

# A Place to Belong To

Creating Community Spirit in Hammarkullen by Re-designing Common Space Emma Gellerbring

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# A PLACE TO BELONG TO

CREATING COMMUNITY SPIRIT IN HAMMARKULLEN
BY RE-DESIGNING COMMON SPACE

#### **ABSTRACT**

As human beings, we need places where we can build social relations and networks, to create a feeling of belonging. Today there is a lack of these kinds of meeting places in the transition between the public and the private sphere. The notion of the common space is generally limited to practical functions but has a potential for new meanings and to become a place for social interaction, collaborations and exchange.

The aim of this thesis is to explore how common spaces in a Million Program context, with Hammarkullen as a case study, can be transformed in order to strengthen the sense of belonging for the inhabitants. The large-scale building typology in combination with issues of segregation and social exclusion generates many social problems in the common spaces. There is a duality between the anonymous character of the buildings and the colourful identity of the area, and also a lack of possibility to influence.

The methods used are literature studies, site mapping, observation and spatial explorations. This thesis is carried out within the research project Learning Lab Hammarkullen, which also provides knowledge from participatory workshops arranged in the area.

The result of this study is a set of design tools for providing new common spaces and adding new spatial qualities into the existing structure. The design tools could be further developed and evaluated through a dialogue with tenants in the area and in collaboration with local actors; providing inspiration for the housing company and for future development of the area, as well as being applied in similar contexts.

COMMON SPACE

MILLION PROGRAM

**EMPOWERMENT** 

TOOLS FOR PARTICIPATION

# **ACKNOWLEDGEMENTS**

I want to thank Emilio Brandao and Joaquim Tarrasso for tutoring and great engagement throughout this whole process. I want to thank Jenny Stenberg for support and knowledge about Hammarkullen, and also the people I have talked to in Hammarkullen that has been very helpful when learning about the area. I also want to thank the great people in my studio, for being there in good and bad days. Finally I want to thank my family and friends for always supporting me.

# READING INSTRUCTIONS

- 1 Introduction, describes the purpose and framework of the project.
- 2 Background, frames the project within the topic of the Million Program and common space
- 3 Case Analysis: Hammarkullen, analyses the local context of the area and the building typology to define issues and qualities
- 4 Design Approaches, brings up design strategies and develops different design concepts in form of a toolbox
- 5 Further Exploration, a deeper exploration of the design one of the tools
- 6 Conclusions & reflections, reflects on the process and result of the project
- 7 References
- 8 Appendix, contains additional material from the process

# ABOUT THE AUTHOR



Emma Gellerbring has a Bachelor's degree in Fine Arts from Umeå School of Architecture.

"Throughout my studies I have always been interested in the connections between social interactions and architecture. With people in focus, trying to understand how our physical environment influence our lives. In my master studies I took the studio Design and Planning for Social Inclusion which introduced me to the Million Program Context with its many challenges and social issues. There I found a strong engagement for working with social sustainability and participation. This made me want to continue this exploration and make my thesis a part in the discussion of how to design for a more democratic, equal and integrated city. "

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# 1. INTRODUCTION

#### STARTING POINT

I am interested in places where people meet and interact, which often happens in the public space or in the privacy of the home. But what about the space in-between? The common space seems so forgotten. The space we share with our neighbours living in the same building. People we meet in the entrance or elevator an rarely exchange more than a "hi". I think this space has an unexplored potential that can play an important role in our individualized society, a potential to be something more than just a function. This thought is the starting point to my thesis.

#### **PURPOSE**

I believe that we as human beings need to build local communities, networks for socialization, collaboration and exchange. In order for this to happen we need to rethink the way we see common spaces today and create new visions for spaces where we can be together. There is a need for developing a broader meaning of common space, and a more nuanced hierarchy of different levels of shared spaces in order for people to be able to meet in different ways in everyday life.

The Swedish Million Program suburb with its specific building typologies and existing social issues is an interesting case for investigating the common space. A context where one can see a clear need for community spaces. With a lower socioeconomic status than the cities in general and a more vulnerable situation due to segregation and stigmatization, there is a greater need for building a sense of community in order to deal with social issues and empower people.

The potential for the common space to be more than a function or transition but a space for people to meet, could play an important role in dealing with these social issues. If the common space can build a stronger community it could also have potential to change the lack of trust between neighbours or the feeling of being unsafe. This potential in the common spaces to redevelop the social structure of the buildings could be applied to many similar cases when renovating Million Program areas in the near future.



Fig. 1

# AIM

Thesis question: How can common spaces in a Million Program typology be transformed in order to create a sense of belonging?

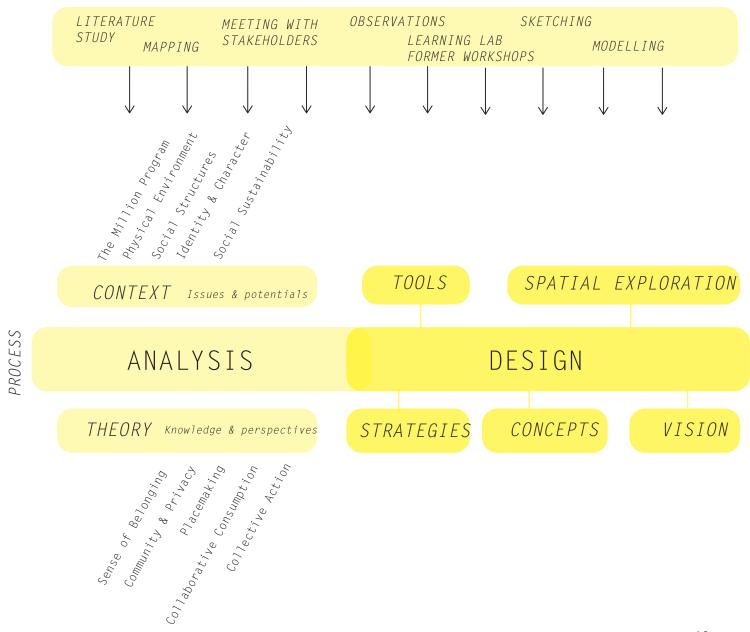
The aim with this thesis is to explore possibilities of how to transform the meaning and design of common spaces in a Million Program building typology in order to generate community spirit and a sense of belonging. With the intention of providing new spatial qualities of the common space, the process will be an exploration of the transition between public, common and private, and the lacking hierarchy inbetween. By breaking the anonymous and static building structure, new opportunities for social interaction between neighbours can be provided, with a design that is flexible to different programs initiated by the community themselves. A design that gives opportunities for place making.

Sub-questions:

How can new spatial qualities create opportunities for social interaction and community building?

How can the transition from public to private be defined through a hierarchy of shared spaces?

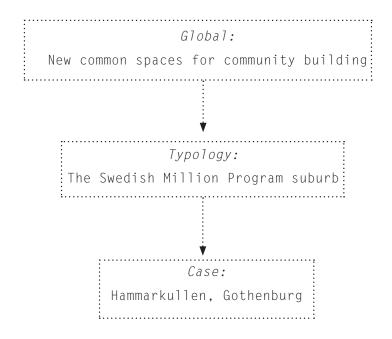
# **METHODS**



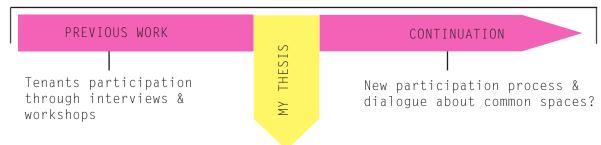
#### FRAMEWORK

This master's thesis is carried out as a part in the research project Learning lab Hammarkullen. Learning lab is a collaboration between Chalmers University of Technology, Gothenburg University and the local actors in Hammarkullen such as the municipal housing company Bostadsbolaget and the tenants association. The common goal is to work with tenants influence and participation in sustainable renovation processes. Within my thesis I have attended meetings within the Learning Lab project and have gotten access to information and results from former workshops and interviews with tenants in the area. This knowledge and material is used as a basis to understand the background to the situation today and to build on what has already been researched. My role is to provide new inspiration and ideas for development in the area through my design tools.

It is important for me in this context to have a clear focus on the architectural perspective in connection to the social processes, in order to contribute in the best way within my field of knowledge and my role as architect.



Research project: LEARNING LAB HAMMARKULLEN

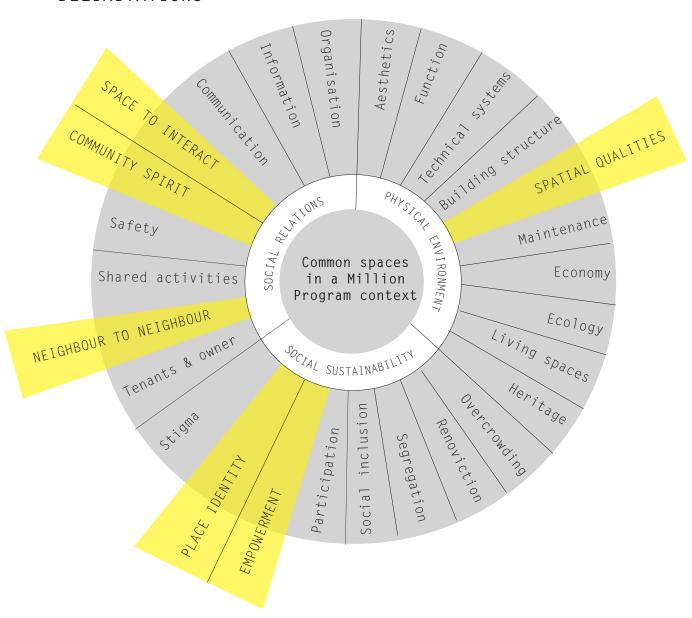


# Kan förbättras huset



Fig.2 Example of used knowledge from collected results of dialogue work within Learning Lab

# **DELIMITATIONS**



- Challenging & providing tools for improving common spaces
- Focusing on spatial aspects

# 2. BACKGROUND

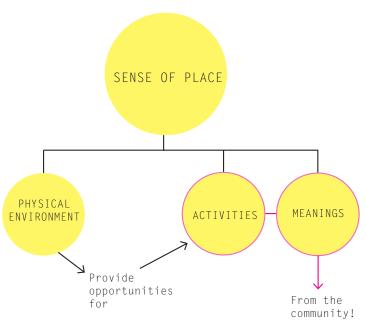
# COMMON SPACE

Placemaking & Sense of Belonging

"Architecture provides protected and controlled environments for human activities. It is an expression of cultural values, meaning and identity. At its best, architecture interfaces with its context to create man-made places that enhance our experience of being together."

