

H O M E A L O N E

*Investigating the one-person household
typology*

Master's Thesis by Ellinor Eskilsson
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CHALMERS

Home Alone

Master's Thesis 2016

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ABSTRACT

The one person household is the most common way to live in Gothenburg today, making up 42% of all homes. This group of dwellers is overlooked, since both the existing housing stock as well as the new production derives from the outdated norm of the nuclear family. Alternative solutions often suggest either co-housing and new ways of residing together or minimum space short term solutions, but the numbers say it all - many urbanites spend parts of their adult lives dwelling alone.

This thesis aims to investigate design for the one person household in an urban setting, without assuming that the solitude is unintended. The method has been to map the user group through statistical research, to contemplate how a new user group changes the preconditions of housing design and to understand the social bonds in a building through literary studies and previous case studies. Entering

the design process, the site was analysed in regards of history, urban context, character and public space.

The result is a suggestion for a housing at the site of Kapellplatsen in central Gothenburg. Discoveries regarding the lone dweller are shown in the organisation of the building and the plan layout, while the preconditions of the site inform the materiality and structure. The relationship between the living situation of the dweller, the private and communal space and the urban situation, and how these are connected to spatial and architectural qualities are the central themes.

The discussion will hopefully regard positive and problematic aspects of living alone and how the range of solutions might be broadened. The thesis should inspire further discussion and research of the role of the seemingly overlooked sole dwellers in our cities.

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1 / INTRODUCTION

INTRODUCTION

BACKGROUND

Commencing the work with this Master Thesis, the aim was a proposal for housing. Having worked in a housing studio, I had seen the strict limitations of rules and demands and how the space within budgets and time frames sometimes disallows deeper reflection. With this came the realisation that I wanted to spend my thesis semester making an investigation into this mayor field of the architectural trade.

Initially, I wanted to go into the topic of shared housing. I have lived in shared flats, a positive experience. But when assessing the current housing situation of Sweden, I found a group of dwellers, on the opposite side of the scale compared to co-housing. The lone dwellers. Not only in Sweden but on a global scale as well, the lone dweller inhabits our cities. The discourse regarding this growing user group often focuses on space saving solutions and co-housing, and I would like to take critical stance against this. Because, while these solutions might apply to certain user groups, not everyone benefits from a small apartment, being prevented to lay out the functions of the apartment after ones own will. And not everyone wants to share their housing - they simply prefer to live on their own (note: not alone!).

Thoughts like these inspired me to look further into the field of the lone dweller - and I also found it to be an interesting and intriguing design challenge - to take something that is as standardised as the plan layout for an apartment, and redesign it deriving from new preconditions.

To bring depth to this design challenge, the aim was to come far in the design of the building, and to reach a high level of detailing. Architectural quality regarding construction, material and the space it creates should be researched - a core competence of the trade itself. However, the most interesting questions asked will be the ones regarding the single household - such a common and popular typology, yet questioned and perhaps regarded outdated. Re-inventing the single household might make an interesting contribution to the discussion, not being juxtaposed against co-housing and sharing but rather put next to it, as a way to broaden how we discuss the current housing situation.

INTRODUCTION

QUESTIONS & DELIMITATIONS

Main questions are formulated in such a way as to aid in the design process.

- + How does the preconditions of housing design change, when deriving from the lone dweller?
- + What are the characteristics of the lone dweller, and how can they inform the building design?
- + How can the building design connect the lone dweller to the urban situation?

The aim is to achieve more of a practical or functional understanding of the target group, rather than a social or emotional. The sources used in this

project therefore focuses on conclusions that might inform the design.

My contribution will be the architectural proposal, which is my tool to formulate an addition to the debate. There is a broad discussion about housing, and seemingly endless fields to do research within. I believe that the limitation of focusing on the single household and will help the project to stay narrow, and aid me in moving on into the construction and materiality of space early enough to give attention to the intended level of detail.

METHOD

This thesis consists of two parts: a background partially informing the design, and a designed suggestion for a building.

The background research is presented in the CONTEXT chapter, where I will orient myself in the field of the single household and the individual living by themselves. This is to raise and understand contextual issues, which can be evaluated and prioritized, and then hopefully integrated in the design. The method used has been gathering statistical data, literary studies, reflecting upon the dwelling situation of the user group, as well as mapping the urban functions of the site, building a landscape model, studying the morphology surrounding the site. The result where evaluated, in some cases discarded and in some cases informing the design.

The building design is presented in DESIGN PROPOSAL. Gathering the material which might inform the design, I continuously worked on the design proposal. The anticipation was to let the findings of the background research inform the design. The making of the design has been through the production of sketches, conceptual work, model building - put short, the traditional tools of the architect. I will move from the big scale, with volume studies, main concept trials trying different solutions regarding the single household, spatial design, construction, into materiality and detailing.

I would also like to mention discussion with others, friends, colleagues and my tutor as important influences throughout the process.

2 / CONTEXT

CONTEXT

RESEARCH AIM



POSITIONING THE LONE DWELLER

Impact of individual lifestyle to architecture

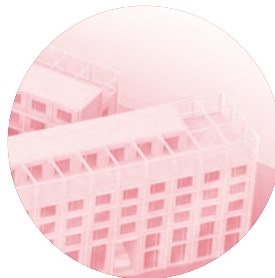
Research
Reference
Reasoning



SITE ANALYSIS

Understanding the location

History
Typology
Character
Urbanity



INFORMING THE PROJECT

The demands raised when aiming for the buildable

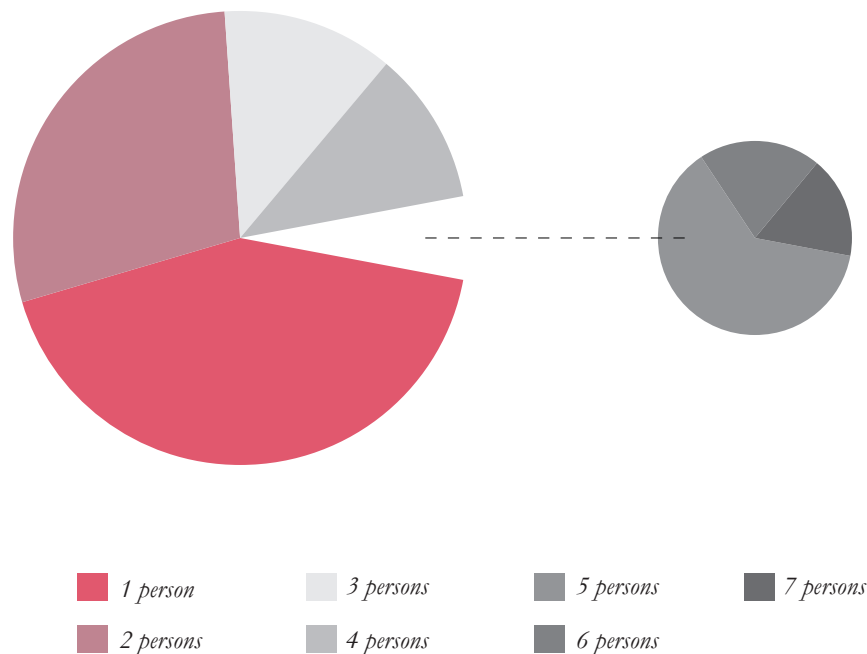
Social + spatial values
Function
Detail

The research has been carried out, intending to inform the design proposal in different ways. During the semester, I have conducted two parallel fields of research. The Positioning of the Lone Dweller

regards the state of the single household. The Site Analysis is a way to achieve a deep understanding of the site, allowing the identification of site character to be a part of the project.

CONTEXT

POSITIONING THE LONE DWELLER



A. Percentage of households according to household size, Gothenburg, 2015

As a part of understanding the chosen target group, statistical data was extracted and analysed.

As stated, almost half of all households (42%) are single ones. A common perception is that these single dwellers are mainly made up of younger people, often students, and maybe some elders, whose kids have left home, perhaps newly separated or with a recently deceased partner. This proved to be a misconception. When looking at age and gender group, over half of the group is between the age of 30-65 years (Diagrams B and C). Men seem to live alone in their younger ages, and women in a later stage in life. But the difference in gender might be influenced by the fact that in many cases, children with divorced families are often written on their mothers' address - even though they might spend time at their fathers' house as well.

The fact that lone dwellers exist in all age groups is interesting, since the design preconditions might be changed by this. Should keeping costs as low as possible, like in the case with students, be the primary target? Perhaps a one room apartment isn't what the dweller would wish for over a longer period of time?

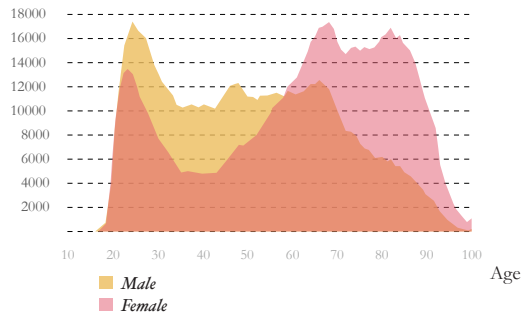
CONTEXT

POSITIONING THE LONE DWELLER

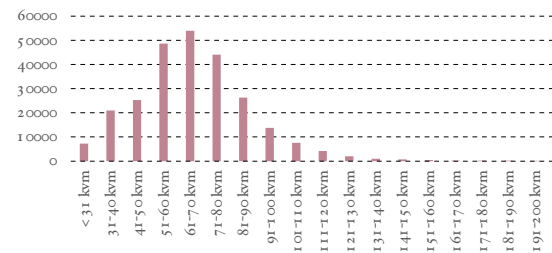
Who are the single dwellers?

What is being built?

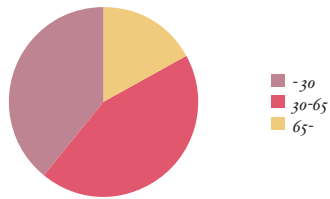
B. Single dwellers, age and gender, 2012



D. Apartments stock after size, Göteborg 2014



C. Percentage of single dwellers according to age, 2012, Sweden

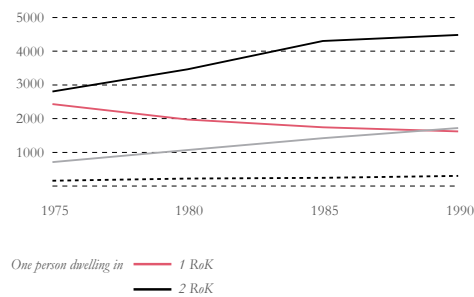


C. Completed apartments in size, Gothenburg 2006

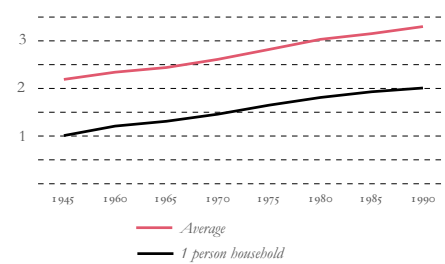


How do they live?

E. Single dwellers after apartment size over time



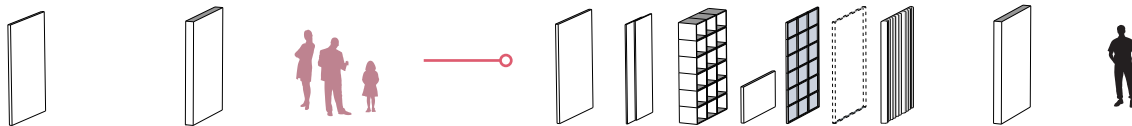
F. Room unit per dweller over time



All statistics extracted from SCB, Statistiska Centralbyrån

CONTEXT

POSITIONING THE LONE DWELLER



No need for privacy within apartment

Single dwellerisms

While knowing who the lone dweller is is important, I also contemplated on how functions change when dwelling alone. The boundaries of the housing block are moved. Living with other people, your private room is the most intimate zone, needing to be soundproof and possible to shut close. Common areas shared within the apartment is the next zone, and thereafter the staircase and entrance, shared with neighbours. When dwelling alone, the whole apartment is your intimate zone. For everyday life, there is no need for walls. One person can not cook and sleep at the same time. The zoning changes in comparison with the shared flat: there is no zone in between private and shared with neighbours. The primary network of the dweller within the limit of the building changes from the family to the neighbours.

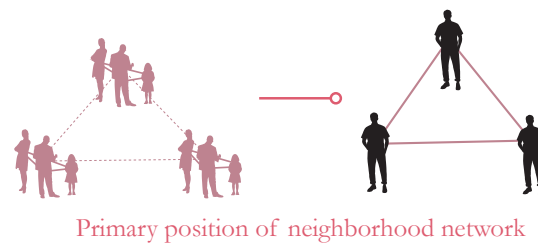
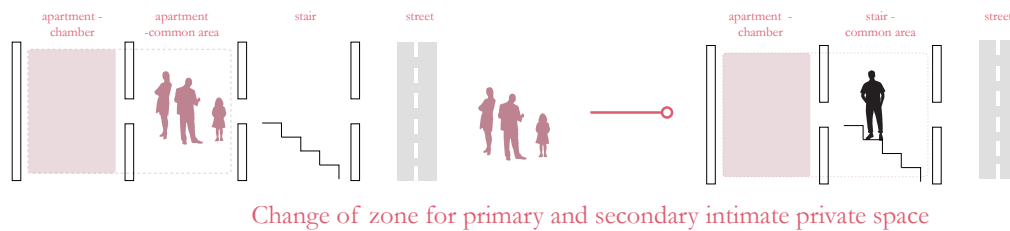
The social network of the building

As stated, the neighbourhood network might become more important when dwelling alone, since you don't have anyone within your apartment. Supporting functions of the house should become more important, encouraging neighbour networking.

In his Master's Thesis *Together on our own* Jens Axelsson investigates what makes resilient housing communities, focusing on case studies of co-housing projects in Sweden. Important conclusions, inspiring this project, is that even though contact between neighbours in general is regarded as positive due to both societal as well as safety effects, integrity and control is also important. He also cites that the residential community might have an even bigger importance for people dwelling alone, as well as elderly and children, as they might have difficulties

CONTEXT

POSITIONING THE LONE DWELLER



moving to other locations to meet family and friends. Axelsson also points out, that in two of his case studies communication areas are regarded as important places to greet the neighbours.

Sociologist Sören Olsson also attempts to map important factors regarding successful communities in his book *Det Lilla Grannskapet* (The Small Neighbourhood). Unlike Axelsson, his case studies are based on regular houses, of varying types and located in different urban areas. He investigates what kind of neighbourhoods relations are wanted, and how the environments closest to the apartment such as courtyards and staircases contribute to the communities. Olsson concludes, similar to Axelsson, that although positive contacts with neighbours are an important factor for safety and well-being within the residential community, no one wants to be intrusive or nosey. Integrity is crucial, and the apartment door

should be a clear social threshold.

He also concludes four reasons as to *why* people benefit from good relations with neighbours:

- Recognition of other inhabitants, control of who has access to semi-private areas
- A pleasant social environment.
- Trading services, giving and receiving aid.
- Joint problem solving - being able to control and intervene when problematic situations arise.

Another of Olssons observations worth mentioning is the case of a building with a very beautiful and special courtyard. Even though there had been a high turnover of residents, the residential community was still strong, which Olsson deduces the courtyard contributes to. Adding space of high value might also strengthen the bonds in the building.

