
PLAN +02 / SCALE: 1:500 / HASSAPORTA

Figure 32: Hassaporta site observation route (own scheme, 2018)

**PLAN +03 / SCALE: 1:500 / HASSAPORTA**

Figure 33: Hassaporta site observation route (own scheme, 2018)

PLAN +04 / SCALE: 1:500 / HASSAPORTA

Figure 34: Hassaporta site observation route (own scheme, 2018)

# INTERNAL



# EXTERNAL

Figure 35: Hassaporta site observation (own archive, 2018). From left to right- internal staircase, internal corridor, external staircase, courtyard and the external gallery
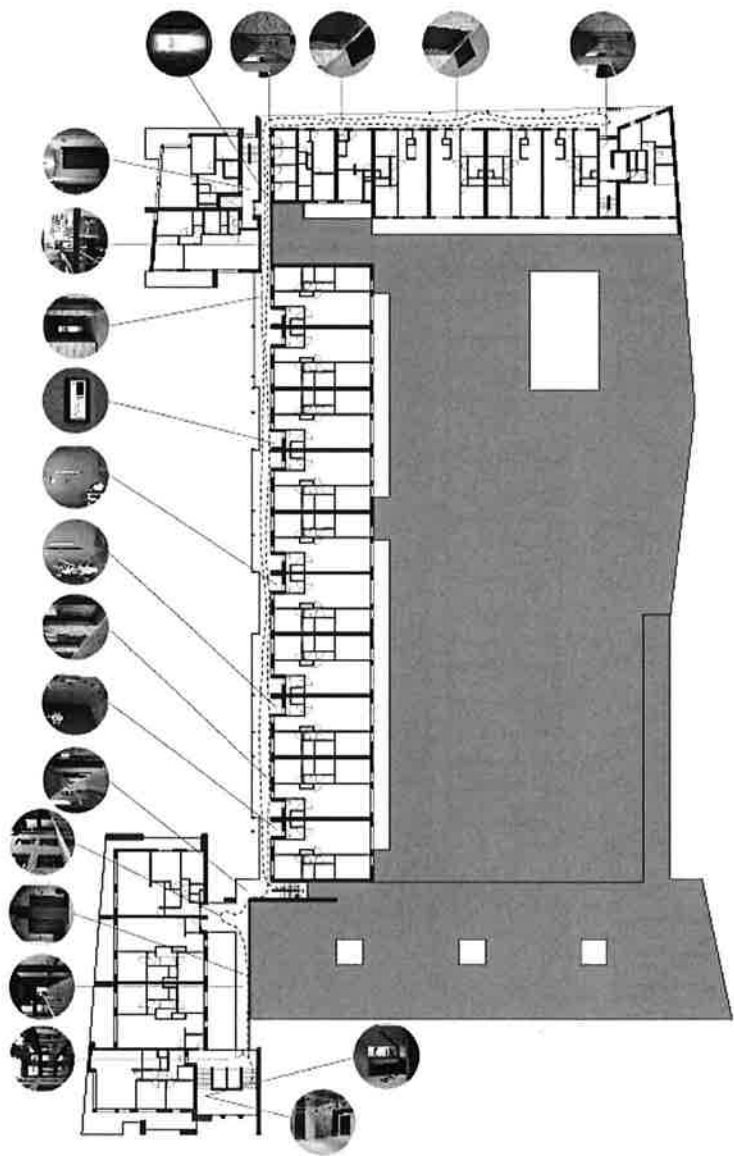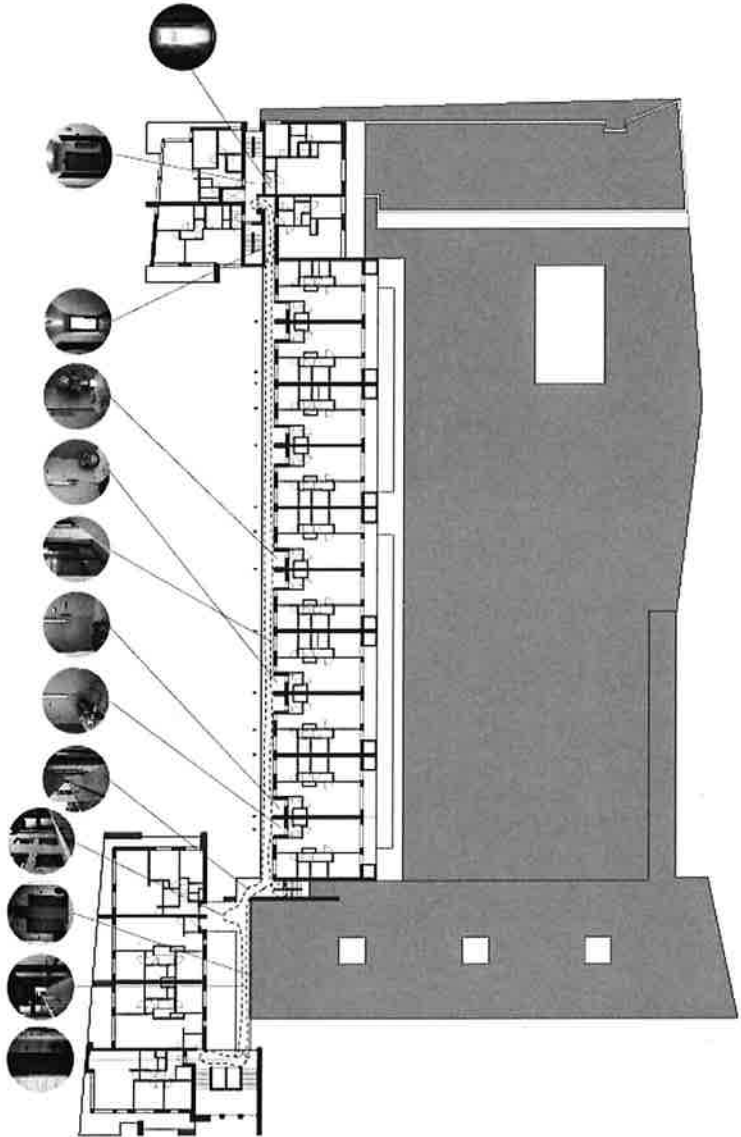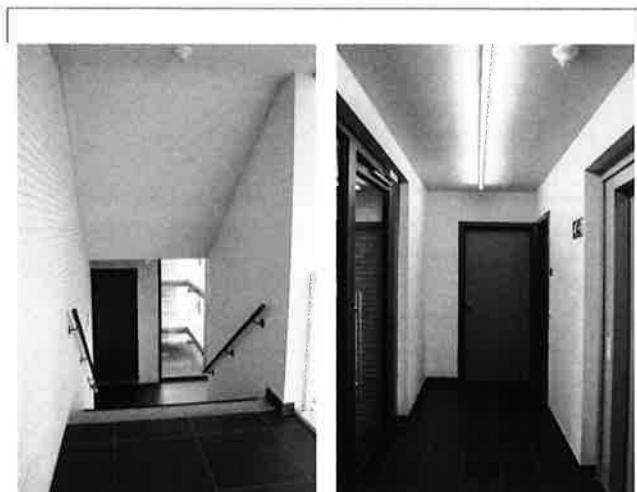
The first thing I did, was defining more clearly all the different transitional spaces. These can be classified in five different typologies: the internal staircase, the external staircase, the internal corridor, the courtyard and the external gallery (Figure 35).

There is a clear division between the transitional spaces on the outside of the building protective shell and the inside. They clearly differ in materiality and finishes, where on the outside everything focuses on concrete, the inside is focused on plastered walls and tiled floors. As for the usage of the transitional space there is a clear hierarchy. The external staircase seemed to be the transitional space that is less often used by the inhabitants. In the two hours I did the site observation I saw nobody using the external staircase, they always used the internal staircase. When I took the external stair I directly saw why, the stair was badly maintained. The railing of the stairs felt dirty and dusty which didn't make it pleasant to take this stair.

After I investigated the different typologies of the transitional spaces, I started observing the usage of the transitional spaces on all the floors. The one thing I noticed immediately was that, although I did my observation on a Saturday there weren't a lot of people within the transitional spaces. Occasionally I saw a person leaving their private home and go directly to the internal corridor to leave the building, or the other way around. It seemed to me they use the transitional spaces only for going from private to public space.



*Figure 36: Hassaporta exterior view (own archive, 2018)*

the following part I will go through all the aspects of the transitional spaces that I noticed
during my observation, from the first floor to the fourth.

## Unclear circulation signage

For a first visit, starting from the elevator on the east side of the building, the circulation was
very unclear to me. You step out of the elevator and have to search for the door to go outside
to the external gallery (Figure 37). Once you are on the external gallery, you would probably
have to search for the right house number whilst walking down the long external gallery. It creates
the feeling of walking down a street full of row houses, where you have to search for the right
house number and you do not know where the next turn on the street will take you. The door
to the internal corridor on the eastside of the building looks like a fire escape door. Which made
me doubt for a moment to even open the door.



*Figure 37: Door to the internal staircase (own archive, 2018)*

## 2) Width of the gallery

The width of the external gallery differs from floor to floor, this makes it more playful and on plan it even looks like there could be a visual connection between the different floors. The width of the gallery differs from 2,3 and 1,5 meters (Figure 38). When I'm on the first floor I had to debunk the idea of the visual contact. There is totally no contact between the different floors on the landings of the external galleries. And on the floor where the gallery has an even width for the whole length of the gallery, the gallery looks very long and not interesting. Interesting is the signage of the different private entrances to the houses, within the external gallery. From an overview you can clearly indicate the different entrances because of the change in materiality.
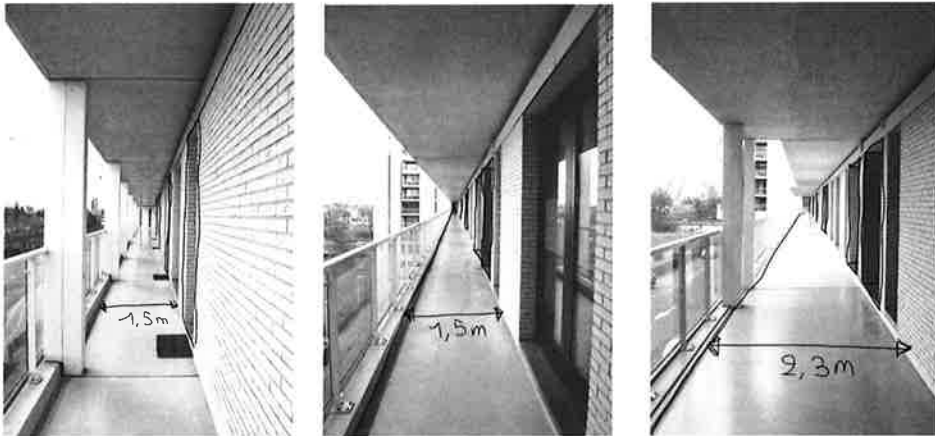


Figure 38: Widths of the external gallery (own archive, 2018). From left to right – First, second and third floor.

## Personalisation of the private landings

hrough-out my whole observation, the most remarking part is the personalisation of the landings
the private houses. It seems to me, people put small objects in their landings to personalise
eir landings and to outstand from the others. Besides the multiple doormats, some people go
/en further and put some plants in front of their door or even a closet to store their shoes
Figure 39). The personalisation is mostly done by the inhabitants that own a private landing
their house in contrary to the inhabitants whose doors directly open into the external gallery
the east side of the building.

*Figure 39: Personalisation of the private landings (own archive, 2018).*

## Visual relation with the courtyard

one point of the external gallery there is visual contact with the courtyard on the roof of the
irking (Figure 40). All of the private terraces are located at this side of the building, and they
have visual contact with the courtyard. But it's not clear how to get on the courtyard or if it
even possible to get there at all. A connection between the external gallery and the courtyard
ould be useful for increasing its use.
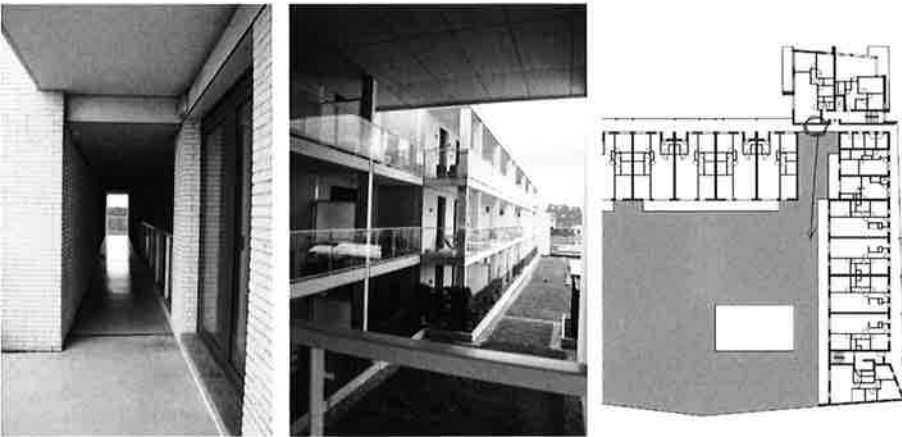


*Figure 40: Relation with the courtyard (own archive, 2018) From left to right – external corridor, view
at the courtyard, indication on plan*

## Private houses at the internal corridor

very inhabitant who lives within the two towers of the building,
ets a front door linked to a small internal corridor (Figure
1). This corridor is very small, dark and it only links with
e external gallery through a glass door. Lights automatically
) on when you enter the corridor, which is clearly needed as
is too dark without artificial lighting. Besides that, the front
>ors of the private houses look like normal interior doors
stead of exterior front doors. Without the doormats in front
the door, it looks like anyone can open the doors and just
alk in. Furthermore there is no visual contact between the
side of private houses and the internal corridor.



*Figure 41: View inside the internal corridor (own archive, 2018)*

## 6) Windoxs towards the external gallery

Instead of only placing the front doors at the external gallery, the architects also placed multiple windows towards the external gallery. This enlarges the contact from within the private house to the external gallery. But when we look at the programmatic composition of the private houses, we see that all of these windows are situated in a bedroom or a kitchen (Figure 42). Because of this composition, most of the windows are covered by curtains to ensure the privacy. To really enlarge the social and visual contact between the private houses and the external gallery, it may would have been better to place the living room next to the external gallery. This because the living room is a space that in most of the cases is more actively used.
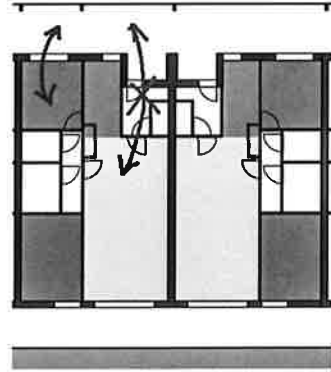


*Figure 42: Internal composition (own scheme, 2018)*

## 7) Windoxs towards the external gallery

Next to the doors of the private houses you can find the house number in big white numbers (Figure 43). These long numbers per individual house make you feel like a number within a big group. Next to the house number, a bit smaller, we see the doorbell. On the doorbell the inhabitants can put their name, but only on a small piece of paper (Figure 43). Some people even leave the original piece of paper on the doorbell. This system with the large house number and the small location of the names makes it very impersonal for the inhabitants to live there.
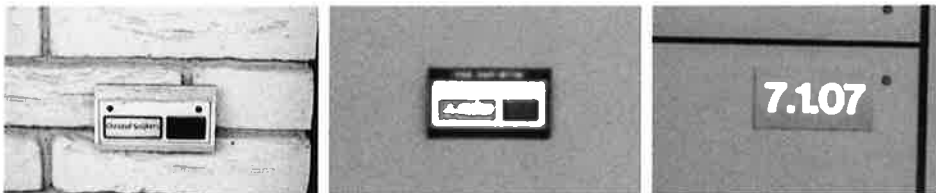


*Figure 43: Doorbells and house numbers (own archive, 2018). From left to right – Name integrated in the doorbell, empty doorbell, house number*

## ) Front doors on the east

he external gallery on the eastside of the building has the same width over all the floors, which
1,5 meters. Besides that, the individual houses do not have a private landing, they have their
ont door directly in the external gallery (Figure 44).



*Figure 44: Entrances on the east (own archive, 2018). From left to right – Personalisation through
doormats, personalisation through doormats, width of the gallery*

After this observation it became very clear to me that the external gallery is the transitional space of the building, with the most untapped potential of improvement. Today they do not see this external gallery as a communal space that could be used to enhance the social contact between neighbours. They merely see this space as a transition zone from private to public space, even though it has very nice architectural features such as the vertical steel beams on the side of the gallery. And with the beautiful overview of the city of Hasselt I could certainly see myself sitting on the external gallery talking to my neighbours. Now it feels like nobody wants to claim a part of the external gallery or maybe that their policies do not allow them to claim a piece of this transitional space. They stick to the small landings they got from the architects, to personalise their homes. This shows us that the inhabitants of the building feel the need for personalisation. Otherwise they would conform with a large house number and a small nameplate on the doorbell, to recognise their homes. Furthermore, on some spots ( 1,5m ) the width of the external gallery might be too small to really use it as a communal space instead of merely a transitional space.

On the other hand the programmatic composition of the private units do not help to encourage the social interaction between private and semi-public space. It may have been better to place living spaces linked to the external gallery than bedrooms. Therefore the multiple windows on the external gallery side would be used more efficiently.