Irena Bauman (Co-designing space)



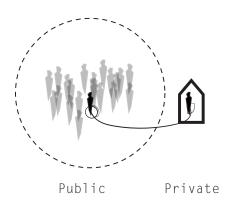


In order to create a place where people feel a sense of belonging, it is important not only to consider the physical environment but also what activities and meanings that builds up that place and how people can identify with it. So the physical space cannot create belonging in itself, but it can provide opportunities for it to happen.

Reference literature: Easthope (2004) Gustafsson (2000) Marlow et. al (2013)

# The Transition from Public to Private

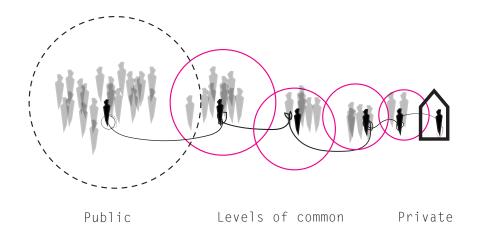
There is a gap in the transition from public to private and a need for defining a hierarchy of spaces with several levels of common space between the public and private sphere.





In the Million Program typology, the public life comes to close to the private with the narrow staircase as the only transition in-between. This contributes to an uncomfortable living situation.

With a new hierarchy, the transition would be more comfortable and provide more possibilities for meeting places on different scales.



Reference literature: Alexander & Chermayeff (1963)

# THE MILLION PROGRAM

Socio-economic development

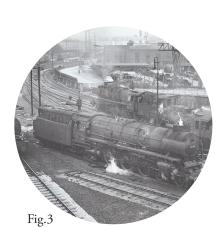




Fig.4

Social democratic government and good economy led to social reforms in order to minimise the income gap, create growth, high levels of employment and better Decision to new hones

Decision to new hones housing standards. (1)

Ralid Trought of on the

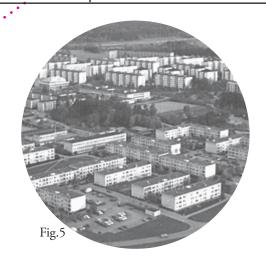
WELFARE SOCIETY

1965

INDUSTRIALISATION

1950

Until **1870** Poor farming society Housing Shortage Kandaré



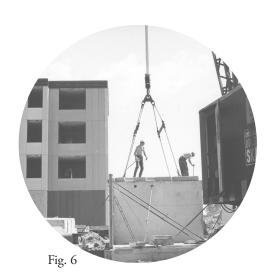
#### References:

- 1. Hall & Vidén 2005
- 2. Utrikespolitiska Institutet
- 20 3. Boverket
  - 4. Göteborg Stad statistik

"THE RECORD YEARS"

# 1961-1975

920 000 dwellings in 40 000 apartment blocks and 480 000 dwellings in single family houses were constructed. This was made possible due to generous state loans, industrialization, standardisation and prefabrication of the construction process. (1)



Visual notory of the services 1960's Criticised for: Salara Mono Tour Risolation .

Efficiency through:

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# TODAY

The big Swedish cities are once again lacking housing and the Million Program areas are in great need of renovation. With the estimated cost around 300-500 billion Swedish crowns it is a major issue for the national economy and housing politics. (3)

Renovations were made in some cases, for example changes of the outdoor environments (1).

1970's to 1990's

**IMMIGRATION** 

Middle income

Unemployment

In the second half of

became a country for

immigration and with

an increasing ethnic

people came to work

in the industry but

from the 1970's the

asylum seekers from

(2)

country opened up for

conflict and war areas.

diversity. At first,

the 1900's, Sweden

Housing short age tons

2016

**SEGREGATION** 

1970's

**ECONOMIC CRISIS** 

In the mid 1970's there

was an economic crisis

within the industry (2).

Many million program

areas stood half empty

Housing surplus

and some were even demolished (3).

with raised oil prises

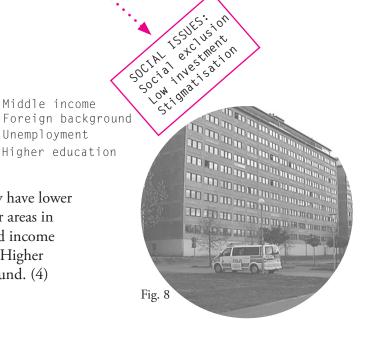
and decreasing jobs

Hammarkullen / Gothenburg

naintenance o in citations

148 200 kr	300 649 kr
84 %	32 %
16 %	9 %
14 %	33 %

The Million Program areas today have lower socio-economic status than other areas in general with lower education and income and higher unemployment rate. Higher percentage have foreign background. (4)



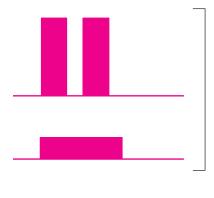
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# Urban Typologies

The Million Program is often associated with monotonous, large-scale concrete buildings but what was built during those years was actually much more diverse. There was both multi-family apartment blocks and single family housing in various sizes and forms. Some buildings were towers of eight stories but around 50 % were three-story slab buildings and a lot were even lower or rental row-houses.

The special characteristics of apartment buildings from the Million Program were partly inspired by the early Modern Movement with strictly geometrical forms with horizontal lines of windows or balconies. The roofs were often flat or with a low slope while the entrances were like "holes in the wall", protected from rain and snow one or two meters behind the façade. The façade materials were most commonly brick or cement but could also be concrete panels and in some cases glass, aluminium or asbestos. The single-family houses were often "catalogue homes" build from wood but also came in more modernist forms. Many buildings were built in the outskirts of smaller towns or outside of bigger cities forming new suburbs.

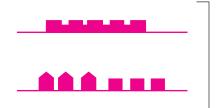
The areas were provided with the necessary services such as daycare, school and service facilities and planned with traffic separation which separated car traffic from the residential area and thereby separated the buildings from the street. (Hall & Vidén, 2005)



Multi-family apartment blocks 66 %

Tower blocks 6-8 storeys

Slab buildings 3-storeys



Single family houses 34 %

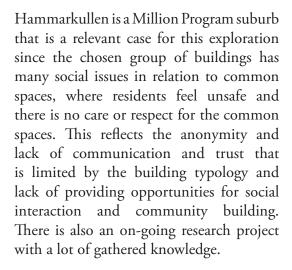
Row-houses

Detached houses

# Why Hammarkullen?



Case: Hammarkullen





Buildings at Bredfjällsgatan

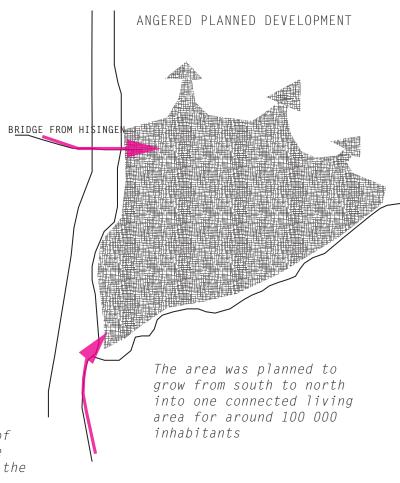
- Large scale buildings with many apartments sharing the common space
- Many social issues related to the building typology

# 3. CASE ANALYSIS: HAMMARKULLEN

# URBAN CONTEXT

Angered district

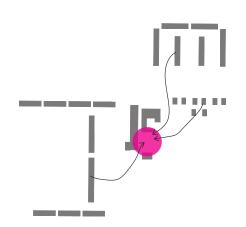
Hammarkullen is located in the North-east of Gothenburg and a part of the district of Angered. The area is around 10 km from the city centre and with tram 14 minutes from the central station.



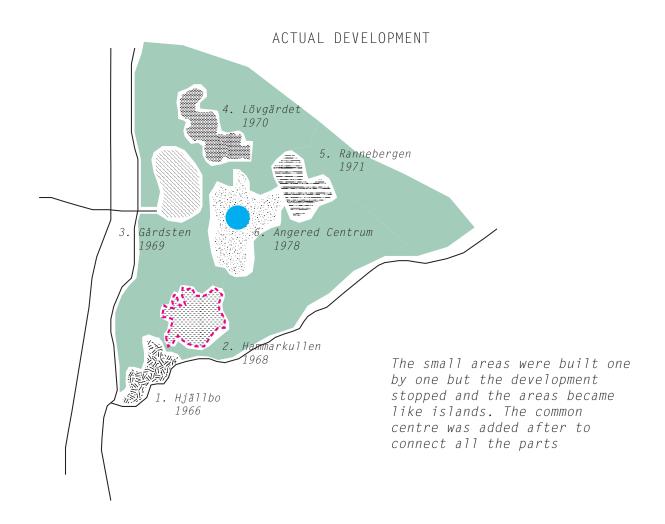
#### CHARACTERISTICS

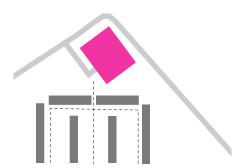


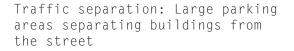
Large, rapidly developed area in peripheral locations

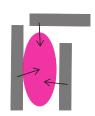


Close access to local services such as school, daycare and centrum









Courtyards with playgrounds between buildings

# CONTEXT ANALYSIS

The area was mainly built during 1968-1970 as a part of the Million Program and has today 8146 inhabitants. The area is mainly residential but with a main public square that gives access to services like library, a small grocery store, café and hairdresser.