CONTEXT

POSITIONING THE LONE DWELLER



Detraditionalisation of core family



Detraditionalisation of building?

Freedom of choice



DIY?

In their article *Housing Identity & Individualisation* (2008) architects Helena Casanova and Jesus Hernandez draw a timeline and contextualize the dweller as an individual in the context of the 20th century. The writers state, that when society has changed from producer-focused into consumer-focused, shouldn't housing to a greater extent be possible to tailor? In what way could architecture or spatial planning change under the pressure of individualization? They mention three different aspects of the individualization process and strategies to deal with them:

The first is detraditionalisation - outdated bonds of the core family are replaced with temporary relations and a wide array of living situations. When the way of life is no longer orchestrated based on traditions, but on individual choice, there should be a hybridization of building typologies, mixing different

form in individual and collective housing, of classic and new typologies. The second is emancipation - the ability to decide for yourself, which should make the house an object of personalisations. What possibilities can we tailor? How can we express ourselves through our living situation? The house is a biographical object, and should to a wider extent be appropriated. They name the possibility to choose types, to choose options and to Do-it-yourself as solutions. The third is the complex relationship between the heterogenised individual and the urban community. How does the contemporary dweller display his or her individuality, and how can a balance be achieved between individual expression and the overall urban fabric.

Summarizing what is stated in the article, the housing building should be less traditional and provide greater possibility of flexible and DIY-friendly solutions.

CONTEXT

POSITIONING THE LONE DWELLER

CONCLUSION???

During research, these are the important points of influence to the design:

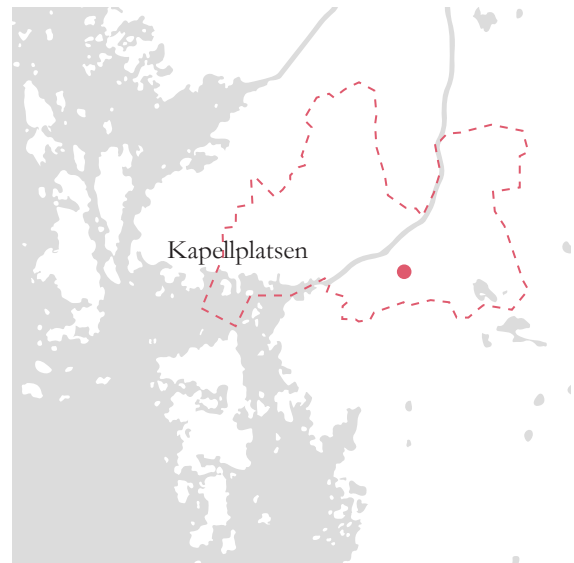
- The lone dweller is a broad user group with different economies, family situations, lifestyles etc.
- Knowing your neighbour is a good thing, but only to a certain extent.
- Function planning & adding space of value benefits social ties within the building
- Detraditionalisation of the life we live should mean a detraditionalisation of typologies regarding building and plan typologies

As concluded earlier, that the lone dweller is a wide user group with a range of economic possibilities, as well as them in some cases being a part of untraditional family structure.



CONTEXT

SITE



Introducing Kapellplatsen

The site at Kapellplatsen was chosen due to its central location, both challenging and with great potential. Among strengths are the already thriving urban life and excellent connectivity. The challenges are the many surrounding typologies and urban fabrics.

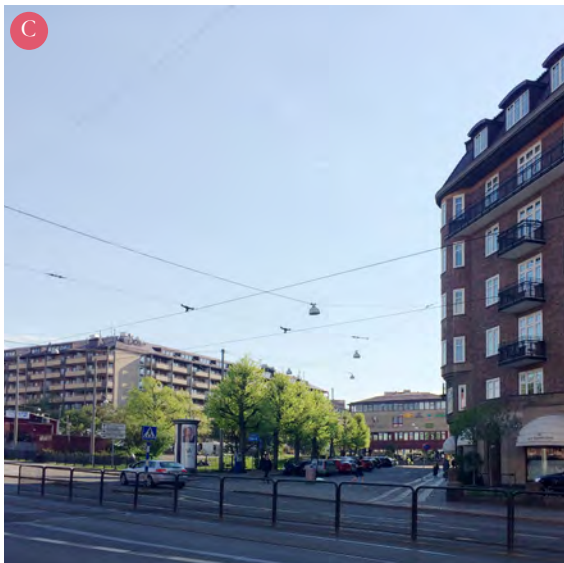
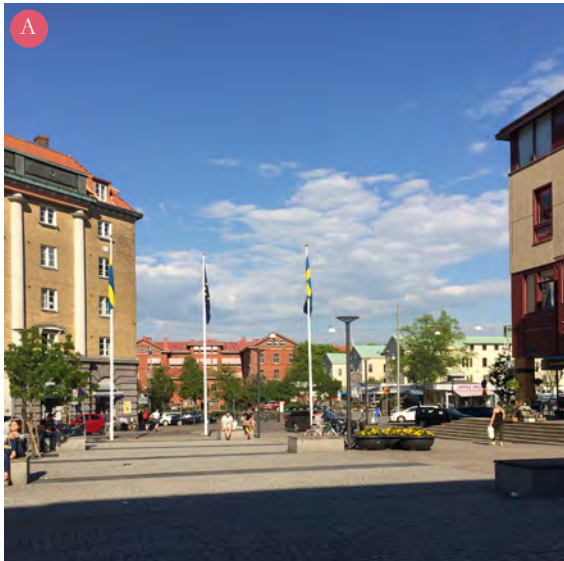
Sources regarding information about the site has been material from the city planning office, site visits and visits to the archive of the city. The purpose

of conducting a thorough site research, is to clarify what the general influences creating the character of the place are. The research has been conducted to place the site in the urban fabric of communication, morphology, historical development, materiality, function and public space. The aim of the site research is to make informed decisions on the building design in volume and expression.



CONTEXT

SITE



- | | | |
|------------------|--------------------------|-------------------------------|
| Tram | 11. Restaurant | 21. Centre for Sustainability |
| Bike path | 12. Gym | 22. Daycare centre |
| 1. Electrician | 13. Bank | 23. Landala Chapel |
| 2. Veterinary | 14. Restaurant | |
| 3. Fruit market | 15. Health store | |
| 4. Pharmacy | 16. Candy store | |
| 6. French school | 17. Bookstore + café | |
| 7. Dentist | 18. Shoemaker | |
| 8. Florist | 19. Hairdresser | |
| 9. Grocery store | 20. International school | |
| 10. Liquor store | | |

CONTEXT

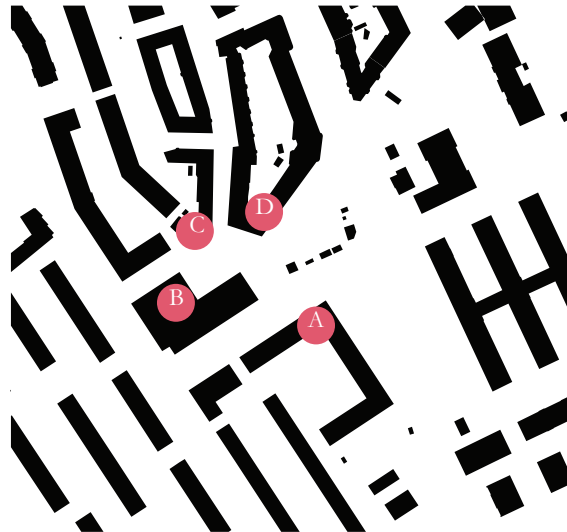
SITE



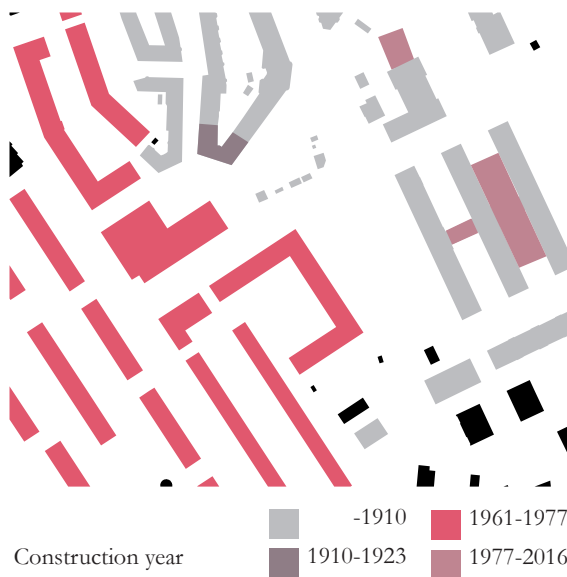
Figure Ground with districts

Morphology & Character

The site is placed in a breaking point, from more than one point of view. The inner city blocks of Vasa meets the Landshövdingehouses and brick blocks of old Landala as well as the concrete slabs of new Landala. To the east, in Lorensberg, there are some blocks, but also free standing buildings. Many early 20th century school buildings and brick villas can be found here. All this - freestanding volumes, brick block in national Romanticism, and a 1970s modernist plan- come together at the site.



Building investigations



Construction year

Since the surrounding houses vary in period of construction, there is a big palette of materials to be found here.

CONTEXT

SITE

A 1970s concrete slab



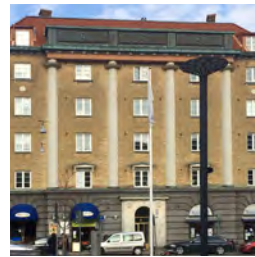
C Landshövdingehouse



D Early 20th century brick block



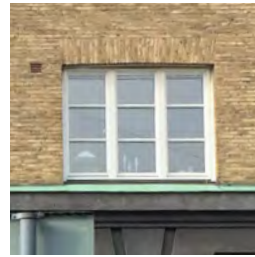
Facade



Plinth



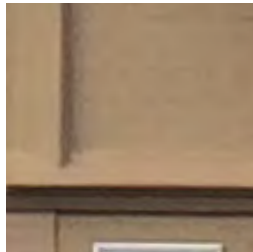
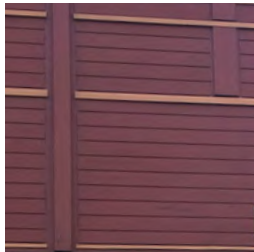
Window



Detail



Material



CONTEXT

SITE - PUBLIC + COMMERCIAL



Mapping public and commercial space, inspired by
Giambattista Nolli's 1748 plan over Rome.

CONTEXT

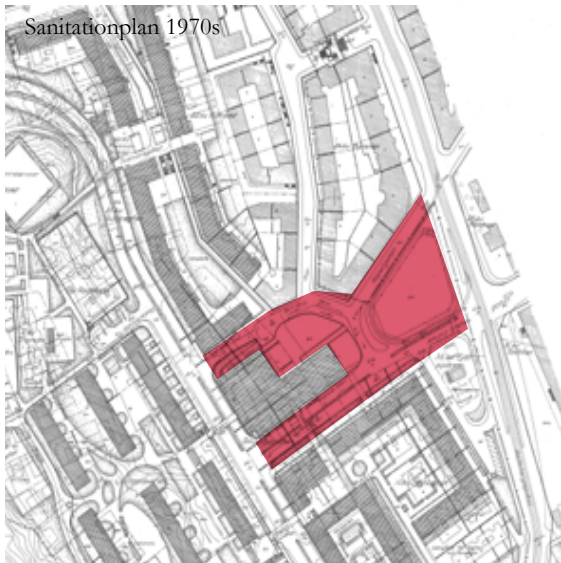
SITE - MORPHOLOGY



Categorizing typologies surrounding the site.

CONTEXT

SITE - DEVELOPMENT



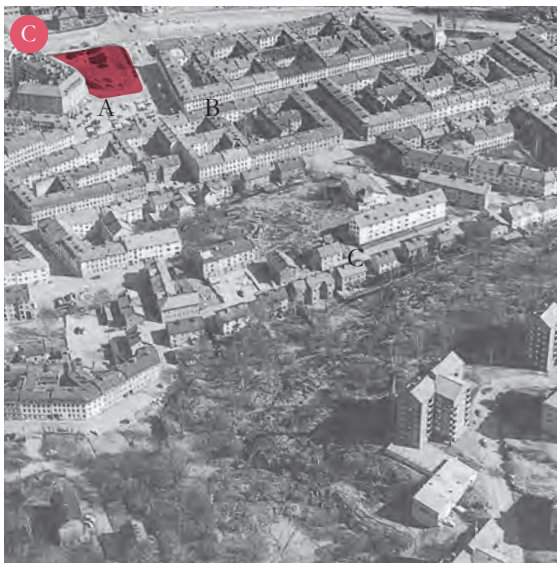
Historical development

In the 1890 plan, Kapellplatsen is mapped as what is today called Landala Torg - the square in front of the 1970s commercial building. It's name derives from the chapel, initially placed here but later moved south to its current location. Kapellplatsen was an important hub for markets, and before the sanitation the area consisted mostly of wooden buildings. For a period of time, the tram looped around the building site as this was the end station. Due to sanitary issues, a big part of the Göteborg Landshövdingehouses were

tore down and replaced by modernists slabs. This happened to a vast part of old Landala - housing blocks were torn down and replaced, and there was an addition of a small commercial centre to the square. This had the effect of somewhat turning the square "inside out", changing its logic from a walled in space to a space surrounding an object.

CONTEXT

SITE - DEVELOPMENT



a. Market at Kapellplatsen. The house to the right is still there.

b. Streetview towards the square. All houses except for the one in the middle is gone, and the sightline is blocked by the commercial building.

c. Aerial view of old Landala, with the site marked in pink.

d. Higher up in the terrain, to the west, there were also smaller wooden houses of a free standing type.

SITE - MUNICIPAL INTENTIONS

Göteborgs Stad
Stadsbyggnadskontoret

Bevarandeprogram

Kulturhistoriskt värdefull bebyggelse - ett program för bevarande

I Göteborg finns det flera miljoner och byggnader som representerar en viktig del av vår historia och som betyder mycket för stadsbilden. I stadens bevarandeprogram, som nu finns på göteborg.se, kan du läsa mer om denna bebyggelse samt vilka lagar och regler som gäller för den.



Göteborgs Stads bevarandeprogram är utarbetat av kommunstyrelsen och är en viktig hjälp till plan- och byggnadsnämnden.

Bevarandeprogrammet finns nu tillgängligt i sin helhet på Göteborgs Stads webbplats.

De byggnader och bebyggelser som finns med i bevarandeprogrammet har ett kulturhistoriskt värde. Programmet beskriver också vad som är särskilt värdefullt eller karaktäristiskt.

Bevarandeprogrammet reglerar också under 1987 i plan- och bygglagen, främst med avseende på yttre utseende, färdighet och försäkring och underhåll.

Ändringen i alla byggnader, oavsett när de är uppförda, måste utföras varannat och ta hänsyn till byggnadens specifika karaktär.