Also if the external gallery would have been interpreted more as an experience instead of merely as a transition between private and public, people would probably stay longer in the transitional space. And when people have the intention to linger in the external gallery, social contact can be encouraged and people will know who their neighbour is.

# N.  PHASE 2 - Examples of best-practices on the transitional space

As shown before, the external gallery is the most interesting transitional space of the building. And because of the scale of the external gallery it is impossible to also focus on the other transitional spaces of the building. So for the second phase I will focus my interviews on the inhabitants that find themselves within the external gallery.

To enhance the conversations, between me and the inhabitants of Hassaporta, I searched for some examples of best practices of external galleries that enhance the social sustainability. These best practices I intend to use during my conversations with the inhabitants. These will make it easier for people, who have no knowledge of architecture, to understand what good social sustainability is. Hereby I hope to give them some points to reflect on their own living environment and how it could have been different.

All of the projects will be evaluated through the same matrix of components for social sustainability, retrieved from the literature review. The first shown matrix is filled in for the project of Hassaporta itself.

# 1.   Hassaporta

| | |
|---|---|
| **ARCHITECT:** | Jaspers – Eyers & Partners |
| **LOCATION:** | Belgium – Hasselt |
| **STATUS:** | Completed (2012) |
| **HOUSING TYPOLOGY:** | High density housing |
| **TRANSITIONAL SPACE TYPOLOGY:** | External gallery – internal staircase – internal corridor – external staircase – courtyard |
| **FUNCTIONS:** | 144 private units (23 units/floor) – 3 commercial spaces – public covered and rooftop parking's |
| **AREAS:** | Total: 16.500 m2<br>Private units: +/- 80 m2 (23 units/floor)<br>Transitional space: 14,5 m2/ per unit<br>Communal functions: the whole groundfloor |
| **FLEXIBILITY:** | Within the programmatic composition of the building there is no flexibility. People fill in their private house landings with small objects, but besides that there is no flexibility. |
| **PARTICIPATION:** | / |
| **SOCIAL COHERENCE/ INTERACTION:** | There is little social coherence between the inhabitants of the project. Each has their own private house, and most of them do not know their neighbours. |
| **IDENTIFICATION:** | Identification of the private units is done through the accent in the façade where the landings are. The inhabitants use these landings to personalise their own front door, to stand out in a row of landings. |
| **ACCESIBILITY:** | Circulation is not clearly shown and it takes a lot of walking and searching to find the right apartment. |
| **ATTRACTIVENESS:** | The building has certain architectural qualities, and a walk on the external gallery can give pretty overviews of the city of Hasselt. Still there could have been more attention on creating spaces as an experience. |
| **PRIVACY:** | The external gallery is linked directly to the private units, which lowers the privacy of the private units. Therefor people need to use curtains to ensure the privacy. |
| | (Kumpen, 2017) |

# 2. Seestadt Aspern

| | |
|---|---|
| **ARCHITECT:** | Wimmer und partner |
| **LOCATION:** | Austria - Vienna |
| **STATUS:** | Completed (2015) |
| **HOUSING TYPOLOGY:** | High-density housing - Communal housing |
| **TRANSITIONAL SPACE TYPOLOGY:** | External gallery |
| **FUNCTIONS:** | 48 private units - External communal building - atelier building |
| **AREAS:** | Private units: 45m2<br>Communal corridor: /<br>Communal functions: / |
| **FLEXIBILITY:** | The plans were designed that there is a high level of uniformity this leaves more space for flexibility. Only the centre of the houses is made of load bearing walls, this makes that the rest of the house can be configured like pleased. Houses can also be combined to create bigger houses. |
| **PARTICIPATION:** | Building group (Baugruppe) |
| **SOCIAL COHERENCE/ INTERACTION:** | The external gallery is linked with the private units through big windows and the semi-private outside spaces. This external gallery tries to evoke social interaction between the inhabitants. The semi-private outside spaces can be combined for children to play with each other. |
| **IDENTIFICATION:** | The semi-private outside spaces are free for personalisation, these personalised outside spaces create a great level of identification within the building. Zooming out on the building there is not much identification. |
| **ACCESIBILITY:** | There is one communal staircase, from there the external gallery can be accessed. The private houses are accessed through the external gallery. |
| **ATTRACTIVENESS:** | Because of the high level of flexibility on the in- and outside, the apartments can be changed individually. |
| **PRIVACY:** | The level of privacy is very low because of the big windows directly next to the external gallery. |
| | (Wimmer und partner, 2017) |

ure 45-50: Wimmer und partner, Seestadt Aspern, Austria, Retrieved from (Wimmer und partner, 2017).
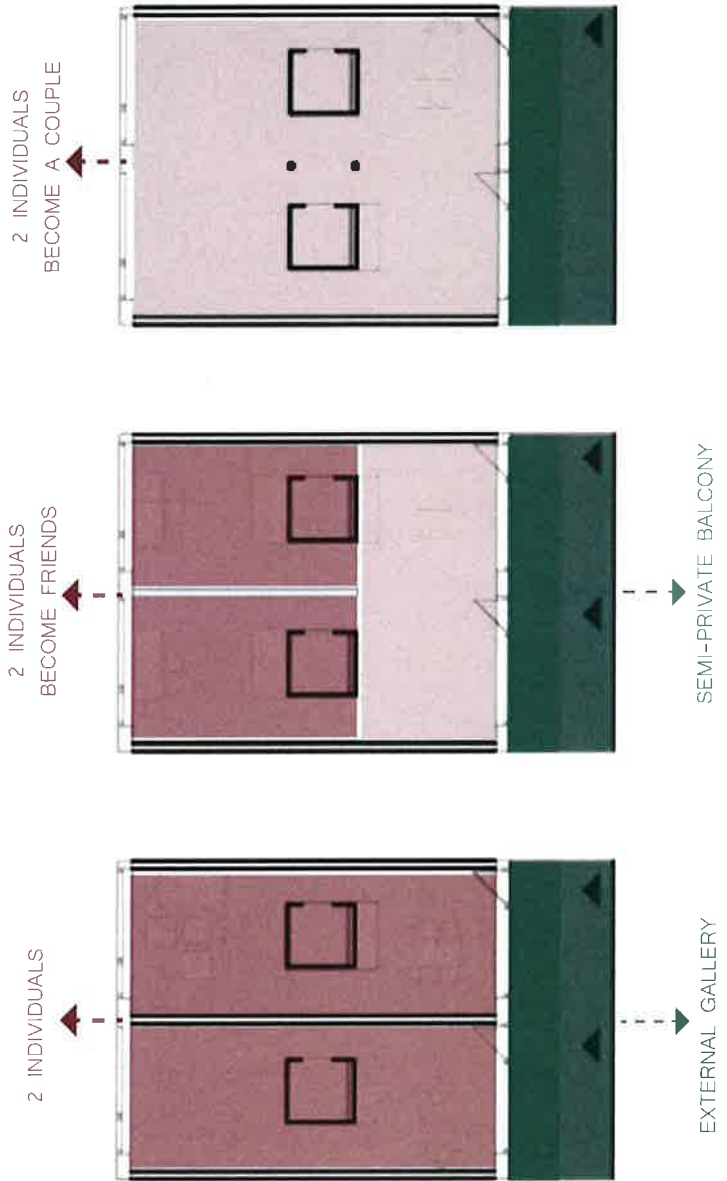
2 INDIVIDUALS
BECOME A COUPLE

2 INDIVIDUALS
BECOME FRIENDS

SEMI-PRIVATE BALCONY

2 INDIVIDUALS

EXTERNAL GALLERY

Figure 51: Location of the transitional and private spaces − Seestadt Aspern (own scheme, 201

# 3.    R-50 Cohousing

| | |
|---|---|
| **ARCHITECT:** | Ifau & Jesko Fezer + Heide & von Beckerath |
| **LOCATION:** | Germany – Berlin |
| **STATUS:** | Completed (2013) |
| **HOUSING TYPOLOGY:** | High-density housing – Co-housing |
| **TRANSITIONAL SPACE TYPOLOGY:** | External gallery – internal staircase |
| **FUNCTIONS:** | 19 private units – laundry room – workshop room – roof terrace – summer kitchen – winter garden |
| **AREAS:** | / |
| **FLEXIBILITY:** | Minimization of detailing gave the building its flexibility. They focused on solid concrete constructions as a base, the rest is open space for the inhabitants to fill in. The minimization of detailing made the building very affordable for low-income families. |
| **PARTICIPATION:** | Cooperative |
| **SOCIAL COHERENCE/ INTERACTION:** | Each floor has three apartments, which are connected with each other by an external gallery. They use this space as a communal outside space for the inhabitants to meet with each other. Because of the big windows in the apartments the external gallery has a big link with the individual apartments. |
| **IDENTIFICATION:** | There is less identification per apartment, but the external gallery is totally free for personalisation and in the way it wraps around the building, a great identification can be achieved. |
| **ACCESIBILITY:** | At the core of the building an internal staircase and an elevator link all floors. |
| **ATTRACTIVENESS:** | The minimization of detailing may make the building look cheaper than others but it leaves much more space for personalization. This can ultimately make the building look more attractive for some. |
| **PRIVACY:** | The big windows to the external gallery provide a big link with the transitional space but also gives a lot of views into the private units. This can lower the privacy level. |
| | (Archdaily, 2015) |

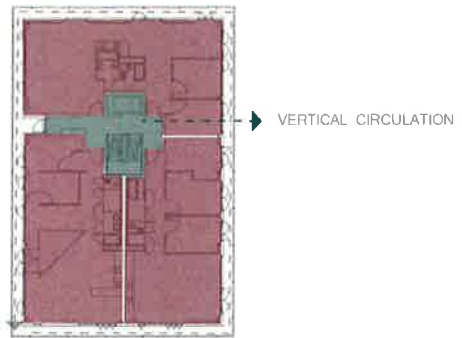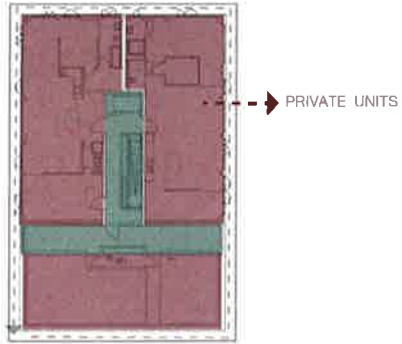Figure 52-57: Ifau & Jesko Fezer + Heide & von Beckerath, R-50 Cohousing, Germany, Retrieved from Archdaily, 2015)

*Figure 58: Location of the transitional and private spaces - R-50 Cohousing (own scheme, 2018)*

# 4.   Torghalle

| | |
|---|---|
| **ARCHITECT:** | JAJA architects |
| **LOCATION:** | Sweden – Katrineholm |
| **STATUS:** | Design contest – not built (2014) |
| **HOUSING TYPOLOGY:** | High-density housing – Hybrid housing |
| **TRANSITIONAL SPACE TYPOLOGY:** | External gallery |
| **FUNCTIONS:** | 30 private units – open market space |
| **AREAS:** | / |
| **FLEXIBILITY:** | The ground floor is conceived as a public open marke space, which is organised very flexible because of th arcade structure. The gallery is placed at the south façad of the building with a flexible solar shading system. Thi system could be changed after the needs of the inhabi- tants, by the inhabitants. |
| **PARTICIPATION:** | / |
| **SOCIAL COHERENCE/ INTERACTION:** | The external gallery can be used by the inhabitants as communal area, where inhabitants can meet each other Big windows linked to this gallery give a greater interactior with the communal area and the private house. The vertica voids create a relation between the different floors. |
| **IDENTIFICATION:** | The semi-public area in front of the entrance of the privat houses, provides a place for personalisation and thus iden- tification. From a greater view, the building doesn't offer great level of identification. |
| **ACCESIBILITY:** | An external circulation was chosen because it is a cost-ef- fective solution. Vertical circulation is clearly centred at on point. The horizontal circulation can be seen clearly fron the outside of the building. |
| **ATTRACTIVENESS:** | The external gallery, acting as a greenhouse, creates perfect environment throughout the season for the inhabi- tants to meet. |
| **PRIVACY:** | The external gallery is extracted from the entrances of th homes, this gives the inhabitants a barrier between thei private house and the communal area. |
| | (Rosenfield, 2014) |

LIVING AREA    SEMI-PRIVATE SPACE
AND CIRCULATION



HISS
+2.
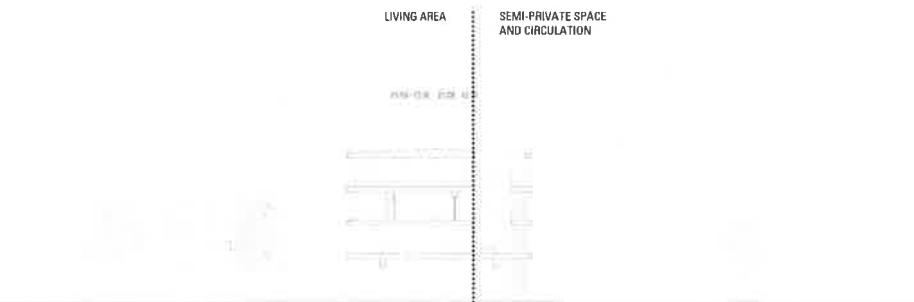
*Figure 59-61: JAJA Architects, Torghalle, Sweden, Retrieved from (Rosenfield, 2014)*

Ground floo | plan

Possible spatial division

EXTERNAL GALLERY

SEMI PRIVATE BALCONY
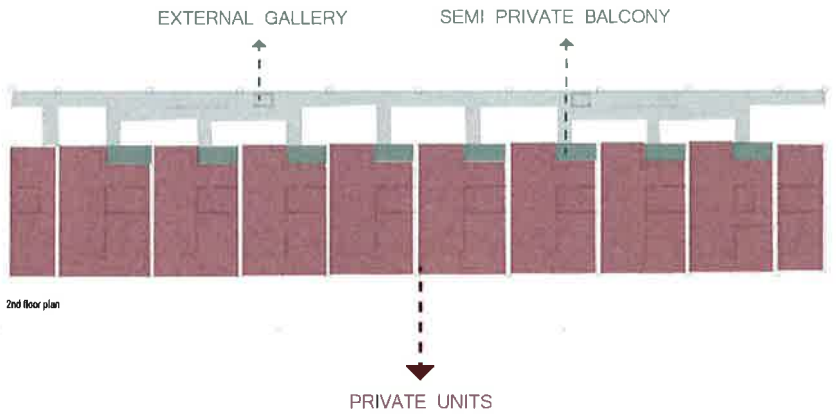
2nd floor plan

PRIVATE UNITS
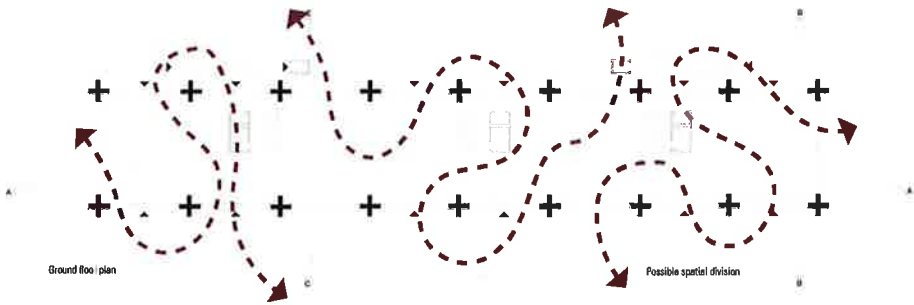
Figure 62: Location of the transitional, private spaces and circulation - Torghalle (own scheme, 2018)

*Figure 63-65: KCAP, Stadstuinen, The Netherlands, Retrieved from (KCAP, 2017)*

# 5.   Stadstuinen

| | |
|---|---|
| **ARCHITECT:** | KCAP |
| **LOCATION:** | The Netherlands – Rotterdam |
| **STATUS:** | Completed (2002) |
| **HOUSING TYPOLOGY:** | High–density housing |
| **TRANSITIONAL SPACE TYPOLOGY:** | Internal gallery |
| **FUNCTIONS:** | 570 private units – urban functions in the plint – communal garden |
| **AREAS:** | / |
| **FLEXIBILITY:** | The external gallery is extracted from the entrance zone of the private houses. The entrance zone is open and flexible for personalisation of this zone. People place plants and small seatings in this zone. |
| **PARTICIPATION:** | / |
| **SOCIAL COHERENCE/ INTERACTION:** | People use the entrance zone of their private house as an extra outside space linked to the communal gallery. From here they can communicate with their neighbours. The vertical voids create a connection between the different floors The entrance zone is used for personalization of the private houses. From a greater view the building doesn't offer a great level of identification. |
| **IDENTIFICATION:** | The horizontal circulation of the building happens through the gallery which can be seen from the outside of the building. |
| **ACCESIBILITY:** | The gallery is closed from the outside environment through removable glass panels, this creates a nice environment in the gallery throughout all the seasons. The personalisation of the entrance zones creates an attractive gallery where people tend to stay a little longer. |
| **ATTRACTIVENESS:** | The extraction from the gallery of the private houses creates a privacy barrier. |
| **PRIVACY:** | (KCAP, 2017) |

Figure 66-70: KCAP, Koekoekspreeuw, The Netherlands, Retrieved from (KCAP, 2017)