# PLACES



1. Tram station



2. Square



3. Public parc



4. Sports facilities



5. Youth centre, Bath house



6. Commercial spots



7. "Activity house"



8. Associations



# SWOT ANALYSIS

# STRENGTHS

- Many small associations
- Nature & greenery
- Topography
- Good connection to city centre
- Access to schools & pre-schools
- The park
- Colourful paintings & mosaic
- Local initiatives
- Culture (culture walk, carnival)
- Sports facilities
- Mix of living space, commercial & associations
- Youth centre, library, folkets hus, folkhögskola
- Cultural diversity

# **OPPORTUNITIES**

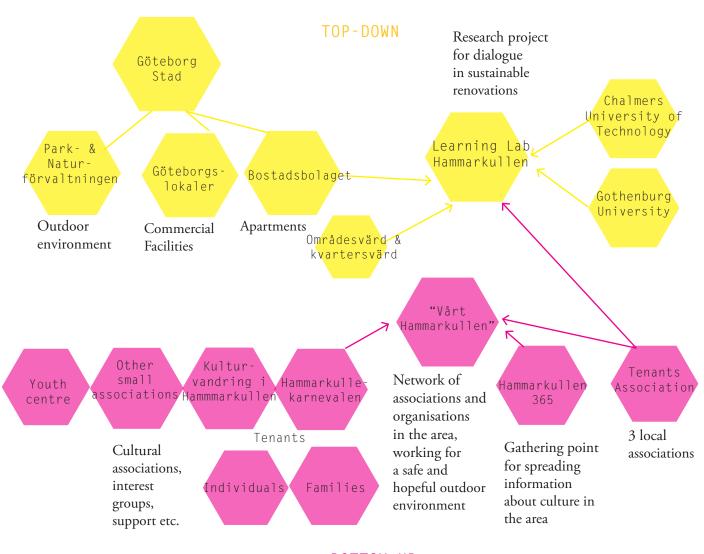
- Strengthen networks, empowerment, grassroots
- Improve living environment
- Create new meeting places
- Culture art, music, dance, food..
- Strengthen the identity of the area

# WEAKNESSES

- Trash (lack of system)
- Low maintenance of buildings
- Topography is a barrier
- Lack of services
- Segregation
- Stigma
- Vandalisation
- Lack of trust and care
- "Backsides"/forgotten places

# **THREATS**

- Unsafe
- Stigma
- Raised rents
- Redevelopment renoviction
- Bad health

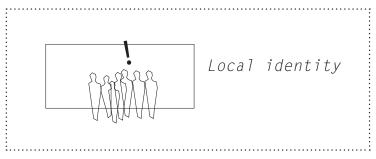


#### BOTTOM-UP

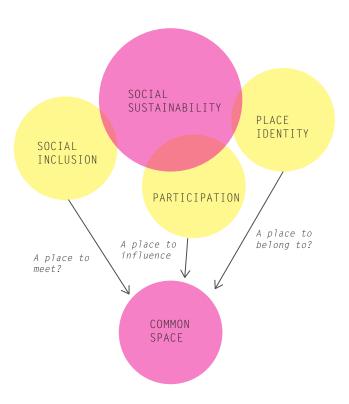
# **ACTORS**

Hammarkullen has many different actors, the top-down actors are mainly Gothenburg municipality while there are many small bottom-up actors like associations and networks with a lot of engagement in the area.

# Strategies:



# SOCIAL SUSTAINABILITY



In order to work for social sustainability in Hammarkullen it is important to deal with aspects of place identity, social inclusion and participation. (Strandberg, 2014) It is also crucial to consider the common space, since it is a critical point where many social issues appear. The common space plays an important role in creating a comfortable and safe living environment. Can the common space also support these aspects in becoming a place to meet, to influence, and to belong to?

#### Social inclusion

Social inclusion can be seen in relation to what social exclusion means which can be from different aspects. Social exclusion can refer to both economy, politics and culture. Economical exclusion is considered the most critical such as poverty and unemployment. Being politically excluded is about not having a stake in power and to participate in decision making. The third form of social exclusion is from the cultural arena which means sharing symbols and meanings like language, religion and nationality. Another part is symbols of identity that comes from consumption patterns or rituals, aesthetics and how we behave socially, this can also be a way of exclusion. (Madanipour, 1998)

In order to create social inclusion in Hammarkullen it is important to make sure that renovation processes does not create too much increased rents in order for tenants to not be forced to move. Another aspect is to deal with overcrowded living situations and to create new meeting places in order to attract people from other areas and support integration. Since the unemployment rate is high is important to employ residents in the area to create new job opportunities. (Strandberg, 2014)

Participation as a part of Empowerment

# One definition of empowerment is:

"the process of helping a group or community to achieve political influence or relevant legal authority"

# Psychological empowerment is:

"consequence of participating in collective action and gaining greater control over one's livelihood"

An important part of this psychological empowerment, for individuals and households, is being part of social networks and organisations. (Lyons et.al, 2001) When dealing with social issues in Hammarkullen, empowerment is an important aspect since the area is socio-economically vulnerable. It is important to involve the residents in the decisions concerning their living environment as well creating opportunities for social networks.

# Place identity

# Stigmatization

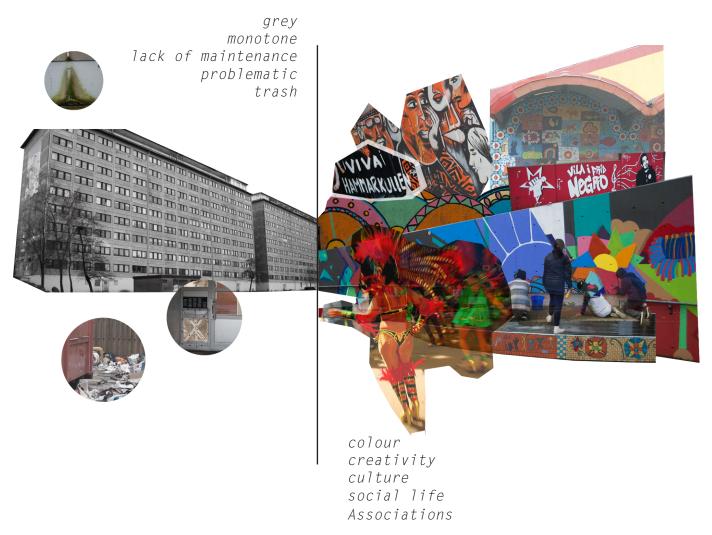
Million program suburbs in Sweden today are subjected to segregation in many aspects. There exists a negative image from media, reporting about criminality and poor living environments. Adding to this, there is a structural discrimination from racism that makes it more difficult to get a job and an apartment if you have a foreign background, other than in poor suburbs. This "territorial stigmatization" is also strengthened by the fact that the million program areas have not been taken care of, and are now facing the need of renovation which subjects the inhabitants to raised rents. (Back et.al, 2013)

Hammarkullen is subjected to stigmatization through a negative images that does not correspond with reality and this also affects the self-image of people living there. In order to create better conditions and opportunities for people living in the area, these mental images needs to change. These images connected to Hammarkullen includes being a low-status area both through the physical space and the people being seen as "problems". (Strandberg, 2014)

# *Identity*

When trying to understand the identity of Hammarkullen one can find two sides. At the first glance there is the media image and the physical appearance of low maintained buildings, trash in the outdoor environment and lack of services. On the other hand there is the identity understood when looking closer and when talking to people who live in and know the area well as well as from social media. Hammarkullen is a place with many grassroots initiatives through small associations and organizations and with fiery spirits working towards a better neighbourhood. When taking a walk around the area one can also see many mural paintings, small traces of the strong cultural identity that the area has. There are several cultural events arranged in the area, where the most well-known is Hammarkullekarnevalen.

To strengthen the place identity it is important to take a starting point in the local character of the area, respecting its existing values while adding new aesthetic qualities (Strandberg, 2014). In Hammarkullen there is a great potential in highlighting and strengthening the colourful cultural identity that already exists.



Strategies: Fig. 11



Dynamic & Flexible

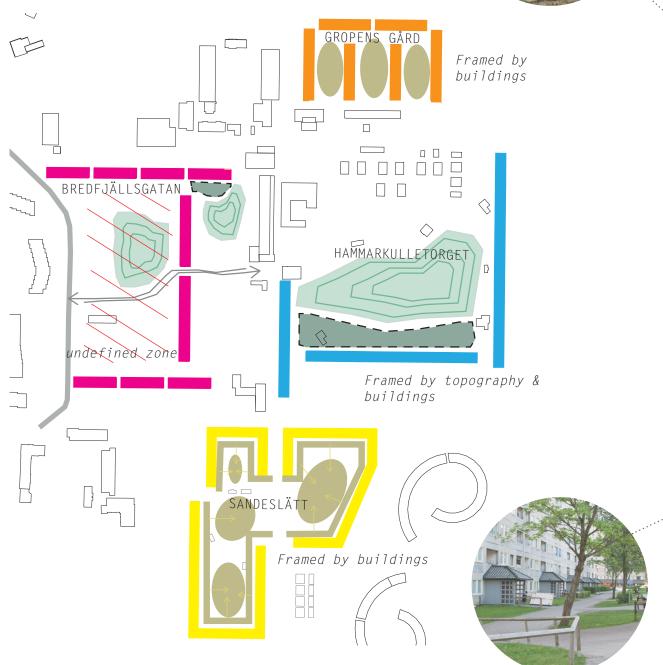


Local identity

# ZOOM IN: CENTRAL AREAS

The central areas in Hammarkullen have different configurations of buildings that create different kinds of outdoor environments and zones. While Sandeslätt, Gropens Gård and Hammarkulletorget have framing elements to create a more intimate semi-public outdoor zone, Bredfjällsgatan lacks that framing which makes more undefined.

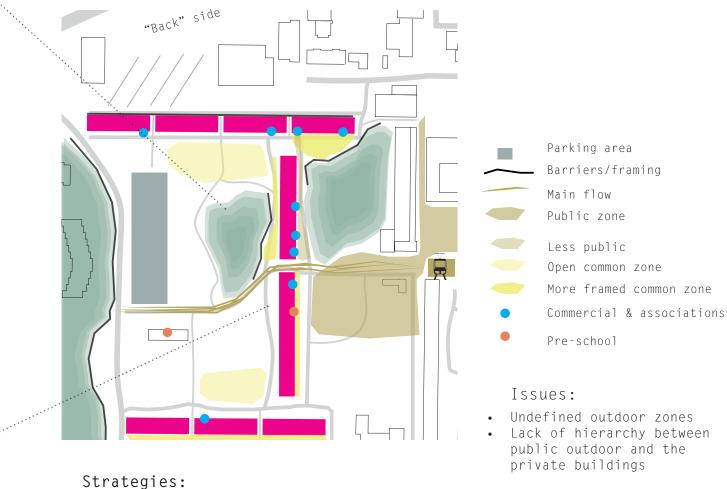




#### FOCUS AREA: BREDFJÄLLSGATAN

The buildings at Bredfjällsgatan are located close to the tram stop and the public square. There is a main flow going through the neighbourhood where the buildings are organised around a large open, semi-public courtyard area with greenery, parking space, playground and a pre-school.

The topography is in some places framing the outdoor space. In the groundfloor of the buildings there are different commercial activities like shops and restaurants as well as associations and preschool



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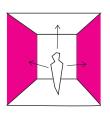


Hierarchy/framing zones

#### BUILDING TYPOLOGY

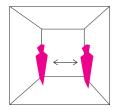
The buildings at Bredfjällsgatan are 9 storeys and based on the same building typology and spatial organisation but with some variations. The main characteristics are the high, long, continuous concrete façades following a repetitive pattern. The urban structure also follows a strict pattern. Here is building A, B, C and D used as an example.