Ändringar av en byggnad och följande av en byggnad med statligt värde är så att mer än hälften till byggnadens konstruktion och till ett av dess grundläggande tekniska, historiska, kulturhistoriska, miljömässiga och konstnärliga värden ska bevaras. FBL 3:17

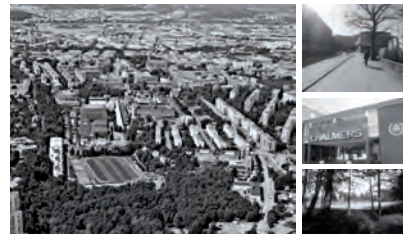
För särskilt värdefulla byggnader, exempelvis bebyggelse som ingår i bevarandeprogrammet, gäller dockens färdighet och försäkring.

Byggnader som är särskilt värdefulla av historisk, kulturhistorisk, miljömässig eller konstnärlig betydelse eller som ingår i bevarandeprogrammet är också karaktär för nya byggnader. FBL 3:13

Bevarandeprogrammet finns på www.goteborg.se/byggarkiv. Mer information om lagar och bestämmelser till www.boverket.se.

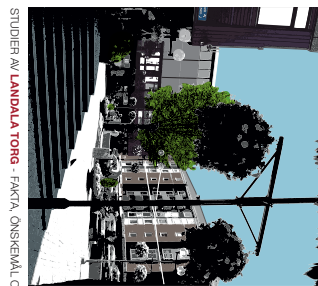
Adress: Box 2054, 402 11 Göteborg, Besöksadress: Kungälvsgatan 25
Telefon: 031 268 00 00, www.goteborg.se, byggnadskontoret@goteborg.se

2012

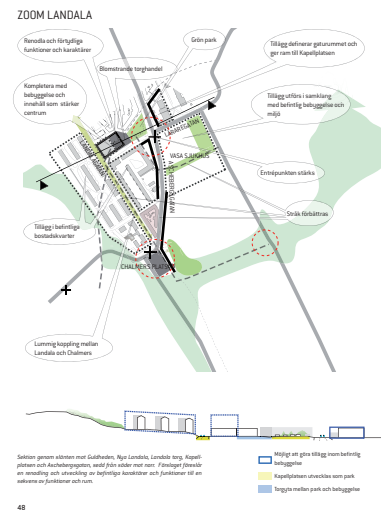


UNDERLAG OCH FÖRDJUPNING PROGRAM FÖR CHALMERS JOHANNEBERG, MOSSEN OCH LANDALA

SAMRÄDSHANDLING, OKTOBER 2012
DIARIENUMMER: 0515/10



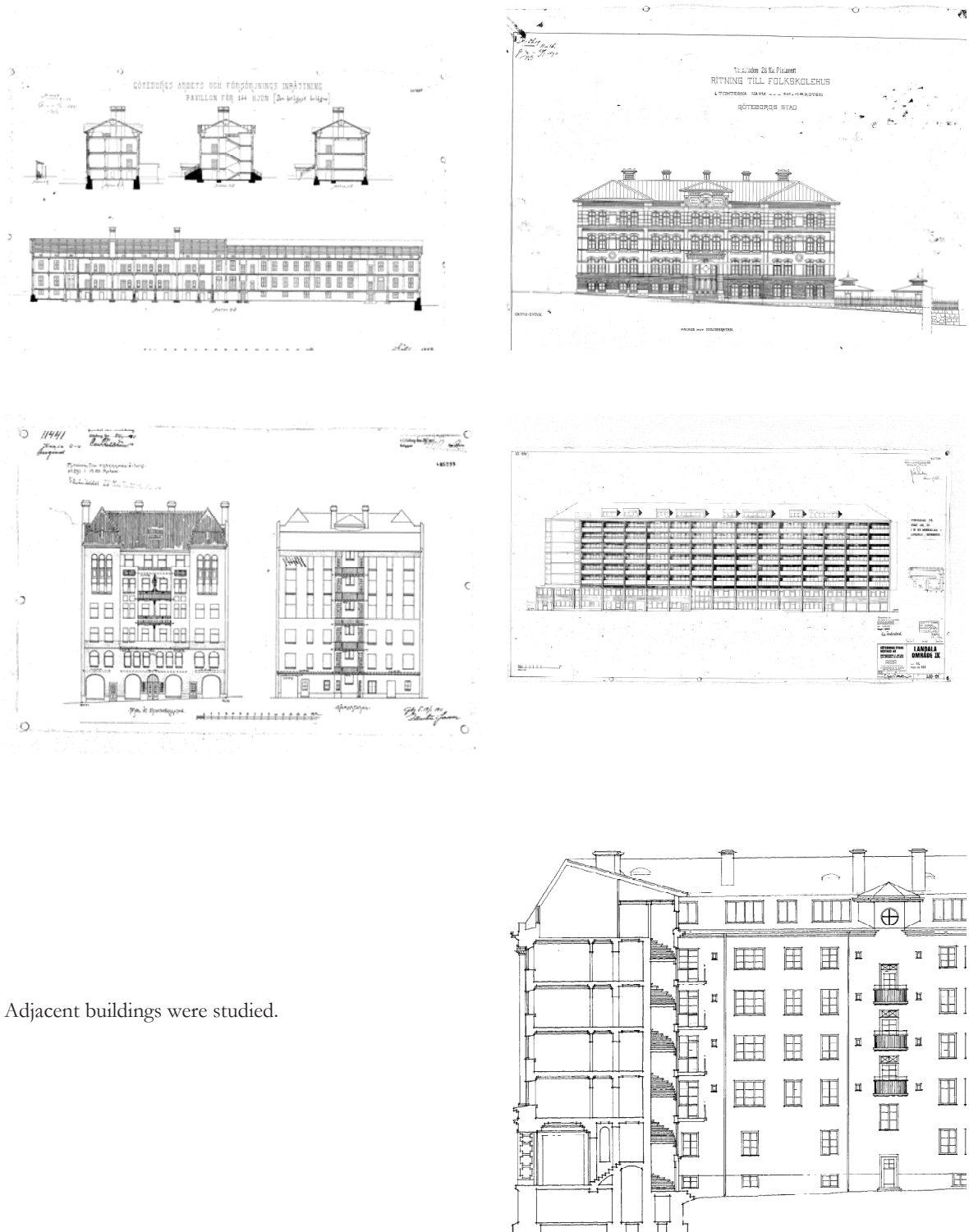
STUDIER AV LANDALA TORG - FAKTA, ÖNSKEMÅL OCH VISIONER



The site has been a part of a development programme created by the municipal planning office of Göteborg. The development comprises Landala, Chalmers and Mossen. Acquiring the material was an important first step in understating the site and the specific preconditions, even though the suggestion of the municipality were not a part of the project.

CONTEXT

SITE - ADJACENT BUILDINGS



Adjacent buildings were studied.



3 / DESIGN PROPOSAL

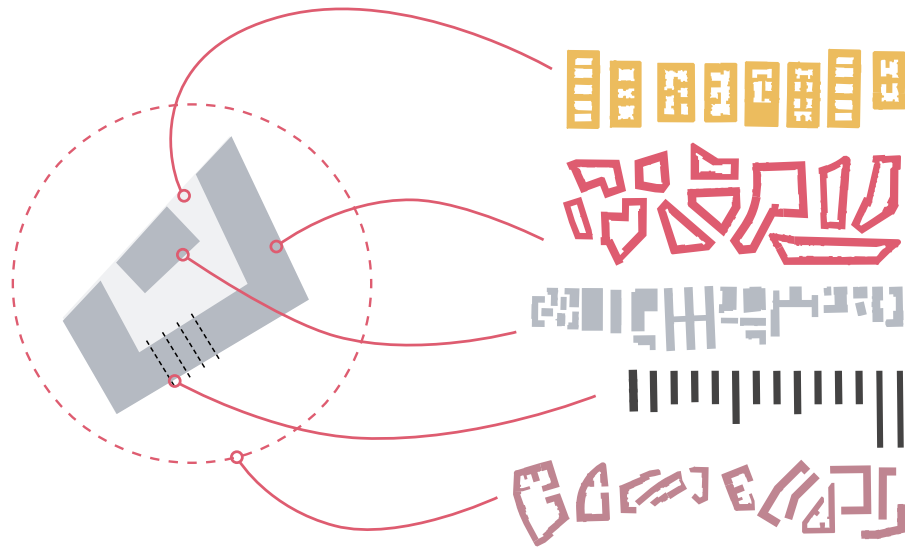
DESIGN PROPOSAL

URBAN STRATEGY



DESIGN PROPOSAL

URBAN STRATEGY



Breaking the block to connect typologies:

Socket footprint alike full block;

Volume alike broken up block;

A solitary alike free standing houses;

Structural logic alike concrete slab blocks;

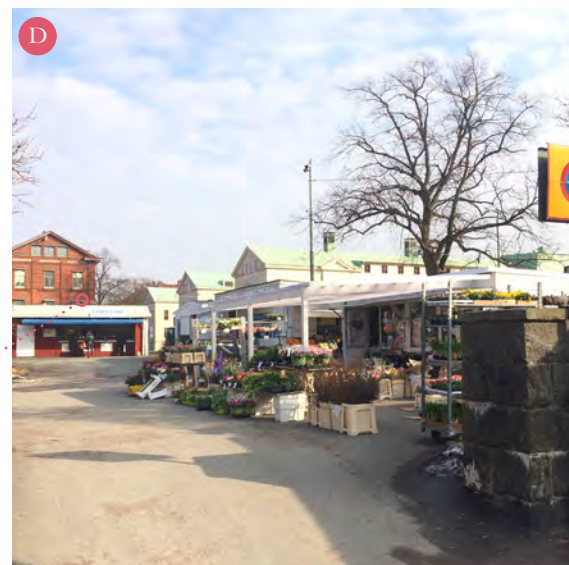
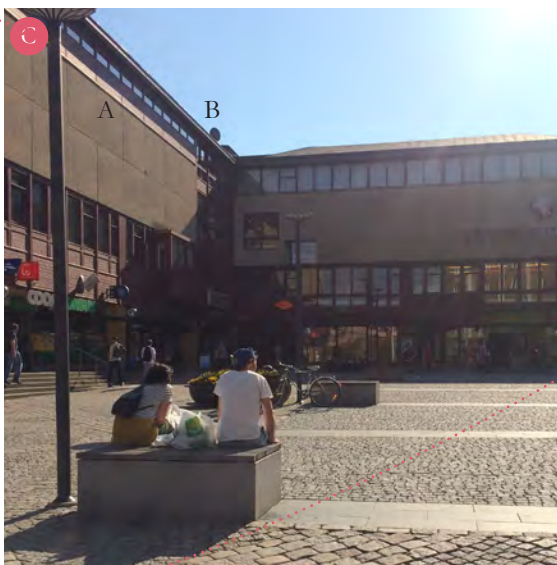
belonging the the category broken up block

The volume efficiently fills out the site, bringing well needed definition to the big scale urban spaces of Landala torg, Kapellplatsen and Aschebergsgatan. Towards Kapellgatan, the block is broken up to improve light conditions, but also to create an interesting and playful streetscape and make a connection to the more free standing buildings to the east.

DESIGN PROPOSAL
SITE PLAN 1:500



DESIGN PROPOSAL



a. Inhabitants enter through foregardens or portals, similar to surrounding buildings.

b. Towards Kapellgatan, there are foregardens and stairs leading up to the courtyard, similar to nearby gardens along Aschebergsgatan.

c. Commercial space borders the whole block, and space is left at sunny spots to encourage inhabiting the urban space.

d. Since the market stalls would be removed, the addition contains space for a small market hall with additional outside space.



View from Landala T



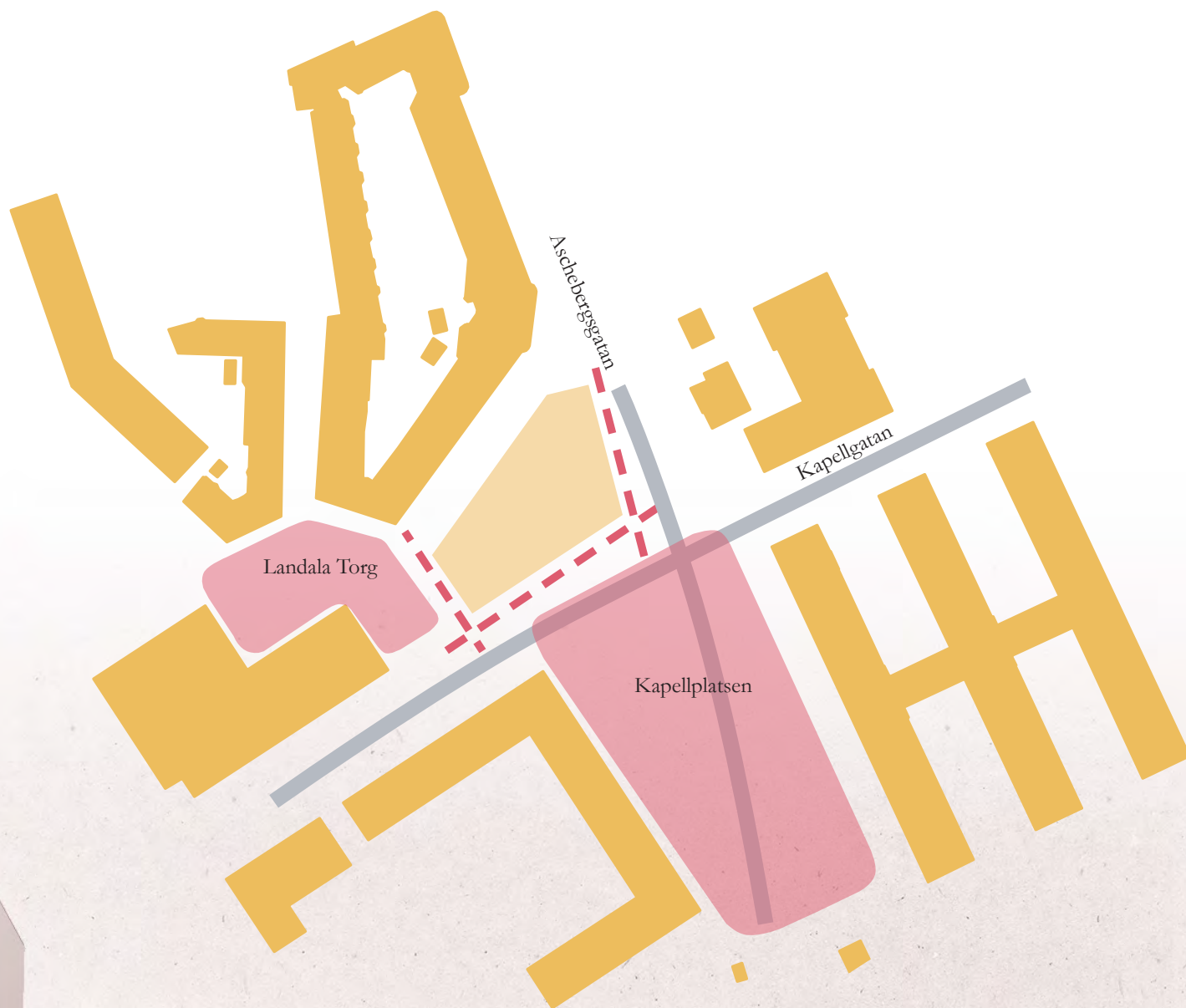
DESIGN PROPOSAL

PUBLIC & COMMERCIAL



Public & Commercial Space

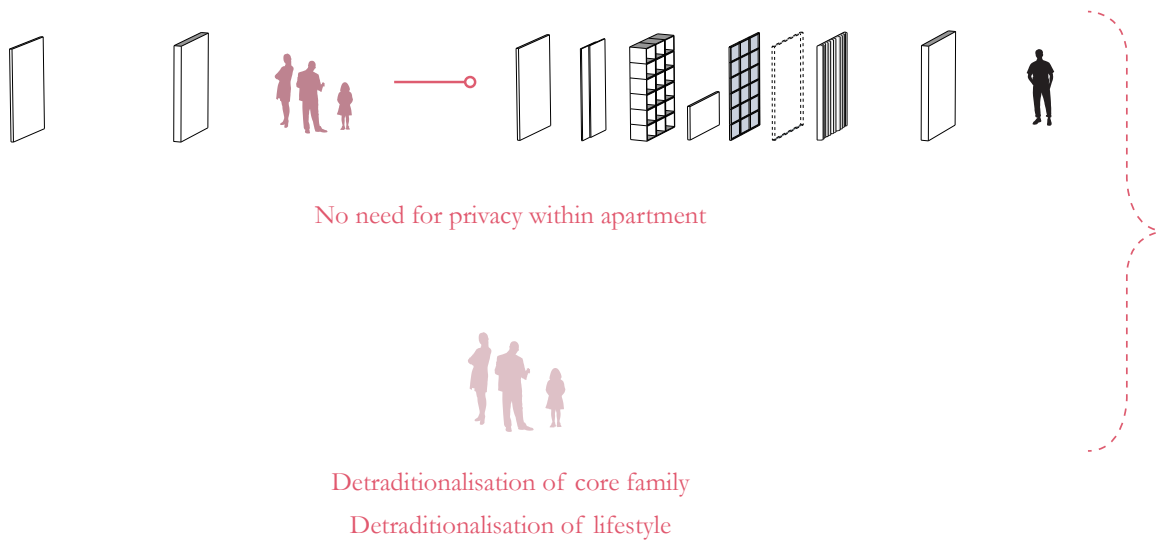
The addition of the new volume creates three kinds of new urban space: the intimate and irregular Landala Torg, the stringent Kapellplatsen and Ascherbergsgatan, and a series of small spaces along Kapellgatan. The added block has commercial space towards all the sites, activating it rather than creating boundaries.