# 6.    Koekoekspreeuw

| | |
|---|---|
| ARCHITECT: | KCAP |
| LOCATION: | The Netherlands - Amersfoort |
| STATUS: | Completed (1998) |
| HOUSING TYPOLOGY: | Social housing |
| TRANSITIONAL SPACE TYPOLOGY: | External gallery - external stairs |
| FUNCTIONS: | Housing |
| AREAS: | / |
| FLEXIBILITY: | The external gallery is extracted from the building, by doing this they created a new type of external gallery, the "living street". The zone in-between the living street and the private units are seen as exterior spaces for the private units which can be adapted as pleased. |
| PARTICIPATION: | / |
| SOCIAL COHERENCE/ INTERACTION: | The living street creates a collective space for the inhabitants to meet with each other. Creating big windows from the private units to the living street creates a greater level of social interaction between the inhabitants. |
| IDENTIFICATION: | Each inhabitant owns "a bridge" from the living street to their private house which can be personalized. These personalized bridges can give some identification to the different units in the building. |
| ACCESIBILITY: | Horizontal and vertical access all occurs on the exterior of the building. The circulation of the building can be clearly seen from the outside of the building. |
| ATTRACTIVENESS: | The living street and it's bridges are constructed out of wood which creates a pleasant environment. The living street isn't merely an external gallery, but an experience. It is understood as a promenade route on the exterior of the building. |
| PRIVACY: | Separating the living street from the private units, it creates a greater level of privacy to the private units. |
| | (KCAP, 2017) |

# 7.    Coming out

| | |
|---|---|
| ARCHITECT: | Maison Edouard Francois |
| LOCATION: | France - Grenoble |
| STATUS: | Completed (2010) |
| HOUSING TYPOLOGY: | Social housing |
| TRANSITIONAL SPACE TYPOLOGY: | External gallery - External stairs |
| FUNCTIONS: | Housing - retail functions |
| AREAS: | Total: 6300 m2 |
| FLEXIBILITY: | The building is shaped in a U-form with the transitional space conceived as wooden walkways in the middle of the u-shape. Extracting these walkways from the private units creates space for the private gardens of the private units. These private gardens can be adapted to the needs of the inhabitants. |
| PARTICIPATION: | / |
| SOCIAL COHERENCE/ INTERACTION: | The wooden walkways are created to be a collective space for the inhabitants to meet. Linking the private "gardens" of the private homes to this collective spaces enlarges the social interaction on the passways. |
| IDENTIFICATION: | Because of the private gardens being connected to the wooden walkways, one can easily personalize and thus identify their private home. |
| ACCESIBILITY: | The accessibility of the building happens on the outside of the building, which can be clearly read from the outside view of the building. |
| ATTRACTIVENESS: | Connecting the private gardens to the wooden walkways create a colourful and pleasantly personalized environment. |
| PRIVACY: | The private gardens create a visual barrier between the collective wooden walkways and the private homes. |
| | (Maison édouard francois, 2017) |

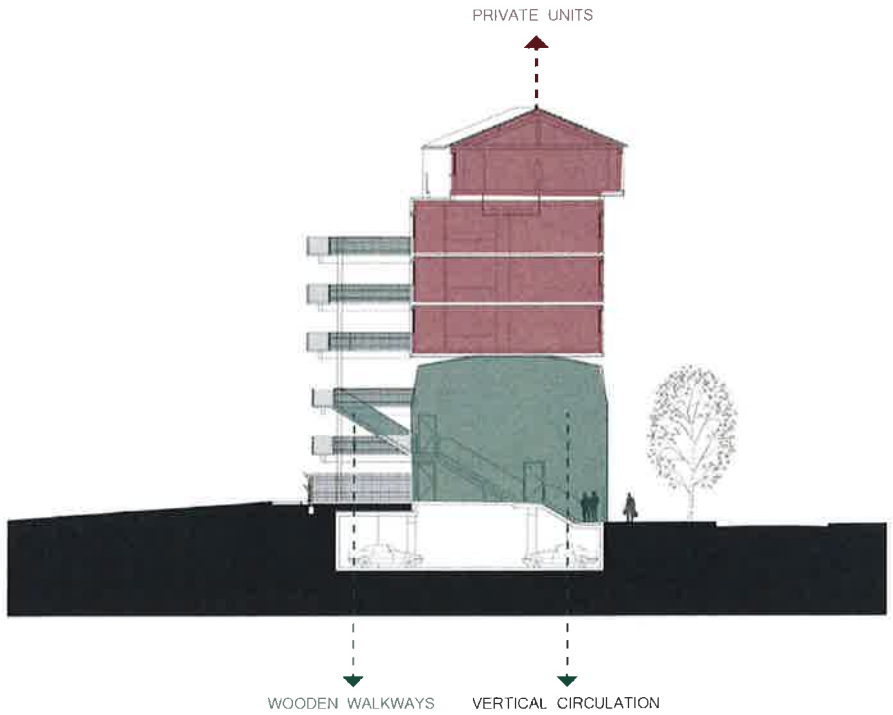Figure 71-76: Maision Edouard Francois, Coming out, France, Retrieved from (Maison édouard francois, 2017)

PRIVATE UNITS

WOODEN WALKWAYS    VERTICAL CIRCULATION

*Figure 77: Location of the transitional and private space — Coming out (own scheme, 2018)*

# ). **PHASE 3 - inhabitants' stories**

ıring the site observation, it became clear that the external gallery has the potential for becoming
 lever of social sustainability within the project. For the following phase I will interview some
habitants of the building, to get to know their opinion about the transitional spaces, and more
ecific the external gallery.

ese conversations will be done in two phases, one before and one after showing them examples
 best practices, described in the previous subsection N. These examples of best practices will
lp with the conversations, so the inhabitants have visuals of how an external gallery could have
en otherwise. From these conversations, some design features of the external gallery will be
nerated. The design proposals can be divided into changes that can be made to the external
illery now and the design features that should have been implemented within the initial design
oposal.

r the conversations with the inhabitants I summed up some of the questions, related to the use
 the transitional spaces, I will ask the inhabitants. This list of questions will help me to steer
e conversations to the social sustainability in the project and the transitional spaces. The method
 semi-structured interviewing and not all the questions will be answered by each individual.
ese questions are more used as a tool to guide the conversations. The interviews will be done
 Dutch and the questions are divided into a phase before showing the pictures of the best
actices, and after showing the pictures. The complete interviews can be found in the appendix.

# 1. Interview questionnaire

1) NOOD AAN PERSONALISATIE:
   Heeft u een eigen inkom gedeelte of komt uw voordeur direct uit op de externe galerij?
   Personaliseert u die inkom en waarom doet u dit?
   Vindt u dat u dit nodig heeft om u zelf te kunnen onderscheiden van uw buren?

2) GEBRUIK VAN DE EXTERNE GALLERIJ:
   Hoe vaak gebruikt u de externe galerij?
   Gebruikt u deze galerij voor iets anders dan enkel als een overgangszone? (van appartement naar buiten)
   Voor welke andere doeleinden gebruikt u deze galerij?
   Hebben de seizoenen invloed op uw gebruik van de externe galerij?

3) ONTWERP ASPECTEN:
   Wat vindt u van het ontwerp van de externe galerij?
   Zijn er bepaalde zaken die u liever anders had gezien aan de galerij?
   Vindt u dat de externe galerij zo ontworpen is dat het aangenaam is om er langer te verblijven?
   Is er een relatie tussen uw woning en de externe galerij?
   Vindt u deze relatie aangenaam en waarom?
   Vind u deze relatie groot genoeg?
   En hoe heeft dit een invloed op uw privacy?

4) SOCIALE SAMENHANG:
   Hou zou u, uw relatie met uw buren kunnen omschrijven?
   Hoeveel buren kent u?
   Hoe vaak praat u met uw buren?
   Waar ontmoet u uw buren?
   Worden er soms feestjes of buren aangelegenheden georganiseerd?
   Denkt u dat als er meer gemeenschappelijke ruimte zou zijn geweest, dat u dan meer met u buren in contact kwam?
   Speelt de externe galerij een rol in u contact met uw buren?
   Zo niet, denkt u dat de externe galerij zou kunnen aangepast worden zodat u hier uw buren op een aangename manier zou kunnen ontmoeten?
   Dus hoe zou u de externe galerij vandaag de dag aanpassen zodat er meer sociale interactie is tussen u en uw buren?

COOPERATIEVE ONTWERP METHODES:
Had u als bewoner inzicht op het ontwerp proces van het gebouw en dus de galerij?
Zo niet, zou u dit graag gewild hebben?

ls volgt zou ik u enkele foto's willen laten zien, van projecten waarbij men op een andere manier omgegaan met de externe galerij. (Figures 47, 48, 49, 53, 61, 64, 65, 69, 70, 74, 75)

ONTWERP ASPECTEN:
Wat zouden de architecten anders kunnen hebben gedaan om van de externe galerij een aangenamere plek te maken die gebruikt kan worden door de buren?

COOPERATIEVE ONTWERP METHODES:
Als u inspraak had gehad in het ontwerp van het gebouw zou het project er dan anders hebben uitgezien?
Welke aspecten zou u aangepast hebben?
Zou u iets verandert hebben aan de galerij?

# Analysis

fter doing the interviews with multiple inhabitants, elderly and younger people, I analysed the terviews through verbatim transcriptions from recordings of the interviews and ultimately through ematic coding. By using this method of analysing I could extract multiple key points, semantic r latent, out of the interviews. Codes can have similarities, therefor these codes are classified nder organising themes. Ultimately these themes all form an opinion on the general theme of e interviews. Following you can find the scheme of the thematic coding (Figure 78), and later n a short recap of all the different themes and a short explanation. After this analysing part of hase three, I will go on to create some design proposals in phase four.

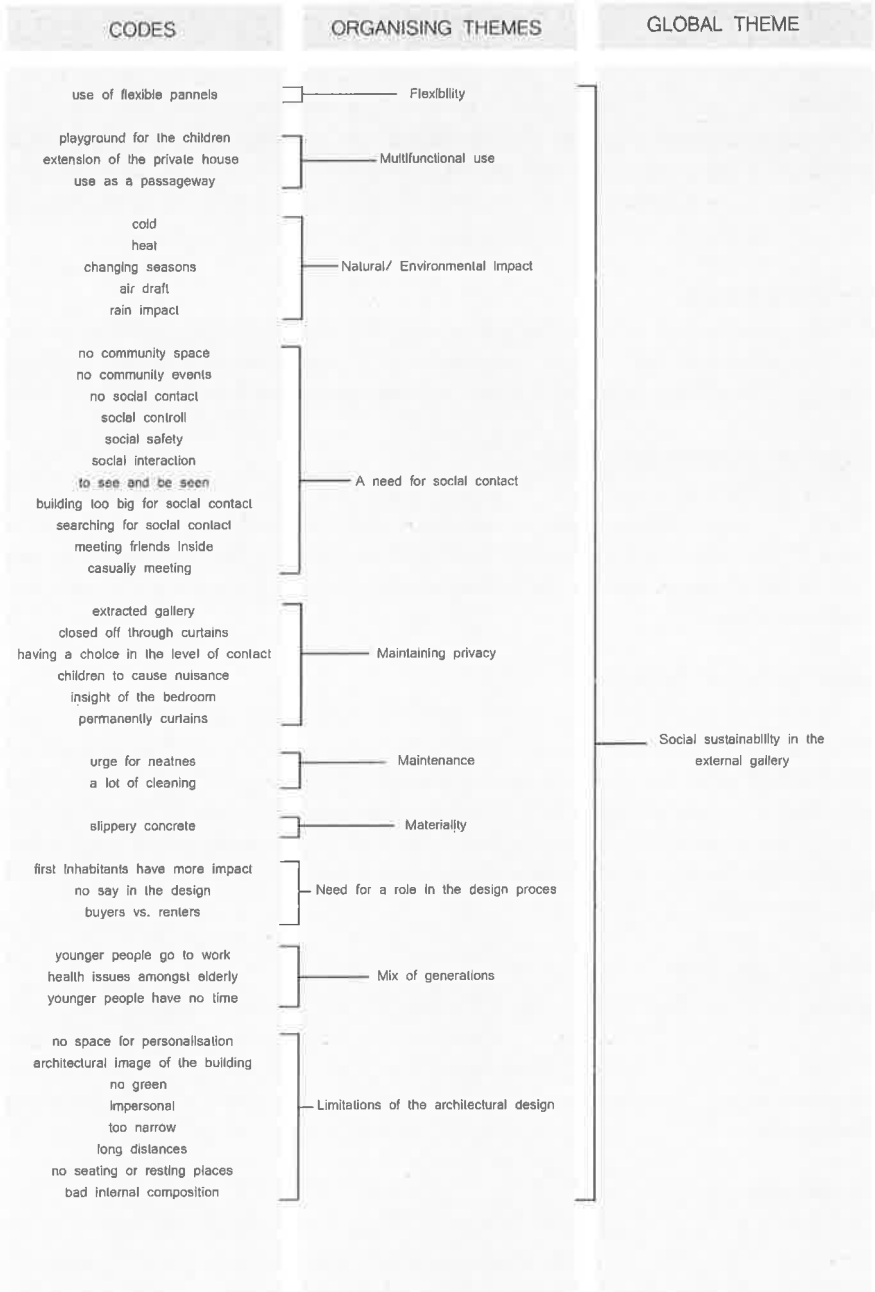| CODES | ORGANISING THEMES | GLOBAL THEME |
|---|---|---|
| use of flexible pannels | Flexibility | |
| playground for the children<br>extension of the private house<br>use as a passageway | Multifunctional use | |
| cold<br>heat<br>changing seasons<br>air draft<br>rain impact | Natural/ Environmental impact | |
| no community space<br>no community events<br>no social contact<br>social controll<br>social safety<br>social interaction<br>to see and be seen<br>building too big for social contact<br>searching for social contact<br>meeting friends inside<br>casually meeting | A need for social contact | |
| extracted gallery<br>closed off through curtains<br>having a choice in the level of contact<br>children to cause nuisance<br>insight of the bedroom<br>permanently curtains | Maintaining privacy | |
| urge for neatnes<br>a lot of cleaning | Maintenance | Social sustainability in the external gallery |
| slippery concrete | Materiality | |
| first inhabitants have more impact<br>no say in the design<br>buyers vs. renters | Need for a role in the design proces | |
| younger people go to work<br>health issues amongst elderly<br>younger people have no time | Mix of generations | |
| no space for personalisation<br>architectural image of the building<br>no green<br>impersonal<br>too narrow<br>long distances<br>no seating or resting places<br>bad internal composition | Limitations of the architectural design | |

*Figure 78: Thematic coding scheme (own scheme, 2018)*

# .1 Analysing themes

## lexibility

hroughout the interviews it became clear to me that the inhabitants are searching for flexibility the design of the project. Combined with the theme of the natural or environmental impacts, e can see that the inhabitants are in need of a flexible system to protect them of natural harm. lso for privacy reasons, which is also a theme, flexibility can be an opportunity.

## Multifunctional use

oday the external gallery is mostly used as a passageway, but not solely, often children use this pace as a playground. When people leave their front door open for their children to play within ie external gallery, this space even becomes an extension of the private house.

## latural/ environmental impact

ecause of the external gallery being an exterior space, it is influenced by natural harm or even ie changing seasons. Where people do not want to be in the external gallery during the winter, ecause of the cold, they prefer it over their terraces during the summer. Orientation plays a g role in this choice of sides of the building, as the gallery is orientated at the north and the rraces at the south.

## need for social contact

he inhabitants of Hassaporta have a need for social contact, they are constantly in search of pcial contact between their neighbours. Today they miss a space for them to meet each other s a community would do, or just for casual meetings. Today they often do not linger within the xternal gallery to have this social contact, they have to meet each other in their private houses. his social interaction is very important for the greater half of the inhabitants of Hassaporta. The pntact that they have today they appreciate it, as they see it as some sort of social control or ven a safety feeling.

## Maintaining privacy

esides a need for social contact, the inhabitants still attach a lot of importance to a certain vel of privacy. Today the internal composition of the private houses interrupts with this level privacy. Ideas like, extracting the external gallery from the private units seems to be an ppropriate proposal. Today this level of privacy is made sure through closing the private spaces f with curtains.

## Maintenance

hoosing for a more communal space ultimately also brings more maintenance as the inhabitants ce everything cleaned up. This can cause for some conflicts between the inhabitants. A clear anagement system can be key for the maintenance of such spaces.

## 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. On the other hand they do like the architectural design of the external gallery with the vertical steel beams. Materiality can create or break a pleasant space to be in.

## Need for a role in the design process
Today there is a difference between the buyers and renters within the project. Renters did not have say at all during the design process, but they also do not miss this as they come and go. Buyers on the other hand would have liked a say within the design process. Some inhabitants who were early with buying their house, got a say within the project but others that came in later did not.

## Mix of generations
Within this project we can clearly define a mix of generations, younger and elderly people live amongst each other. Where elderly do search for social contact with their neighbours, the younger people do not have any time for this although they would appreciate some initiatives, such as parties or events created by and for the neighbours. Where today these different generations see each other as opponents, they could respond to and complement one another.

## Limitations of the architectural design
Overall there is a feeling of satisfaction, about the architectural design, amongst the inhabitants. But they do acknowledge some of its limitations, such as the external gallery being too narrow. Within the project the inhabitants have tried to personalise their private landings to create a more pleasant and liveable environment. Today the architectural design has no clearly defined space for this personalisation so people start personalising their own landings as they please.

