



IN SYNERGY

An Architectural Pursuit for Integration

SYNERGY (noun) - A state in which two or more things work together in a particularly fruitful way that produces an effect greater than the sum of their individual effects. Expressed also as “the whole is greater than the sum of its parts.”

Abstract

The number of refugees entering Europe, in search of safety and in search of a better life, is continuously rising. Sweden continues to be one of the main recipients of asylum applications, but the problem of housing shortage, the country has been facing, impacts on the opportunities of the newly arrived to successfully establish themselves in the new society.

The purpose of this master thesis is to explore ways architecture influences on social integration and contributes in making people feeling safe and welcome in a foreign setting. By blurring the boundaries between public and private and by introducing a variety of spaces with different accessibility levels, it aims to discover strategies to promote social interaction and in that way ease the establishment of the newly arrived refugee tenants into the Swedish context.

After the initial phase of literature reviews, interviews and study visits, the concept was formed and the dialogue with the target group was established.

The dialogue and participation offered a critical reflection upon what has been done so far and allowed the development of the final project proposal.

The final design result is a proposal of a housing complex, shared between students and youth refugees in Frihamnen area in Gothenburg City. The aim is to translate future tenant's needs into a combination of private spaces, providing them with accommodation, and public spaces providing them with cultural, educational and social developmental opportunities.

This thesis contributes to the general reflection around refugee accommodation and offers a permanent solution as an alternative to temporary ones. It also questions the role and responsibility of our profession when it comes to social change and aims to prove that the process of social integration can be facilitated with adequate design.

Acknowledgments

I want to thank my supervisor, Emilio Brand-ao, and my examiner, Joaquim Tarraso, for their trust, constructive advices and involvement.

Elke Miedema, thank you for supporting the idea since the very beginning and for always beliving in me.

Mohammad Alabed, Khaled Alaydi, Saqer Anwar Razzouk, Saria Dalain, Ahmad Khallouf, Olga Qandalaft, Abdurrahman Toryalay, thank you for participating in the design workshop and for your valuable feedback.

Reham Abdulsalam and Ali Wassouf, thank you for your help and advices, but most of all thank you for your friendship.

Chalmers Students for Sustainability and members of the project “Innovation for Integration”, thank you for your support and for interesting ideas and projects.

To my studio colleagues, thank you for being a source of inspiration and for sharing this journey with me.

To all of my friends, thank you, for giving me confidence and energy, and for sharing my passions.

Last but not least, I want to thank my family, for their unconditional love and support.

About the Author

I graduated in July 2013 from University IUAV of Venice and hold a Bachelor Degree in Architecture. The three-year undergraduate program provided me with the basic knowledge in the field of architecture and it created an ulterior motivation and persistence to deepen the knowledge in the field, which is what brought me to Chalmers, where I attended Master’s Program in Architecture and Urban Design.

Coming to Sweden was an eye opening experience. The first course I took on Chalmers, Sustainable Development and Design Professions, confirmed the important role an architect has when it come to social and environmental changes occurring in the world.

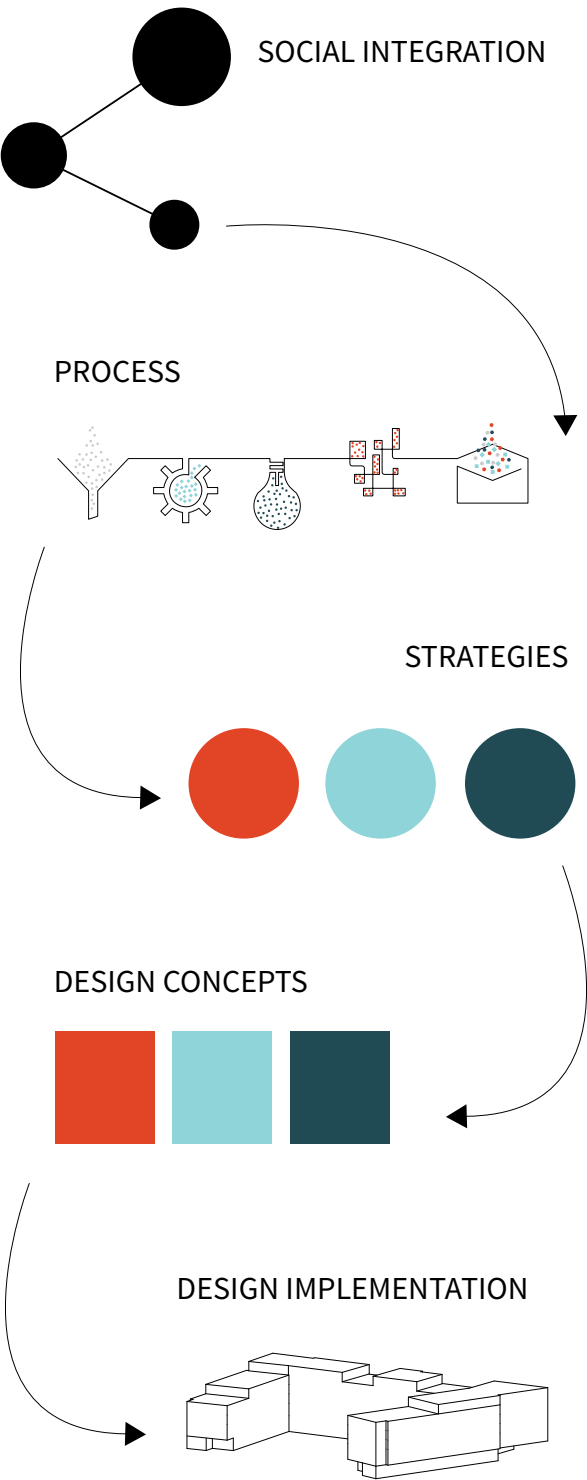
The Reality Studio I attended in the spring 2015, only strengthened my desire to include social sustainability aspects into my design.

The design in the studio was carried out with close collaboration with the local community, and the final result never felt more meaningful and fulfilling. After that I decided to dedicate my professional work in trying to find ways I can contribute in reducing issues, such as social discrimination and inequality, trough architectural design with emphasis on participation and collaboration.

This personal interest is reflected in the idea for the master thesis, which combines architectural design with the issue of social integration.



Approach



The journey began from one of the biggest challenges we are facing in today's society, the challenge of social integration. The question, what can I as an architect do regarding the matter led to the decision of exploring this topic further. The process, consisting of various phases, provided knowledge and information which led to formulation of three strategies. The strategies were translated into design concepts which were implemented in a specific site and context.

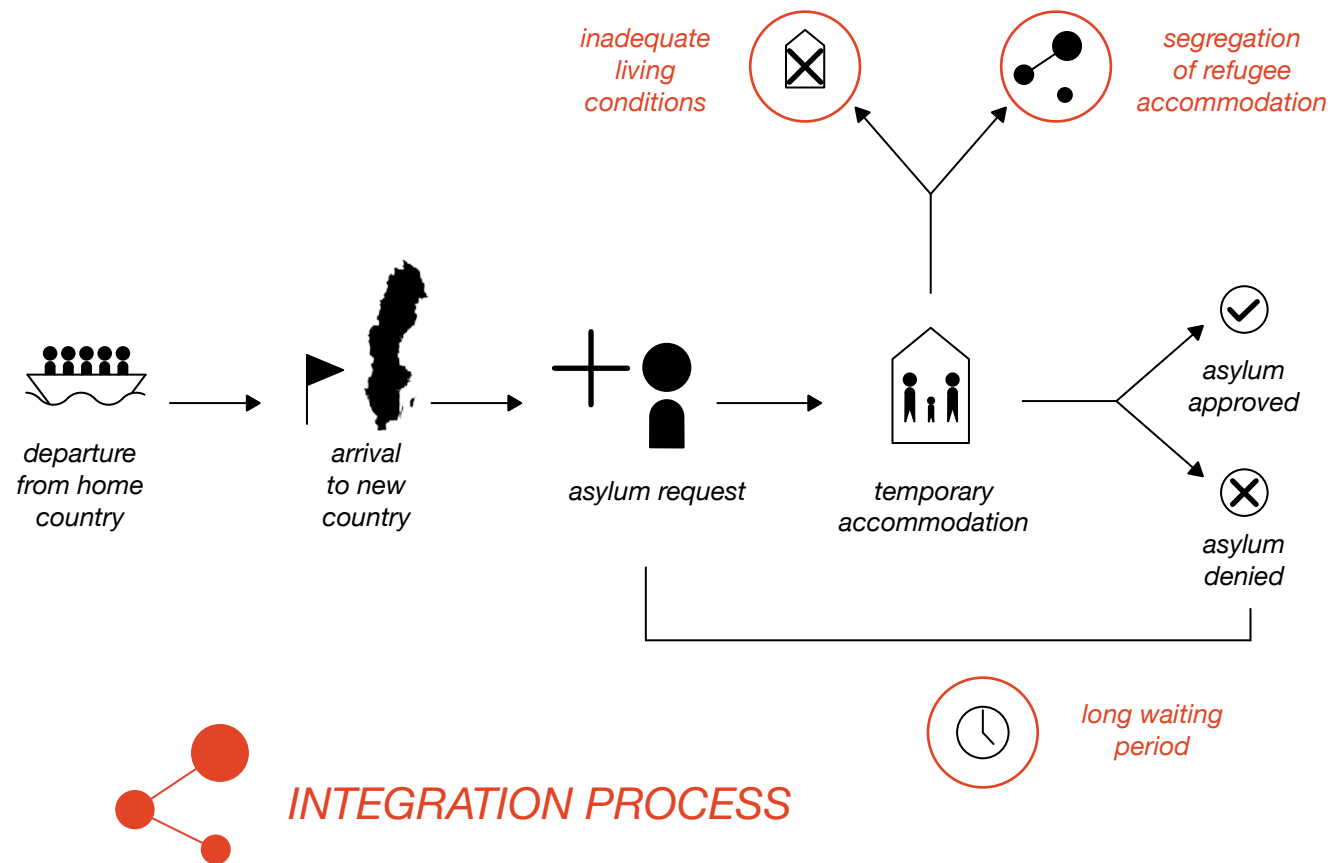
Table of Content

●	01 Introduction	
	Background- THE WHY	12-13
	Purpose and Research questions- THE HOW	14
	Delimitations- THE WHAT	15
	Methods and Tools	16
	Stakeholders and Final Result	17
	Process Timeline and Overview	18-19
	The Empirical	20-21
	Findings	21
■	02 Prestudy	
●	Research	24
	Context- THE WHERE	25
	Site Analysis	26-30
	Findings	31
	Workshop	32-35
	Findings	35
	Strategies	36-37
	Concepts	38-39
◆	03 Design Implementation	
	The Design Result	42-43
	Gradual Transition	44-55
	The Connection Link	56-59
	Inviting In	60-61
	Blurring the Boundaries / What If	62-63
●	04 Conclusion	
■	Reflection and Recommendation	66
●	Discussion	67
◆	References	68

01

Introduction

Background - THE WHY



Sweden was mostly an emigrating country until refugees escaping World War II began to slowly change it back into an immigrating country. It has been facing immigration since then which contributed in making it a multicultural country. The rise of asylum seekers began in the 1980s when Sweden saw some of its highest immigration rates and it continues today when refugees from active war zones continue to immigrate to Sweden and other European countries (<https://sweden.se/migration/#1887>).