View from tram station.

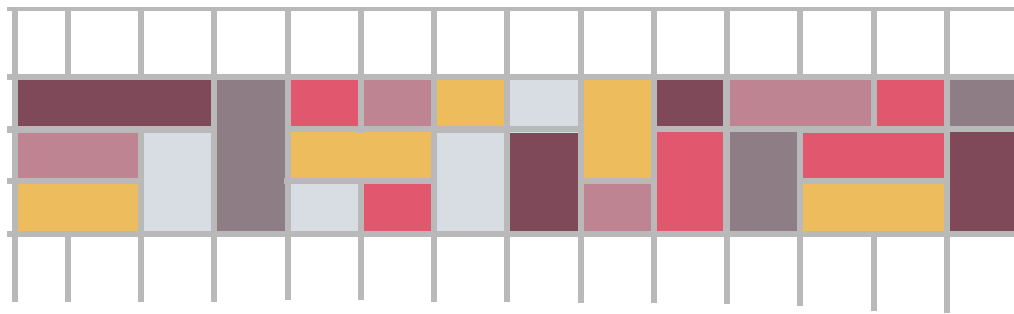
DESIGN PROPOSAL

SYSTEMATIC CONCEPT



DESIGN PROPOSAL

SYSTEMATIC CONCEPT



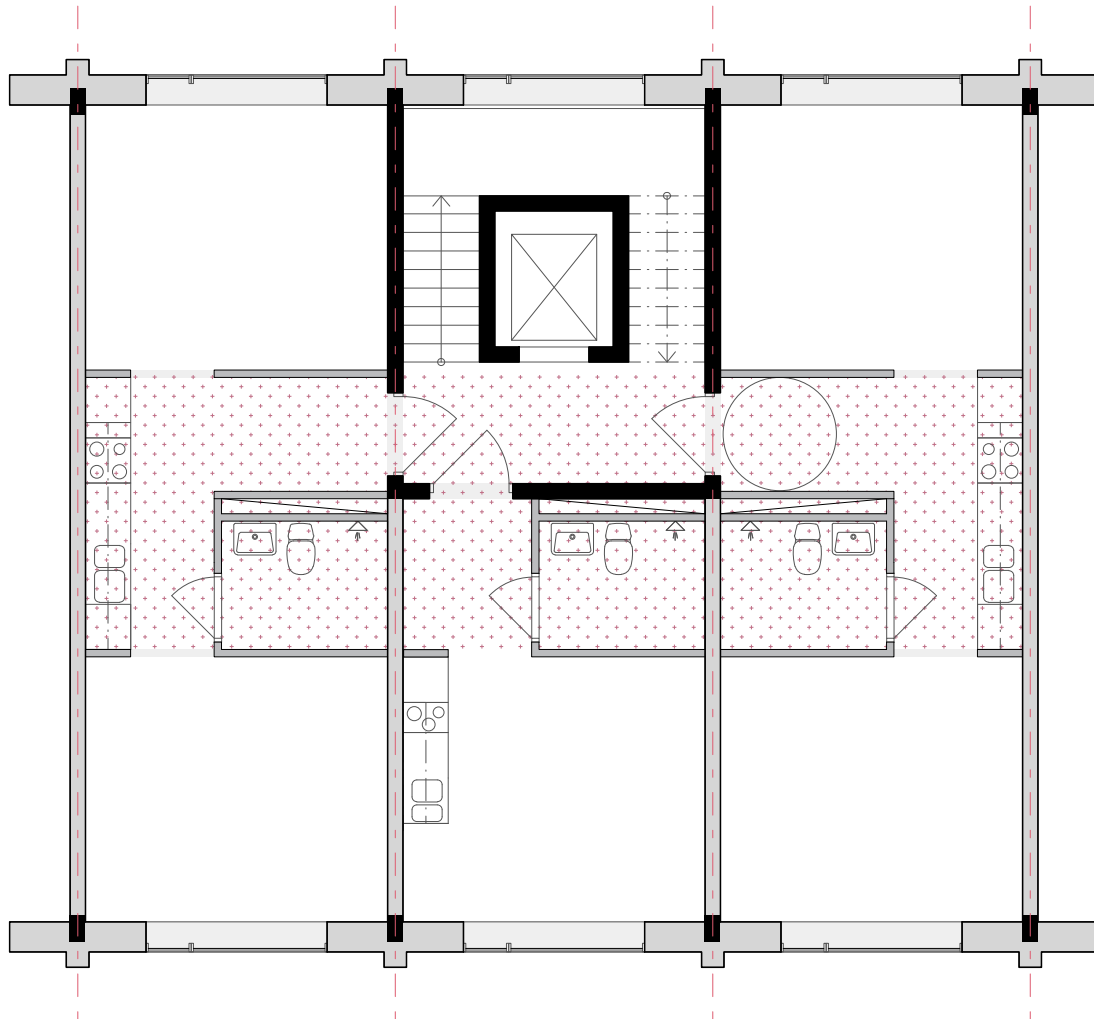
A flexible system of general spaces
within a rational grid

A systematic concept for housing was developed. The concept derives partly from the precondition that no walls would be needed in the lone dweller apartment, which would demand a free structure with as few load-bearing walls as possible.

As concluded earlier, that the lone dweller is a wide user group with a range of economic possibilities, as well as them in some cases being a part of untraditional family structure. This led up to the idea of a flexible structure, where the inhabitants may puzzle their own ultimate plan layout within a rational grid.

DESIGN PROPOSAL

SYSTEMATIC CONCEPT



Type plan 1:50

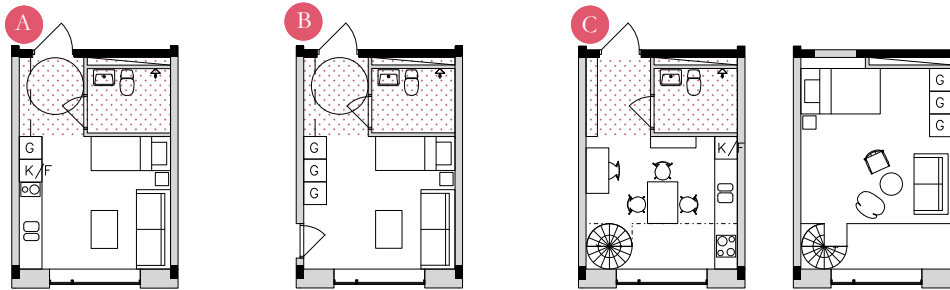
The basic plan layout is a staircase with three attached apartments. Load-bearing pillars are located at outer walls and along a central grid line, not disturbing the plan layout. The rooms are of general size, allowing the dweller to inhabit the spaces as wished.

Bathroom and kitchen/storage is located in the core, creating a boundary within the apartment without using walls.

Initially, new inhabitants would choose the preferred layout, according to unique life situations and economic possibilities. Over time, the general sizing of the rooms allows for change, and in an even longer perspective, the whole building could be re-purposed, either into many smaller flats or fewer, more generous.

DESIGN PROPOSAL

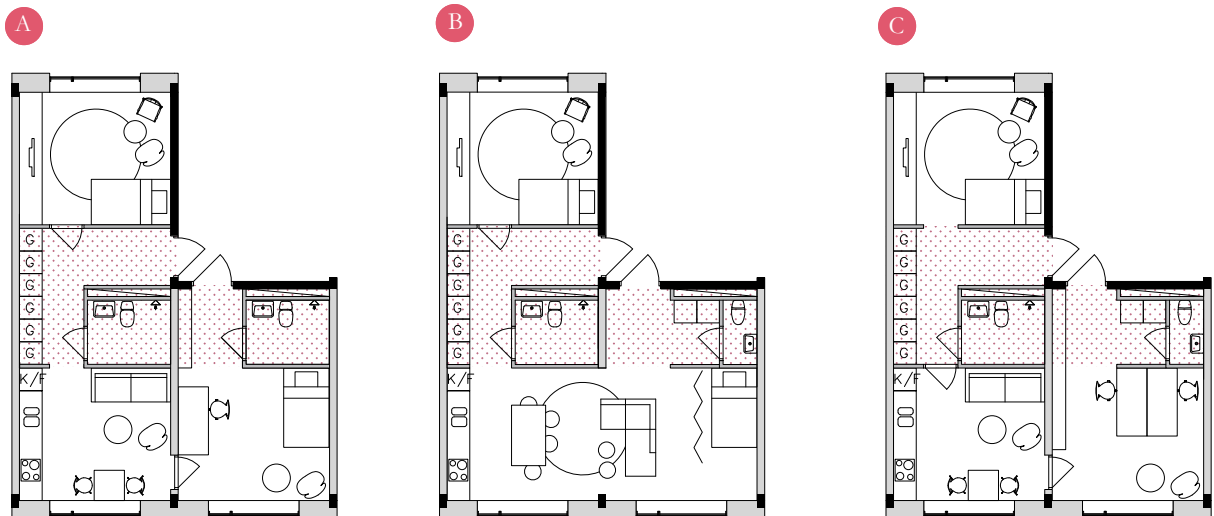
SYSTEMATIC CONCEPT



The one room apartment:

To every staircase there is a unit consisting of sanitary space + one room. The space could, for example, function as a minimum space flat at 22.5 sqm (A), a rentable room

connected to the neighbour apartment(B), or be connected vertically into a 2 room duplex apartment(C).

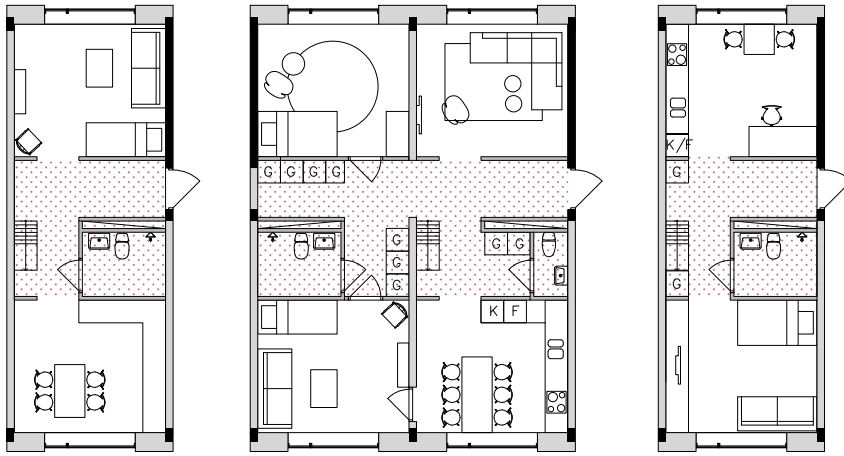


The most common plan layout is the two room layout, stretching from facade to facade. The single unit room can be attached.

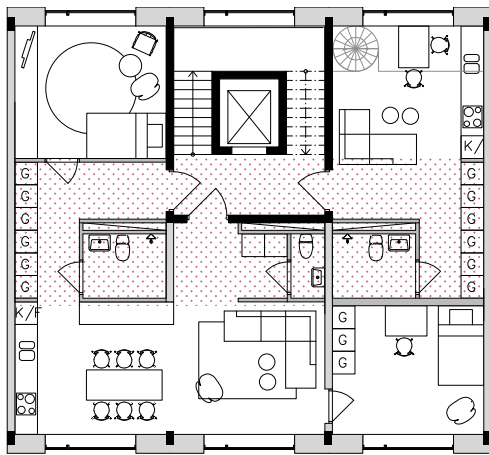
Shown here are living space/office of two different sizes (43/66 sqm) with the functional core serving as a buffer between the two zones(A+B). the third example (C) shown the home of a parent with a teenage child visiting every other week - the parent might use the livingroom - kitchen area as bedroom as well, while the kid has its own personal space.

DESIGN PROPOSAL

SYSTEMATIC CONCEPT



The grid layout might also be connected vertically - here two separated parents dwell on the 1st and 3rd level, while the children live in the 2nd level. Every other week, respective parent has access to the 2nd level parts of the flat. In total 8 units, making up 174 sqm.



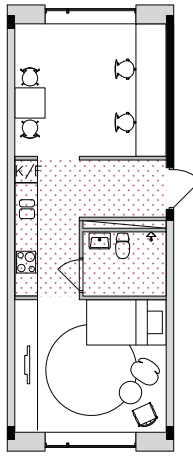
Another possibility is to split the two-room apartment layout and add one of the spaces to the neighbour apartment. In this case, two friends are sharing an apartment of 80 sqm with a generous social area and separate entrances.