# 2.   PHASE 4 - Design principles

or this phase of the empirical research, I pointed out some of the threats and possibilities for ie external gallery as a transitional space, which I retrieved from the interviews and my own te observation. Linking this to the insights from my literature review, I tried to create alternative esign proposals for the external gallery of Hassaporta.

# .   Alternative design proposals

## HE EXTERNAL GALLERY AS AN OUTSIDE/INSIDE SPACE

he overall comment people gave about the external gallery, is about the comfort temperature. oday the external gallery is a complete outside space, with a serious draft problem. People tend ) rapidly go back into their homes because the external gallery is too cold. The inhabitants do not ant to stay, on the external gallery, for a longer period than is needed to reach their home or to ay hello to neighbours. Today the external gallery is good for only small-talk between neighbours.

o create a better situation today, we could opt for a secondary façade system that controls the omfort temperature within the external gallery. Contrary, people still like that the external gallery an outside space. It is a way for them to come out once in a while, certainly for elderly eople. In this case flexibility is important, inhabitants should get to choose if the external gallery ecomes an inside or an outside space. Therefor, a flexible façade system consisting of panels, uld be a viable solution.

we would rethink the building today, or if the inhabitants would have had their say during the esign process, it would have been an option to place the external gallery on the inner side of ie building. By doing this, the external gallery enjoys a preferable south orientation. On the other and, this side of the building can become to be very hot during the summer period, so also ere a flexible wall system could be a solution.

NEW SITUATION

ADJUSTED SITUATION
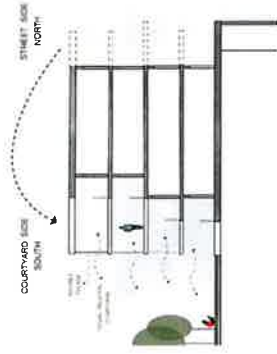
TODAY

*Figure 79: Design proposals for the external gallery (own schemes, 2018)*

# HE EXTERNAL GALLERY AS A COMMUNAL MEETING SPACE

oday the building does not focus on creating communal spaces as much as focussing on the dividual units. Even more there are almost no communal spaces within the building. During the terviews it became clear that the inhabitants are in search for spaces to gather with neighbours. oday they only meet shortly within the external gallery or in their homes, they always have to earch for social contact.

y creating a more pleasant environment, as opted in the previous part, people will be more ely to stay within the external gallery. Adding to the flexible façade, could be some benches r people to stay longer within the external gallery as the comfort temperature can be managed. lso the attractiveness of the external gallery plays a role in this. A greater attractiveness can e achieved by adding plants to the external gallery.

hen we would rethink the design of the external gallery, a greater width would have fit better to e needs of the inhabitants. There would be room to create small meeting spots or spaces for ildren to play, without interrupting the daily transition of every inhabitant from private to public. ven small parties can be organised in the external gallery, and the external gallery could be lapting to these events by letting people put up playful lightings or ornaments.

NEW SITUATION

ADJUSTED SITUATION

TODAY

*Figure 80: Design proposals for the external gallery (own schemes, 2018)*

# THE EXTERNAL GALLERY AS A MEDIATOR BETWEEN GENERATIONS

Within the building today we can find a lot of elderly people but also a certain number of younger people. Today these different groups do not mix with each other, they acknowledge each other but there is no close contact. The younger people mostly live for shorter periods within the building until they find a house they would like to buy. And in most of the cases, these younger people are working from early in the morning till late at night. Meanwhile the elderly are at home, and in need for social contact. While today these elderly people told me they look out for their grandchildren, I would suggest a management system where the elderly look out for the children of the younger people, not only their grandchildren, while they are at work. This can help to solve the loneliness of the elderly people in the building. This is an intangible solution but it contributes to the togetherness of a building.

Using the external gallery more as a communal meeting space can be good to enhance social contact between inhabitants, on the contrary, elderly people do enjoy their calm and quiet once in a while. They like to see movement within the external gallery from out of their homes, but they still do enjoy their own privacy when they choose to. When rethinking the external gallery, it could be good to separate the external gallery from the private houses, so there is still visible contact but it is kept at a distance.

# THE EXTERNAL GALLERY AND THE RELATION TO THE PRIVATE HOUSE

Through the internal composition of the private houses, the external gallery is mostly linked to the kitchen and a bedroom. Even though there are a lot of windows facing the external gallery, there is less visual contact because of this internal composition. During the interviews the elderly people mentioned that they enjoy the occasional passenger in front of their kitchen window.

If we would rethink the design of the project, I would opt for a switch in the internal distribution of spaces, where living spaces are visually connected with the external gallery through windows. This would also create a greater feeling of safety within the external gallery because of the social security given by neighbours. On the contrary, privacy should be guaranteed, this can be done through separating the external gallery from the windows as opted in the case studies described in subsection N.

NEW SITUATION

ADJUSTED SITUATION

TODAY

Figure 81: Design proposals for the external gallery (own schemes, 2018)

# THE EXTERNAL GALLERY TO IDENTIFY THEIR SELVES

he inhabitants of Hassaporta do enjoy their small private entrance landings, where they can identify themselves from the crowd. One woman even stated that otherwise the building would eel like an average hotel. As previously mentioned in the site observation, each house is known y a very large house number, which gives a very impersonal feeling to the building. I certainly eel that today the inhabitants need these personalization's to stand out from the crowd, because ach private house looks the same.

he personalization of these small private entrance landings is a good way to create a greater identification and place attachment for the inhabitants. Instead of identifying themselves through irge house numbers, the inhabitants differ their individuality from others through doormats, plants, mall shoe closets, decorations, etc. Thus they have already created a solution to the existing ituation.

Vhen rethinking the design of the external gallery, it could have been helpful to differ each rivate landing in the design already. This could be done through different colours or materials. han people can indicate their homes by saying: "I live at the house with the red door on the econd floor.". On the other hand furniture could have been integrated in the design, for people put their shoes away or to sit on. By integrating a window in the private landings, you give ach inhabitant a frame to personalize. They can place decorations at the window to differ from eir neighbours, thereby as a designer you can frame the level of personalisation within a project. t last, personal lighting could be integrated in each private landing as there is now only little ommunal lighting in the external gallery.

NEW SITUATION

TODAY

*Figure 82: Design proposals for the external gallery (own schemes, 2018)*

# A COMMUNAL BUILDING WITH A COOPERATIVE STRATEGY

Today the building is created by a big development company and designed by a big architect firm, without ever discussing with the future inhabitants. Only the inhabitants who bought the apartments early got a say in the internal composition of their house, but not in the overall project. We see this type of development all-over Flanders. With this typology of development a lot of possibilities for the building were left behind. The greatest reason for this kind of development is the monetary aspect. They try to create as fast as possible and as much as possible, cheap housing in the city, this being ultimately the biggest problem. They kept the building, as much as they could, at a low cost, which is preferable for the inhabitants. But by doing this, a lot of chances were missed.

A cooperative building method could have been a better solution. Project costs could have been lowered by grouping together at the beginning of the project. And so they could have discussed all options and possibilities, and they could have kept in mind the needs of the inhabitants. For this project it would almost have been impossible because of the scale of the project. Besides, the building is not only focusing on owners but also tenants. This makes it impossible to apply cooperative designing and building method.

# CONCLUSION

I want to conclude this part with an overall collage for a new and better situation for the external gallery, if we would rethink the project. Keeping in mind that it would be much easier, to achieve this situation, if the project was designed under a cooperative designing and building method.
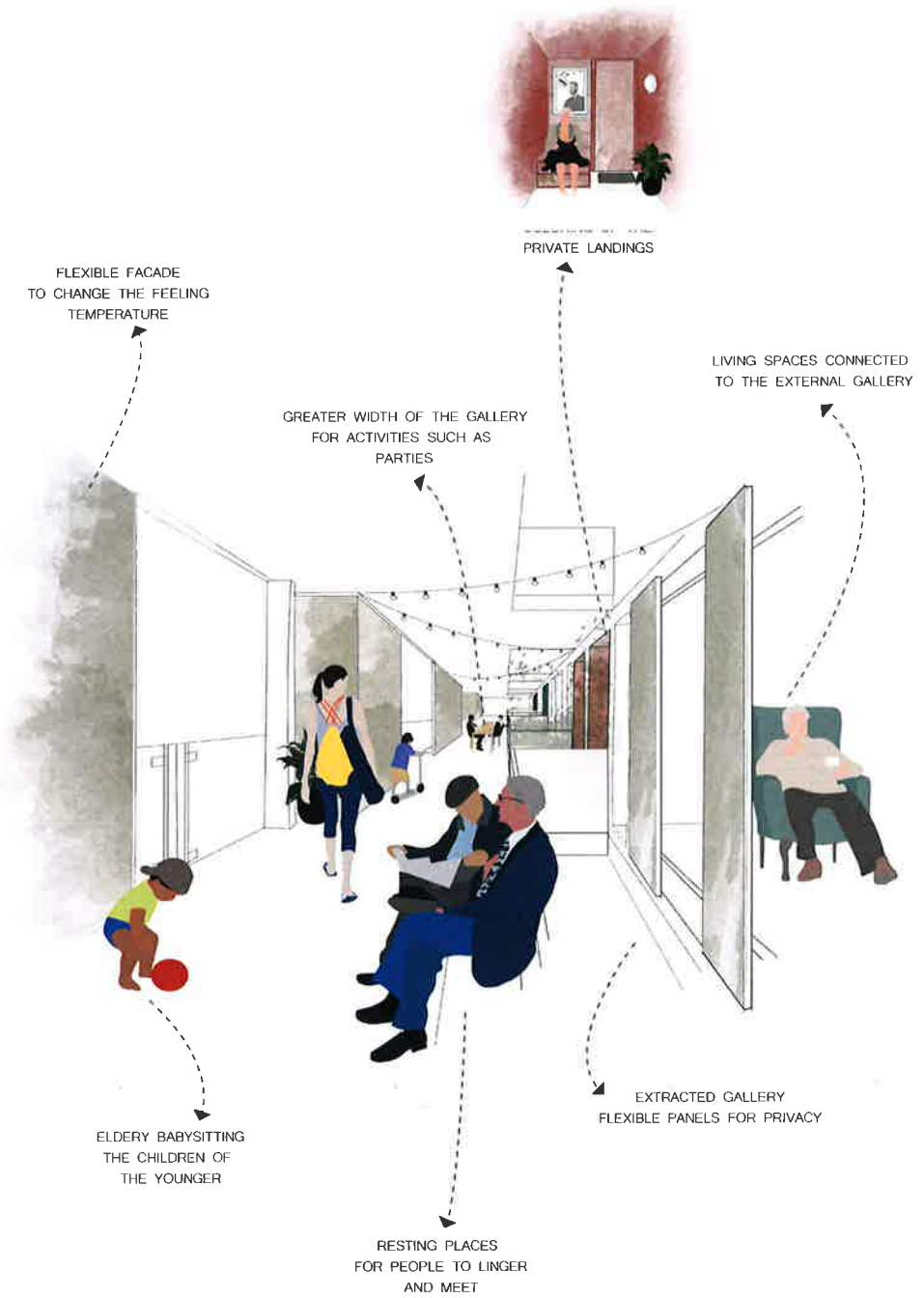
PRIVATE LANDINGS

FLEXIBLE FACADE
TO CHANGE THE FEELING
TEMPERATURE

LIVING SPACES CONNECTED
TO THE EXTERNAL GALLERY

GREATER WIDTH OF THE GALLERY
FOR ACTIVITIES SUCH AS
PARTIES

EXTRACTED GALLERY
FLEXIBLE PANELS FOR PRIVACY

ELDERY BABYSITTING
THE CHILDREN OF
THE YOUNGER

RESTING PLACES
FOR PEOPLE TO LINGER
AND MEET

*Figure 83: Overall design proposal for the external gallery (own scheme, 2018)*

# Q.    Conclusion

I would like to conclude this chapter with some general insights I got from the empirical research, linked to the insights from the literature review. As seen within the literature review, the transitional space today, is still seen as merely a transitional space for people to go from private to public space. This while the transitional spaces has much greater potential, as the one certain communal space within a project. Neighbours already meet each other within this transitional space, but they do not acknowledge this space as a communal space for the inhabitants to meet, they still see this as small casual encounters in a hallway or a staircase.

On the contrary, we feel that there is a need, within buildings like Hassaporta, for the inhabitants to have spaces where they can meet or organise things. Why do not use the transitional space as a communal space to organise events or meet each other? Well, today these spaces aren't designed to their full potentials. In the whole of Flanders we see projects like Hassaporta, built by big developers with only income and fitting as many units as possible in as less space as possible, on their mind. Profit plays a big role within these projects, costs need to be kept at a minimum and standardisation of units and even transitional spaces, is key. Even though a cooperative building and designing strategy could be a solution to enhance social sustainability, for cases like Hassaporta, it would be too difficult, this because of the scale of the building and the focus on rental housing.

But still I believe that a cooperative strategy, where the future inhabitants play a big role in the design and building phase of a project, could be the solution for a social sustainable project. Only, for this to succeed, we have to work on a smaller scale and more bottom-up instead of top-down. But still, for projects like Hassaporta, it could have been helpful to have some design principles about how to implement social sustainability within these transitional spaces. In the following part I summarize five design principles for designers to keep in mind when designing a transitional space. These five principles will then be tested within my masterproject.

# Design principles for social sustainability in the transitional space

### 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. This can be done by implementing windows from the private units to the transitional space, keeping in mind that these can only work if connected to the living environment of the private house instead of the sleeping rooms. 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 on the privacy. This could be achieved through leaving spaces between the transitional space and the private units. Or by implementing flexible integrated systems, such as moveable panels in front of windows, so that the level of privacy can be adjusted by the inhabitants.

1

### 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 their selves through these personalization's. As a designer, not only leaving space, but already providing identification or spaces for identification is evenly, if not more, important. This can be done, for example, by indicating the different units with different colours or materials, but also through giving people personal adjustable features, such as personal outside lighting.

2

### 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. In most of the cases, the transitional space is focused on the transitioning in two directions, resulting in small widths. It could be better, to foresee a greater width for spontaneous events organised by the inhabitants. Because in a building where no communal rooms are foreseen, a transitional space could be designed flexible enough to house spontaneous communal events, such as: parties, meetings, conversations, playing games,.... It could really be a place for the community to meet each other.

3

## COMFORT THROUGH FLEXIBILITY

4

Whilst comfort seems to be one of the focal points of the environmental sustainability, this principle goes further than the average amount of insulation to create thermal comfort. 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's, sometimes an outside space needs to become an inside space, and visa 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.

## ATTRACTIVENESS TO STIMULATE MULTIFUNCTIONALITY

5

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, by implementing greenery or using other materials for example, they will stimulate other activities than merely transitioning. These activities, such as lingering or children playing, can create a more pleasant environment with a greater social coherence and interaction.