The number of asylum applications received in 2014 in European Union Member States has risen by 25 per cent compared to the same period in 2013. This massive increase was driven mainly by the war in Syria, which at the end of last year had forced 2.5 million people into becoming refugees and made 6.5 million internally displaced. Germany continues to be the recipient of the largest number of asylum applications, followed by France, Sweden, Italy and the United Kingdom (<http://www.unhcr.org>).

In 2014, there were over 80,000 asylum seekers in Sweden, and according to the statistics there are around 200 000 refugees and asylum seekers currently residing in the country (<http://www.migrationsverket.se/English/About-the-Migration-Agency/Facts-and-statistics-/Statistics/2015.html>).

The Migration Agency offers temporary accommodation to the newcomers, which is in most cases quite segregated from the central parts of the cities. Considering that the challenge of refugee accommodation is relatively new, there is no proper refugee accommodation but in most cases it is a refurbished building which in the past had a completely different function. The refugees have a daily allowance at their disposal that varies between thirty-seven and seventy-one SEK, depending on their status. The waiting times for documents approval lasts from six months to up to a couple of years.

Interaction is the key in creating social networks which are a crucial component in a successful integration process.

When we take these facts such as inadequate living conditions, segregation and low or no income it becomes clear how difficult it is for the newly arrived to successfully interact with the society they are now a part of.

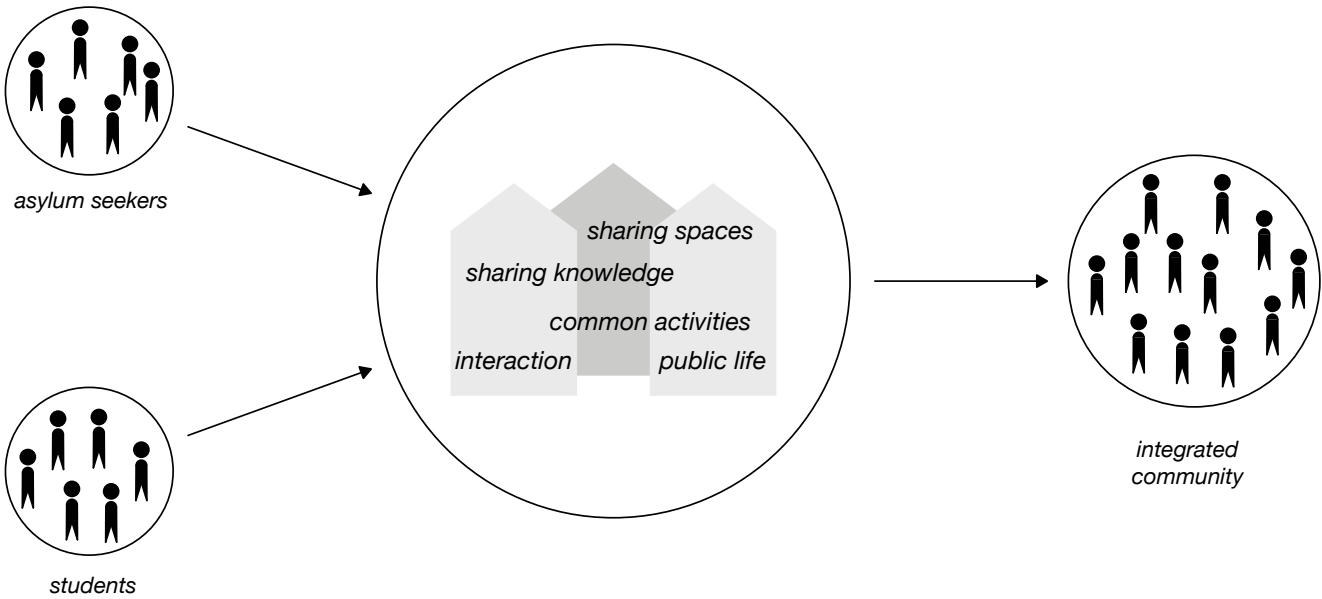
Reducing the gap and striving for greater equality in living standards to create a more socially sustainable city is a focus area for the whole city, politicians and officials alike. As Gothenburg grows, there are increasing demands on a long-term dialogue with residents to create a shared idea of how the city will develop (<http://international.goteborg.se/urban-development/providing-equal-living-standards>).

Purpose and Research Questions- THE HOW

The purpose of this master thesis is to explore ways architecture influences on social integration and contributes in making people feeling safe and welcome in a foreign setting. By blurring the boundaries between public and private and by introducing a variety of spaces with different accessibility levels, it aims to discover strategies to promote social interaction and in that way ease the establishment of the newly arrived refugee tenants into the Swedish context. Other than providing accommodation, the design aims to provide youth refugees with cultural, educational and social developmental opportunities (build community relationships, fosters cultural knowledge and understanding etc.).

How can architectural design influence the process of integration of newly arrived refugees in a foreign context?

- Can architectural design stimulate social interaction?
- What kind of functions could be places in collective shared spaces?
- Which activities within could stimulate social interaction?
- How can the process of participatory design empower future tenants' and become an integration tool itself?



Delimitations - THE WHAT



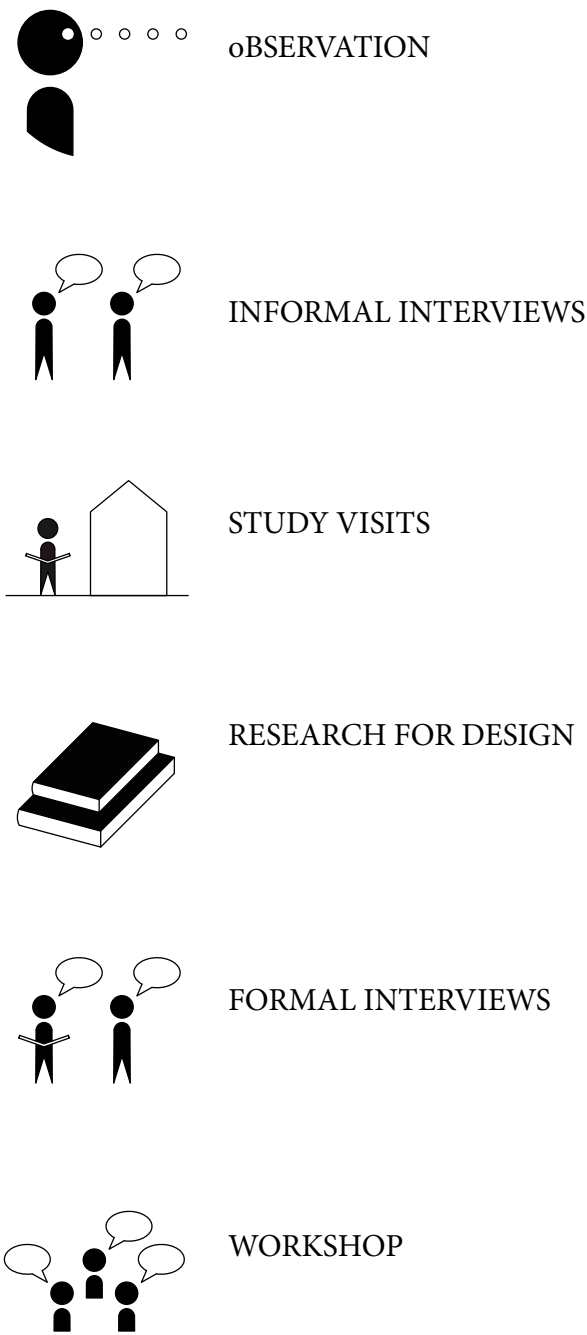
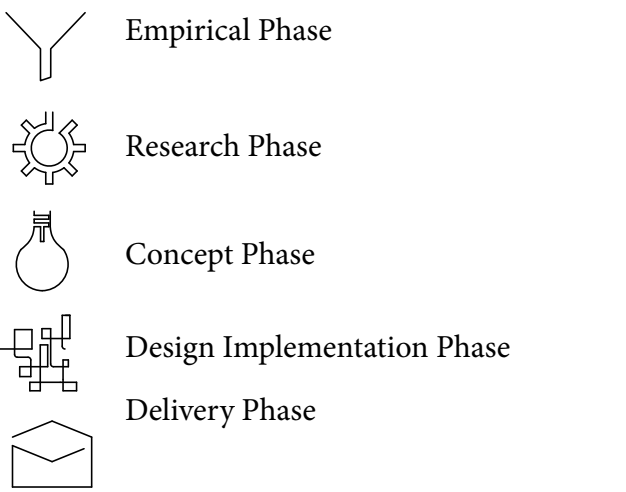
Methods and Tools

The process consists of five stages. The first phase, as the name suggests, offers empirical knowledge of the topic due to various study trips and events organized with asylum seekers during which numerous informal interviews were held.

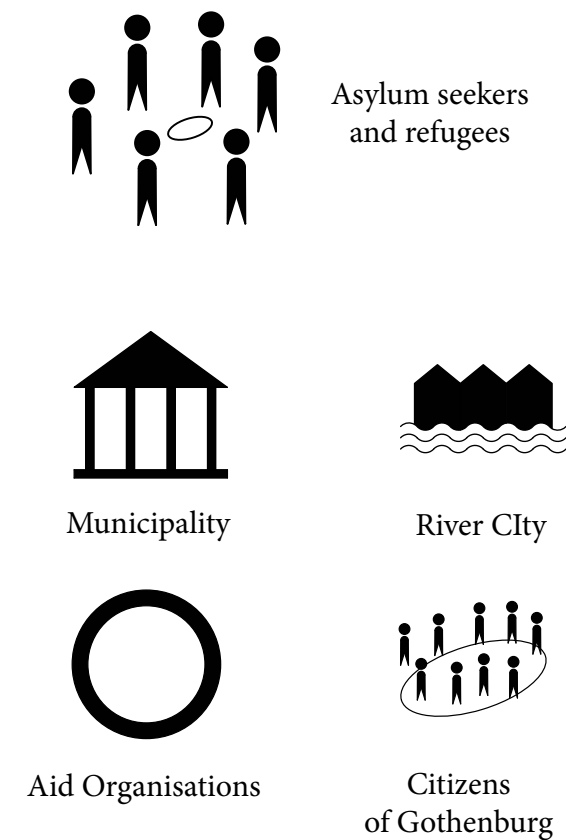
The next phases are the phases of the master thesis and are divided in the research part, concept part, design implementation and delivery.