- Owned by Bostadsbolaget
- 9 buildings
- Built in 1969-1970



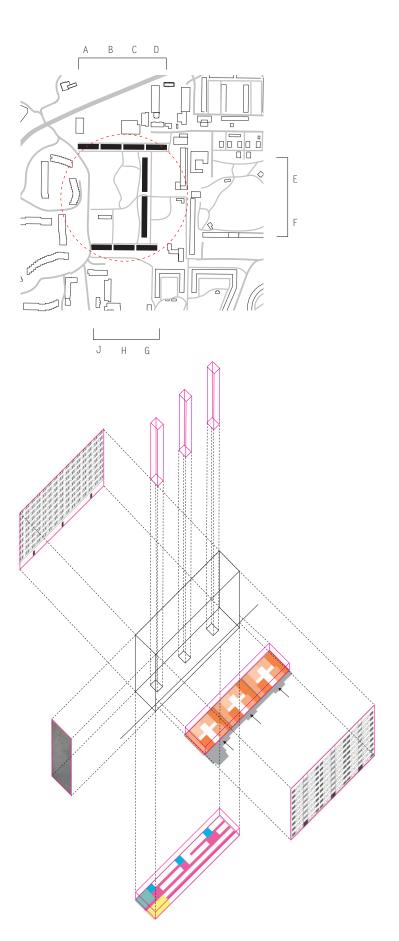
SPATIAL ISSUES

Conclusions from observations on site and explorations of existing drawings.



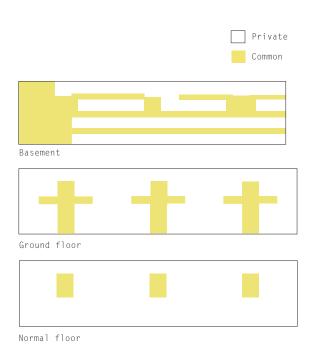
SOCIAL ISSUES

Conclusions from previous Learning lab participatory workshops with tenants in the area, visit to staircase meeting and feedback from talking to staff working in the area.



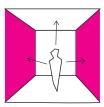
#### • PRIVATE & COMMON

The buildings are mainly private spaces with the apartments and the common spaces are limited to staircases and basement.



#### Issues:

# SPATIAL



- Lack of transition/ hierarchy from public to private
- Lack of common space that is not only function
- Lack of spatial qualities

# $\longleftrightarrow$

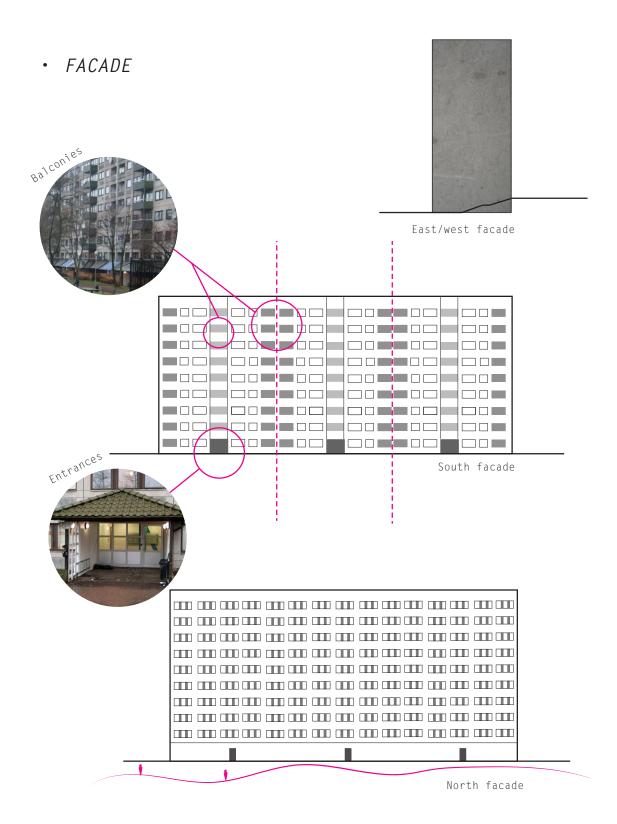
#### SOCIAL

- Common spaces feel unsafe
- Lack of care for common spaces
- Lack of space to meet

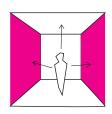
#### Strategies:



Hierarchy/framing zones

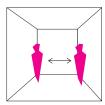


#### Issues:



#### SPATIAL

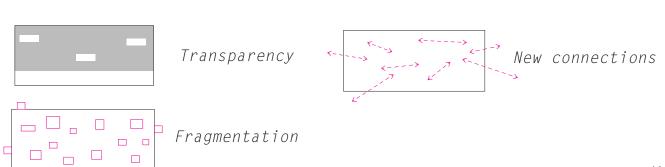
- Repetition, monotony
- No communication inside/outside
- Enclosed
- Anonymous
- Hidden entrances
- North facade like "back" side



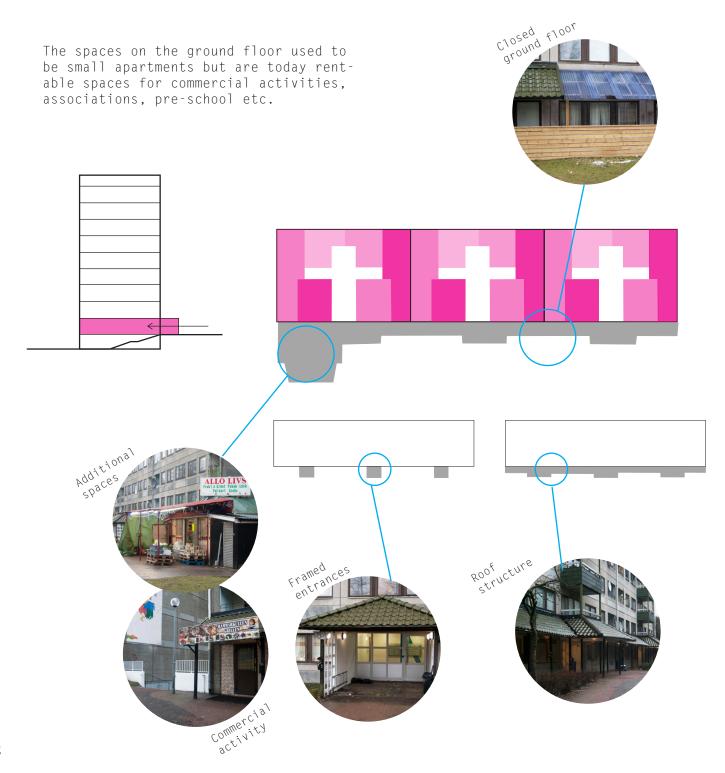
#### SOCIAL

- Appearance connected to stigma
- Anonymity & lack of transparency & creates lack of social interactions & safety
- People throwing trash on north side close to walking path

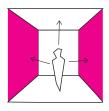
#### Strategies:



#### • GROUNDFLOOR

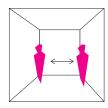


#### Issues:



#### SPATIAL

• Closed with lack of communication out



#### SOCIAL

 Common space limited to entrance

#### Strategies:

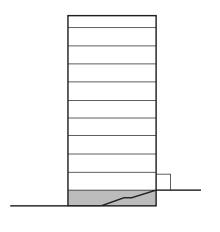


Transparency

#### • BASEMENT

Basement is private storage and shared functions like laundry, bike storage and garbage disposal





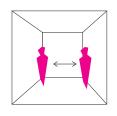
#### Issues:

# • Narrow



SPATIAL

Lack of daylight & visual connections



#### SOCIAL

- People feel unsafeUncomfortable with
- Uncomfortable with laundry rooms in basement

#### Strategies:

Bike storage Laundry room

Circulation



Flexible & Dynamic

Garbage room



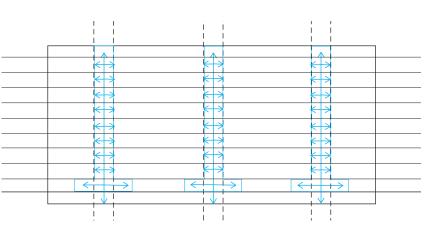
Transparency

#### STAIRCASE

1 staircase is shared by
24 apartments
3-6 staircases per
building

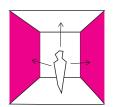




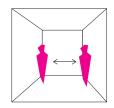


#### Issues:

#### SPATIAL



- Narrow
- Anonymous
- Limited to circulation only, no place to meet neighbours or arrange staircase meetings



#### SOCIAL

- People don't know each other so many apartments
- No care or respect the space is destroyed by trash, urine, cigarettes...

#### Strategies:



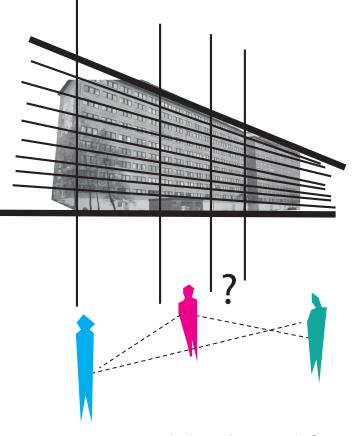
Flexible & Dynamic



Transparency

#### PROBLEM STATEMENT

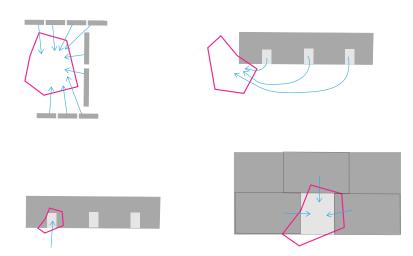
The physical structure of the building typology generates a problematic lack of social relations between neighbours, creating anonymity and an unsafe feeling. The large scale structure is continuous and enclosed with narrow spaces and strong barriers. It follows a strict, repetitive pattern and lacks connections, transparency and spatial hierarchy between public and private.



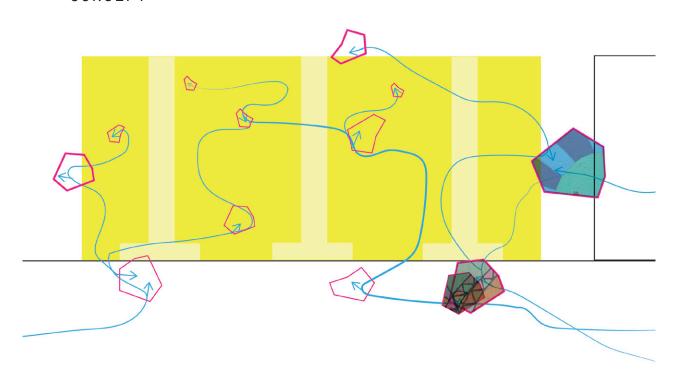
#### OVERALL AIM

- Break the anonymity!