0 |-----| 10 M

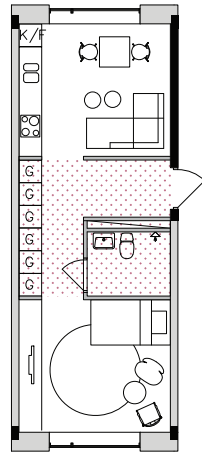
1:100

DESIGN PROPOSAL

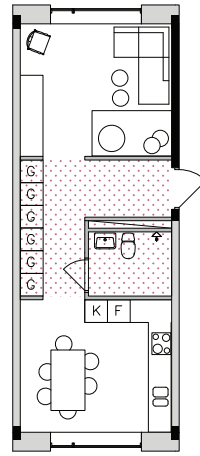
SYSTEMATIC CONCEPT



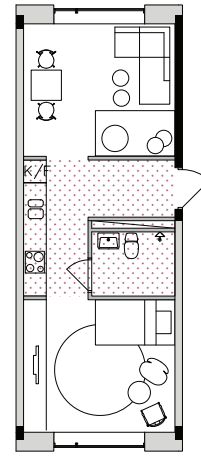
2 UNITS: Home office



2 UNITS: Eat & Sleep



2 UNITS: Entertainer



2 UNITS: Weekly visitor

DESIGN PROPOSAL

SYSTEMATIC CONCEPT

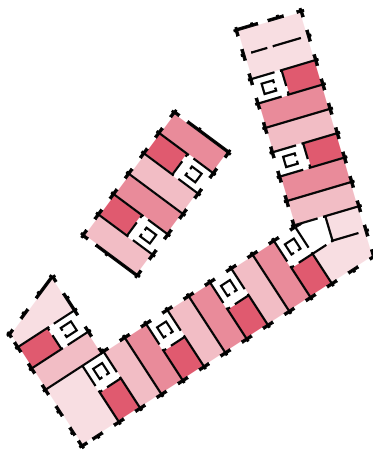


Detraditionalisation of core family

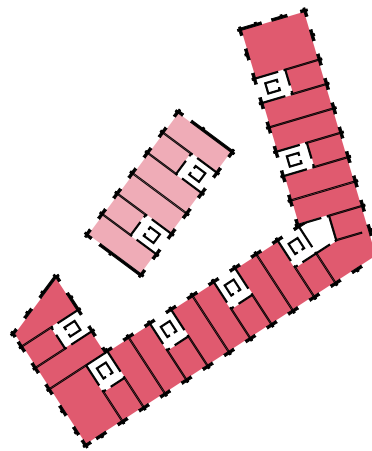
living alone

living large

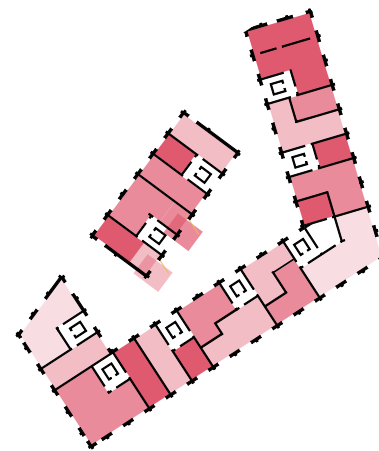
living in new and old
constellations



MIN

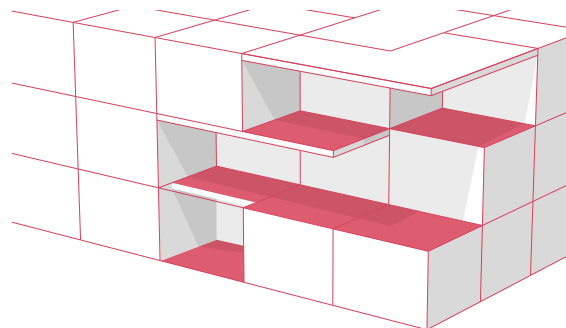


MAX



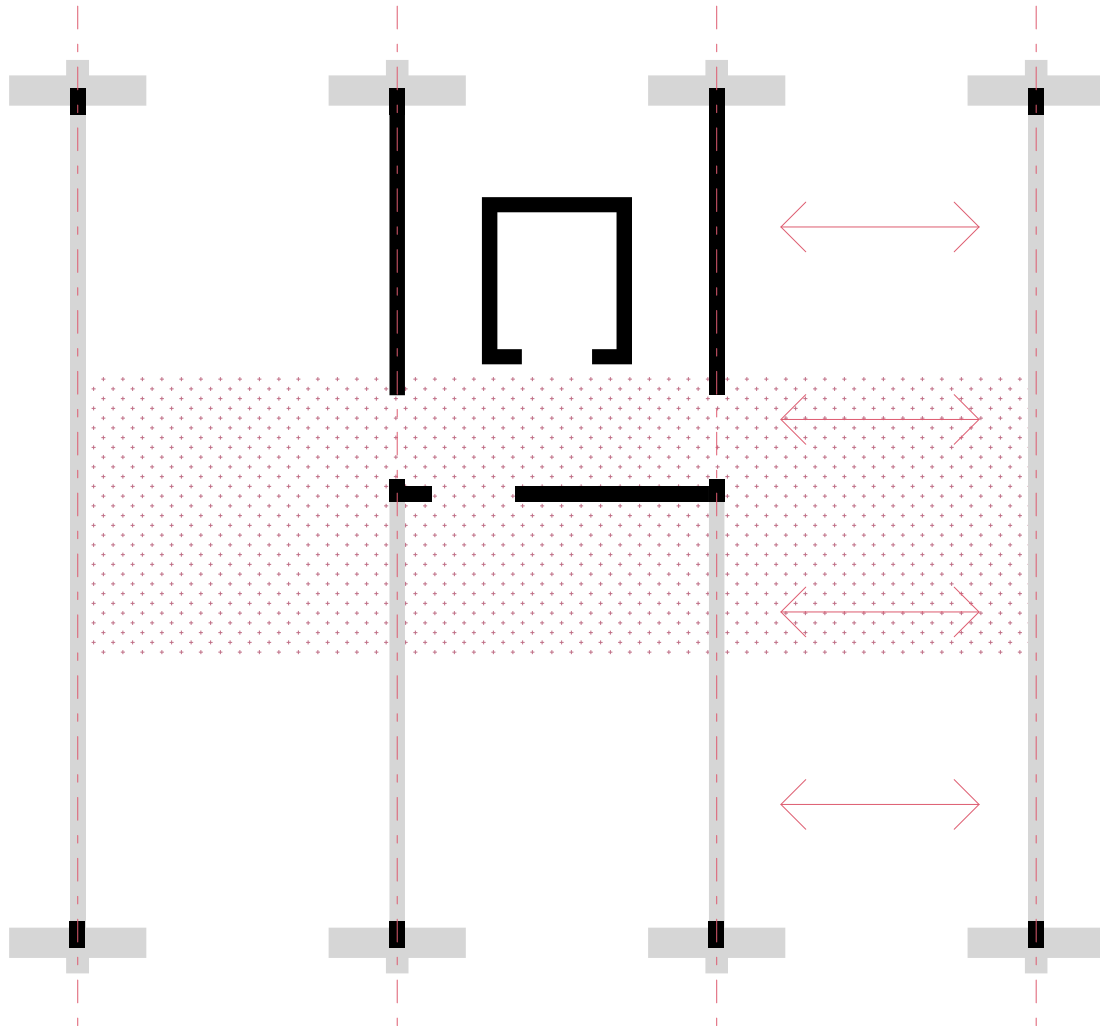
MIX

In extension, the building can consists of a wide number of flats, according to the desires of its inhabitants. The minimum layout type plan contains 29 apartments, the maximum just 2, and a midi version contains 24. The connection vertically could also be over several levels, perhaps connecting different staircases.



DESIGN PROPOSAL

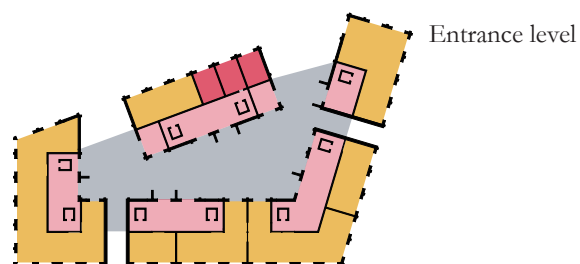
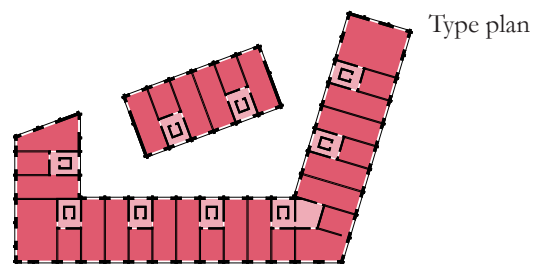
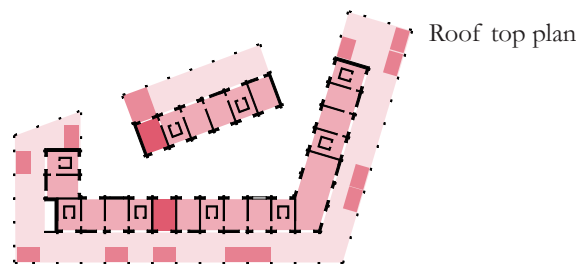
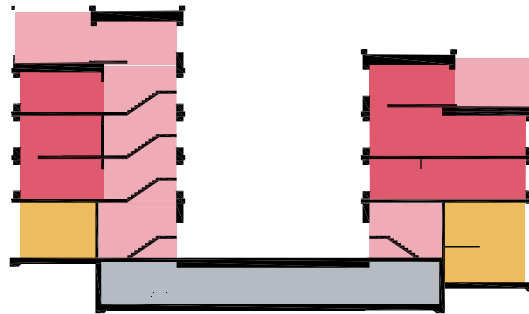
STRUCTURAL PRINCIPLE



The building is made up of a concrete pillar-beam structure, with sandwich elements and a brick cavity wall for the facade. Precast concrete joists span between beams, to facilitate vertical connections through floor openings.

DESIGN PROPOSAL

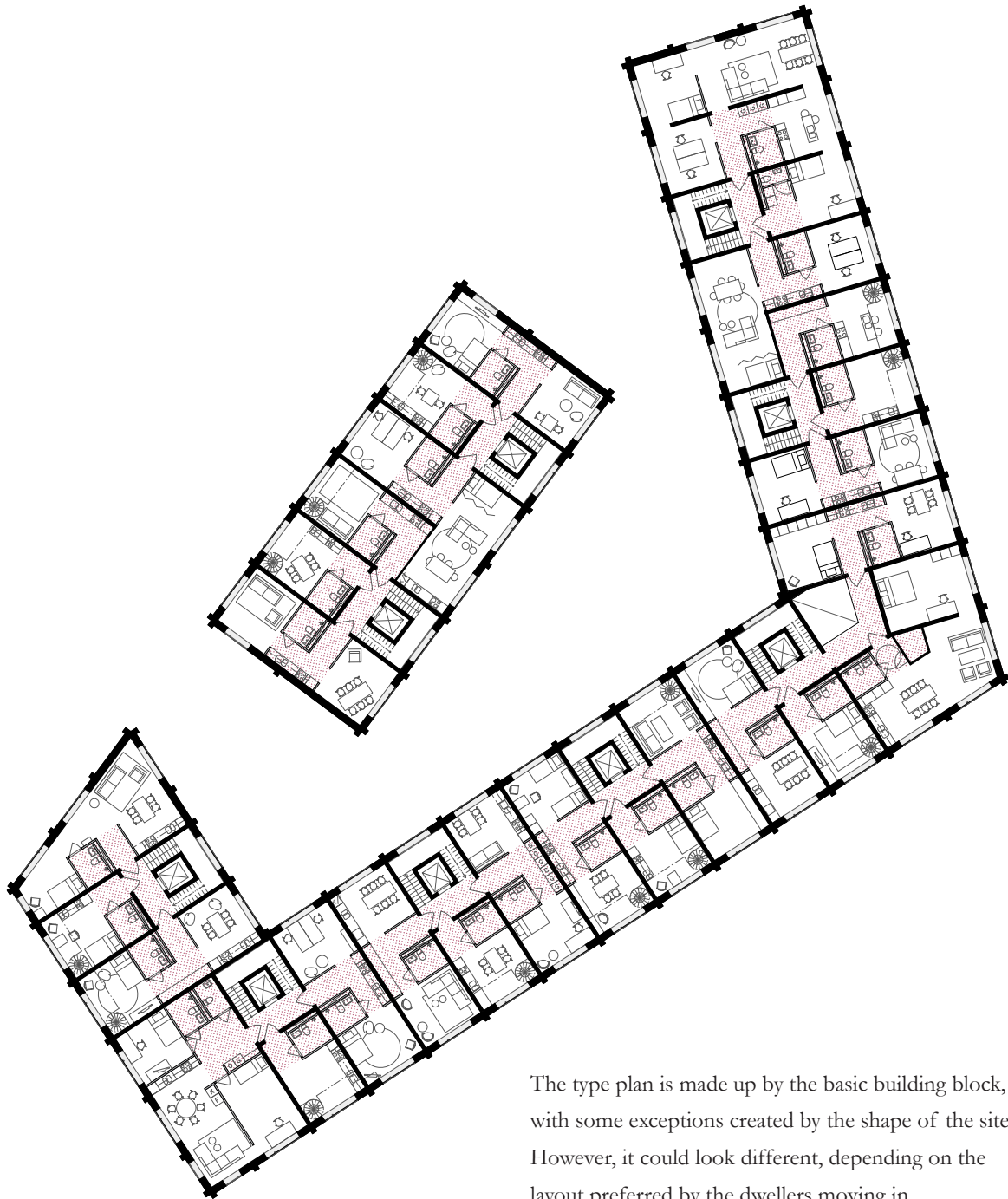
USAGE



- Commercial
- Common
- Private
- Parking/Service

DESIGN PROPOSAL

TYPE PLAN 1:400

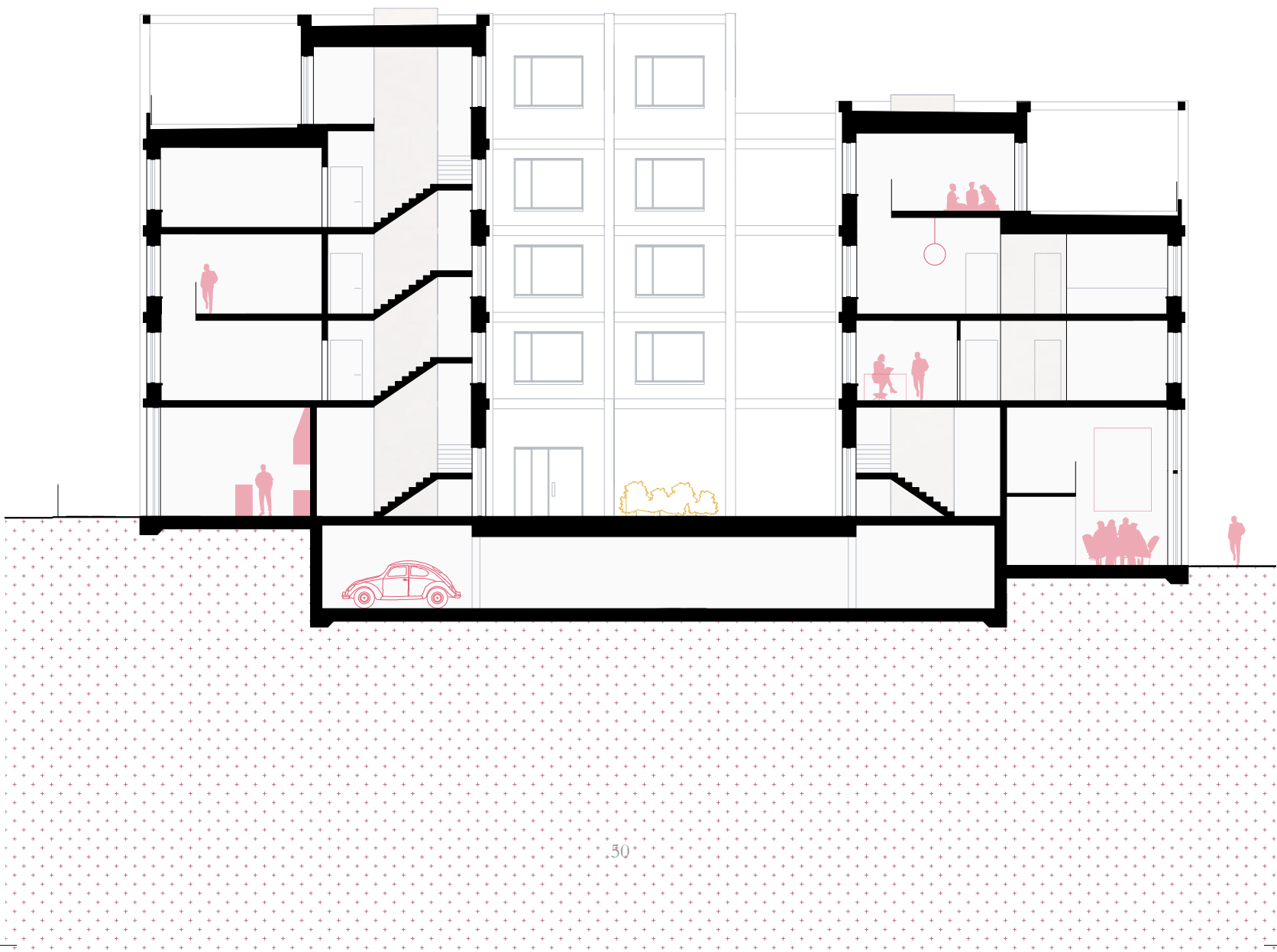


The type plan is made up by the basic building block, with some exceptions created by the shape of the site. However, it could look different, depending on the layout preferred by the dwellers moving in.