The research phase was dedicated to literature review where I looked into topics of participation methods and co-designing, co-living and the role of public space in an everyday life etc. During this phase interviews with the Municipality and the River City organization were held, which proved to be crucial in the process since it determined the project site.

In the concept phase the most important part of the process was emphasized, participation. The workshop with a group of asylum seekers and refugees was essential since the constructive feedback received from the participants helped in formulating the concept and subsequently the final proposal.



Stakeholders and Final Result



Stakeholders that had influence on the process and the decision making were most of all the projects potential future users, the asylum seekers and the refugees followed by the Municipality ad the River City organisation.

Indirect stakeholders of the process are the citizens of Gothenburg and different Aid Organization.

Asylum Seeker - is someone whose request for sanctuary has yet to be processed (<http://www.unhcr.org>)

Refugees- people fleeing conflict or persecution; they are defined and protected in international law, and must not be expelled or returned to situations where their life and freedom are at risk (<http://www.unhcr.org>)

The intended result is a design proposal of a housing complex, shared between students and youth refugees in Frihamnen area in Gothenburg City. It is a mixed building combining both private (accommodation) and public (collective) spaces. The project connects to the first phase of Frihamnen's development and it adds upon its detailed plan.

Process Timeline & Overview

WHY

WHAT

WHERE

HOW

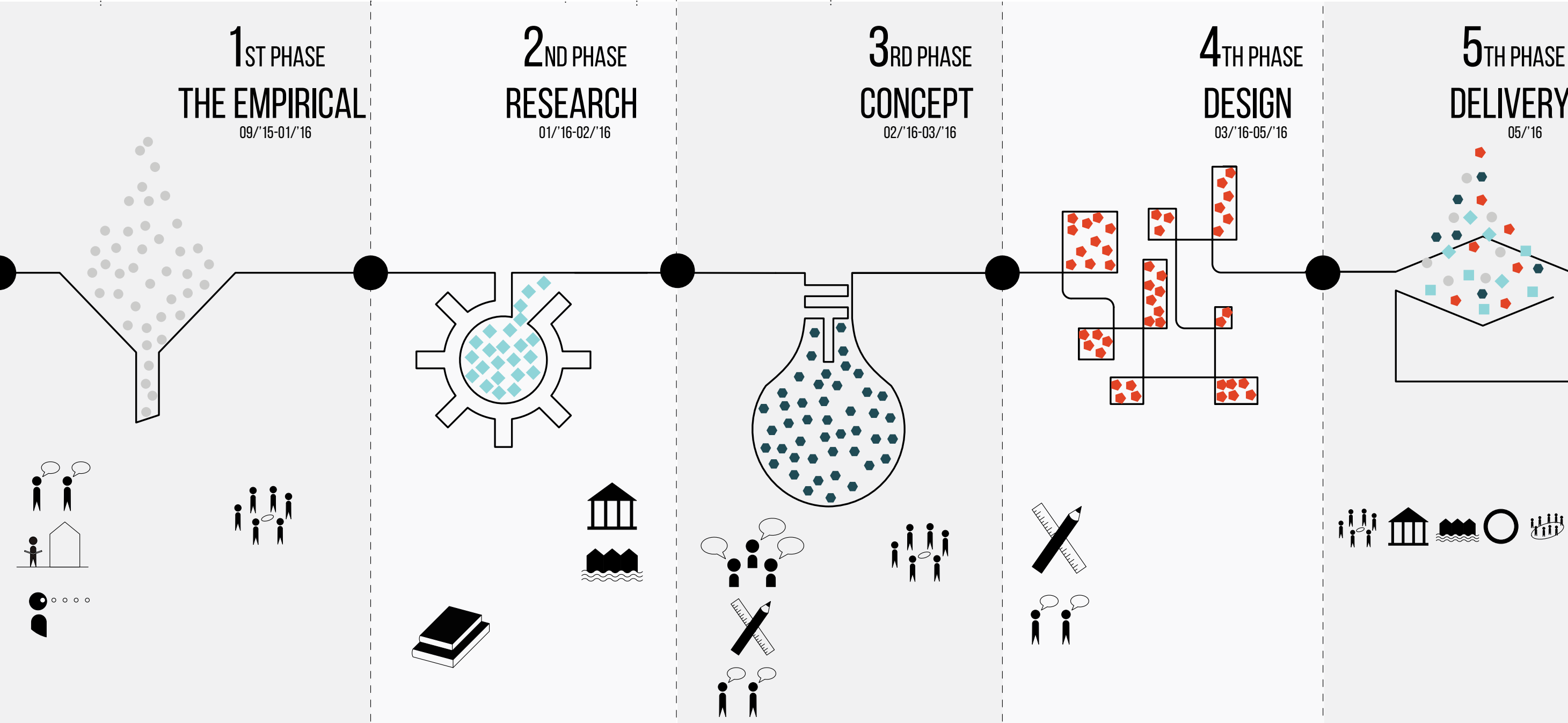
1ST PHASE
THE EMPIRICAL
09/'15-01/'16

2ND PHASE
RESEARCH
01/'16-02/'16

3RD PHASE
CONCEPT
02/'16-03/'16

4TH PHASE
DESIGN
03/'16-05/'16

5TH PHASE
DELIVERY
05/'16



The Empirical



*Chalmers Students
for Sustainability; project
Innovation for Integration*



In the beginning of the phase I became a member of a project called “Innovation for Integration”, part of a non-profit organization Chalmers Students for Sustainability. The project focuses non tangible aspect of the settlement of the newly arrived asylum seekers such as support networks and social connections. Part of the project was initiative called “The Buddy Program” where Swedish and international student socialize with young asylum seekers. It was on the events organized by the Buddy Program Group where numerous informal interviews were held and where the desire of addressing this challenge in my master thesis emerged. Being a part of this events gave me an insight into asylum seekers everyday reality, long waiting times for documents approval, segregated living locations with inadequate living conditions but this was the phase where the idea of co-living and socially mixed housing emerged, because based on my “empirical” experience, we are all “In Synergy”.

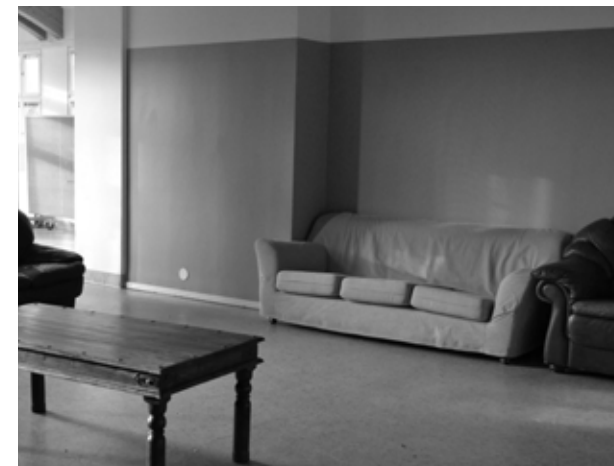


photos from a Buddy event (private collection)



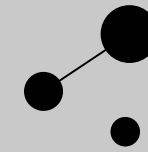
*Ullared Refugee Camp
(private collection)*

The first study visit was to Ullared refugee camp, approximately two hours from Gothenburg city. The main problem in the camp was it’s segregated location, which enabled people to spend time with the locals in bigger city centers. Common rooms have a huge role as the places where people gather, interact and form communities. The second study visit was to Dallagarde refugee camp in Hisingen, Gothenburg City. Even though not distant from the center, the camp’s has issues such as lack of private space, lack of facilities and accessories.



*Dallagarde Refugee Camp
(private collection)*

FINDINGS



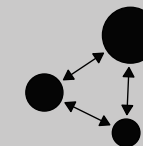
Segregation of
current refugee
accommodation



Long waiting times
for document
approval



Importance of
common spaces
in the accommodation



Importance of good
connection with
the surroundings

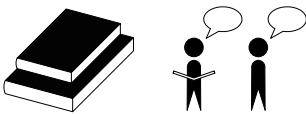


Common Interest
between students and
young asylum seekers
-SYNERGY

02

Prestudy

The Research

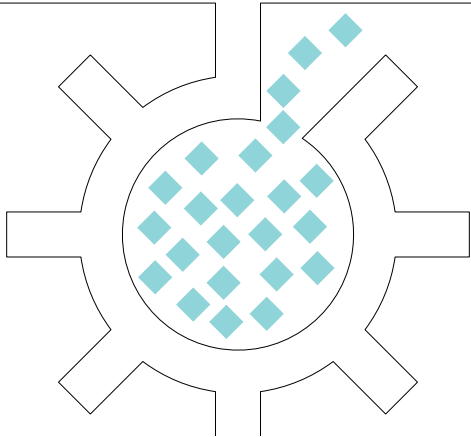


The research phase was dedicated to literature review, interviews with different stakeholders and to site analysis.

After the idea of socially mixed housing from the first phase the theory study was dedicated to benefits of co-living, the role of public space in an everyday life, the meaning of home, theory of participatory design and social inclusion. Two formal interviews were held with the Municipality and with the River City Organization after which site analysis were made.