Transform the common space to generate opportunities for social interaction on different scales, and activities that supports community building.



#### CONCEPT



ADD NEW LAYER OF MOVEMENT & "COMMUNITY PLACES" ON DIFFERENT SCALES

Dynamic and exposed movement. Flexible spaces for social interaction & community building on neighbourhood, building, staircase & apartments scale

#### 4. DESIGN APPROACHES

#### DESIGN STRATEGIES



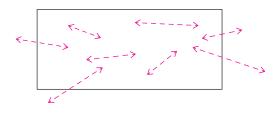
#### FRAGMENTATION

Attach smaller elements to the structure in order to break the continuity



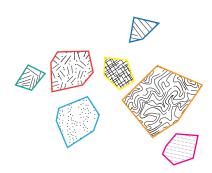
#### TRANSPARENCY

Opening up the structure, highlighting common spaces by making them more visible. More exposure in order to provide feeling of safety



#### NEW CONNECTIONS

Create new visual connections and in the movement, both in the building & between inside/ outside



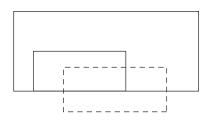
FIFXIBLE & DYNAMIC

Contrast the static building structure with dynamic spaces. Spaces that are different from each other and flexible to different needs and changes over time



LOCAL IDENTITY

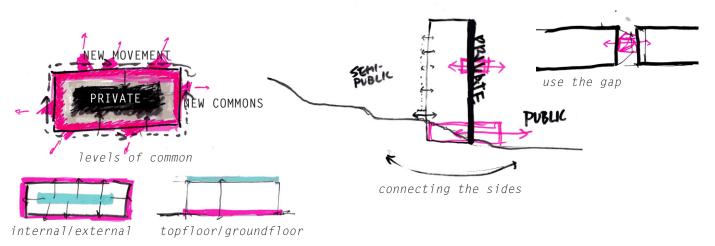
Give opportunities to strengthen & express local identity. Allow for grassroots initiatives & influence by people

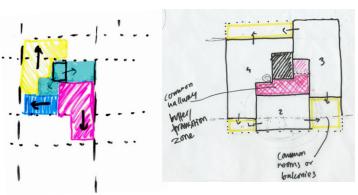


HIERARCHY/FRAMING ZONES

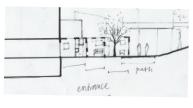
Define the transition between public & private through different levels of access, visibility, transparency, scale & framing zones

#### SKETCH PROCESS

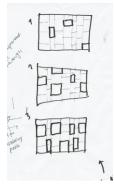


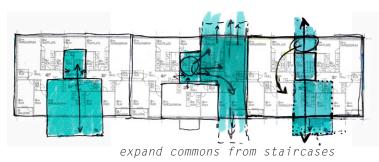




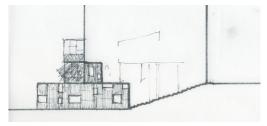


layers around entrance

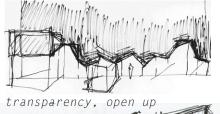








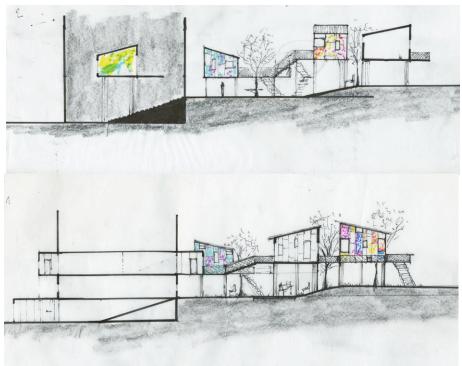
groundfloor





small irregular volumes, new spaces

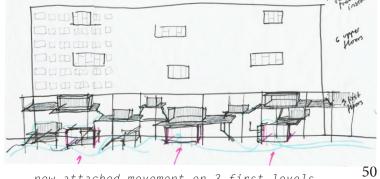
#### platforms with community houses



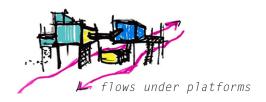


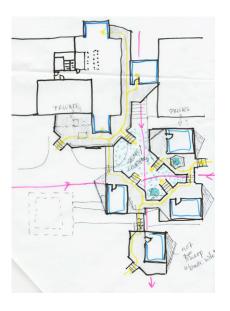


highlighted entrances

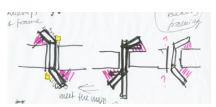


new attached movement on 3 first levels

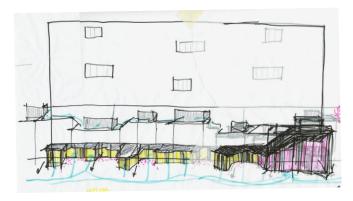




platform configurations



directions

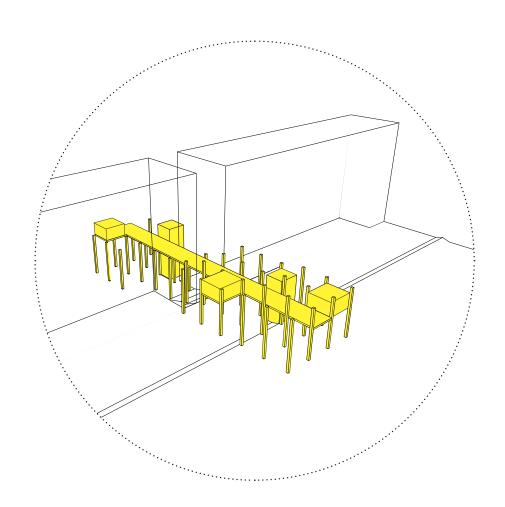


transparent/expanding commercial spaces and large entrance

## T00LB0X

The toolbox consists of three tools that are dealing with different issues concerning common space. They could be implemented and developed separately, or combined into a holistic solution for the building with surroundings.

# 1. INCREMENTAL PLATFORM

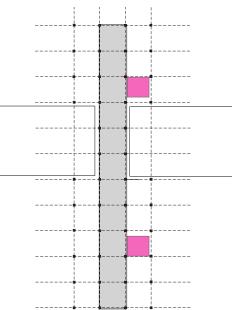


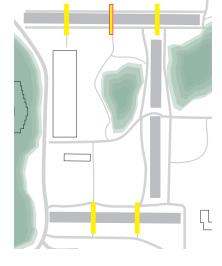
#### PROPOSAL

#### Provide infrastructure

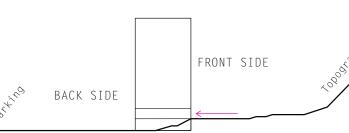
A new infrastructure that allows for incremental development of the common outdoor environment and building new common spaces from a bottom-up approach.

- Structrual grid with pillars
- Shafts for circulation & piping
- Platform as a new street level

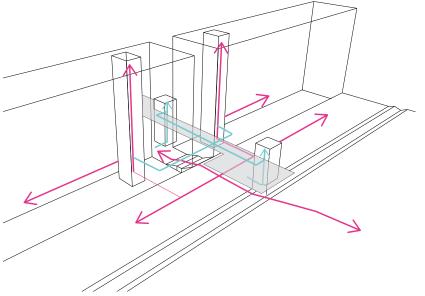




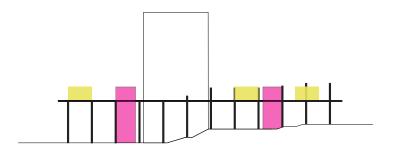
Five possible gaps for application



The additional structure uses the gap to create a new direction that connects the front and back side and new movement between the levels



#### Community built houses



Connecting to the new infrastructure, small community houses can be built and added over time



The houses are created by people in the area, providing new common spaces for associations

#### ANALYSIS

#### What it does/not:

- New common spaces for associations
- + New flows and connections
- + Allows for participation
- Does not deal with issues within the building

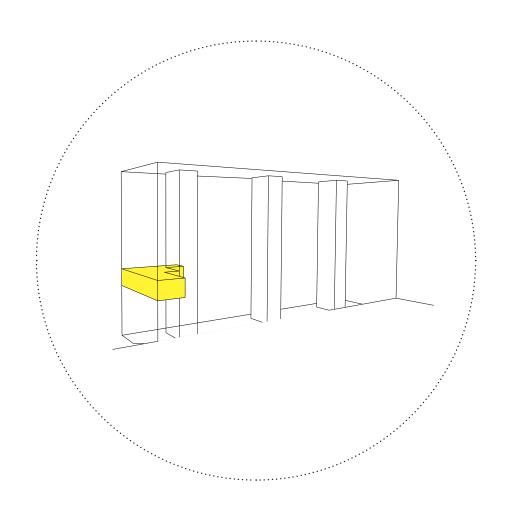
#### Opportunities:

- Supporting local initiatives and strengthening the identity of the area
- Letting the area develop incrementally over time with the people as co-creators. Gives value to the place and strangthens the sense of belonging
- To build and develop new structure without interfering or depending on the existing building structure
- Make use and give quality to the un-used gaps

#### Challenges:

 To structure and organise the building process, creating clear rules and tools for participants to use while still leaving room for interpretations.