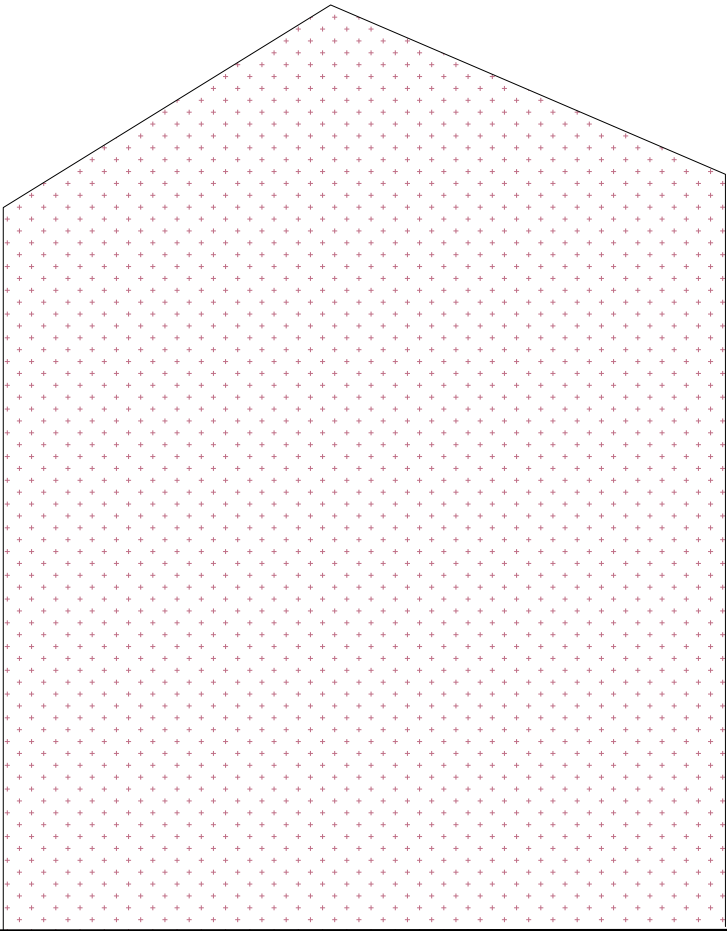
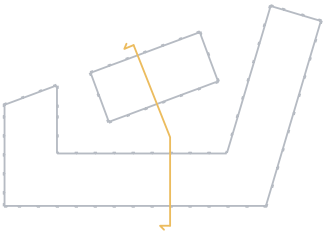
Type plan, 1:400

DESIGN PROPOSAL

SECTION DRAWING 1:200

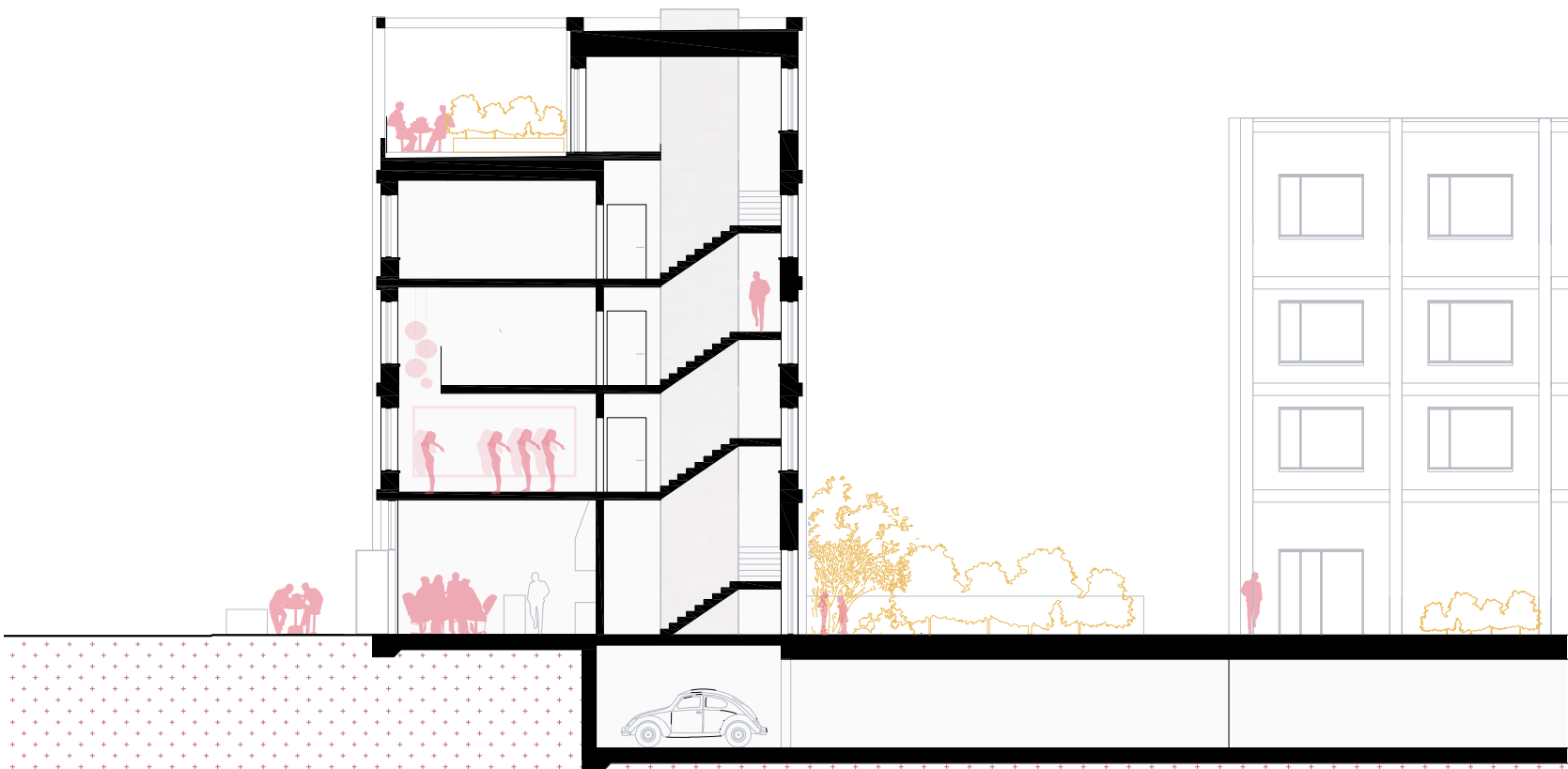


DESIGN PROPOSAL

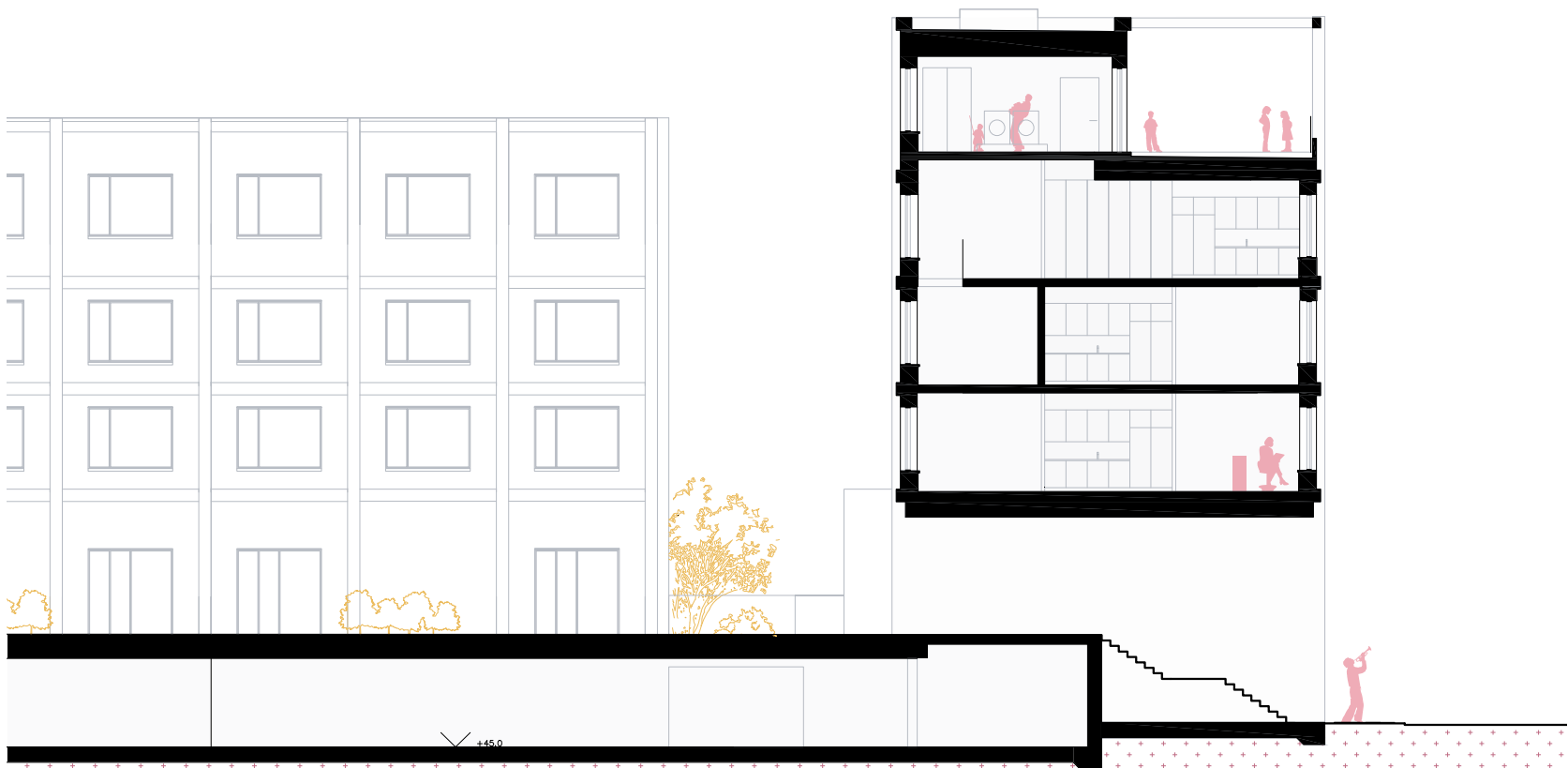
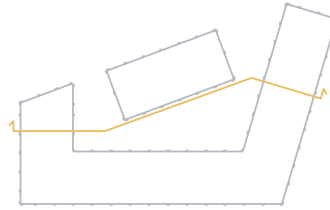


DESIGN PROPOSAL

SECTION DRAWING 1:200



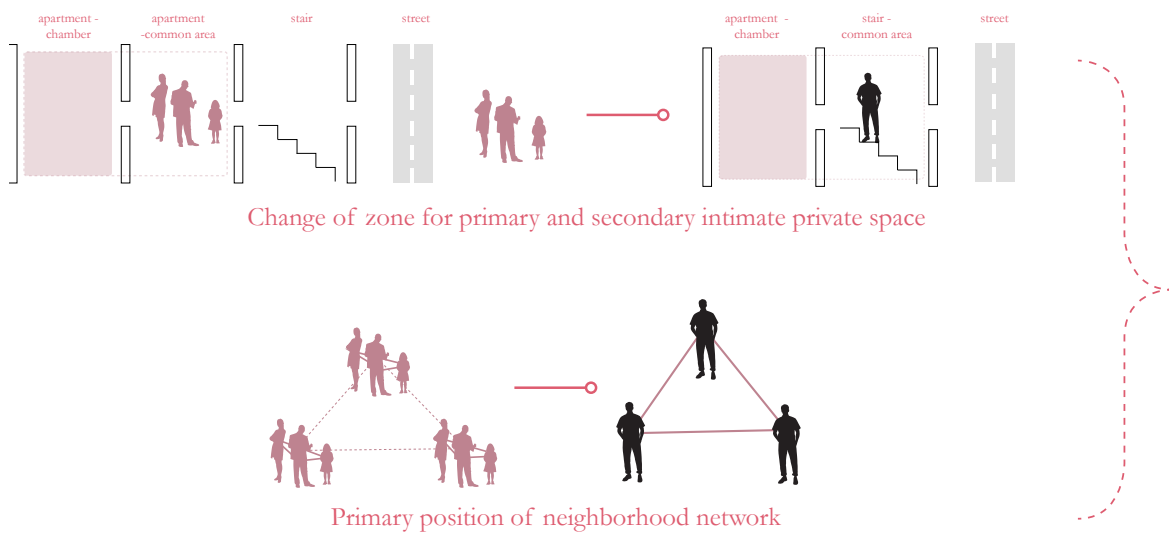
DESIGN PROPOSAL



0 20 M 1:200

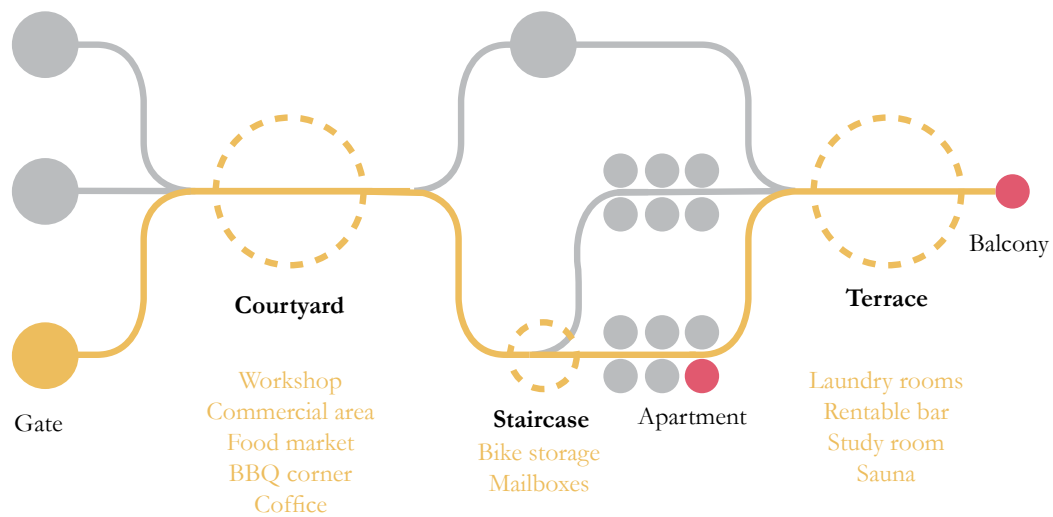
DESIGN PROPOSAL

CONNECTING NEIGHBOURS



DESIGN PROPOSAL

CONNECTING NEIGHBOURS



Organising shared spaces at strategic locations in the building

The network inside the building is the primary local network of the lone dweller. Even though intimate relationships with neighbours are not always desired, an everyday contact is positive and smaller neighbourhoods seem to be working better preventing anonymity. This is mirrored in the layout of the common spaces of the building. Entering from

gates to the courtyard, all neighbours use it to get to their staircases. There are many small stairs, keeping down the number of people in each.