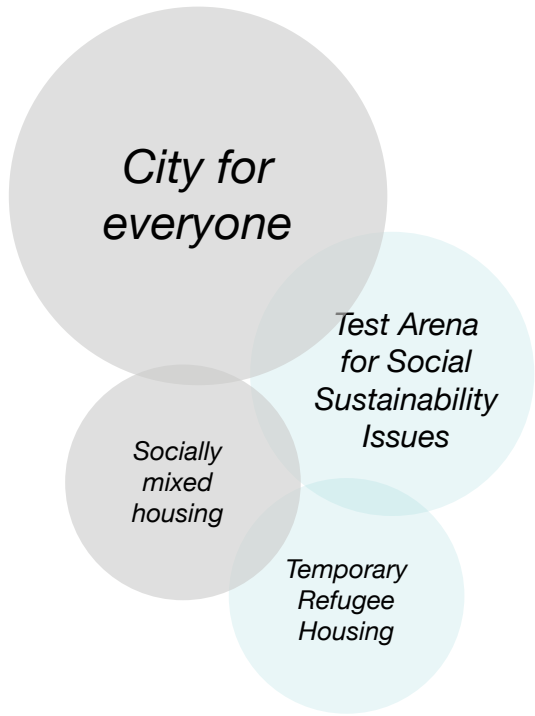
Interview with the Municipality provided an insight into the current refugee accommodation situation and the future initiatives city is undertaking regarding the matter. Due to the short duration of document approval the city is planning to build numerous temporary refugee accommodations with the building permit from ten to fifteen years.



An accommodation of that type is planned of being built in Frihamnen area in Gothenburg city as a part of River City's Development Plan. The interview with the River City Organization defined the site for the project and the typology of accommodation.



Context - THE WHERE



The location for the project was chosen based on cities awareness of the problem and River City's vision for the future development based on equality of opportunity for everyone. A permanent building for refugee accommodation offers a response and alternative to the temporary one planned for the area.

-framing of River City and Frihamnen visions relevant for the project



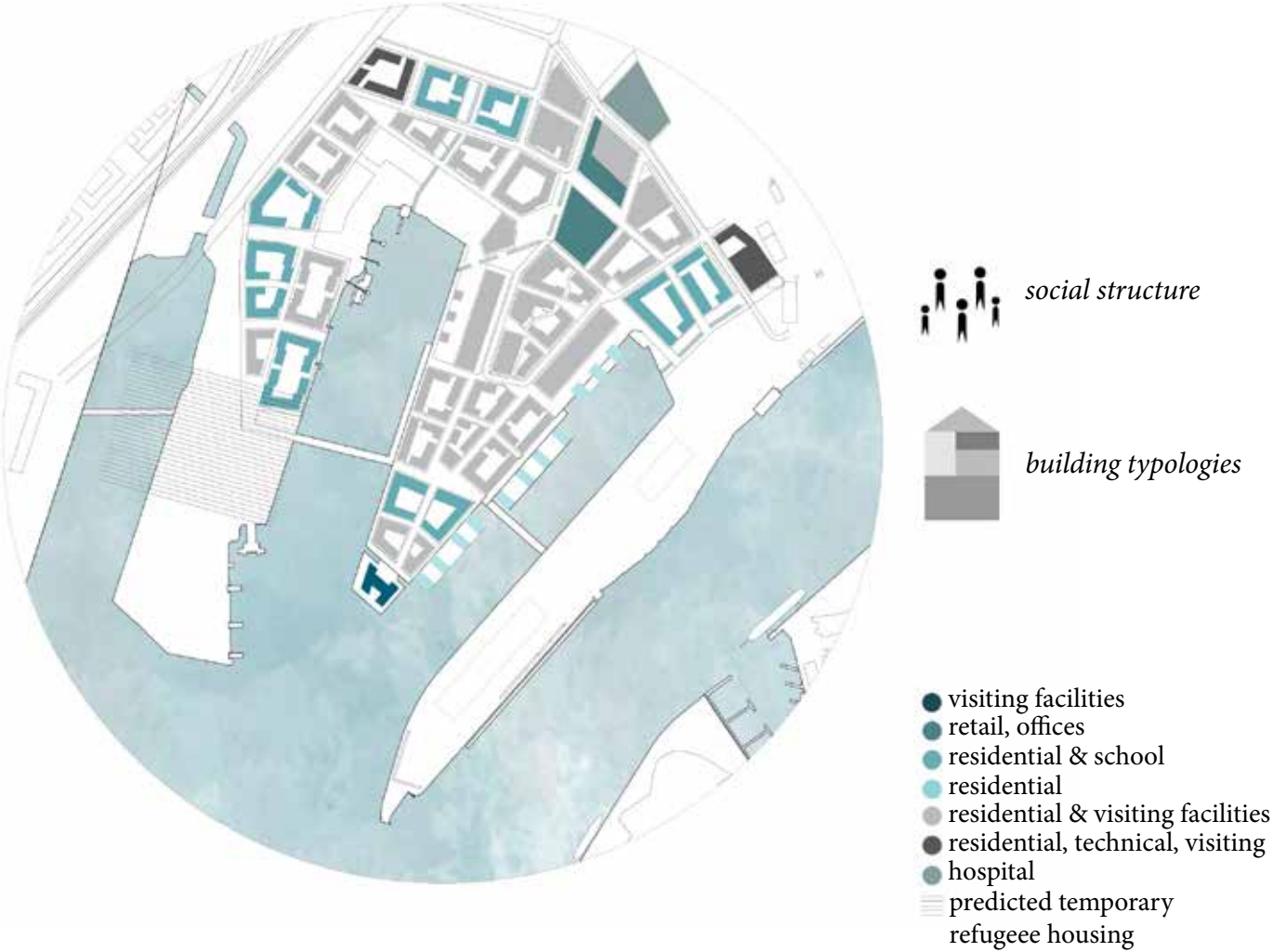
Frihamnen - Future Vision



The vision (retrieved from <http://alvstaden.goteborg.se>)

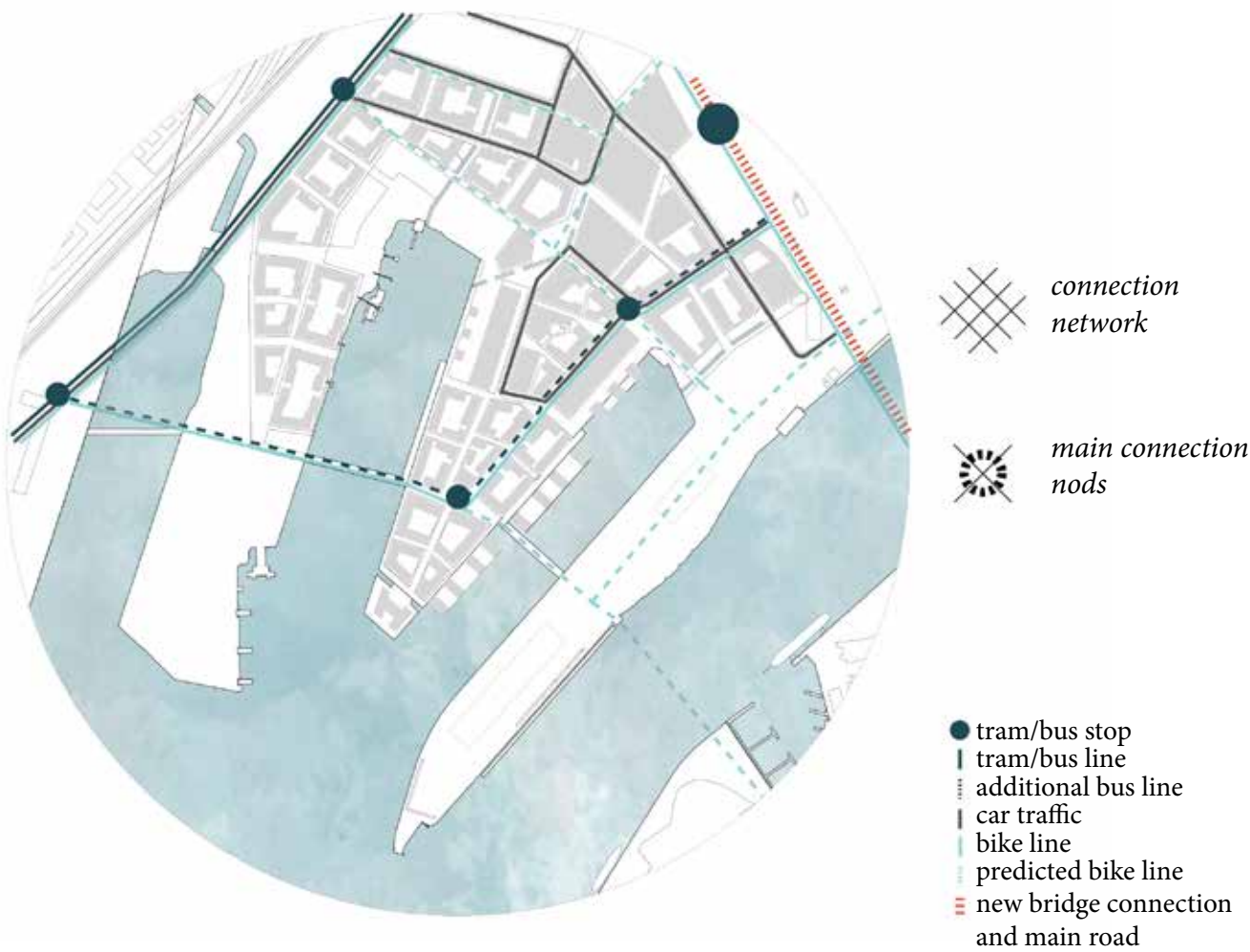
Frihamnen - Building Analysis

This analysis provided an insight in Frihamnen's future diverse building typology which combines private and different public functions.