Pilot Project
# CHAPTER 3
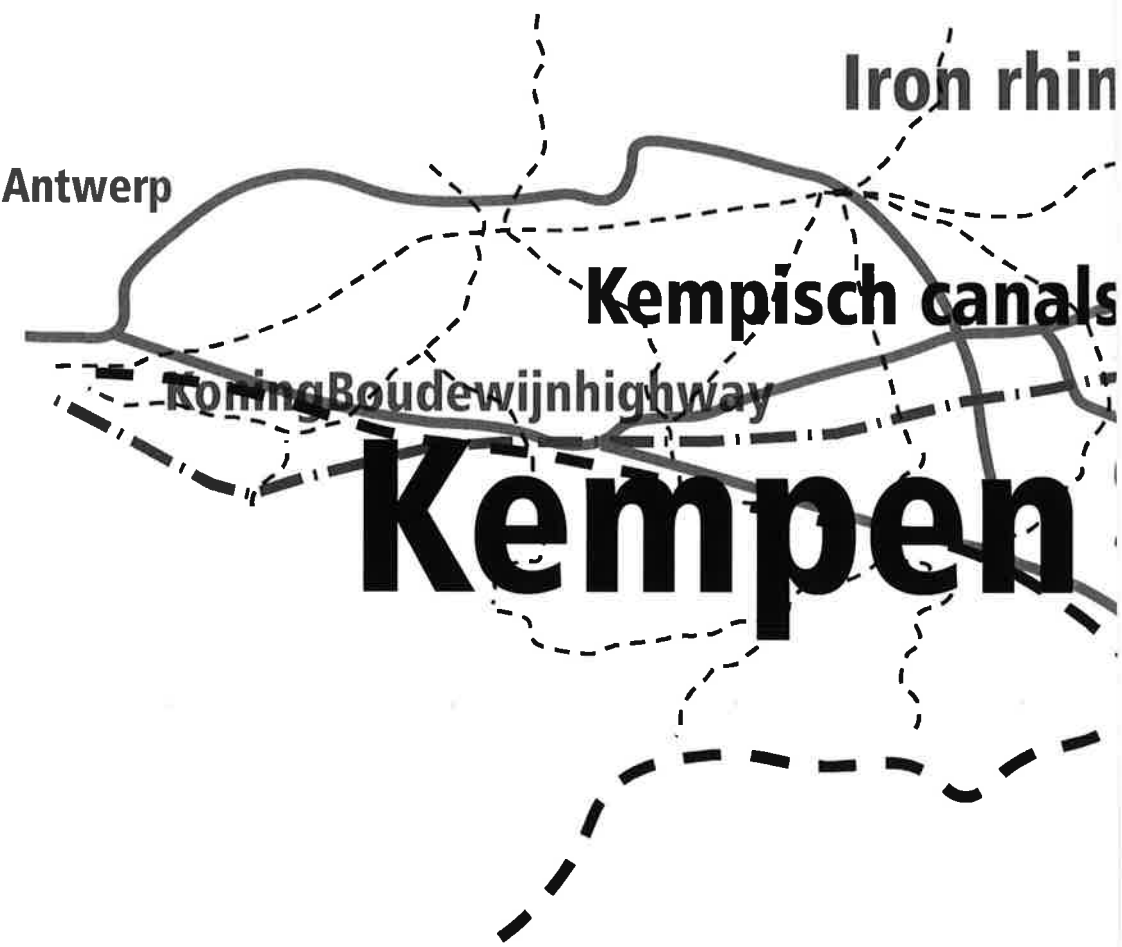
Iron rhin

Antwerp

Kempisch canals

KoningBoudewijnhighway

Kempen

# R.   NEW ECONOMIES - Hasselt

## 1.   Assignment Description

Within the studio of New economies we are searching for new stimulations for the region around Hasselt and Genk. One of the many perspectives the cities already have, is to merge into one big city. This gives the cities the chances to become one big well-known city like Antwerp or Brussels. Each of the cities has its individual qualities but also weaknesses. Within this studio we have researched these weakness and opportunities on three different scales: macro, meso and micro. The overall remark we noticed within these cities is the lack of new ways of generating money, or economics. Today we can not put our hopes in big industries like Ford Genk, or the Philips factory. When big influencers like that, leave the area they leave a big mark behind accompanied by a great amount of unemployment and thus welfare. Today we feel the need to rethink the typology of economics or money making within this region. In the following parts I will guide you through the different scales of the studio to ultimately end with my masterproject, the movie house.
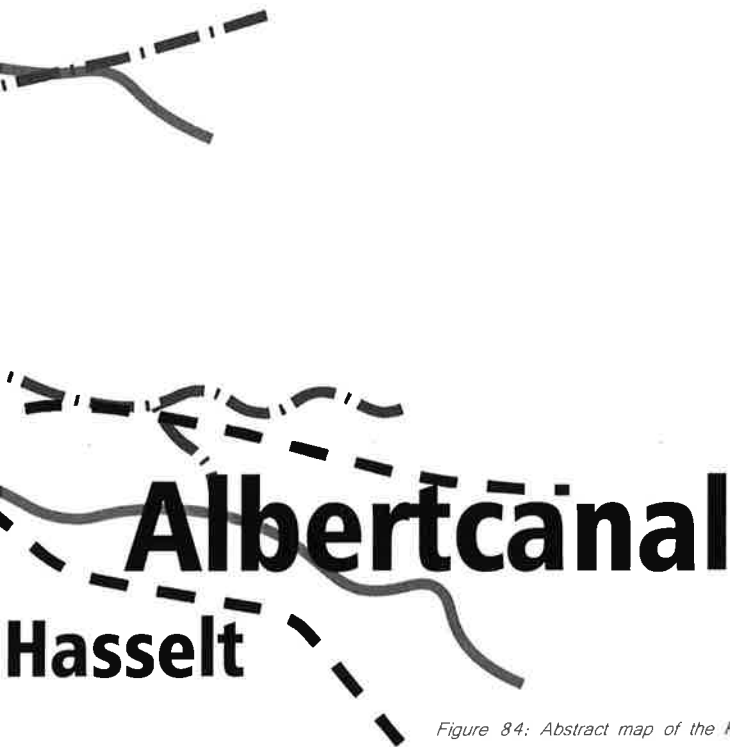
Figure 84: Abstract map of the Region: The Kempen (own scheme, 2018)

# 2.    MACRO - Masterplan

/ithin the history of the Kempen we noticed that cities like Hasselt or Genk were always created round main infrastructure networks; water, railroad and highways. The interesting part about these evelopments is that the cities were almost every time development in between two infrastructure ne. Looking at Hasselt and Genk today we can still feel these marks of development within the ructure of these cities.

n the other hand, as stated in the beginning of this thesis, the demographics are changing in anders, we are noticing a diversified population through migration and natural causes, which akes u to rethink our design principles when designing in cities in Flanders. Hasselt in specific acknowledging a growing elderly population, while younger people are leaving the city because the high rental and buying prices. We can feel that in the cities of Hasselt and Genk they e in search for new housing typologies. Where Hasselt needs to grow more into high density, enk is known for its small scale housing typology. Each has its value and own character that eeds to be respected.

oth cities do not thrive on large industries anymore. Once these industries leave the city they ave big marks on their environment but also the surrounding inhabitants. Employment and estruction rule over these sites when industries leave. Today we have the chance to rethink ese economic hotspots into a more sustainable typology. Do we still need big factories moving to our cities? Or are we in need of more small scale and local working environments. As we ave seen before, we are noticing the biggest amount of traffic jams within Flanders. This because e have to travel a lot from our home to our work. Why can we not live where we work or ork where we live? When we create places where the car isn't the main player anymore and here services are gathered around housing and working we can maybe create a more socially istainable living environment for the inhabitants of these cities.

*Figure 85: Map of potentials New economies (Studio New Economies, 2018)*

# 3.    MESO - Masterplan Water Frontyard

We have seen that Hasselt and Genk have a different type of city structure, where Hasselt searching for high density, Genk is acknowledging their value of the small scale typologies. Because of my thesis being constructed around higher density housing typologies I have chosen a location within the city centre of Hasselt. Therefor I also have done the case study on Bassaporta in Hasselt. One of the most interesting zone within the city centre of Hasselt is the site of the industrial canal zone. This industrial zone is situated alongside the Albert canal in Hasselt, feeling the pressure of the cities as it is broadening its boundaries. Today the city of Hasselt is expanding and is searching for places where they can expand. The are of the industrial canal zone seems to be such a zone with a lot of potential qualities for working and living environments. Today this area has a lack of human scale, mostly focussing on big infrastructures and industries.

On the other hand we can see that Hasselt is have problems with keeping younger people within the city. These younger people do not have enough money to stay within the city centre so they leave. Also the young creative minded people like artists, leave the city because they do not find a lot of support bases for their art to be developed within the city.

Besides that, Hasselt has already acknowledged it's demographic "problem" of a growing elderly population. This they did by building up the Kanaalkom with luxury housing units. The problem with these kinds of developments is that they are not created with a focus on equity, one of the components of social sustainability. Younger people cannot afford a place within these building so they are again left out. But also elderly single with not a lot of money do not fit into these concepts. Hasselt needs to search for a more flexible all-inclusive housing typology to answer to these demographic changes.

Within our masterplan we focus on all these aspect; the human scale, new housing typologies, small scale working typologies, creative hotspots, etc.. Instead of building up the whole site with high density housing units we cleared the are to create a park zone for the city, to give the city a frontyard at the waterside inside of a concretized backyard. Within this park zone, sustainable housing typologies will be generated accompanied by new ways of working on a more local and small-scale level.
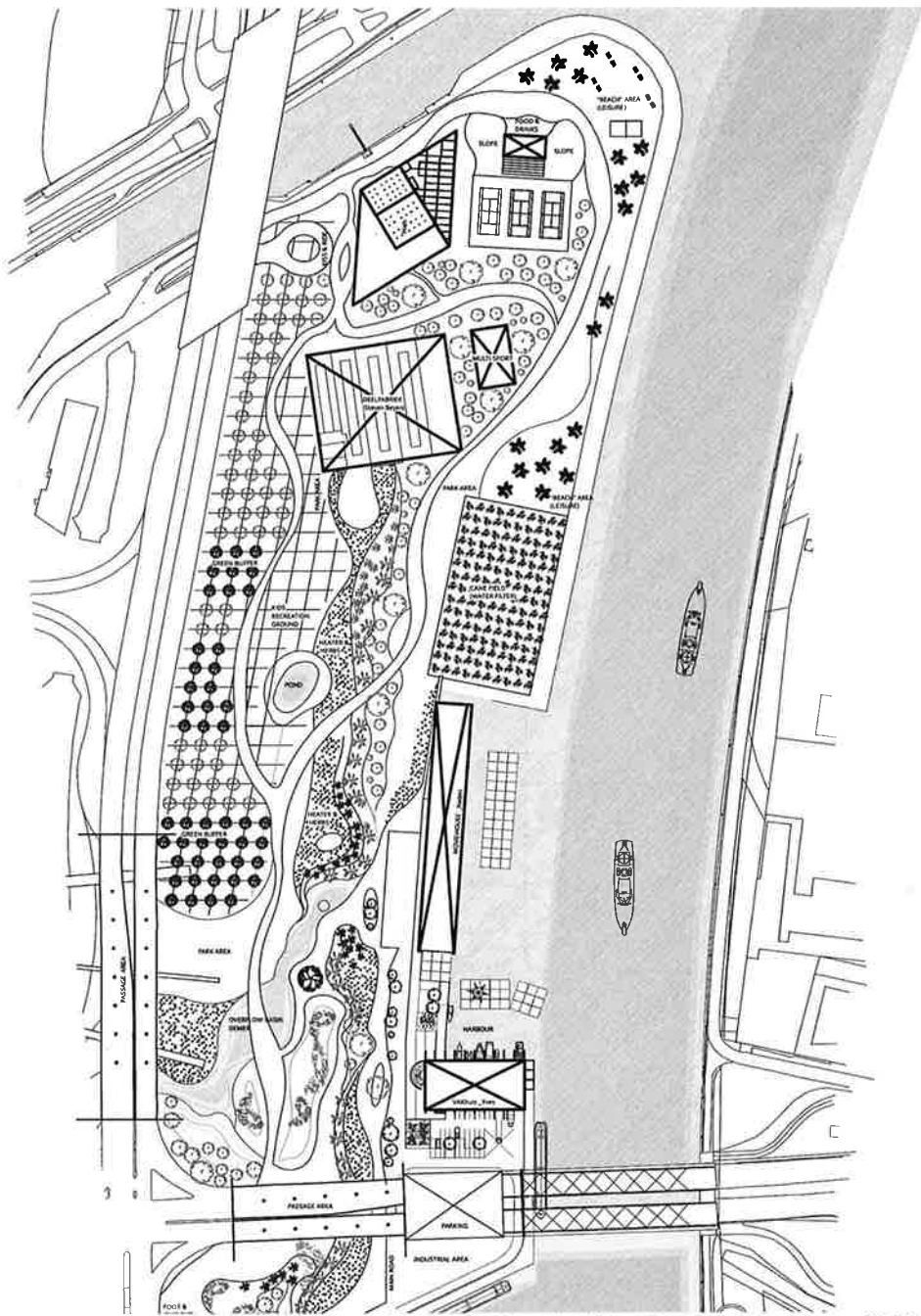
Figure 86: Masterplan Water Frontyard (own scheme, 2018)
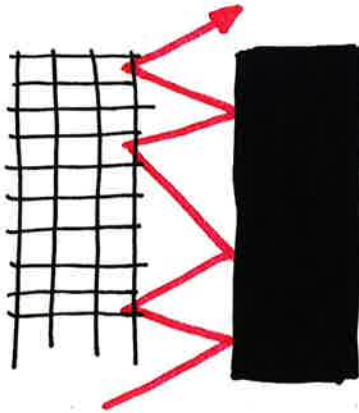
# 3.    MICRO - The Moviehouse

oday we are broadcasting our lives on the Internet through social media, for everyone to see. s true millennials we have a broad social network through these mediums, interrupting our daily e constantly. But then why do we all feel so lonely when we are shutting our phones off? 'hat is the reality of these social networks and what is our place in this?

seems today that we are too focussed on these social networks, we put our whole life on e Internet for everybody to watch, we live almost transparently. But on the other hand we still loose to live separately, and within long commuting distances from each other. The so called nillennials" these days, even feel more lonely than other generations do, although they are uch more socially involved in these social networks. We need to find back our link with our nvironment.

n the other hand, we are young and own a lot less money than our parents did, this in a time here the rental costs and buying costs of a home our the highest. We do not want to spend ur hard earned money on a home while we still are not certain on the way we want to live. esides that we can see that today people can feel almost everywhere at home, as everything designed in such a way that it feels like home. People even tend to state that they do not eed a home for their own to feel like home as they can evenly feel at home at their nearest ife or library. We can see a real shift from owning things to sharing things. We are already aring our car, our music, our bikes, etc.. Then why aren't we sharing the places we live? seems to me that we are more and more growing into communal living typologies than into dividual ones. And as researched within this thesis, communal housing typologies seem to have eat advantages for the social sustainability within a project.

om my own interest I started looking into movie making and how this industry can have its levance in the city centre of Hasselt. Through out history there have been a lot of movie studios at are built in a horizontal way, covering up a lot of land. With our land scarcity in Flanders it ems almost unforgivable to create such an infrastructure in a small city like Hasselt. But when e look back at social networks, we can see that we are daily using film and movie to entertain . One of the most used and commonly known social networks engaged with the movie industry, YouTube. Youtube focusses on the one-man-film, the more small scale film productions that ich and everyone can start on their own with their own smartphone or camera. Today YouTube as grown to be a economically interesting platform as so many people are making a job our of eir work on youtube. they gain money through the views they get and the sponsorships they gage in. YouTube seems to be a new way of creating money on a social platform. But on e other hand it is much more than only creating money, it is also about creating community. buTube acts as a real community of all like-minded people, creative small scale movie makers. ery year there are gatherings for YouTubers to come in contact with each other and their fans, this community feeling is so important for this social platform.

When we combine these two interesting ideas of living more commonly and a working environment, which is focussed on the idea of a community, we seem to have a viable answer to this answer of new housing and working typologies. With my project I focus on a co-living environment within the housing part of the project. Here everything is shared and extra communal functions are generated, such as a co-working space or a sauna. For the money-maker of my project i have chosen to create a YouTube space where learning, creating and community is key. In between these two the transitional space is constructed. Perceived as a floating path in a demountable structure, the paths create a connection with transitional space on the inside of the co-living space. Here the transitional space on the inside functions as a communal meeting place. Thus in this project, the transitional space really tries to be a reconciler between a working environment and a living environment. Both standing next to each other with their own opportunities for the region, but also being connected with each other through a transitional space.



HOUSE - INBETWEEN - MOVIE

Figure 87: Concept of the Moviehouse (own scheme, 2018)

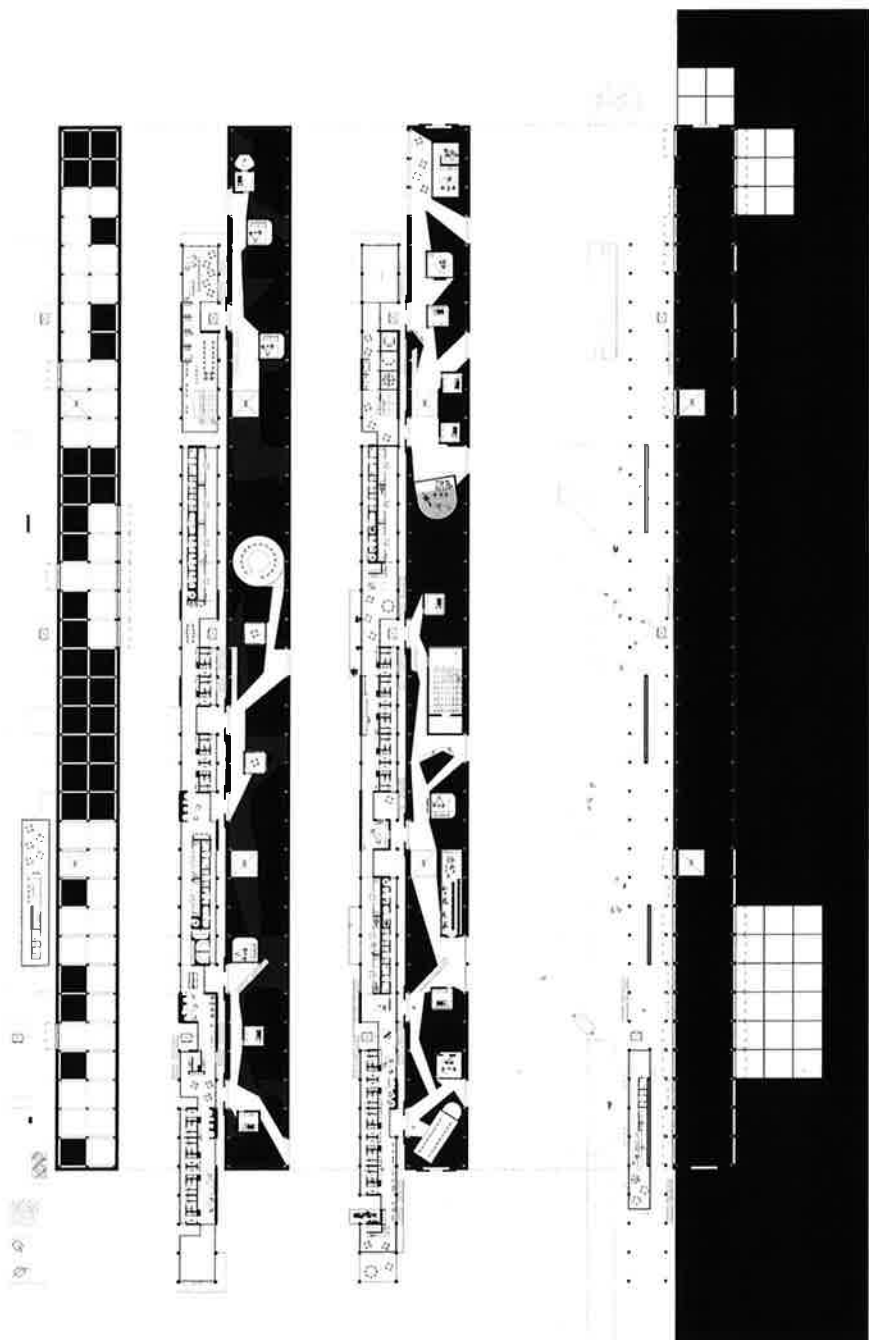Figure 88: Test section of the Moviehouse (own scheme, 2018)

Figure 89: plans of the Moviehouse (own scheme, 2018)

# REFLECTION

I started this research by asking myself: *"How can we use the transitional space as a lever for social sustainability in residential housing?"*. During this research I found out that we are in a great need of new future proof housing typologies in Flanders, with a focus on social sustainability. The answer to this problematic I found in the typology of communal housing, where the transitional space is communally owned space and where people are more likely to meet each other. And as seen through out the thesis it is important to acknowledge the social sustainability within projects, as when we do not do this, projects tend to fail.