# 2. COMMUNITY SPACE



#### EXISTING UNIT

The building is very dense of apartments which leaves no possibilities to provide new common spaces

# 4 rooms 3 rooms



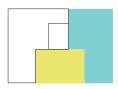
3 Units

3 Apartments around 1 staircase

#### PROPOSAL

#### Decrease density

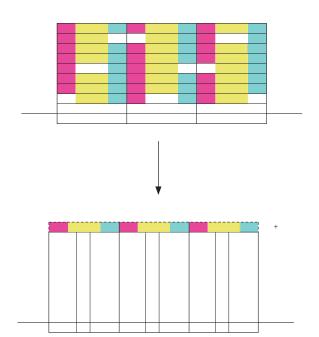
In order to make space for new common spaces in the building, there is a need to remove some of the apartments. These are options that creates three different sized common spaces





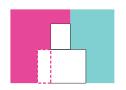


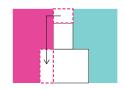
This approach can be applied in every third floor in all units in order to make everyone in the building having access to their "local" small scale common space. As a solution to replace the missing apartments, a new floor is added on top of the building



#### Give & take space

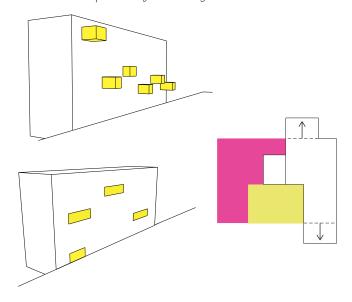
With the new common space, there are possibilities to either make the whole apartment into common, or providing additional space to one of the remaining apartments according to needs





Another option is to remove space from one place in one apartment and replace it on the other side. This opens up the common staircase to both facades

#### Facade transparency & Fragmentation



The new common space can be made more visible by highlighting it in the facade. Either though expanding the common space with attached boxes on the facade, or "cutting out" parts of the facade to increase the transparency

#### ANALYSIS

#### What it does/not:

- + New common space for different activities, on a smaller scale
- + Fragmentation and transparency of facade
- Does not deal with core issue on all floors

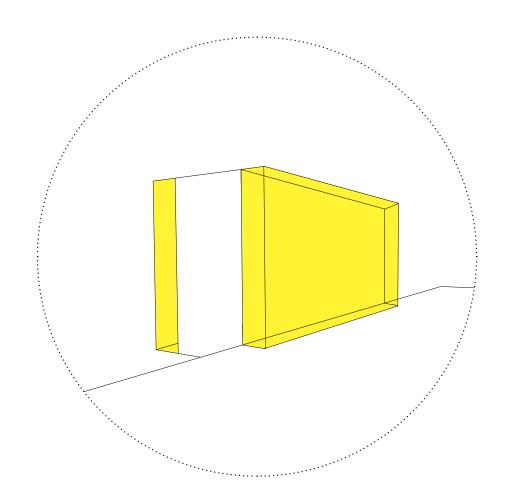
#### Opportunities:

- To fulfil the need of common spaces on different scales, for example where tenants sharing the same staircase can meet and interact
- To give opportunities for community building could solve issues with lack of care for common spaces make people feel more safe in the building
- Possibility to deal with overcrowded conditions by adding space to private apartments, responding to different needs or to use new common spaces for functions to spread out from the apartment

#### Challenges:

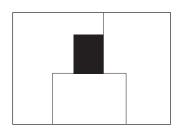
- In order to replace private apartments, an extensive participatory process would be required to gain knowledge about the people and their needs. Another aspect is to be aware of the impact of raised rents
- To make the new common spaces function and being taken care of it also requires to involve the tenants in that process in order to make them feel ownership of the space

# 3. SECOND SKIN



#### FXISTING UNIT

The intention of this tool is to deal with the lacking transition in the core of the building



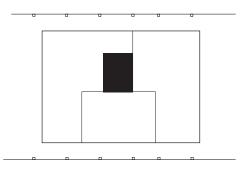


\* the staircase is normally seen as a common zone but in this specific case, the feeling of the staircase is more public since it is accessible to 24 apartments and some entrances even fully accessible to the public

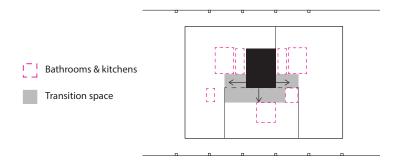
#### PROPOSAL

#### Transition in the core

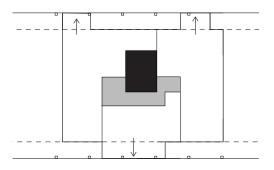
In order to deal with this issue, a new transitional space needs to be added between the staircase and the private apartments. A space that is only accessible to the three apartments on that floor, creating a buffer zone towards the public. The high density of the building makes it necessary to extend the amount of space, which can be done through the facade.



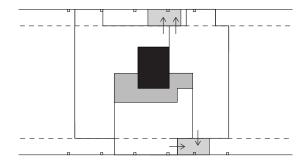
1. Add new structural layer outside the existing facade, a second skin



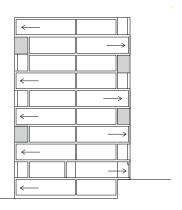
2. "Take" space from the apartments to create a new transition space



3. Expand parts of the apartments out towards the new skin to replace the missing space

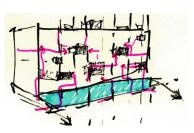


4. Add common & private terraces to use the possibilities of the new facade



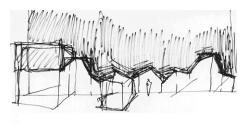
5. Create variety on the different floors

#### Facade transparency & fragmentation



Another aspect is the issue with the continuous and enclosed facade, where the new skin provides opportunities to play with variation of volumes and transparency.

Highlight entrance & open up basement



The new skin also creates possibilities to expand and highlight the entrance and open up the basement



ANALYSIS

#### What it does/not:

- New transition space within the core of the building
- Increased facade transparency
- Possibility to extend entrance & open up basement
- It does not add new common space for activities

#### Opportunities:

Dealing with the problems within the core of the building and the communication out through the facade. It could create at better transition between public and private and provide better comfort, safety and quality for the tenants.

#### Challenges:

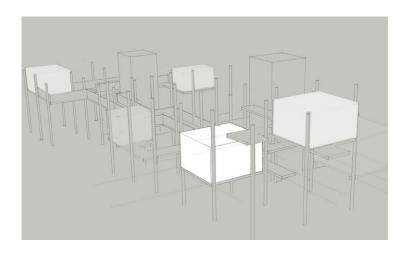
- A major transformation that requires a lot of knowledge about the needs of the private apartments and a sensitivity towards the tenants and awareness to avoid high costs and possible renoviction. It would require an extensive participatory process
- Dependant on the ambition and investment of the housing company
- Making sure all apartmens get enough light when extending the building
- Renovating the facade in an environmentally sustainable way, creating more energy efficient buildings 63

## OTHER RESEARCH PROJECTS RELEVANT TO THE SUBJECT:

- Erik Stenberg, Associate professor at KTH Royal Institute of Technology, Stockholm.
   Focusing on construction systems of the Million Program era and how configurations of apartments can be altered in renovation.
- Jenny Stenberg, Associate Professor at Chalmers University of Technology. Focusing on social aspects and particularly citizen participation in planning.
- Paula Femenias, Associate Professor at Chalmers University of Technology. Focusing on sustainable development of the built environment.
- Lina Jonsdotter and Esmeralda Björnsdotter, Master's Thesis at Chalmers Architecture. Focusing on acessability in renovation of the Million Program Apartments.

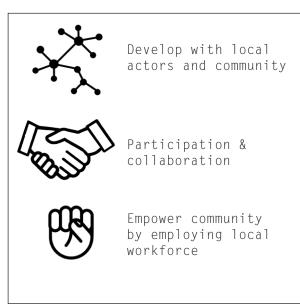
#### 5. FURTHER EXPLORATION

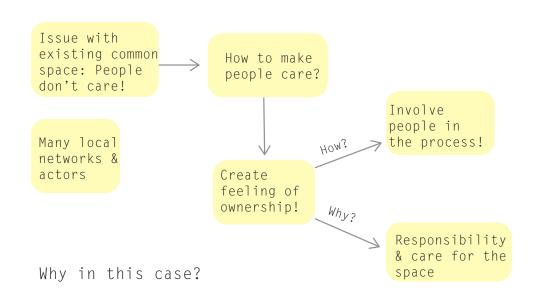
#### INCREMENTAL CONCEPT

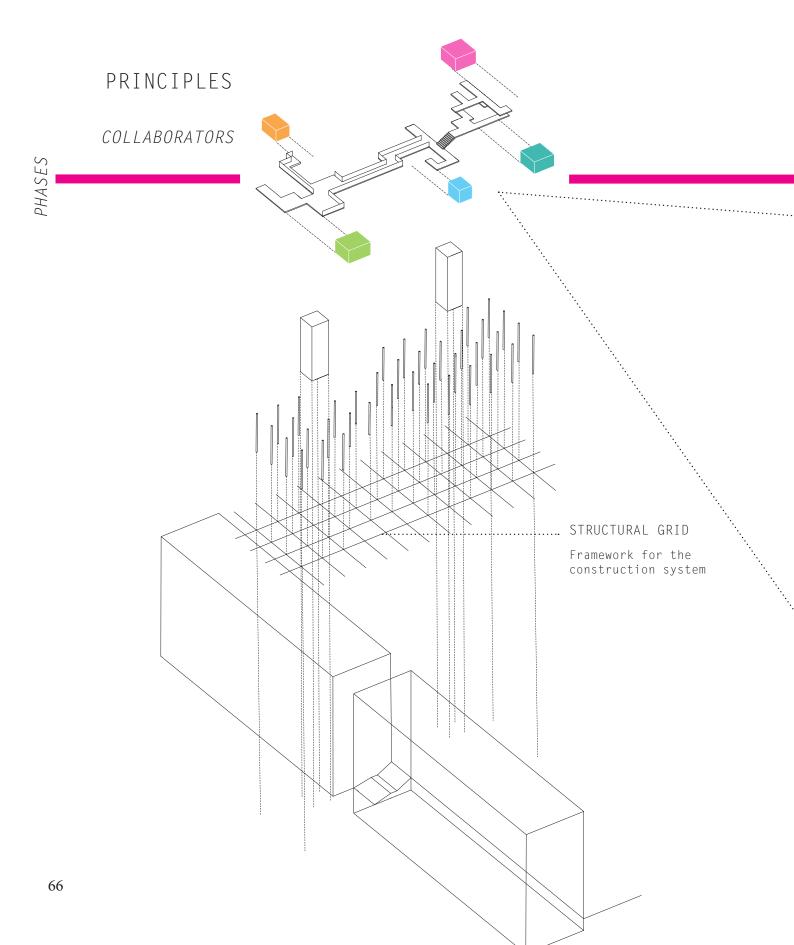


Provide opportunities for the common space to grow from the people, piece by piece