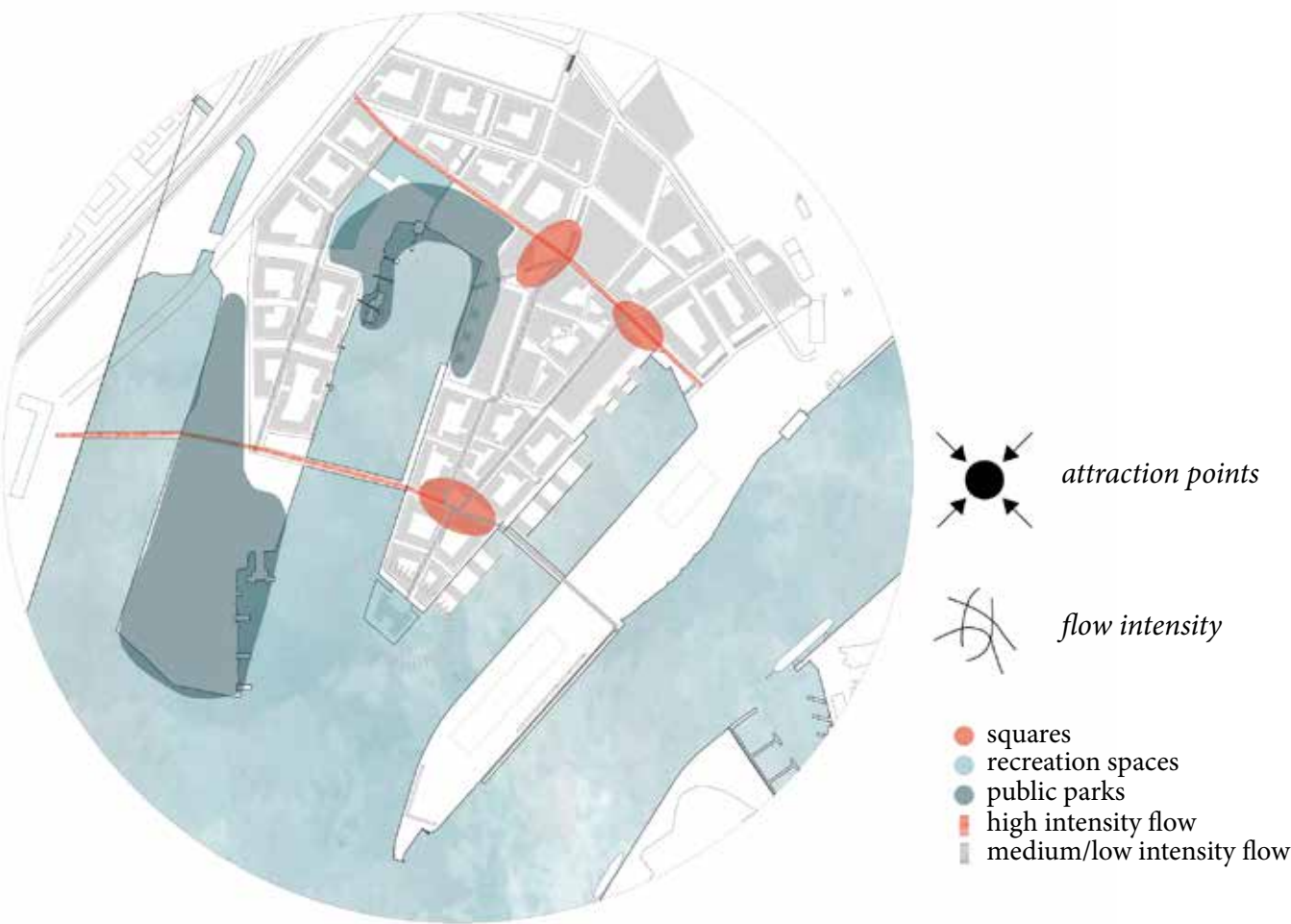
Frihamnen - Traffic Analysis

The traffic analysis shows the planned connection network and reveals the main connection nodes, a factor of high importance for future project location.



Frihamnen - Flows and Public Spaces

This analysis revealed the most important public spaces and recreational within the neighbourhood, as well as directions with estimated high intensity flows of people.





Site Selection

The specific project site was chosen base on previously done analysis. It is located in between the public square and a recreational area as well as in close proximity to the main connection lines and the tram stop, which connects the site to the city.



FINDINGS



Currently only temporary refugee accomodation

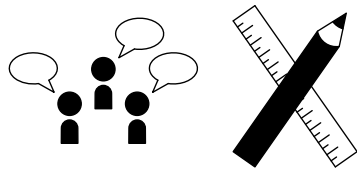


Importance of the location (central)



Benefits of co-living when it comes to social integration

The Concept



DESIGN WORKSHOP

The design workshop was held with the goal of basing future design decisions on actual needs and wants from the target group of project’s potential future users.

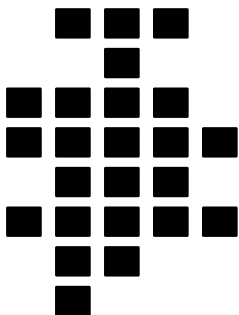
There were seven participants, of Syrian, Afghani and Palestinian origin. Three of the participants are students at Chalmers University, and the rest are asylum seekers or refugees.

The workshop was an opportunity to get constructive feedback from the target group but also an integration tool itself since it contributed into creating new social networks.

It was divided in three main parts:

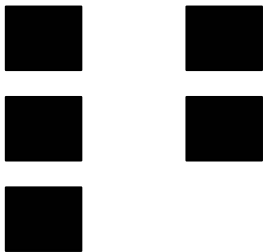
1. City Scale

-medium input



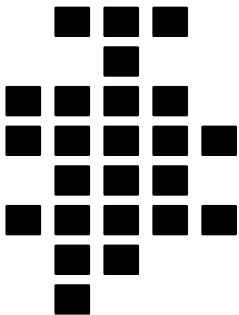
2. Neighbourhood Scale

-low input



3. Buildingscale Scale

-higg input

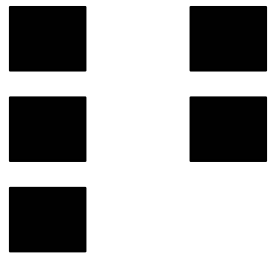


Gothenburg City

In the first part of the workshop the participants were asked to place different landmarks on the map of Gothenburg City. A physical model of Frihamnen was used as a central part of the task, surrounded with the map of the rest of the city. The purpose was to get a deeper understanding of the context we are in, as well as the relationship between central parts of the city and the project location.

*Workshop photos
(private collection)*





Frihamnen

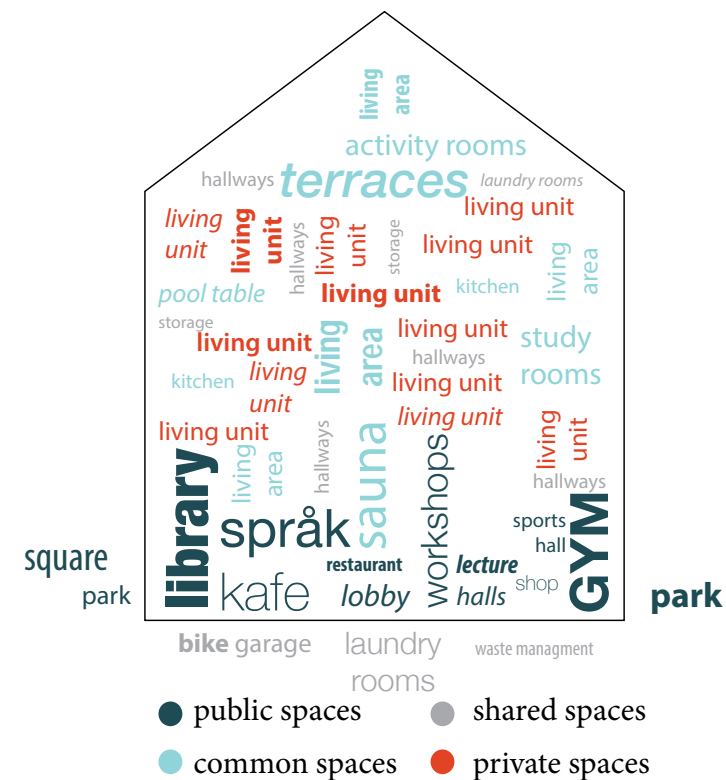
In the neighbourhood part of the workshop a zoom in model in scale 1:400 was used. The site for the future implementation was left empty while the surrounding future buildings were on the model to provide the vision for the future development. Participants were asked to try to build a volume of the future building with foam modules.

*Workshop photos
(private collection)*



In Synergy

In the last part participants were asked detailed questions about building's future functional program, and an opinion about the project idea so far and the idea of socially mixed housing shared between young refugees and students. At the end of this phase the functional program of the building was established as well as diverse spatial typologies within.



Importance of spatial diversity

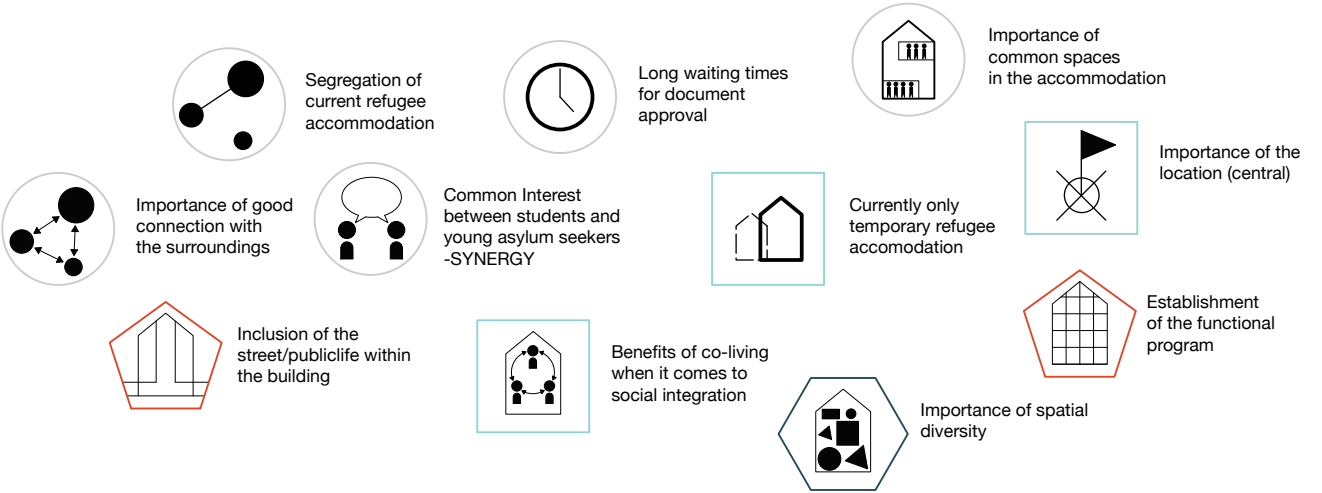


Inclusion of the street/publiclife within the building

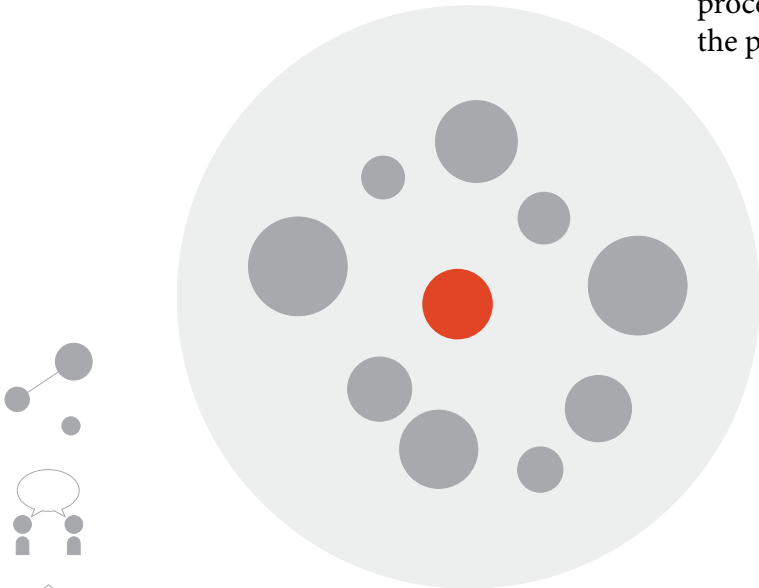


Establishment of the functional program

Strategies



1 INCLUSION



- socially mixed housing
- participation and collaboration
- public and common within

The findings gathered during the first three phases of the process were used and combined into three different strategies, each consisting of multiple parts.