This research was done throughout three clear stages where in the first one I did a literature review to broaden my own mind-set on social sustainability. It showed me that we are still lacking a comprehensive guide to social sustainability, today. Out of multiple researches and books I tried to construct a list of components, which help to guide our projects into more socially sustainable projects. But only listing these components would be false so I searched for best practices but also a case-study in maybe the worst example, Hassaporta. This case-study made it really clear to me that people are always searching for social contact with their neighbours and that a project can make this search more difficult. The in depth interviews I did with the inhabitants helped me to form some solutions for Hassaporta today.

All the information I gathered during the first stages was then implemented into my design of the final project. Starting from the idea that a transitional space can be very important to enlarge the social sustainability within a project, I tried to create a project where the transitional places are common meeting spaces. Spaces where experience and feeling good in a place, is as important as the functional use. To me the most interesting part of the research was the case-study, where I could really test the viability of all the information I gathered. because of the scale of the building it was impossible to interview all the inhabitants, but surely the interviews I did gave so much information about the situation of the project today.

The goal of this thesis was to create a framework, or a list of guidelines for designers to follow during their designs, to enhance the social sustainability of their projects. But on the other hand it also became very important to me to start up the conversation about new typologies of housing within Flanders, in forms like communal housing. This thesis can show people the real need and meaning for these typologies, make them understand and convince them that we could live a lot more different, more sustainable, than we are doing right now.

# REFERENCES

# WRITTEN SOURCES

AG Stadsplanning Antwerpen. (2014). Slim verdichten, onderzoeksrapport. Antwerp: Kenniscentrum Vlaamse Steden.

Architectuurwijzer vzw. (2017). *At Home, building and living in communities*. Genk: Architectuurwijzer vzw.

Arya, R. (2011). Transitional spaces: The Phenomenology of the Awayday. *Tamara: journal for critical organization inquiry*, 9 (3-4), pp.23-33.

Báldea, M. (2012). *Future Adaptive Architecture of High Density*. Paper. Romania: Politechnica University of Timisoara.

Báldea, M., & Dumitrescu, C. (2013). High-Density Forms in Contemporary Architecture. *Acta Technica Napocensis: Civil Engineering & Architecture*, 56(2) pp.175-185.

Bacon, N., Caistor-Arendar, L., Hackett, T., & Woodcraft, S. (2012). *Design for social sustainability, A framework for creating thriving new communities*. Social life.

Becker, A., et al. (2015). *Building and Living in Communities*. Basel: Birkhäuser Verlag GmbH.

Beenaerts, S. (2014). *Collectief wonen in Vlaanderen: kenmerken, knelpunten en toekomstperspectieven*. Scriptie. Antwerp: University of Antwerp.

Bolos, C. C. (2009). *Transitional spaces in architecture: elements and profound experiences*. Scriptie. Utah: University of Utah.

Bristol, K. G. (1991). The Pruitt-igoe Myth. *Journal of Architectural Education*, 44(3), pp.163-171.

Camp, P. (2017). *Wonen in de 21ste eeuw*. The Hague: Acco Nederland.

Cheng, V. (2010). Understanding Density and High Density. In Ng, E. (Ed(s).), *Designing high-density cities*, London: Taylor & francis Ltd, pp.3-17.

Chun, C., Kwok, A., & Tamura, A. (2004). Thermal comfort in transitional spaces - basic concepts: literature review and trial measurement. *Building and Environment*, 39(10), pp. 1187-1192.

De Visscher, L. (2016). "De regels moeten soepeler": Interview met Vlaams Bouwmeester Leo Van Broeck. *A+: Architecture in Belgium*, 262, pp.34-36.

Deberdt, S., et al. (2015). *Samenhuizen Startgids: ABC van gemeenschappelijk wonen.* Vilvoorde: Samenhuizen vzw..

Deboosere, P., et al. (2009). *Sociaal-economische Enquête 2011, Monografiëen, Huishoudens en gezinnen in Belgie.* Brussels: FOD Economie.

Kopec , M., Doudová, H. & Dušek, O. (2015). *Baugruppe! handbook.* Prague: Prague Institute of Planning and Development.

Egolf, B., et al. (1992). The Roseto-effect: a 50-year Comparison of Mortality Rates. *American Journal of Public Health,* 82(8), pp.1089-1092.

Eizenberg, E., & Jabareen, Y. (2017). Social Sustainability: A New Conceptual Framework. *Sustainability,* 9(1), pp.1-16.

Gehl, J. (2011). *Life between buildings, using public space.* Great Britain: Island Press.

Heynen, H. (2010). Belgium and the Netherlands: Two Different Ways of Coping with the Housing Crisis, 1945-70. *Home cultures,* 7 (2), pp.159-178.

Hugentobler, M., Hofer, A., & Simmendinger, P. (2016). *More than housing: cooperative planning - a case study in Zürich.* Basel: Birkhauser.

Janssens, B. (2014). *Transitional Spaces: Reconciling Conflicts in Dense Housing Projects. Paper.* Antwerp: University of Antwerp.

Jonckheere, L., Kums, R., & Maes, T. (2010). *Samenhuizen in België: waar staan we, waar gaan we.* Belgium: Samenhuizen vzw..

Kesteloot, C. (2003). Verstedelijking in Vlaanderen: problemen, kansen en uitdagingen voor het beleid in de 21e eeuw. *De eeuw van de stad,* pp.15-39.

Khan, R. (2016). *How Frugal Innovation Promotes Social Sustainability.* Paper. Finland: Lappeenranta University Of Technology.

Leupen, B., & Mooij, H. (2011). *Housing design, a manual.* Rotterdam: NAi Publishers.

Nakano, J., & Tanabe, S. (2004). Thermal Comfort and Adaptation in Semi-Outdoor Environments. *ASHRAE Transactions,* 110(2), pp.543-553.

Ruimte Vlaanderen. (2016). *Witboek Beleidsplan Vlaanderen.* Brussels: Vlaanderen is ruimte.

Sterken, S. (2006). Aantekeningen bij een aantal recente projecten van groepswoningbouw in Vlaanderen. *Jaarboek Architectuur Vlaanderen editie 2004-2005,* pp.43-50.

allance, S., Perkins, H. C., & Dixon, J. E. (2011). What is social sustainability? A clarification of concepts. *Elsevier*, 42(3), pp.342-348.

an Broeck, L. (2014). *Expertenadvies sensibilisering bouwcultuur en ruimtelijk rendement.* Brussels: Bogdan & Van Broeck Architects.

ervoort, P., & Loris, I. (2017). De gedeelde baksteen in de maag: Meerwaarde realiseren door gemeenschappelijk wonen en collectief bouwen. *Gedeelde ruimte,* pp.83-93.

Vebb, M. (2017). *Building community: new apartment architecture.* London: Thames & Hudson.

## INTERNET SOURCES

Archdaily. (2015). *R50-Cohousing/Ifau un Jesko Fezer + HEIDE & VON BECKERATH*, Via https://www.archdaily.com/593154/r50-nil-cohousing-ifau-und-jesko-fezer-heide-and-von-beckerath [Accessed on 11 October 2017].

Belgian Federal Government. (2017). *Bouwvergunningen*. via http://statbel.fgov.be/nl/statistieken/cijfers/economie/bouw_industrie/bouwvergunning/ [Accessed on 31 October 2017].

Boulanger, P., et al. (2009). *Huishoudens en gezinnen in België*. via https://statbel.fgov.be/sites/default/files/Over_Statbel_FR/Sociaal-Economische%20Enqu%C3%AAte%202001%20-%20monografie%204-Huishoudens%20en%20gezinnen%20in%20Belgi%C3%AB.pdf [Accessed on 1 April 2018].

CIB Vlaaderen. (2016). *Kadastrale statistiek - Vlaams gebouwenpark op 1 januari 2015*, via http://www.cibweb.be/sites/default/files/dossier/2016%2002%2015%20Kadastrale%20statistiek%20-%20Verkenning.pdf [Accessed on 20 October 2017].

Eerdekens, A. (2016). *Blauwe Boulevard Hasselt breidt uit met Quartier Bleu*. via http://www.architectura.be/nl/nieuws/13328/blauwe-boulevard-hasselt-breidt-uit-met-quartier-bleu [Accessed on 30 October 2017].

KCAP. (2017). *Koekoekspreeuw Amersfoort (nl): woongebouw as onderdeel van de revitalisering van een naoorlogse wijk*. via http://www.kcap.eu/nl/projects/v/koekoekspreeuw/ [Accessed on 20 December 2017].

KCAP. (2017). *Stadstuinen Rotterdam (NL) Residential district in a development area on Kop van Zuid*. via http://www.kcap.eu/en/projects/v/stadstuinen/ [Accessed on 20 December 2017].

Kumpen. (2017). *Appartementen en winkels Hassaporta – Hasselt*. via http://www.kumpen.be/projecten/appartementen-en-winkels-hassaporta-%E2%80%93-hasselt [Accessed on 20 December 2017].

Maison édouard francois. (2017). *Coming out Grenoble - France*. via http://www.edouardfrancois.com/en/projects/housing/details/article/167/coming-out/#.Wkl8WlSdWRs [Accessed on 20 December 2017].

Matexi. (2015, 11 17). *De belgen en hun buurt*. via https://www.matexi.be/nl/nieuws-en-artikels/de-belgen-en-hun-buurt [Accessed on 10 November 2017].

Rosenfield, K. ( 2014 ). *JAJA Wins Second Prize for Swedish Housing and Market Hall Hybrid.* via https://www.archdaily.com/570903/jaja-wins-second-prize-for-affordable-housing-and-market-hall-hybrid-in-katrineholm [Accessed on 20 December 2017].

Ruimte vlaanderen. ( 2015 ). *Leidraad goede praktijk: Hoe omgaan met gemeenschappelijk wonen.* via https://www.ruimtelijkeordening.be/Portals/108/docs/Wetgeving/leidraad_gemeenschappelijk_wonen.pdf [Accessed on 10 October 2017].

Statistiek, Algemene Directie. ( 2017 ). Het gebouwenpark. via http://statbel.fgov.be/nl/statistieken/cijfers/economie/bouw_industrie/gebouwenpark/ [Accessed on 5 May 2017].

VL. ( 2011 ). *Hassaporta: wonen in Hasselt.* via https://www.youtube.com/watch?v=X-xG6rkJdZo [Accessed on 27 December 2017].

Vanneste, D., Thomas, I., & Goossens, L. ( 2007 ). *Woning en woonomgeving in België.* via https://statbel.fgov.be/sites/default/files/Over_Statbel_FR/Sociaal-Economische%20Enqu%C3%AAte%202001%20-%20monografie%202%20Woning%20en%20woonomgeving%20in%20Belgi%C3%AB.pdf [Accessed on 20 September 2017].

Vermeersch, L. ( 2016 ). *Bouwmeester Van Broeck wil Vlaming uit zijn villa lokken.* via http://www.bruzz.be/nl/actua/bouwmeester-van-broeck-wil-vlaming-uit-zijn-villa-lokken [Accessed on 27 September 2017].

Vlaams verkeerscentrum. ( 2017 ). *Rapport Verkeersindicatoren Snelwegen Vlaanderen 2016.* via http://www.verkeerscentrum.be/verkeersinfo/verkeersindicatoren/jaarrapport-2016-170313 [Accessed on 13 December 2017].

Wimmer und partner. ( 2017 ). *Wohnbau "Baugruppe LiSA" Seestadt Aspern.* via http://www.wimmerundpartner.com/index.php?seite=projekte&projekt=lisa&lang=de [Accessed on 11 October 2017].

## PICTURES

Figure 1-4: Politecture. ( 2011 ). *The destruction of Pruitt-Igoe*. [picture]. via https://politecture. files.wordpress.com/2011/11/pruitt-igoe.jpg [Accessed on 10 February 2018].

Figure 5: Schuermans, N. ( 2018 ). *Structure scheme of the content of the thesis*. [illustration]. Own image archive.

Figure 6: Schuermans, N. ( 2017 ). *Structure scheme of the methodology*. [illustration]. Own image archive.

Figure 7: Schuermans, N. ( 2017 ). *Amount of housing typologies in Flanders*. [illustration]. Own image archive.

Figure 8: Schuermans, N. ( 2017 ). *Land usage in Flanders*. [illustration]. Own image archive.

Figure 9: Vlaams Bouwmeester. ( 2018 ). *Birds perspective of the fragmentized landscape of Flanders*. [picture]. [Accessed on 10 October 2018]. via http-//www.vlaamsbouwmeester. be/nl/instrumenten/open-oproep/projecten/oo3407-moerbeke-masterplan

Figure 10: Janssens, B. ( 2014 ). *Architectural morphologies and corresponding UPH's*. [picture]. via Transitional Spaces: Reconciling Conflicts in Dense Housing Projects.

Figure 11: Leupen, B., & Mooij, H. ( 2011 ). *Morphology of high-density*. [picture]. via Housing design, a manual

Figure 12: Boulanger, P., et al. ( 2009 ). *Household typologies in Flanders from 1970 to 2001*. [picture]. via https://statbel.fgov.be/sites/default/files/Over_Statbel_FR/Sociaal-Economische%20Enqu%C3%AAte%202001%20-%20monografie%204-Huishoudens%20 en%20gezinnen%20in%20Belgi%C3%AB.pdf [Accessed on 1 April 2018].

Figure 13: Vallance, S., Perkins, H. C., & Dixon, J. E. ( 2011 ). *Framework for social sustainability*. [illustration]. via What is social sustainability? A clarification of concepts.

Figure 14: Schuermans, N. ( 2017 ). *The components for social sustainability*. [chart]. Own image archive.

Figure 15: Schuermans, N. ( 2017 ). *Connection between the positive and negative aspects of communal housing and the components of social sustainability*. [illustration]. Own image archive.

Figure 16: Vervoort, P., & Loris, I. ( 2017 ). *Location of communal housing projects in Flanders*. [picture]. via De gedeelde baksteen in de maag: Meerwaarde realiseren door gemeenschappelijk wonen en collectief bouwen.

igure 17: Archdaily. (2013). *Ville Radieuse*. [picture]. via https://www.archdaily.com/411878/ad-classics-ville-radieuse-le-corbusier/51fadfbbe8e44ea2b00000010-ad-classics-ville-radieuse-le-corbusier-image [Accessed on 1 april 2018].

igure 18: Scod public blog. (2011). *Garden cities*. [picture]. via https://scodpub.wordpress.com/2011/03/01/garden-cities-by-ebenezer-howard/ [Accessed on 1 april 2018].

igure 19 - 28: Schuermans, N. (2018). *Typologies of transitional spaces*. [illustration]. Own image archive.

igure 29: Chateaux real estate. (2018). *Render of Hassaporta*. [picture]. via http://www.chateauxrealestate.be/uploads/images/Gallery/Hassaporta/projectfoto2.jpg [Accessed on 1 april 2018].

igure 30: Schuermans, N. (2017). *Hassaporta Hasselt*. [picture]. Own image archive.

igure 31 – 34: Schuermans, N. (2018). *Hassaporta site observation route*. [map]. Own image archive.

igure 35: Schuermans, N. (2018). *Hassaporta site observation*. [picture]. Own image archive.

igure 36: Schuermans, N. (2018). *Hassaporta exterior view*. [picture]. Own image archive.

igure 37: Schuermans, N. (2018). *Door to the internal staircase*. [picture]. Own image archive.

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igure 43: Schuermans, N. (2018). *Doorbells and house numbers*. [picture]. Own image archive.

igure 44: Schuermans, N. (2018). *Entrances on the east*. [picture]. Own image archive.

Figure 45 - 50: Wimmer und partner. (2017). *Seestadt Aspern*. [picture]. via http://www.wimmerundpartner.com/index.php?seite=projekte&projekt=lisa&lang=de [Accessed on 1 april 2018].