DESIGN PROPOSAL

STREET LEVEL PLAN 1:400



DESIGN PROPOSAL

ROOF TOP PLAN 1:400



DESIGN PROPOSAL

COMMON AREA: STREET LEVEL

The staircases are grouped in pairs at the entrance level, to create a small subgroup and also to provide a spacious entrance. Informal storage and mailboxes

contribute to making this a meeting point. Spaces are also used for shared functions such as a workshop and bbq kitchen.



DESIGN PROPOSAL

COMMON AREA: ROOF TOP

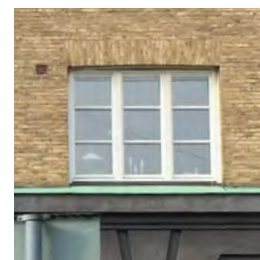
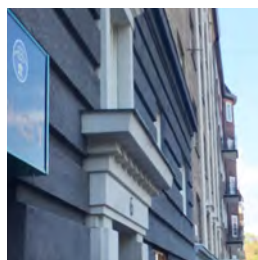
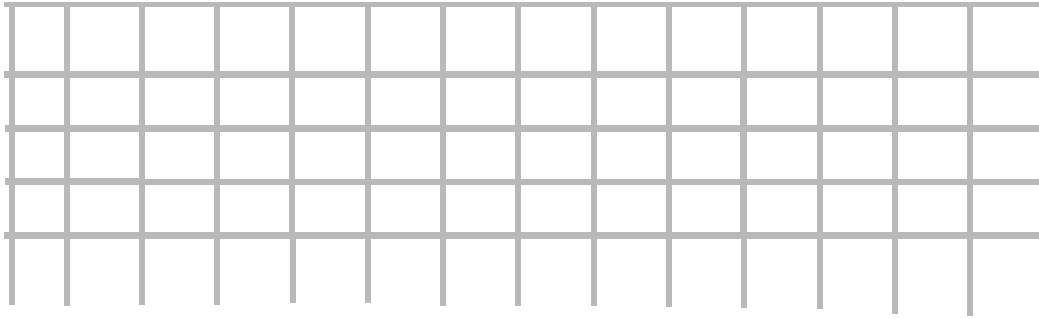
Many common functions are placed at the best location of the building - the roof top terrace, where every apartment can get its own slot - like a detached

balcony or allotment garden. Laundry rooms and storage spaces are also located here. Spare spaces are used by the apartments on the level below.



DESIGN PROPOSAL

EXTERIOR CONCEPT

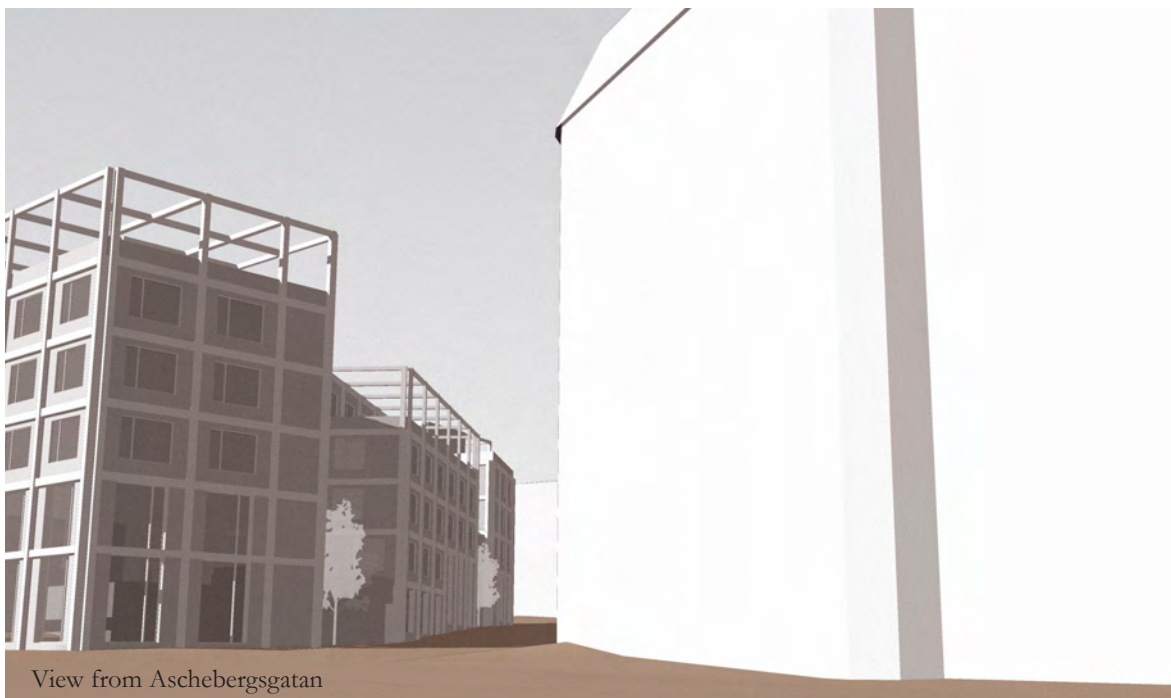
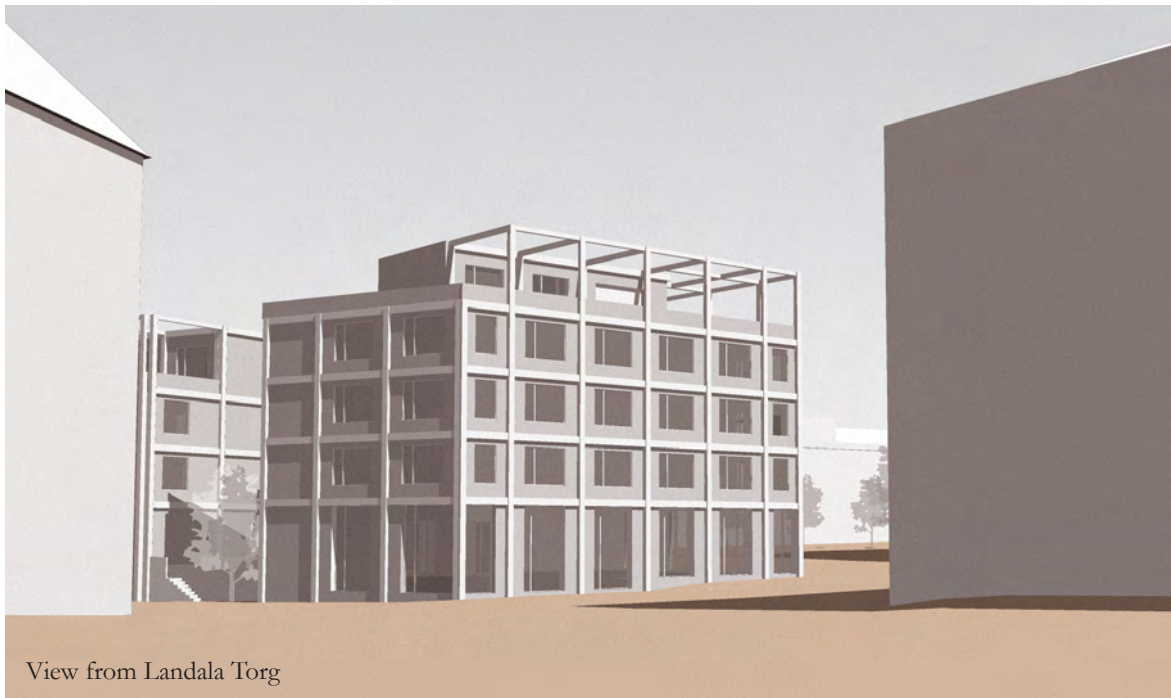


A flexible system of general spaces
within a rational grid

The concept of the facade is to merge the expression of the 1970s concrete slab buildings with the character of the older surrounding buildings. To achieve this, the grid layout is mirrored in the facade, similar to the 70s house. To balance the somewhat brutal expression, materials and character of the older buildings inspire the materials and detailing of the addition. Using a desaturated light yellow brick and limestone but contrasting it with a slightly cold bronze toned aluminium window frame, there is a hint to the yellow brick houses nearby.

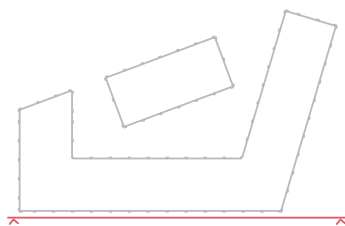
DESIGN PROPOSAL

VOLUME STUDIES



DESIGN PROPOSAL

FACADE 1:200



DESIGN PROPOSAL

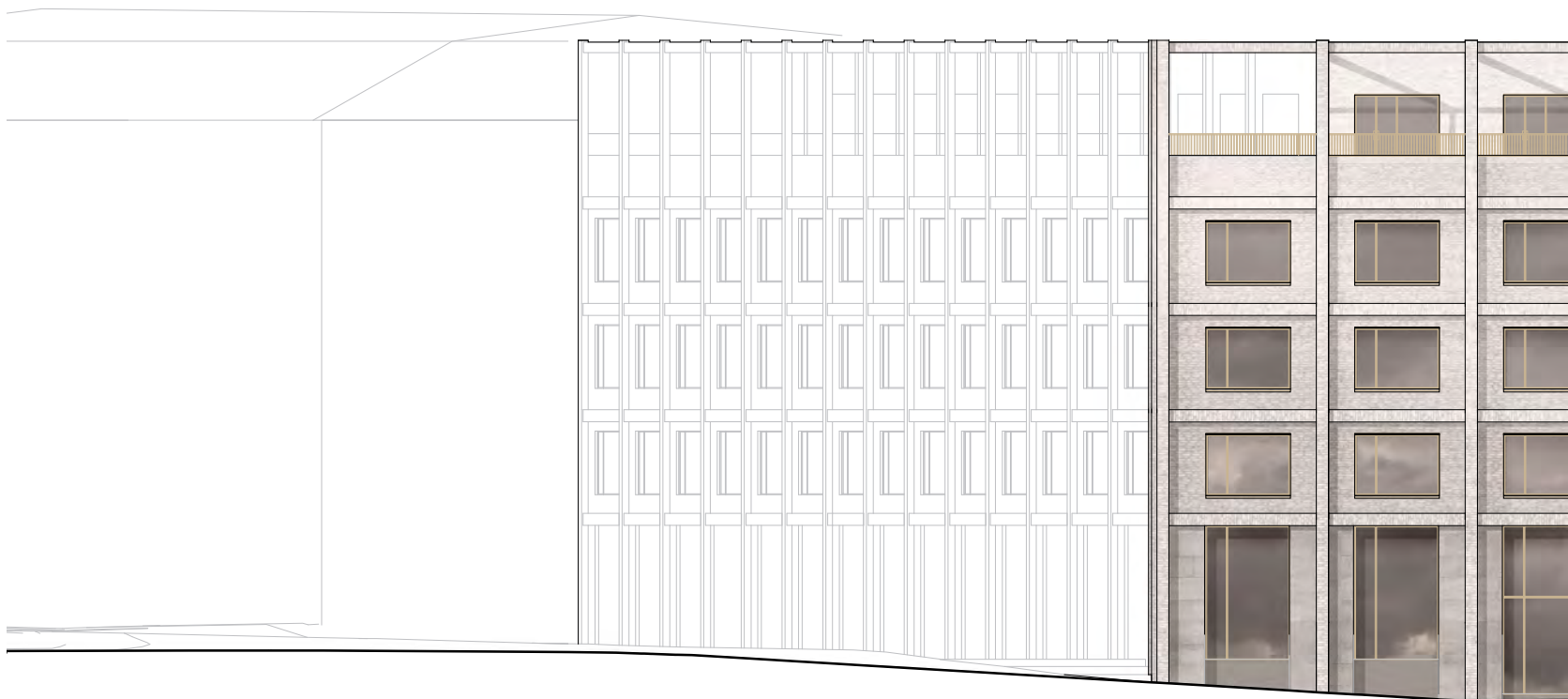
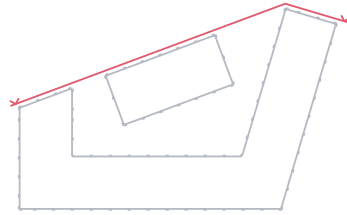