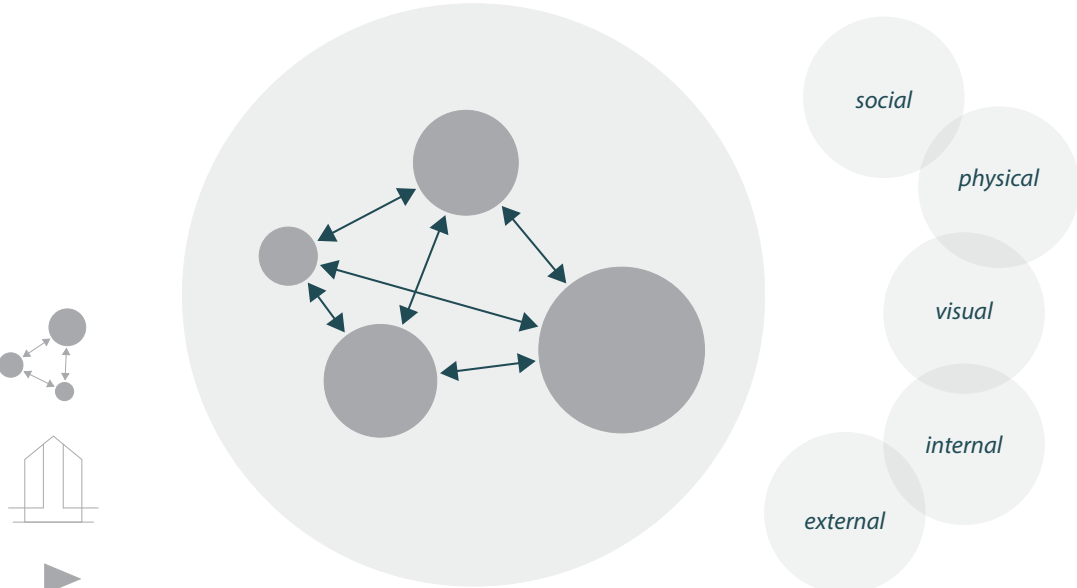
The strategies inclusion takes into consideration the participation and collaboration with the target group and different stakeholders during the process, socially mixes housing and inclusion of the public/ street life in the building itself.

2 DIVERSITY



Diversity not only of the social structure of the building, but of spatial typologies within the building itself.

3 CONNECTIONS



Connectivity refers both to social connections as well as the physical and visual connections between different levels and spaces.

Concepts

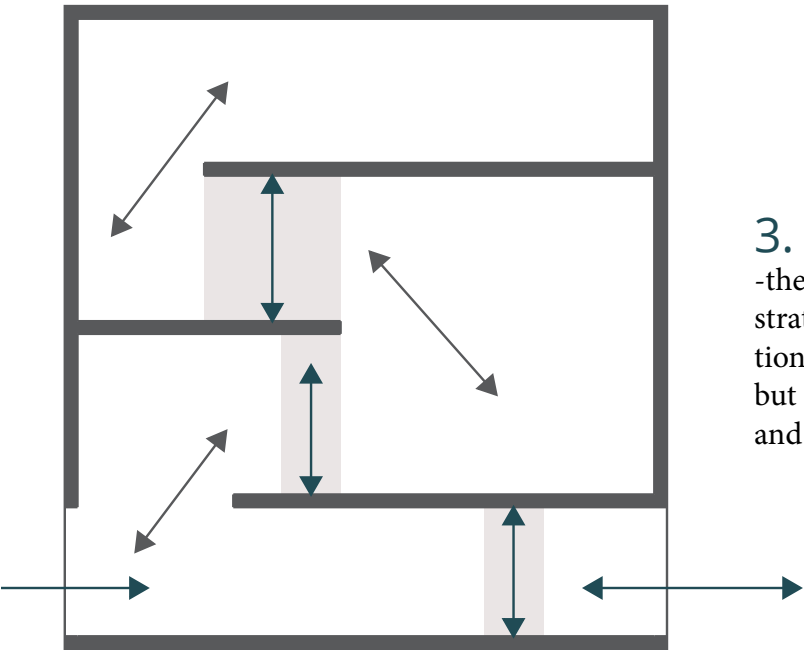
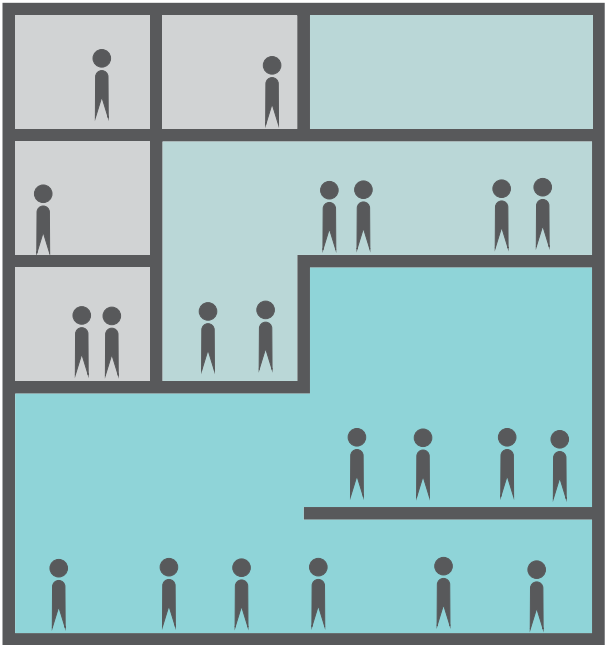
1. BRING IN THE PUBLIC

- the concept of bringing in the public within the building both horizontally and vertically refers to the strategy of inclusion
- by bringing in the public the flow of people around and in the building intensifies and in that way creates more opportunities for social interaction and creation of social networks



2. THINK DIVERSE

- when it comes to the second strategy, it finds it's implementation in creation of different spatial typologies, with different accessibility levels, sizes, numbers of users etc.
- diversity to create both environments where one can be alone in it's comfort zone but has the possibility to interact with it's surroundings on different levels



3. CONNECT

- the concept connectivity derives from the third strategy and it does not only refer to the connections within the building (physical and visual) but also to the connections to it's surrounding and the city

03

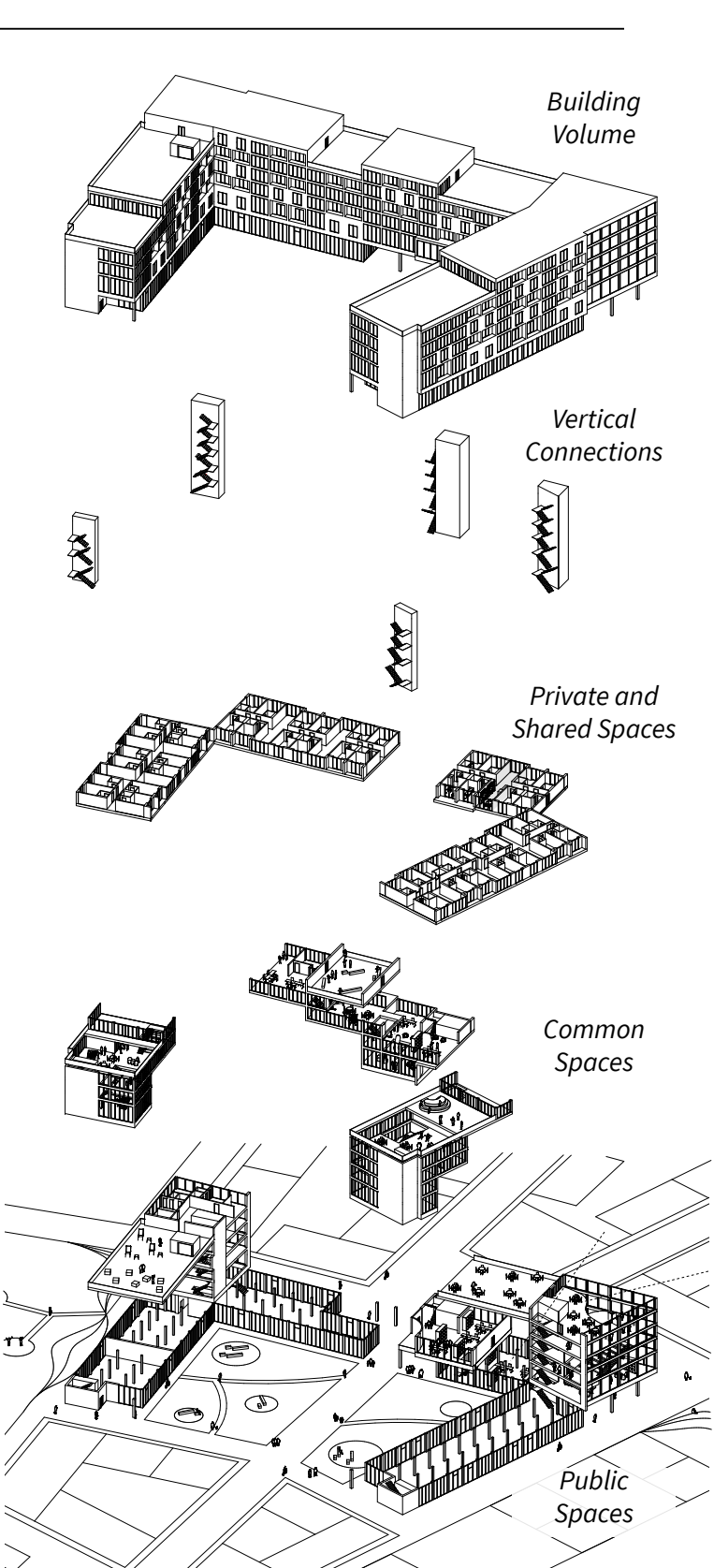
Design
Implementation

The Design Result

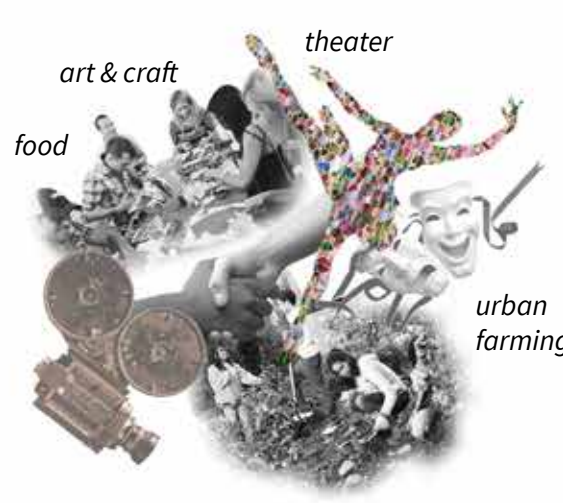
The housing complex combines both private spaces, which provide its users with accomodation, and shared, common and public spaces providing the users with cultural, educational and social developmental opportunities.