Figure 51: Schuermans, N. (2018). *Location of the transitional and private spaces – Seestadt Aspern*. [illustration]. Own image archive.

Figure 52 - 57: Archdaily. (2015). *R-50 Cohousing*. [picture]. via https://www.archdaily.com/593154/r50-nil-cohousing-ifau-und-jesko-fezer-heide-and-von-beckerath [Accessed on 11 October 2017].

Figure 58: Schuermans, N. (2018). *Location of the transitional and private spaces – R-50 Cohousing*. [illustration]. Own image archive.

Figure 59 – 61: Rosenfield, K. (2014). *Torghalle*. [picture]. via https://www.archdaily.com/570903/jaja-wins-second-prize-for-affordable-housing-and-market-hall-hybrid-in-katrineholm [Accessed on 20 December 2017].

Figure 62: Schuermans, N. (2018). *Location of the transitional, private spaces and circulation – Torghalle*. [illustration]. Own image archive.

Figure 63 - 65: KCAP. (2017). *Stadstuinen*. [picture]. via http://www.kcap.eu/en/projects/v/stadstuinen/ [Accessed on 20 December 2017].

Figure 66 - 70: KCAP. (2017). *Koekoekspreeuw*. [picture]. via http://www.kcap.eu/nl/projects/v/koekoekspreeuw/ [Accessed on 20 December 2017].

Figure 71 – 76: Maison édouard francois. (2017). *Coming out*. [picture]. via http://www.edouardfrancois.com/en/projects/housing/details/article/167/coming-out/#.WkI8WISdWRs [Accessed on 20 December 2017].

Figure 77: Schuermans, N. (2018). *Location of the transitional, private spaces and circulation – Coming out*. [illustration]. Own image archive.

Figure 78: Schuermans, N. (2018). *Thematic coding scheme*. [chart]. Own image archive.

Figure 79 - 82: Schuermans, N. (2018). *Design proposals for the external gallery*. [illustration]. Own image archive.

Figure 83: Schuermans, N. (2018). *Overall design proposal for the external gallery*. [illustration]. Own image archive.

# APPENDIX

GELSACHT: Man & vrouw

EEFTIJD: 65 & 61

K: *Ik zie dat u een eigen kleine inkom heeft, en dat u deze ook personaliseert. Vindt u dat dit nodig is?*

Man: Dat mag wel wat hebben ja.

K: *Zodat u zich een beetje kan onderscheiden van uw buren?*

Man: Ja inderdaad, ik vind dat wel leuk, dat het een beetje aangekleed is.

Vrouw: Maar bij ons komt de buggy van de kleinkinderen er te staan, daarom staat er nog niks, anders zouden wij er ook iets zetten.

K: *En hoe vaak gebruikt u de galerij buiten?*

Man: Dagelijks een keer of vijf of zes, minimum. Het straatje?

K: *Ja inderdaad de grote buitengang*

Man: Ja die gebruiken we heel veel.

K: *Gebruikt u deze louter om van uw woning naar buiten te gaan en het gebouw te verlaten?*

Man: Ja en om naar de kelder en de berging te gaan.

Vrouw: In het begin denk je: "bah zo ver wandelen". En ook door de kou is het niet aangenaam en moet je steeds een vest aan doen. Maar nu denken we, "we komen eens buiten". Al is het maar om eens even naar de brievenbus te gaan, je komt eens even op de lucht, iets wat je toch ook nodig hebt he.

K: *Maar u gebruikt deze ruimte voor geen andere doeleinden? Er wordt nooit iets georganiseerd?*

Vrouw: Nee dat doen ze hier niet, en dat missen we hier wel. In het begin wouden we dingen organiseren maar er zijn geen lokalen die groot genoeg zijn.

Man: Er is geen enkel lokaal in het gebouw ook niet in de kelder, waar iets kan, bijvoorbeeld een vogelpik of een dartbord. Maar er is geen enkel lokaal dat er zich toe verleend.

Vrouw: We zijn heel goed voorzien op fietsers, wat ook echt nodig is want er zijn altijd plaatsen te kort, maar er is niks voorzien om ergens iets te organiseren of samen te komen. Maar volgens mij was het de bedoeling van de stad dat wij het grasveldje tegenover het gebouw kregen. Om dan daar wat banken op te zetten of zoiets.

Man: Dat is nog steeds de bedoeling hoor.

Vrouw: Maar de studenten en die met hun honden pikken dit helemaal in. En echt spelen kun je er niet op omdat de Demer er langs ligt en dan vallen de ballen rechtstreeks in het water.

K: *En hier op de galerij wordt er niet gespeeld door de kinderen?*

Vrouw: Soms de kleinkinderen.

Man: Maar heel weinig.

K: Is het dan niet veilig?

Ik: Is het dan niet veilig?

Man: Jawel heel veilig hoor, maar het gebeurt heel weinig.

Vrouw: Als onze zoon komt met de kleinkinderen dan zetten we de deur open en dan spelen ze wel eens op het straatje. En laatst zag ik ook de kleinkindjes van hier wat verder, spelen op het straatje. Op en af rennen over het straatje of met de step op en af gaan.

Ik: En het weer beïnvloedt dit gebruik misschien?

Vrouw: Ja inderdaad als het mooi weer is gebeurt dit vaker. Maar in de winter ook hoor. En dan hoor je ze met de step over de naadjes van het beton rijden klik, klik, klik. Maar het blijft wel proper hoor, er is nooit rommel of zoiets.

Man: Nee geen rommel, maar in het begin dat we hier kwamen hadden ze gezegd dat ze het helemaal opnieuw gingen polieren en terug een laag gingen opzetten, maar dat is niet gebeurd. Op de eerste verdieping is de beton zo glad als iets. Maar die mevrouw was er hier een van de eerste en heeft er intens aan gewerkt om het zo te krijgen.

Ik: en hoe vindt u dat zo de relatie is tussen de woning en de galerij. Want ik zie u heeft hier een raam van de keuken naar de galerij, vindt u dat aangenaam?

Vrouw: Ja! Dan zien we de buren.

Man: Ja je ziet wie er passeert.

Vrouw: Ja je ziet wie doorkomt, het is maar kort maar je ziet het. We hebben ook geen ander volk dat we zien, als degene wie het straatje passeert straatje he.

Man: Want ja, de bovenburen, een paar ken je er maar we zitten hier met 102 appartementen.

Ik: Kent u eigenlijk veel buren?

Man: Ja die van het straatje hier en een paar hier boven, maar zo heel veel niet. Van de 102 ken je er 25 zal ik maar zeggen.

Ik: En die ontmoet u dan ook door de galerij te gebruiken?

Vrouw: Ja inderdaad en ook in de liften natuurlijk.

Man: Maar de meeste hier boven zijn jongere mensen en die zijn altijd werken.

Ik: maar het is niet zo dat u eens langer in de galerij blijft staan om wat met u buren te babbelen?

Man: Soms, jawel.

Vrouw: Als de stroom is uitgevallen he. Dan gaan we samenkomen op het straatje allemaal. Maar ja het is ook de gezondheid van de mensen. Hier wonen veel ongezonde oudere mensen, en mensen met problemen. En die blijven niet staan om te praten. Hier vooraan het straatje is er eentje die heeft parkinson dus die kan niet goed stappen en die moet in de rolstoel blijven zitten. En hier langs woont iemand van 70 en daar ga ik dan buurten zo af en toe.

Ik: Vind u dat er met deze mensen dan geen rekening is gehouden bij het ontwerp om hun buren te ontmoeten? Want het zijn natuurlijk hele lange afstanden die u moet afleggen in de galerij.

Man: Ja inderdaad. Wat in het begin de mensen tegen stak waren de brievenbussen op een lange afstand.

Vrouw: Maar wij vinden dat fijn.

Man: Maar soms, als er dan een aangetekende brief wordt gebracht en de postbode belt aan, eerdat ik daar ben, is de postbode soms weg.

Vrouw: Maar ja, die van aan het kanaal moeten tot buiten gaan voor hun brievenbus. Het is niet zo evident maar het gaat nog.

k: *Zou u iets aan de galerij nu willen veranderen? Iets wat nu kan verandert worden, iets wat het aangenamer maakt voor mensen om langer in de galerij te verblijven?*

Vrouw: Ja ze hebben hier dat groen plein gemaakt met een door kijk, maar dat is 1 groot tocht gat he.

Man: Dat ze plastieken wanden of zoiets daar tegen aanbrengen. Want er is een enorme tocht, je waait bijna omver.

Vrouw: Maar nee, contact heb je hier weinig hoor. Maar je voelt ook dat de mensen er ergens geen nood aan hebben. Dan hoor je weer "we hebben je al zo lang niet meer gezien" maar het is dan toch een kleine moeite om mij aan te spreken denk ik dan.

k: *Maar zou vandaag de dag iets willen veranderen of toevoegen aan de gang zodat mensen hier wel langer zouden blijven? En dat sociaal contact gestimuleerd wordt?*

Vrouw: Eigenlijk wel. Ik zou wel ergens een bankje willen buiten om wat langer te kunnen zitten. Maar ja dat is de noord kant, dat is het probleem. Dat is niet de goede kant om wat langer te blijven zitten. Mijn man heeft het natuurlijk nooit koud. Maar over het algemeen zijn we heel tevreden hoor, over de indeling ook hoor. Maar ja je kan er ook altijd weinig aan veranderen. Het appartement moet zo optimaal mogelijk zijn he.

k: *Heeft u eigenlijk inspraak gehad in het gebouw terwijl het ontworpen werd?*

Vrouw: Nee! Wij mochten nooit, nooit, nooit komen kijken. Mijn man heeft dat ooit onofficieel gedaan he maar we mochten nooit komen kijken.

k: *Maar bij het ontwerp van het gebouw ook totaal niet?*

Vrouw: Nee totaal niet, je koopt het zoals het is. Nee sorry dat is niet waar, als je op tijd koopt dan mag je veranderingen aanvragen. Want er is een vrouwtje hier langs die heeft haar halletje versmald zodat ze keuken kastjes heeft kunnen bijzetten.

k: *Maar het is niet zo dat jullie iets konden veranderen aan de galerij?*

Vrouw: Er is ook ene die zijn hele indeling heeft verandert hoor. Die heeft een hele mooie keuken en living. Maar dan moet je echt heel in het begin zijn hoor.

k: Ik heb enkele foto's bij van projecten waar men de galerij op een aparte manier heeft toegepast. Zo zien we bijvoorbeeld dat deze mensen hun tuintje aan de galerij hebben liggen en deze volledig kunnen personaliseren met groen enzovoort.

rouw: Wij mogen zelfs onze terrassen niet personaliseren.

Man: Nee totaal niet! Dat was allemaal klimop normaal, maar die was volledig kapot gegaan en die heb ik er dan uitgegooid. Maar normaal mocht dat niet.

rouw: Ze hebben de bloembakken zelfs zo gemaakt, dat ze buiten de draad staan en het hoort bij de groen dienst van de daktuin. Ze zijn bang dat wij iets gaan planten wat niet in het beeld van het gebouw past. Nu zijn er toch veel mensen die na die klimop toch iets van een groen afscherming hebben aangebracht, maar geen planten! Heel in het begin van de bouw waren er nog geen tussenschotten tussen de terrassen, dat was tof. En nu hebben ze die tussenschotten er overal tussen gezet en nu hoor of zie je niks meer van de buren. Wij weten echt niks van de buren. Ik weet niet of die situatie zonder tussenschotten aangenaam bleef maar het was iets socialer.

*Ik: Zoals bij dit voorbeeld, hier hebben de mensen en kleiner privé gedeelte gelinkt aan die galerij, waardoor er meer sociaal contact is. Hier hebben ze ook grote ramen gebruikt om meer relatie te hebben met de galerij.*

Man: dit is natuurlijk hier niet meer te verwezenlijken.

*Ik: Vandaar mijn volgende vraag, zou u iets veranderen aan het gebouw moest het volledig opnieuw gebouwd worden? Of had u iets anders gedaan als u inspraak had gehad tijdens de ontwerp fase?*

Vrouw: Wij zouden de tussenschotten flexibel maken, zodat we de kunnen kiezen, dicht of open. Dan kan je bijvoorbeeld zeggen naar de buur van 70, ik laat het open zodat ik u zie.

Man: Ik zou werken aan het tochtprobleem. Een systeem plaatsen zodat er minder tocht is aan het gebouw.

Vrouw: Meer gelegenheden om te verblijven in de galerij. Al was het maar een paar banken. Voor bijvoorbeeld de mensen die niet goed meer kunnen. Die kunnen dan eens gaan zitten op een bank. In de inkomhal mis ik dit ook. Ik vind het voorbeeld waar de galerij van de ramen weggetrokken wordt fijn. Zo is er ook meer plaats om eens een stoel te zetten. Maar hier is de galerij op het noorden gericht dus het is niet heel aangenaam om er te zitten. Het is er echt heel vaak koud.

*Ik: Maar zo zijn er ook voorbeelden waar er gewerkt is met een flexibele wand om de temperatuur in zo een galerij te regelen.*

Vrouw: Ik heb daar ooit over nagedacht, want als het dan echt slecht weer is kan je nog buiten lopen. Ik zit ook vaak op mijn terras en soms hoor je dan de ene naar de andere roepen. Dan merk je toch dat ze er nood aan hebben. Maar als ze mensen hadden willen motiveren om de gang te gebruiken voor de buren te ontmoeten, hadden ze dit misschien beter aan de andere kant gemaakt. Dan ligt het op de zuidkant. Dan hadden de terrassen misschien aan deze galerij gelegen maar dat kan wel. Soms denk je wel eens "waarom hebben ze hier niet verder over nagedacht". Zoals bijvoorbeeld over de plaatsing van de deuren in de woning. Nu staan de deuren op één lijn en is er veel tocht.

Man: Het probleem is natuurlijk dat er ook mensen zijn die dit niet willen. Er zijn er ook die de hele dag hun gordijnen naar beneden hebben. In het gebouw wonen er ook veel oudere mensen. Op deze verdieping alleen, zijn het hoofdzakelijk ouderen.

Vrouw: Nu wonen er wel twee jongere mensen langs ons, waar we weinig contact mee hebben. De Eigenaar van dat appartement woonde hier vroeger en daar hadden we fijn contact mee. Hij kwam gewoon aanbellen als hij eens iets nodig had.

Man: De mensen daar langs zijn elke dag werken van 's ochtends tot 's avonds, dus die zie je heel weinig.

Vrouw: vroeger zagen we hun wel eens op het straatje en dan babbelden we wel eens, maar dat is altijd even kort. Maar dat ontmoeten vind ik wel heel belangrijk. Maar ja als ze het misschien anders hadden ontworpen, misschien een plaatsje waar je kan zitten, dat er dan wel meer contact was.

Man: Nu is de gang ook niet breed genoeg om én met een kar door te lopen én er een bank of dergelijken te plaatsen. Maar de architect heeft hier veel fouten gemaakt. De glazen wand aan de grote inkom was nooit voorzien op plan. Deze heeft ons uiteindelijk onwaarschijnlijk veel geld gekost! Deze moet ieder jaar gewassen worden door een firma.

Vrouw: er is ook enorm veel poetswerk aan het straatje. Die witte pilaren en de beton wordt ongelofelijk vuil.

Man: wij poetsen dit nog, maar niet iedereen kan dat nog.

ELSACHT: Man & vrouw
EEFTIJD: 63 & 58

DEEL 1:

*k: Ik zie dat u een eigen kleine inkom heeft, en dat u deze ook personaliseert. Vindt u dat dit nodig is?*

Vrouw: Ja een beetje he, dat is wel nodig.

*k: Gebruikt u de galerij buiten vaak? En gebruikt u deze dan alleen om naar buiten te gaan of ook voor andere doeleinden?*

Vrouw: Nee, enkel en alleen voor naar buiten te gaan hoor.

*k: Hebben bij u de seizoenen geen invloed op het gebruik van de galerij?*

Vrouw: Nee helemaal niet. Ik denk ook niet dat wij zo maar met een stoel buiten mogen zitten. Het is en blijft een doorgang he.

*k: Had u misschien graag gehad dat de gang anders ontworpen was geweest? Dat die mogelijkheid er misschien wel geweest was?*

Vrouw: Ja dat zou wel fijn geweest zijn ja. En ook in de zomer als je dan op het terras zit is het veel te warm. En als het dan echt te warm is kan je dan niet op je terras zitten, en daar op het straatje is het dan wel goed. Maar we kunnen daar nu niet gaan zitten he.

*k: Hebt u eigenlijk veel contact met u buren?*

Vrouw: Ja dat gaat wel, het is een heel gezellige gemeenschap hier.

*k: Waar ontmoet u, uw buren dan?*

Vrouw: Meestal hier op dat straatje. Mijn man gaat dan buiten zijn sigaar roken en dan zie je je buren. Of we spreken binnen af. Niet dat ik bij iedereen zo maar binnen en buiten loop. Maar je hebt wel bepaalde buren waar je echt contact mee hebt.

*k: En de galerij speelt die dan een rol in jullie contact?*

Vrouw: oh jawel! In de zomer 's avonds is het daar heel aangenaam. En dan gaan we daar een beetje babbelen enzovoort. Gewoon met wie er voorbij komt, maar natuurlijk niet dat je daar een halve dag gaat staan.