#### HOW?



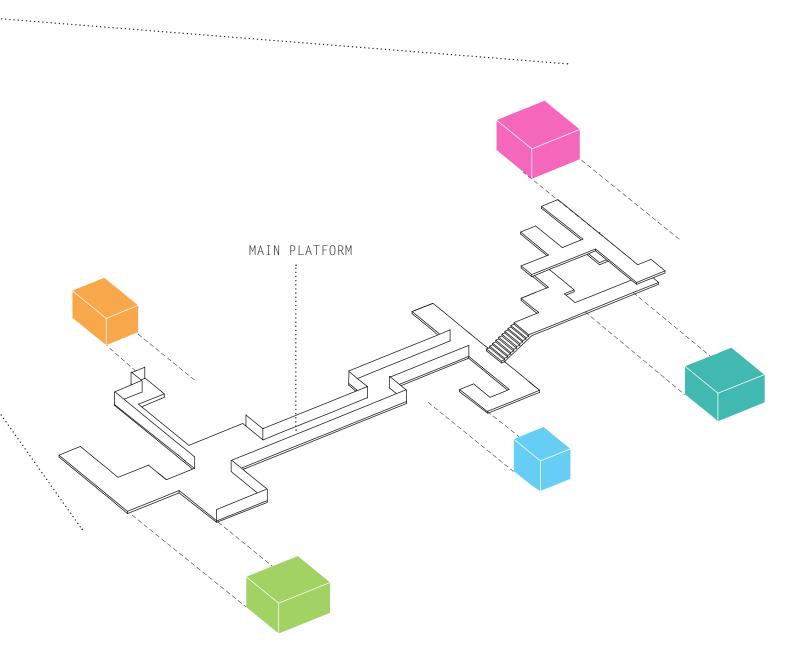


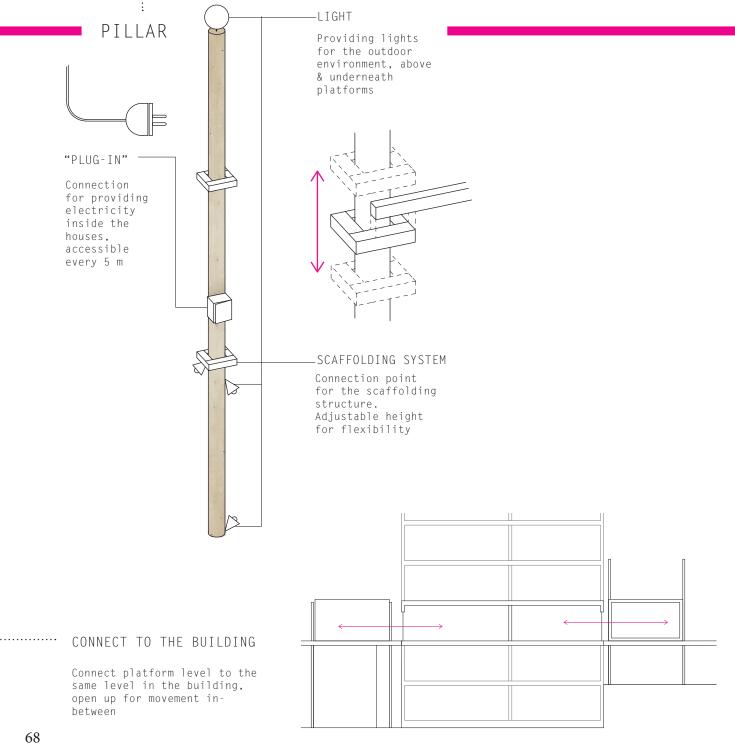


## ARCHITECT'S TOOLS

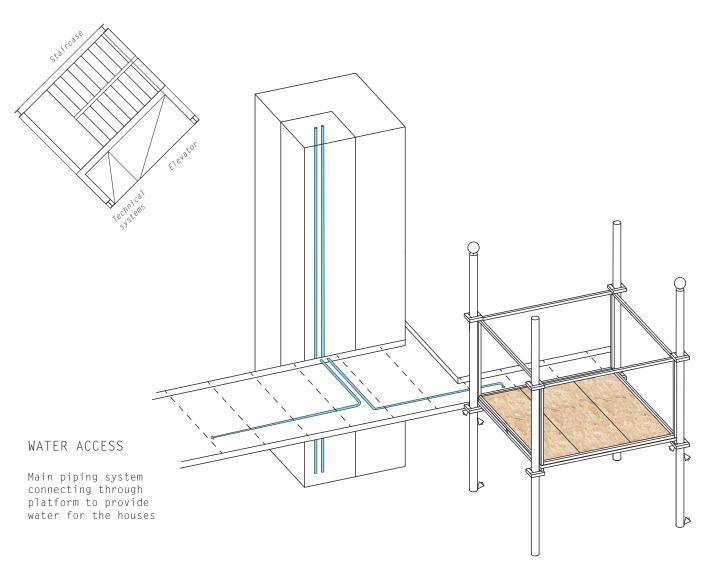
Design of the permanent structure that provides a framework for the incremental development

- Bostadsbolaget
- Park- & Naturförvaltningen





#### CIRCULATION



• "Vårt Hammarkullen" or Tenants Association can be part in attracting associations to be part of the structure

### ASSOCIATION'S TOOLS

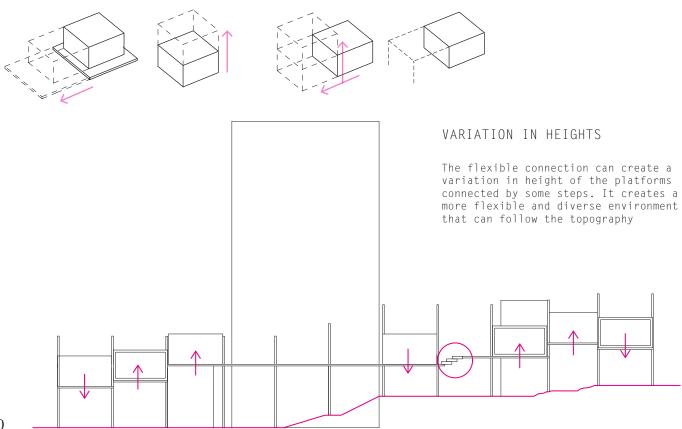


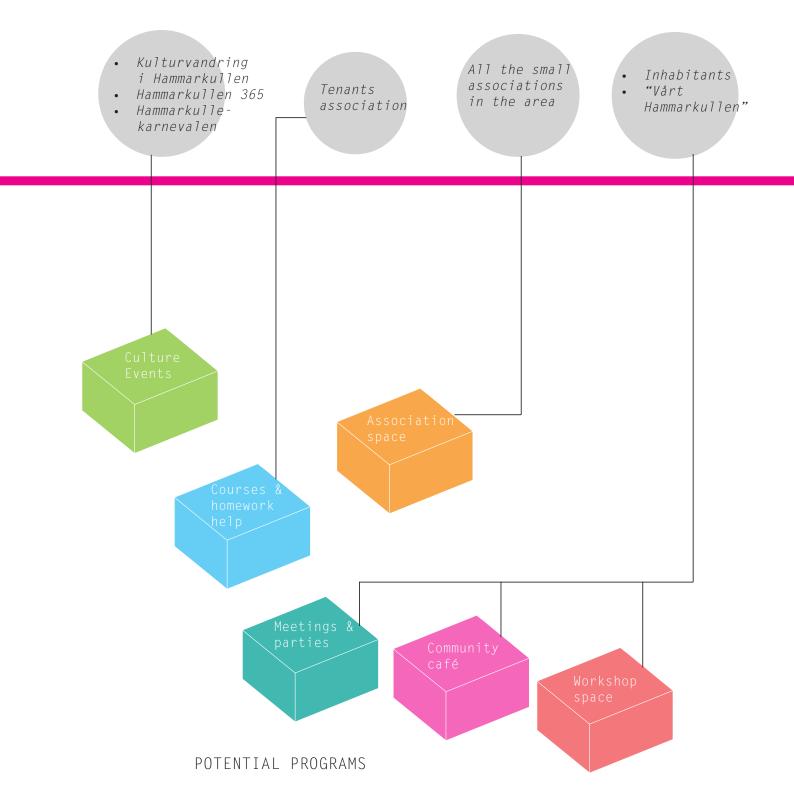
Within the framework, associations or other groups can be part in developing their own community box space according to their needs



Basic floor plan of 25 m<sup>2</sup>

#### FLEXIBILITY TO EXPAND OVER TIME

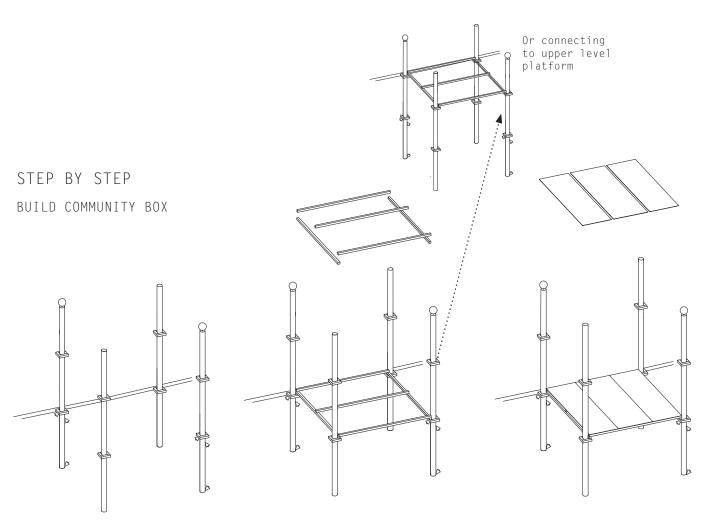




## BUILDER'S TOOLS 7



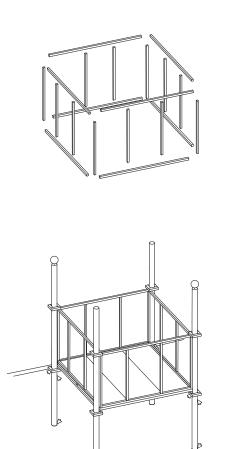
After the initiating phases, the community box is to be build with locally employed craftsmen and trainees. A simple construction, easily constructed in wood.



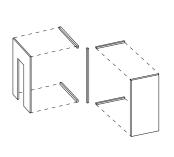
1. Build structure for platform on connection points between four pillars

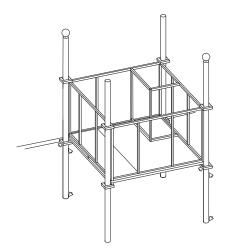
Attach wooden boards on 2. to the structure

• Local workforce to build, in collaboration with association

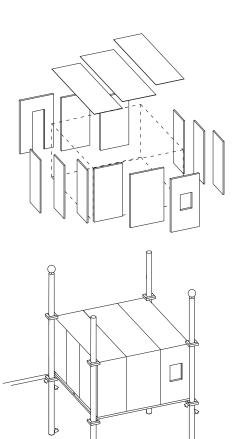


On the platform, build the skeleton structure for the house





4 Add inner walls for bathroom



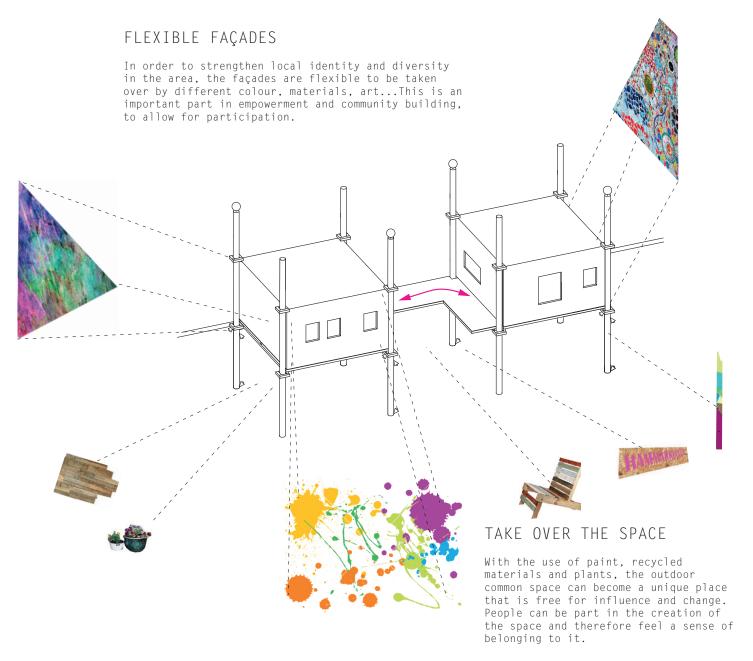
5. Attach wooden panels to structure for outer walls and roof

# PARTICIPANT'S TOOLS

When the community box is built, the association can take part in making the space and the facade personal and creative. The surrounding outdoor common space is for everyone to be taken over and changed with different activities and coloured by the identity of Hammarkullen.