Model photos (scale 1:2000, dim. 50x50cm)



Sharing Knowledge

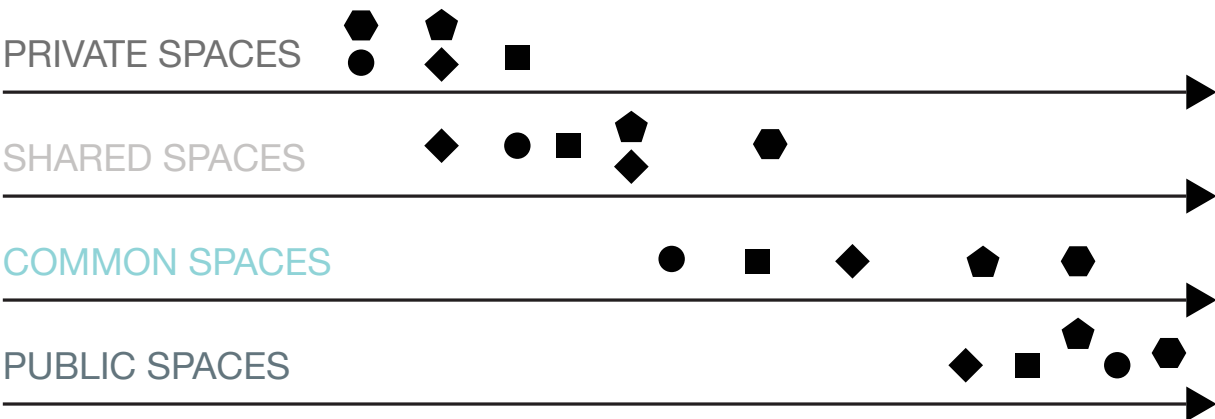


Co-Production

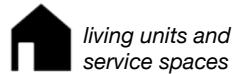
- number of users
- ◆ size
- permeability
- ◆ openness
- ◆ visual accessibility



Social Activities



SHARED SPACES AND PRIVATE UNITS



living units and
service spaces

COMMON SPACES



workshops



learning
halls



leisure
activity rooms

PUBLIC SPACES



workshops



urban
farming



sport and
game
center



bike kitchen
and garage

gym open kitchen library shops classrooms

Gradual Transition

Different spatial typologies promote social interaction on different levels (diverse number of people and different activities) and allow the resident the freedom of choice with whom and where to socialize.

Control of space can be construed as control of social interactions within that space, and this implies a state of privacy, or control of access to the self (Altman, 1975).

The establishment of a social structure and corresponding physical structure with communal spaces at various levels permits movement from small groups and spaces toward larger ones, and from the more private to the gradually more public spaces, giving a greater feeling of security and a stronger sense of belonging to the areas outside the private residence (Gehl, 2006.).

Private spaces provide intimate zones, where a

person can simply be alone and where the level of self-expression is the highest.

It is proved that when individuals are in control of the space they live in, and have privacy needs met, feelings of comfort and freedom are possible. This freedom permits relaxation and the individual development of the self (Smith, 1994).

Common spaces (kitchen, living-room, facilities and so on) can support shared activities, which gets people to meet and know each other and to have common experiences. Common experiences can help to create a community feeling, which can act as a springboard for small scale integration, eventually leading to integration at larger scale (city) (Wilhelm, 2013.). That is exactly why the public spaces now take part of the building itself, extending themselves in the building both horizontally and vertically, blurring the boundaries and the strict distinction between public and private.

Sime (1986.) states that “designing spaces” cannot really be done by only considering the material aspect of the design, the architectural form in itself, the object. This is also about social life and personal activities taking place in this architectural form, which is why the functional programme of the building promotes activities of knowledge sharing and co-production, as well as social activities, but also the idea of collaborative consumption and sharing of resources.

Collaborative consumption is not only about the green elements of sustainability. It is also about social sustainability since it's in many cases empowering people to make meaningful connections. Collaborative consumption is enabled through trust between strangers when it comes to sharing, renting or lending things to each other. This creates personal relationships so one major advantage with collaborative consumption is the social aspect of it. (Rachel Botsman, ted talks).



language
cafe

art gallery

theater

#private space



#shared space

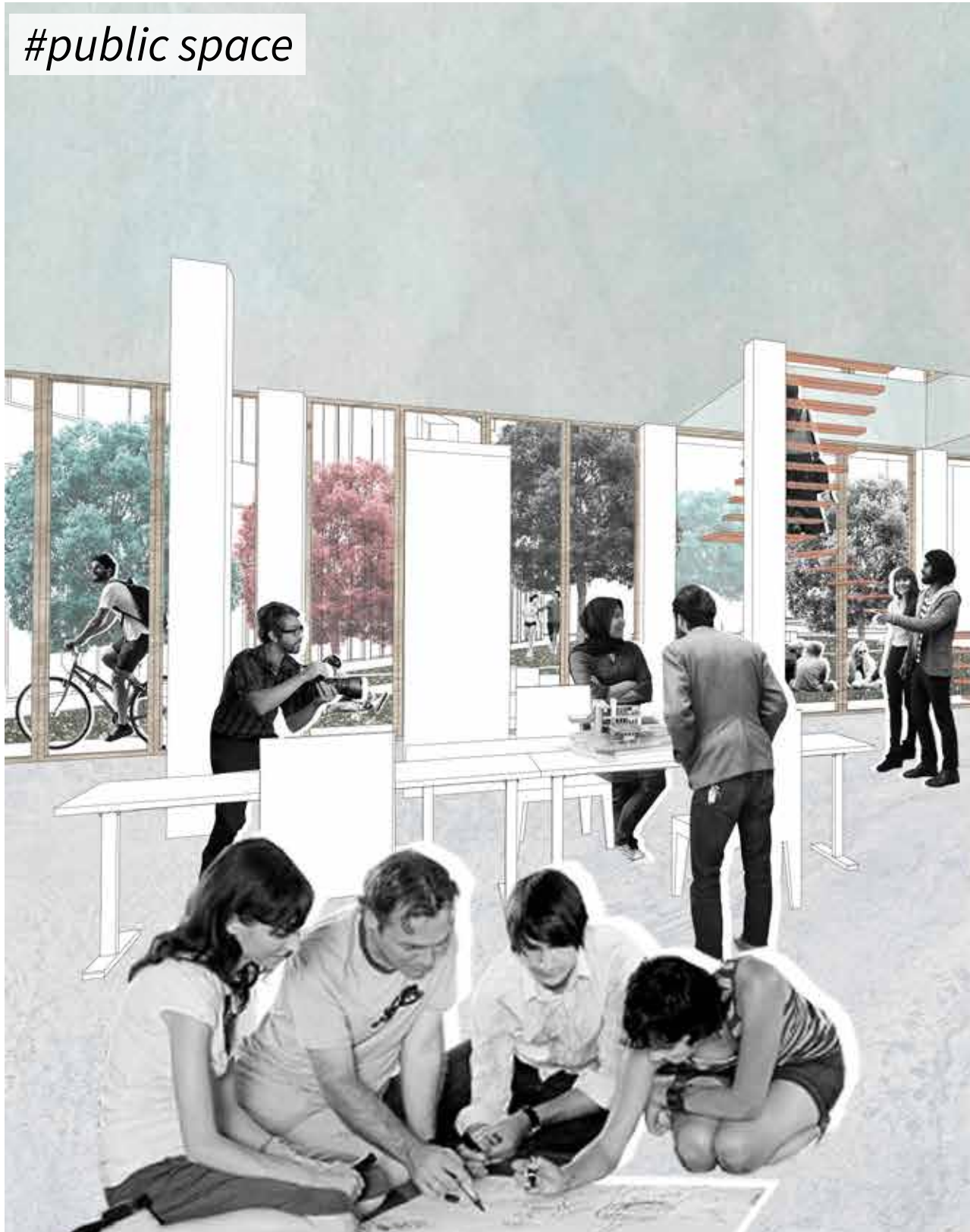


#common space

JUST MET JONAS
AND FATHI, THEY WILL
JOIN US AFTER THEIR
PING PONG MATCH...



#public space



THERE SEEMS TO BE A
WORKSHOP IN THE LIBRARY,
THERE IS SO MANY
PEOPLE ATTENDING...