*k: Zou u bepaalde zaken aan de gang aanpassen of toevoegen vandaag?*

Vrouw: Ergens om te zitten zou wel heel interessant zijn. Want we komen in feite niet buiten en we hadden dan al eens afgesproken dat we op het grasveldje voor het gebouw een paar banken zouden zetten. Om dan 's avonds nog wat buiten te komen en contact te hebben met iedereen. Maar ja niet iedereen denkt hier hetzelfde over.

*Ik: Ik heb ook enkele voorbeelden bij van projecten waar men de galerij anders heeft opgevat.*
*Zoals bijvoorbeeld bij dit project waar de mensen een privé terras hebben aan de galerij.*
Vrouw: Dat zie ik hier al niet gebeuren want ja het straatje is veel te smal.

*Ik: Vandaar mij volgende vraag, zou u iets veranderen aan het gebouw moest het volledig opnieuw gebouwd worden? Of had u iets anders gedaan als u inspraak had gehad tijdens de ontwerp fase?*
Vrouw: Wij hebben totaal geen inspraak gehad in de ontwerp fase van het gebouw. Binnen mochten we nog dingen veranderen zoals muren enzovoort, tijdens de constructiefase. Maar specifiek over bepaalde zaken van het gebouw hebben we geen inspraak gehad.

*Ik: Had u graag deze inspraak gehad?*
Vrouw: Ja natuurlijk! Maar bij ons is de situatie anders, het gebouw was al gebouwd toen wij hier aan kwamen. De indeling van de woningen konden toen wel aangepast worden maar de grote constructie niet meer.

*Ik: Maar de ontwerpen van de voorbeelden zou u interessant vinden, of niet?*
Vrouw: Jawel! Want zoals het voorbeeld met de flexibele wand, dat heeft een gebouw hier naast. Maar wij kunnen zoiets niet, maar het was wel interessant geweest natuurlijk. Wat fijn is hier is dat het heel goed geïsoleerd is en je niks hoort. Maar ja je ziet en je hoort inderdaad ook helemaal niks. Je hebt totaal geen contact, je moet het zelf gaan opzoeken. Als er ruimte zou zijn waar je kan zitten en waar mensen passeren, dan kan je automatisch een beetje babbelen en contact hebben.

ELSACHT: Vrouw
EEFTIJD: 63

: Ik zie dat u een eigen kleine inkom heeft, en dat u deze ook personaliseert. Vindt u dat dit
odig is?

Vrouw: Ik vind van wel, anders zit je bijna ergens in een hotel. En de inkom
halletjes zijn ook heel mooi gemaakt dus ik vind dat dit wel moet kunnen.

: Gebruikt u de galerij buiten vaak? En gebruikt u deze dan alleen om naar buiten te gaan
f ook voor andere doeleinden?

Vrouw: Ja heel vaak, maar enkel om naar buiten te gaan. Voor iets anders
gebruiken we ze eigenlijk niet. In de zomer zitten we soms wel eens buiten op
een stoeltje. Hier is het dan veel frisser als op ons terras want de zon schijnt hier
minder hard.

: Zijn er bepaalde aspecten die u zou aanpassen of toevoegen, op dit moment aan de galerij?

Vrouw: Nee eigenlijk helemaal niet. Anders wordt het ook te rommelig. Plus veel
mensen huren, er komen en er gaan veel mensen, waardoor het moeilijk is om de
hal persoonlijk aan te passen, zo wordt het een rommeltje.

: heeft u veel contact met u buren?

Vrouw: Ja toch wel.

: En ontmoet u deze dan op de galerij?

Vrouw: Ja meestal wel. Soms ga ik ook wel eens aanbellen om iets te vragen of
een praatje te maken.

: Is het zo dat de galerij dat contact dan stimuleert? Dat u hier wat langer verblijft?

Vrouw: In de zomer wel ja! Nu is het veel te koud!

: Heeft u inspraak gehad in het ontwerp van het gebouw?

Vrouw: Nee want ik ben een huurder.


EEL 2:

: Ik heb ook enkele voorbeelden bij van projecten waar men de galerij anders heeft opgevat.
oals bijvoorbeeld bij dit project waar de mensen een privé terras hebben aan de galerij.

Vrouw: Wij hebben daarom een groot terras, maar daar komen we natuurlijk niemand
tegen. Maar ik zou niet willen dat zo maar iedereen voorbij mijn terras kan passeren.
En wie gaat dat onderhouden? Plus ook aan deze kant heb je zicht op de drukke
straat. Ik ben blij als ik de deur kan dicht trekken achter mij. Niet voor het lawaai,
maar gewoon het vuil.

: Stel we hadden gezegd dat de gang aan de andere zijde van het gebouw kwam te liggen,
ad u dit aangenamer gevonden?

Vrouw: Nu heb je privé en dat heb je dan niet meer. Als er hier een terras is en
iedereen komt daar langs door dan heb je totaal geen privé meer. Niet dat ik geen
contact wil maar ik wil toch nog privé hebben.

*Ik: Wat mij bijvoorbeeld direct opviel bij dit gebouw, is dat er geen ruimtes voorzien zijn voor de inwoners om samen te komen of elkaar te ontmoeten, wat vindt u daarvan?*

Vrouw: Er wonen hier ook redelijk wat jongeren, en die komen en gaan. Dus daar schep je geen band mee. De jongen mensen hebben geen tijd vandaag de dag. Maar het is goed dat er een mix is tussen jongeren en ouderen. Want door in zo een blok te wonen hou je ook contact met mensen. Want als je alleen woont moet je toch contact hebben met je buren. Ik zeg altijd tegen mijn buurvrouw "zie je me vier dagen niet, kom dan maar eens kijken". Maar zo onder de ouderen is er een goed contact, ik woon hier dan ook graag.

# NTERVIEW 4:

ANTERVIEW

EEL 1:

*: Ik zie dat u een eigen kleine inkom heeft, en dat u deze ook personaliseert. Vindt u dat dit odig is?*

Vrouw: Vroeger woonde ik op de Maastrichtersteenweg en daar stond mijn terras helemaal vol met bloemen. Dus ik heb wel graag dat het gezellig is. Als ik hier niks in het halletje zet is het zo kaal.

*: gebruikt u de galerij vaak?*

Vrouw: Ja daar moeten we door om naar buten te gaan.

*: maar gebruikt u deze enkel om naar buiten te gaan?*

Vrouw: Nee voor niks anders, dat is ook niet gemaakt om er te gaan zitten. Daarvoor hebben we onze terrassen van achter.

*: Had u misschien graag ruimte gehad in de galerij waar dit wel mogelijk was?*

Vrouw: Nee, daar staat ook bijna geen zon. En de mensen moet daardoor passeren dus dat is niet heel aangenaam.

*: Hoe is het contact met uw buren?*

Vrouw: Heel aangenaam! Er wonen veel ouderen maar ook een aantal jongeren die de appartementen huren. Maar die zijn altijd vriendelijk, ze zullen altijd goedendag zeggen.

*: wordt er ooit eens iets georganiseerd onder de buren?*

Vrouw: nee dat gebeurt niet, daarvoor is het gebouw veel te groot.

*: Ook niet per verdieping?*

Vrouw: Nee, wij praten wel veel met elkaar en komen veel bij elkaar op bezoek.

*: Zou u iets aan de galerij veranderen of toevoegen vandaag de dag, om dat contact tussen e buren te stimuleren?*

Vrouw: Nee niet direct. De buren komen we automatisch tegen in de galerij en dan sta je even te babbelen. Bij ons is het terras heel belangrijk aan een appartement want je kan je niet zo maar op straat of buiten ergens zetten.

*: Heeft u ooit inspraak gehad tijdens de ontwerp fase van het gebouw?*

Vrouw: Nee, we hebben het gekocht zoals het nu is. Het gebouw stond er al voordat ik het gekocht had. Maar tussen de buren is er een heel goed contact, zo houden we ook contact via het internet en wensen we elkaar iedere dag goedemorgen.

*Ik: Ik heb ook enkele voorbeelden bij van projecten waar men de galerij anders heeft opgevat. Zoals bijvoorbeeld bij dit project waar de mensen een privé terras hebben aan de galerij.*

Vrouw: Ja, maar er zijn natuurlijk mensen die totaal geen contact willen. En als je dan zoiets hebt is dat fijn voor de mensen die dat willen maar voor de rest niet.

*Ik: Stel nu dat het gebouw opnieuw gebouwd zou worden of jullie zouden toch inspraak in het ontwerp gehad hebben, wat zouden jullie dan veranderen aan die galerij?*

Vrouw: Nu is het heel moeilijk om de situatie nog aan te passen. Maar moest ik inspraak gehad hebben zou ik dit wel interessant gevonden hebben. In mijn vorig appartement wouden ze de terrassen vernieuwen en daar heb ik zon systeem voorgesteld met een flexibele wand. Voor mezelf vind ik het aangenaam dat ik het kan open doen, en contact opzoeken, wanneer ik het wil en ook terug kan sluiten wanneer ik het wil. Maar bijvoorbeeld bij gezinnen met kinderen krijg je dan veel overlast.

*Ik: Inderdaad dat flexibele systeem kan handig zijn in een gebouw waar er een mix is tussen jongeren en ouderen.*

Vrouw: Ja inderdaad, de kinderen lopen in de zomer van de ene hoek naar de andere daardoor zitten de oudere mensen dan ook weer niet op hun gemak. Hierbij kan zo een systeem inderdaad goed werken. Maar zo heel open dat er geen privacy is, zou ik niet willen. Van voor aan de galerij zou ik ook nooit gaan zitten want daar is het veel te koud. Aan de andere kant zou dat wel aangenaam zijn.

Man: Ons terras ligt ook meer afgelegen, wat aangenaam is. Anders lopen mensen de hele tijd voorbij.

*Ik: In sommige voorbeelden wordt er gebruik gemaakt van flexibele wanden zodat de temperatuur van de galerij zelf geregeld kan worden.*

Vrouw: Ja nu is de galerij verschrikkelijk koud.

Man: In de winter is het veel te koud.

Vrouw: En op ons terras is het veel te warm in de zomer.

Man: In plaats van te werken met een halve meter borstwering, hadden ze het beter volledig toe gemaakt. 'S Avonds wil ik mijn stoel kunnen pakken en buiten kunnen zitten en wat rond kijken, maar nu is het veel te koud.

Vrouw: maar dat zou niet haalbaar meer zijn voor de eigenaren, dat kost natuurlijk te veel geld.

Man: Soms in de zomer is het heel aangenaam op de overloop, ook om even te zitten.

*Ik: in dit voorbeeld hebben ze galerij opgevat als een echte aangename wandeling, en hebben de woningen een privé tuintje gelinkt aan de galerij.*

Vrouw: daar hebben ze echt een aangename galerij gemaakt. Maar zo'n tuintje is niks meer voor mij, dat is veel te veel werk, dat doe ik niet meer. Ik kleed wel nog mij inkom halletje aan. En je ziet, één iemand doet het en stilletjes aan groeit dat bij iedereen.

Man: in zo een voorbeelden kan het wel moeilijk zijn met verschillende culturen. Niet alle culturen willen zoiets onderhouden.

*: Hebben jullie hier veel culturen?*

Vrouw: nee hier heb je dat helemaal niet. Hier in Hasselt heb je dat eigenlijk helemaal niet zo veel. Waar mijne vriend gewoond heeft in Genk had je dat veel meer maar hier in Hasselt is dat sowieso al veel minder. Het belangrijkste vind ik, is om rekening te houden met de verschillende generaties binnen één gebouw.

Man: Maar een afscherming aan de galerij zou goed zijn. Ook als het regent en het waait dan wordt je volledig nat.

Vrouw: ja dan moeten we altijd heel kort tegen de kant lopen.

Man: Een hogere afscherming zou beter zijn dan.

Vrouw: Maar ja zoiets moeten ze komen laten wassen en dat is dan weer verschrikkelijk duur.

# INTERVIEW 5:

GESLACHT: Man & Man
LEEFTIJD: 22 & 23

*ik: Ik zie dat u een eigen kleine inkom heeft, maar u personaliseert deze duidelijk niet Vindt u dat dit niet nodig is?*

Man (22): Wij doen hier niks... soms staat er wel eens een plantje en tijdens kerst een kerstboompje met wat lichtjes in. Wij vinden het niet direct nodig om te personaliseren maar het is wel aangenamer voor het oog als andere het doen.

*Ik: Hoe vaak gebruikt u de galerij?*

Man (22): Wij gebruiken deze enkel als doorgang. En dit dan enkele keren per dag natuurlijk.

Man (23): Enkel om naar buiten te gaan of om de post eens te gaan halen ofzo.

*Ik: Maar u gebruikt deze niet voor andere doeleinden?*

Man (22): Nee totaal niet.

*Ik: Hebben de seizoenen hier ook geen invloed op? Op uw gebruik van de ruimte?*

Man (22): In de winter is het mega glad! Dan langlauf je bijna naar de deur. Ook als het nat is wordt het heel glad! Hier hebben ze wel al eens over gesproken om iets aan te doen.

*Ik: Wat vind u van het ontwerp van de galerij vandaag? Zou u bepaalde zaken liever anders gezien hebben?*

Man (22): Dat het minder glad is in de winter en wanneer het regent, natuurlijk. Maar er zou ook wel wat meer leven in de gang mogen zijn. Nu is het maar een dode saaie gang. De gang is totaal niet ontworpen om er eventjes wat langer te verblijven ofzo. Het is natuurlijk wel een mooie moderne gang en het is fijn dat het overdekt is door de bovenliggende gangen.

Man (23): Ja het is wel een mooie galerij hoor maar soms is het gewoon veel te glad. Bovendien is er weinig natuurlijk licht of groen.

*Ik: Is er ook een bepaalde relatie tussen uw woning en deze galerij?*

Man (22): ja ik moet de gang altijd gebruiken om naar mijn woning te gaan ja... Maar ook mijn slaapkamer kijkt uit op deze galerij. Dit stoort mij soms wel qua privacy. Als de gordijnen niet dicht zijn is er totaal geen privacy meer voor mij.

*Ik: Is voor u dan de hoeveelheid van relatie groot genoeg op dit moment?*

Man (22): ja, meer dan genoeg. Toch zeker omdat mijn slaapkamer er aan grenst.

Man (23): ik vind het meer dan groot genoeg nu, aangezien het toch enkel een doorgang blijft... Vandaag moeten de ramen van de slaapkamer en de keuken permanent bedekt zijn om de privacy te behouden.

*Ik: Hou is uw relatie met uw buren?*

Man (22): Ik ken mijn buren eigenlijk helemaal niet... Ik ken ze niet bij voornaam en heb hoogstens een paar keer met hun gesproken, dit gebeurt dan vooral in de lift en wanneer we elkaar op de gang even tegenkomen. Maar echt kennen doe ik hun niet.

Man (23): ik zie mijn buren enkel als er klachten zijn en ze aan mijn deur staan.

: worden er ook geen bijeenkomsten onder de buren georganiseerd?

    Man (22): Niet dat ik weet... Misschien wel maar wij worden in ieder geval nooit uitgenodigd.

    Man (23): jawel, er worden vergaderingen georganiseerd voor de problemen binnen het gebouw maar echt zo sociale evenement worden er niet gehouden nee.

: Zou dit meer gebeuren als er zich een ruimte zou aanbieden om samen te komen?

    Man (22): Ik denk het absoluut wel! Ik zou er toch voor open staan...

: Zou u de galerij vandaag de dag aanpassen zodat dit het sociaal contact zou stimuleren?

    Man (22): Ik zou er wel voor zorgen dat het "buurtstraat" gevoel vergroot wordt... maar daar is nu natuurlijk weinig plaats voor in een appartement complex zoals dit.

    Man (23): rustige plaatsen om effe samen te zitten zou dat wel vergroten denk ik hoor. Anderzijds zou ik ook meer groen voorzien en een geluidsbuffer voor de hinder van die drukke weg.

: Heeft u inspraak gehad in het ontwerp van het gebouw?

    Man (22): Wij zijn totaal niet op de hoogte gebracht van het ontwerp en van de opties. Wij waren dan ook te laat om hierin inspraak te hebben. Maar ik had dit absoluut wel graag gehad, zo was ik dan tenminste op de hoogte geweest van de verschillende mogelijkheden.


EEL 2:

: Nu zou ik u graag enkele foto's willen laten zien van projecten waar men die gang op een ndere manier heeft toegepast.

    Man (22): Deze zijn natuurlijk heel verschillend met onze situatie vandaag..

: Nu u deze voorbeelden gezien heeft, zou u dan iets veranderen aan de galerij?

    Man (22): Ik zou voor veel meer groen kiezen zoals in die voorbeelden... Anderzijds zoals ik al zei ligt nu mijn slaapkamer aan de galerij, en zijn alle appartementen naar het terras toe gericht. De gang zou enkel meer leven hebben moest die indeling verandert zijn. Plus ook dat de gang nu aan de noord zijde ligt en deze dus veel te vaak te koud is. Misschien hadden ze die moeten omleggen?

    Man (23): Maar een geluidsbuffer aan de noordzijde zou wel nodig zijn om de plek aangenamer te maken hoor.

: Ja dat zou natuurlijk een optie geweest zijn. En de gang dan gelinkt aan je terras?

    Man (22): dat zou ik dan ook liever niet willen. Aan mij terras zou ik toch liever privacy willen!