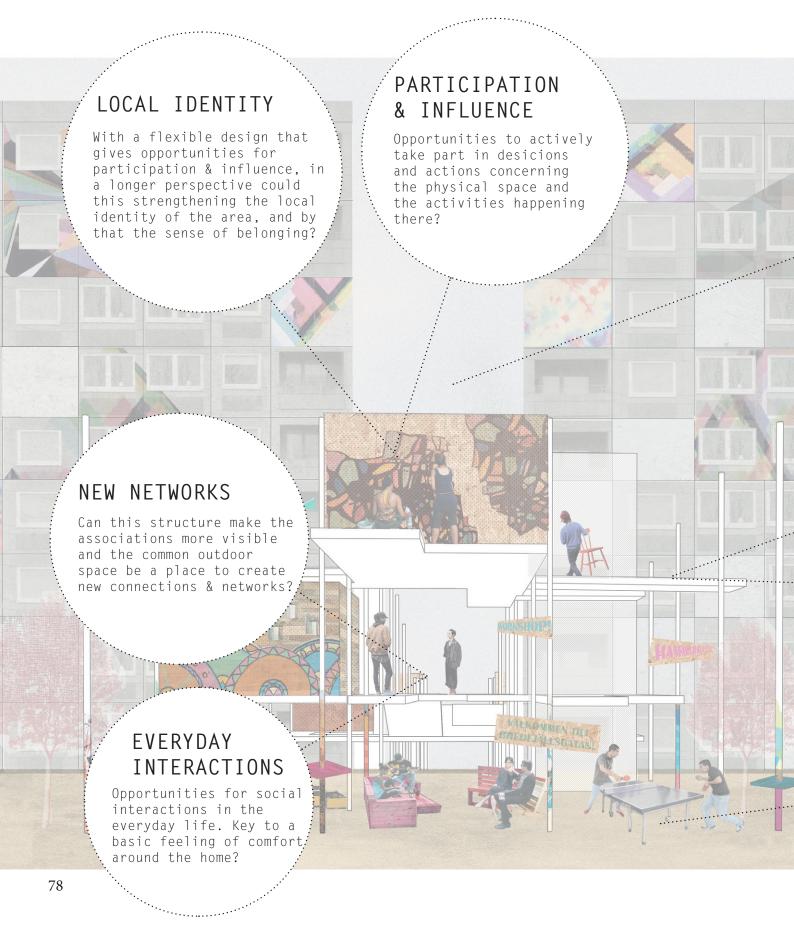


 For people involved in community houses
 Common outdoor space for everyone!









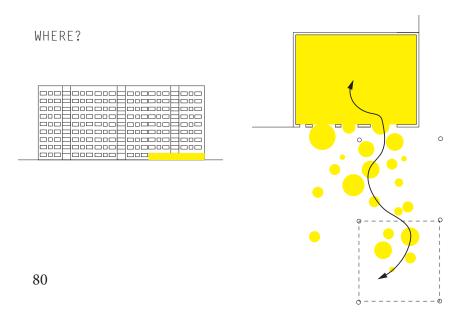
## UN-USED SPACE There is potential in the un-used spaces like the gap between two buildings or the THE ROLE OF roof. Transforming these spaces can add new qualities ARCHITECTURE without disturbing the private apartments. Can it give potential to develop from What is the role of bottom-up? architecture in this context and in relation to belonging? Architecture in itself can not create belonging, but it can create tools & opportunities for people to make it happen? FLEXIBLE DESIGN Belonging is individual. An area develop and change with the people and society. Can the: design be flexible in order to to adjust to these changes and: to people's needs? COMMON ACTIVITIES Possibilities to participate in different activities together with neighbors?

### COMMUNITY SPACES IN THE BUILDING



### EXHIBIT. WORKSHOP

Transparent, spacious common space on the ground floor. Flexible elements to build up for example a stage, an exhibition or seating. Possibility to extend out in the outdoor space.



#### ACTIVITIES:

- Dance or music performance
- Art exhibition
- Workshops art & crafts
- Markets
- Events within carnival and culture walk

#### NEEDS TO LOOK INTO:

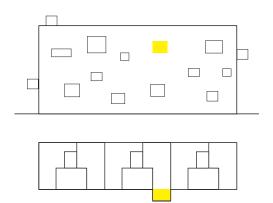
• Sound system for events



### EXCHANGE. GATHER

Transparent common space expanding out through facade, higher up in the building. The large windows frame the outdoor landscape and create a more inspiring space. Place for smaller gatherings, meetings & events for tenants.

#### WHERE?



#### ACTIVITIES:

- Clothes swapping
- Flea market
- Party
- Staircase meeting

#### NEEDS TO LOOK INTO:

 Infrastructure such as electricity to the new addition

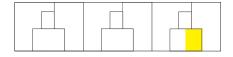


### RELAX. WORK

Small scale, intimate common space higher up in the building, functioning like a second living room. A space both for working & relaxing.

### WHERE?

=		-	



### ACTIVITIES:

- Eating together
- Co-working
- Doing homework
- Gatherings for smaller associations

### NEEDS TO LOOK INTO:

• Small kitchen for making coffee and cooking

### CONCLUSIONS & REFLECTIONS

### Work process

The process of this thesis has been challenging, since the focus have shifted several times. In the beginning, the focus was clearly set on collaborating with the housing company and carrying out a codesign process about common spaces.

The circumstances didn't fit for a collaboration and by gaining more knowledge, I realised that the subject had to be explored a lot first before starting a dialogue process. That shifted the focus and methods of the working process, which was confusing but necessary in adjusting to the current situation. Looking back at these decisions, I believe that it was very good for me to work independently from the housing company, since it gave me freedom to explore things in a new way and being more challenging of the existing.

Working with people in the area and arranging workshops would not have been beneficial before exploring the spatial conditions myself, since the knowledge about different issues in the common spaces and in the area has already been found in other workshops, and in order to contribute with something new, my workshops would have to focus on design solutions. Hopefully the project I ended up with can provide a basis for a discussion and a participatory process about common spaces.

### Design result

What this process has brought me to reflect on is the role of architecture, in the million program context and in relation to belonging. Architecture in itself cannot create belonging, but it can play an important role in providing tools & opportunities for it to happen. Who will have the possibility to affect the environment, what it looks like and what activities it can contain? If we as architects include flexibility into our design, we can give some of this power and sense of ownership to the future users.

A flexible design means also being able to adjust to changing needs over time and today we see the million program typology as an example of a very static structure that with its lack of flexibility is less capable to deal with new social problems. So one important part in renovation is to rethink how these structures will be able to develop and adapt in the future. To not just let people adapt and be limited by the building structure but instead allow the structures to dynamically adjust with the changing needs of people and the society.

This is an interesting discussion about finding the balance between fixed and flexible design. At what point does the flexibility become to much and create new issues instead of solutions? I think it is important to truly understand the specific context and user in order to fully understand what could be the expected consequences to the flexibility. Also to clearly state the rules, how the organisation and future management of the spaces will work, to easily understand who is responsible for what. That means also having an open dialogue and clear communication about the shared environment.

Next steps

If the process of this project were to continue, one next step would be to combine and develop the other tools. In order to do this, dealing with issues in the building such as lack of transition, transparency and common activity space, a participatory process would be required in order to gain a lot of knowledge about the situation in the private apartments.

Also when developing the incremental platform the next step would be to start a participatory process, both involving local actors and having a dialogue with tenants in the area. Local actors would be from both a top-down and bottom up perspective, meeting with the housing company, the tenants association and grassroots initiatives like associations and networks.

Through a dialogue with people in the area, these tools and concepts could be brought up for discussion order to get feedback from the future users. It could be about finding out what kind of common space people want and developing a program together with the community.

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#### IMAGES

If nothing else is mentioned the images are taken or created by the author.

Figure 1: Parts of collage, "Sofielund Kollektivhus" https://kollektivhus.files.wordpress. com/2015/09/mg\_3454\_sa.jpg "community spirit" https://rw-media.s3.amazonaws.com/residential-offices/wp-content/blogs.dir/176/files/2014/03/Hands.jpg

Figure 2: Jenny Stenberg, Chalmers Arkitektur

Figure 3: http://www.historia2.se/historia123/wp-content/uploads/2011/04/steam-train.jpg

Figure 4: Standard kitchen, Sune Sundahl

Figure 5: Rinkeby outside of Stockholm, Holger Ellgard

Figure 6: Centrum in Husby outside of Stockholm, Sune Sundahl

Figure 7: Construction process, photographer unknown, http://media.naringslivshistoria. se/media/www.hsb-historien.se/DA2013-02763-SE\_CFN\_HSB\_HSBR\_K1bc.9\_0006.

jpg?width=1000&height=1000&mode=max&anchor=middlecenter&scale=upscalecanvas

Figure 8: Crime connected to stigma, Svt. http://www.svtstatic.se/cms-image/cachable\_image/1368818930/svts/article1232646.svt/alternates/extralarge/0517-

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Figure 9: Hammarkullekarnevalen https://c1.staticflickr.com/5/4061/4652887802\_a034d78b59\_b.jpg

Figure 10: Kulturvandring i Hammarkullen http://www.hammarkullen365.se/ckfinder/userfiles/images/kulturvrlogo.jpg

Figure 11: Parts of collage, kids painting http://www.hammarkullen365.se/ckfinder/userfiles/images/003.JPG

Credits for cut-out people to: http://www.nonscandinavia.com/ and http://skalgubbar.se/ Credits for some pictograms to The Noun Project: https://thenounproject.com/