#the street

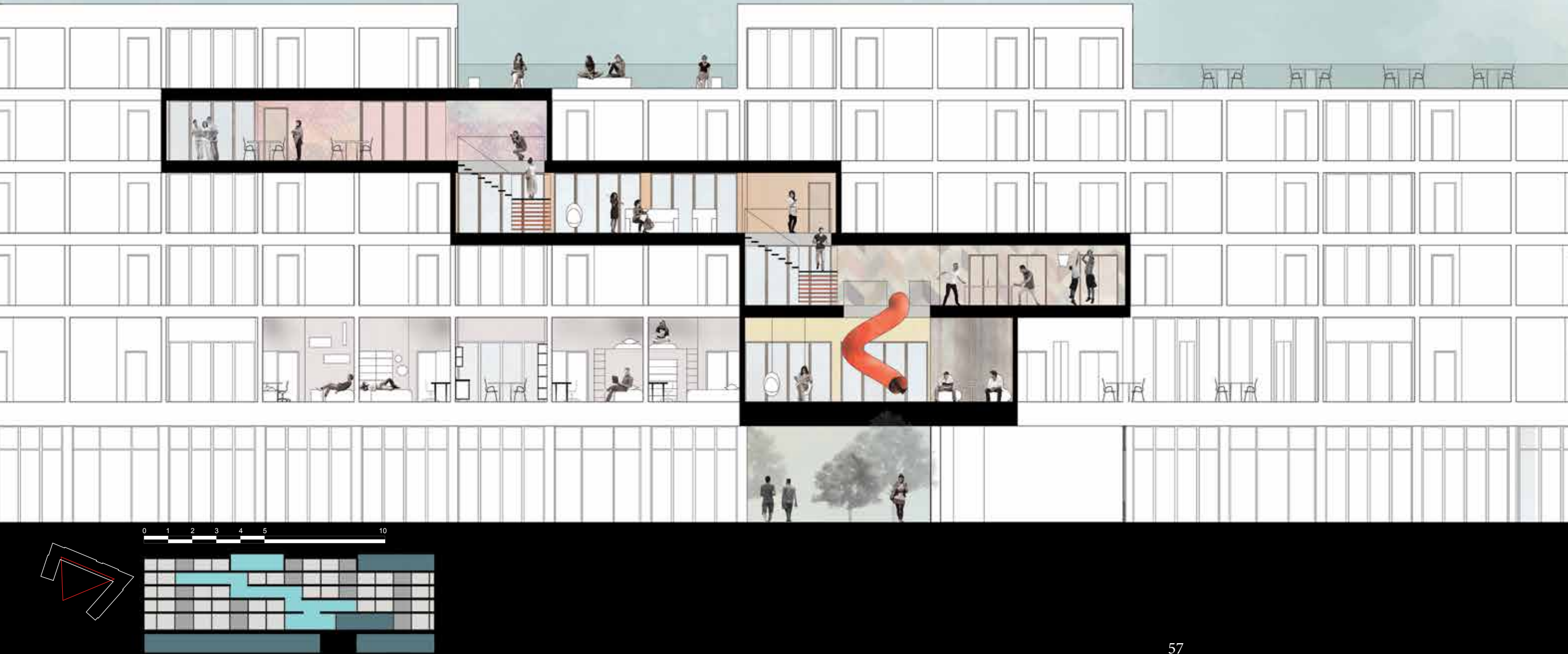
I THINK I SEE
YOU DOWN BY THE GAME
CENTER...I'M WALKING
TOWARDS YOU...



The Connection Link

The section illustrates the use of common spaces as an active link between different levels of the building (common spaces highlighted in turquoise). The part highlighted in grey shows four private

units sharing a kitchen space. The private unit on the first floor can be shared by two people due to the high ceiling, which enables the placement of the second bed on a gallery space.





Inviting In

The facade illustration demonstrates the public life in the building and the concept of inviting in the street life.

The diversity finds its application in facade materials in terms of visual accessibility, public parts remain transparent, always revealing what is happening inside, while the private ones stay more sheltered and intimate.

Being able to see what is going on in public spaces also can be an element of invitation. (Gehl, 2006.)

The activities happening inside the building contribute in creation of social networks and in that way promote and ease the process of integration.



Blurring the Boundaries

The floor plan of the first floor shows the distribution of different spaces as well as the location of public spaces in connection points between three residential blocks. The public parts entering the building are located close to the main connections nodes on the ground floor where the flow of the people is the highest.

The purpose is to invite the people inside and blur the boundaries between the strict distinction of indoors, outdoors, public, private.

What If?

The zoom in of the floor plan shows the possibility of future change due to the use of a regular structural grid. The scheme shows how two living units can be transformed into a forty five square meter apartment, while three units can be transformed into a sixty five square meter apartment.



04

Conclusion

Reflection and Recommendation

This Thesis has been an enriching and valuable experience, both professionally, but also personally. It confirmed the close connection and the important role architecture has when it comes to issues of social sustainability and it strengthened my desire to continue working with the topic in my future professional life.

The most valuable aspect of it was the co-creation process and the continuous dialogue established with the target group of project’s potential future users. The journey confirmed the importance of inclusion of different stakeholders in the design process and of approaching the work from a bottom-up perspective, giving this way the unheard voices the deserved importance and impact.

By developing a new urban typology, flexible enough to be located in different contexts, the thesis aims to prove the influence architecture has on the process of social integration.

Considering the high complexity of the topic, politic and economic issues with multiple stakeholders involved, there are a lot of aspects to be improved.

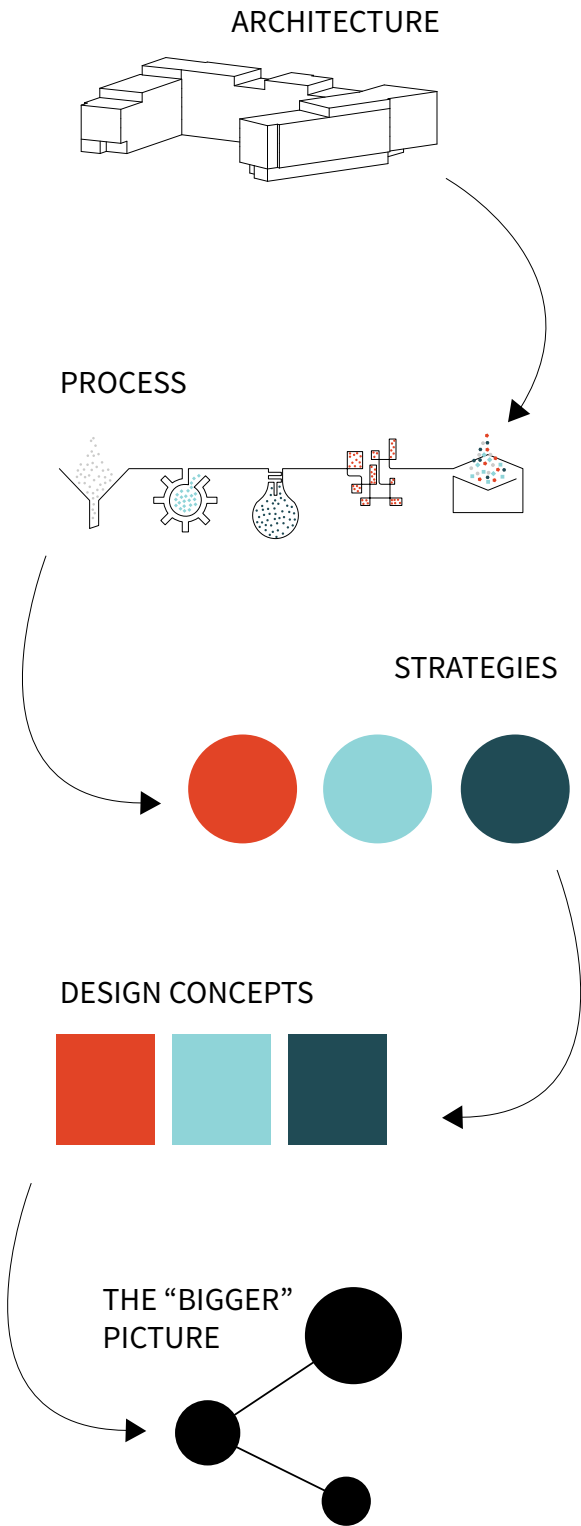
A significant amount of time was spent on research and organization of the participation process. However, it would have been interesting, if more time would have been available, to try to develop multiple alternatives of the urban typology to showcase that the concept is applicable independently of the context the project is located in.

Future work could also be done in terms of presenting the thesis to different stakeholders of the process, for example the Municipality and the River City, as well as some Aid Organizations, connecting them in that way and establishing a potential future collaboration.

Discussion

The thesis questions the responsibility and the role of an architect when it comes to social sustainability. The journey started from recognition of a big social challenge the society is facing today and it continued with a process that resulted in concepts and strategies that formed the final proposal.

The discussion behind is how to start from the design and the architect him or herself who shapes and critically reflects upon his or her process in order to form strategies and concepts that will from the start take into consideration the “bigger picture”.



References

- Altman, I. (1975). *The Environment and Social Behavior: Privacy, Personal Space, Territory, and Crowding*. Monterey.
- Edstrom, O. (2006.). *Final report on Sweden and final table on Sweden done by the Odysseus network for the European Commission on the Implementation of the directive on reception conditions for asylum seekers in: Sweden*. Retrieved from: http://ec.europa.eu/dgs/home-affairs/e-library/docs/pdf/sweden_2007_en_en.pdf
- Gehl, J. (2006). *Life Between the Buildings: Using Public Space*. København : The Danish Architectural Press
- Lundgren, J. and Tassi Carbonari, F. (2014). *FROM EMERGENCY SHELTERS TO HOMES: Design of paperboard housing exploring living conditions in post-disaster settlements*. Master Thesis, Department of Architecture. Gothenburg: Chalmers University of Technology
- Pennartz, P. J. (1986). *Atmosphere at home: A qualitative approach*. Journal of Environmental Psychology, pp. 135-153.
- Sandercock, L. and Attili, G. (2009). *Where Strangers Become Neighbours : Integrating Immigrants in Vancouver, Canada*. Dordrecht : Springer Netherlands
- Schramm, H.L. (2015). *Integrative Housing*. Master Thesis, Department of Architecture. Gothenburg: Chalmers University of Technology
- Sime, Jonathan D. (1986). *Creating places or designing spaces?*. Journal of Environmental Psychology, pp. 49-63
- Smith, S. G. (1994). *The essential qualities of a home*. Journal of Environmental Psychology, pp. 31-46.
- TED, (2010., December 17th). *Rachel Botsman: The Case for Collaborative Consumption*. Retrieved from: <https://www.youtube.com/watch?v=AQa3kUJPEko>
- Westbro, D.U. (2010.). *Living together - cohousing ideas and realities around the world : proceedings from the International Collaborative Housing Conference in Stockholm 5-9 May 2010*. Stockholm : Division of Urban and Regional Studies, Royal Institute of Technology in Collaboration with Kollektivhus NU
- Wilhelm, M. (2013.). *The re-creation of home in a foreign urban environment*. Master Thesis, Department of Architecture. Gothenburg: Chalmers University of Technology



CHALMERS

Ena Sredanovic

IN SYNERGY

An Architectural Pursuit for Integration

Master Thesis at Chalmers Architecture

Spring Term 2016

Master Program in Architecture and Urban Design

Chalmers University of Technology

Gothenburg, Sweden

Tutor: Emilio Brandao

Examiner: Joaquim Tarraso