0 | ————— | 20 M 1:200

63

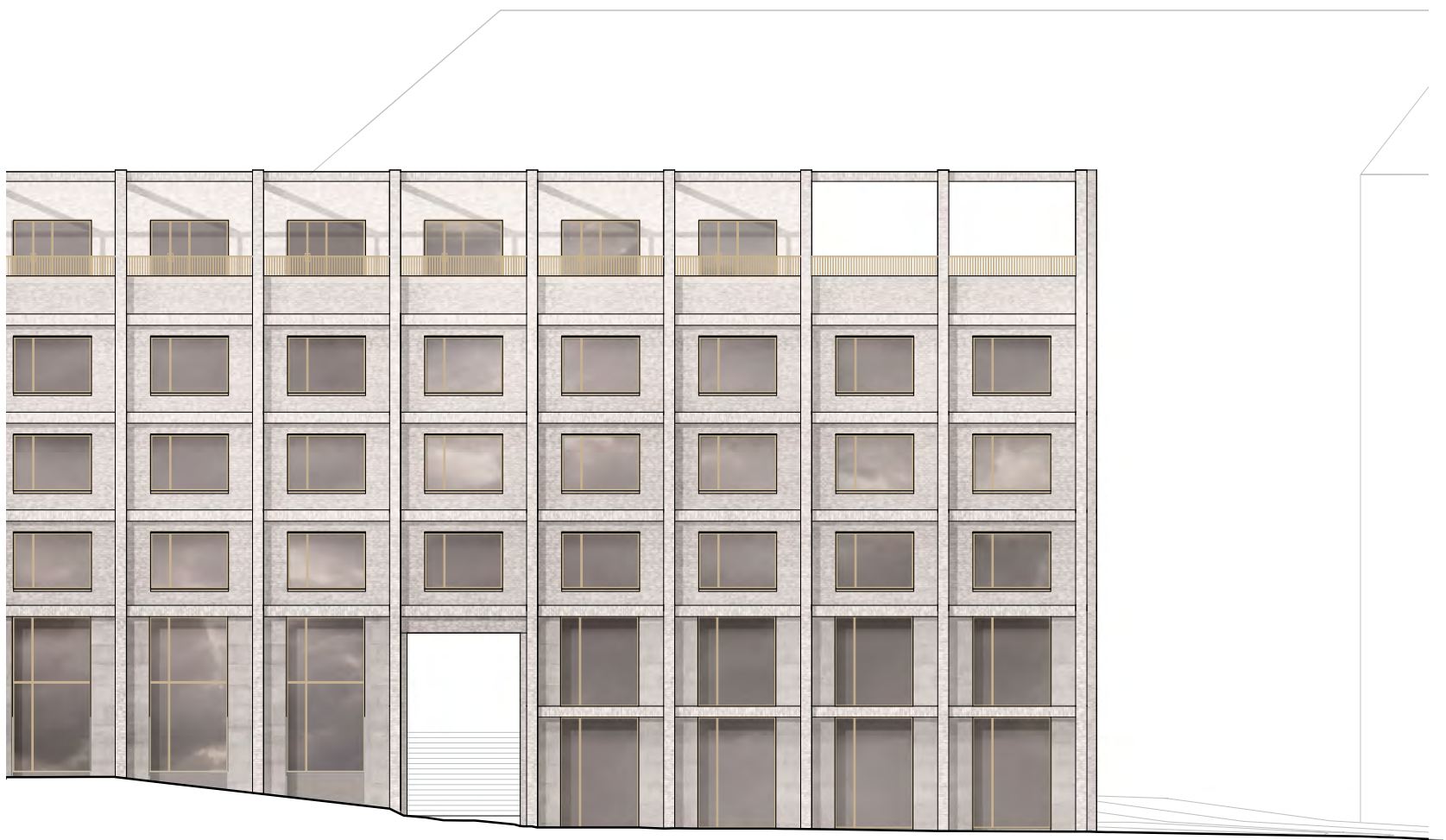
DESIGN PROPOSAL

FACADE 1:200



Facade elevation towards Kapellgatan

DESIGN PROPOSAL



0 | ————— | 20 M 1:200

DESIGN PROPOSAL

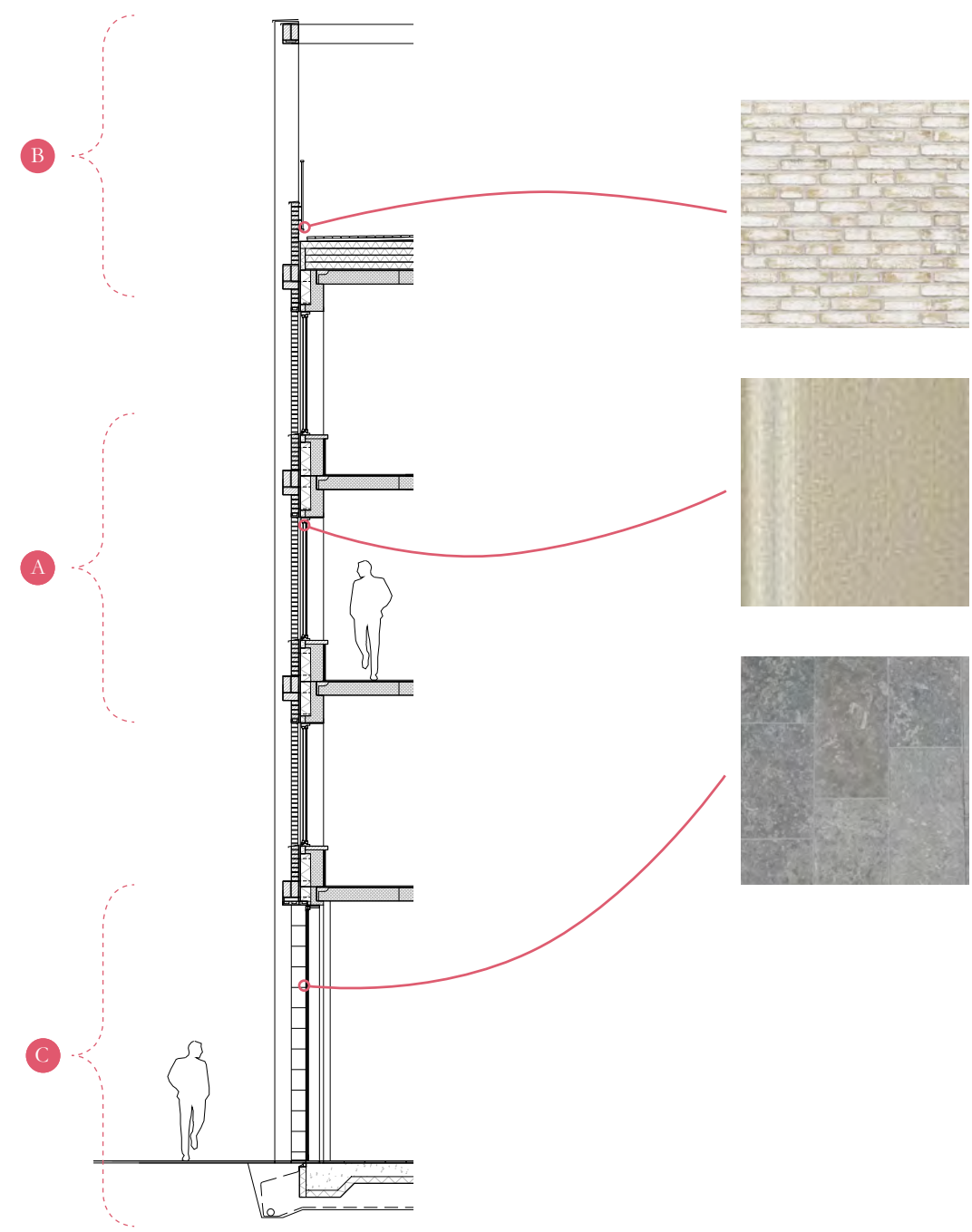
FACADE ELEVATION 1:50



0 |-----| 5 M 1:50

DESIGN PROPOSAL

FACADE SECTION 1:50



0 | | | | 5 M

1:50

A

FLOOR SLAB
PREFABRICATED IN CONCRETE

FACADE ELEMENT
PREFABRICATED IN CONCRETE

FASTENING STUD

BRICK BEAM

FRAME PLATE IN
COLOUR ALIKE WINDOW
SASH

ALUMINUM WINDOW
FRAMING

2+1 WINDOW

WINDOW SILL IN BRICK
ALIKE FACADE

DRIP PLATE IN
COLOR ALIKE
WINDOW SASH

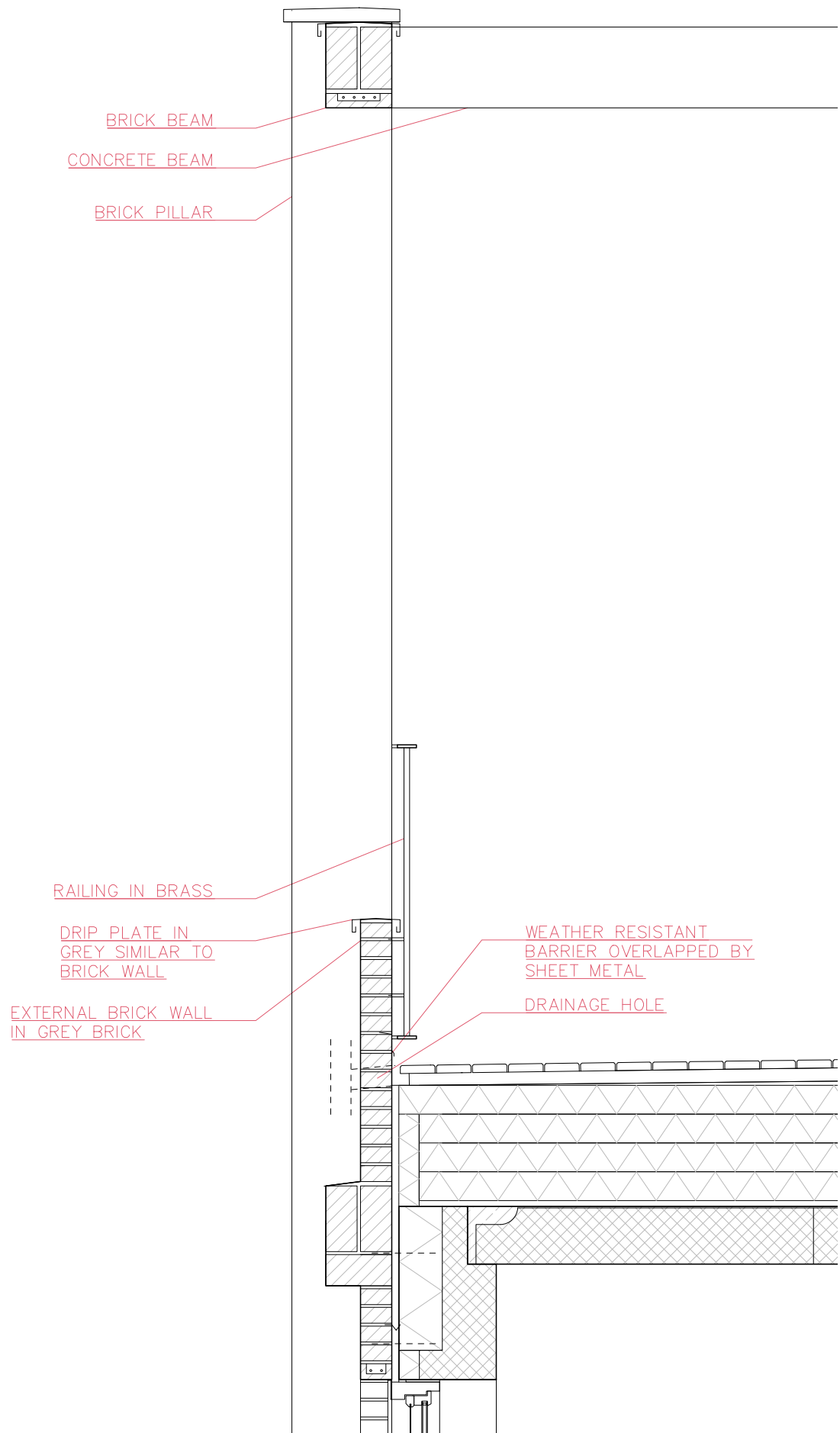
EXTERNAL BRICK WALL
IN GREY BRICK

108 MM BRICK
25 MM AIR SPACE
150 MM BOARD INSULATION
190 MM PREFAB CONCRETE

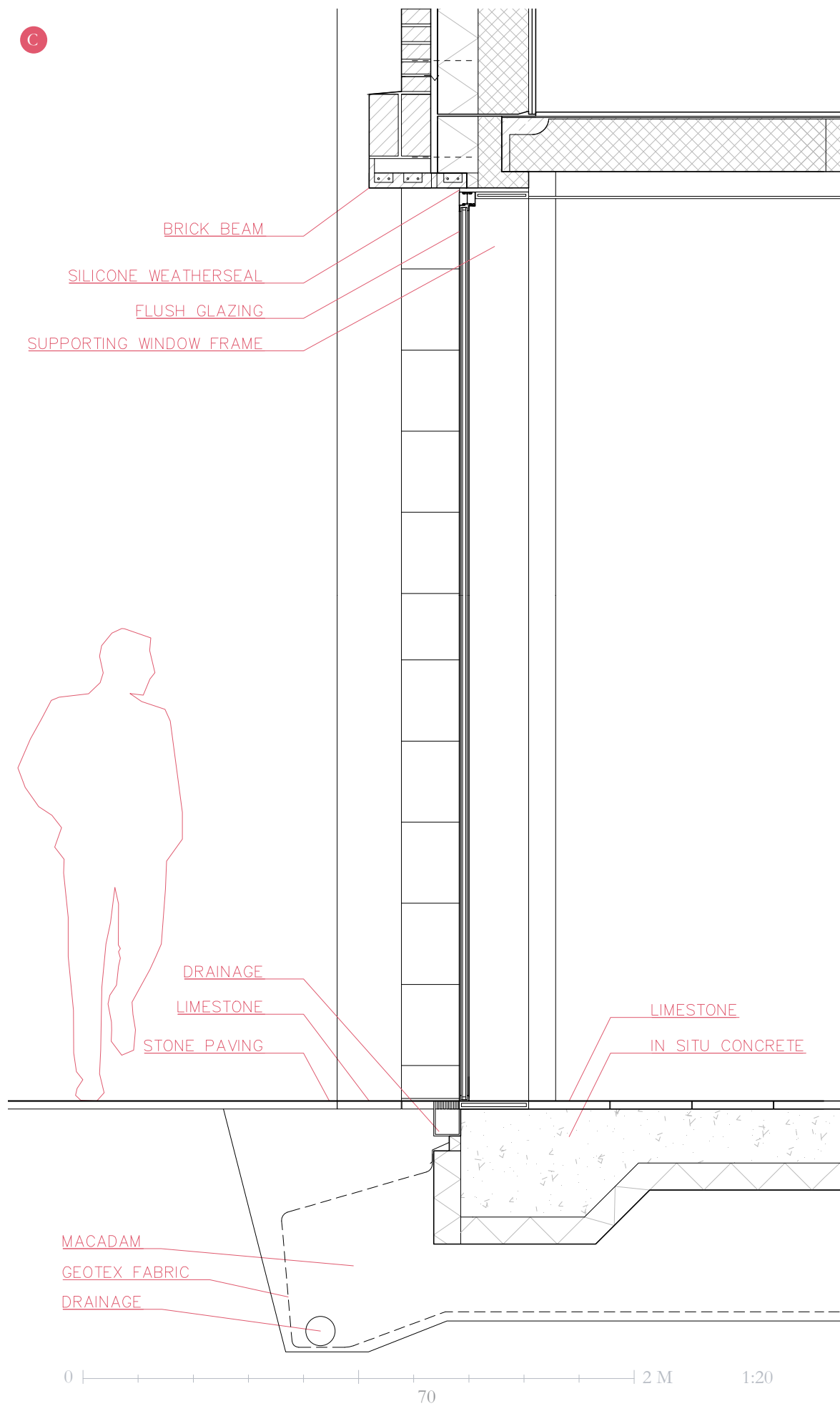
15 MM WOOD PARQUETTE
5 MM SILENCER
FLOAT CONCRETE
PREFABRICATED FLOOR SLAB

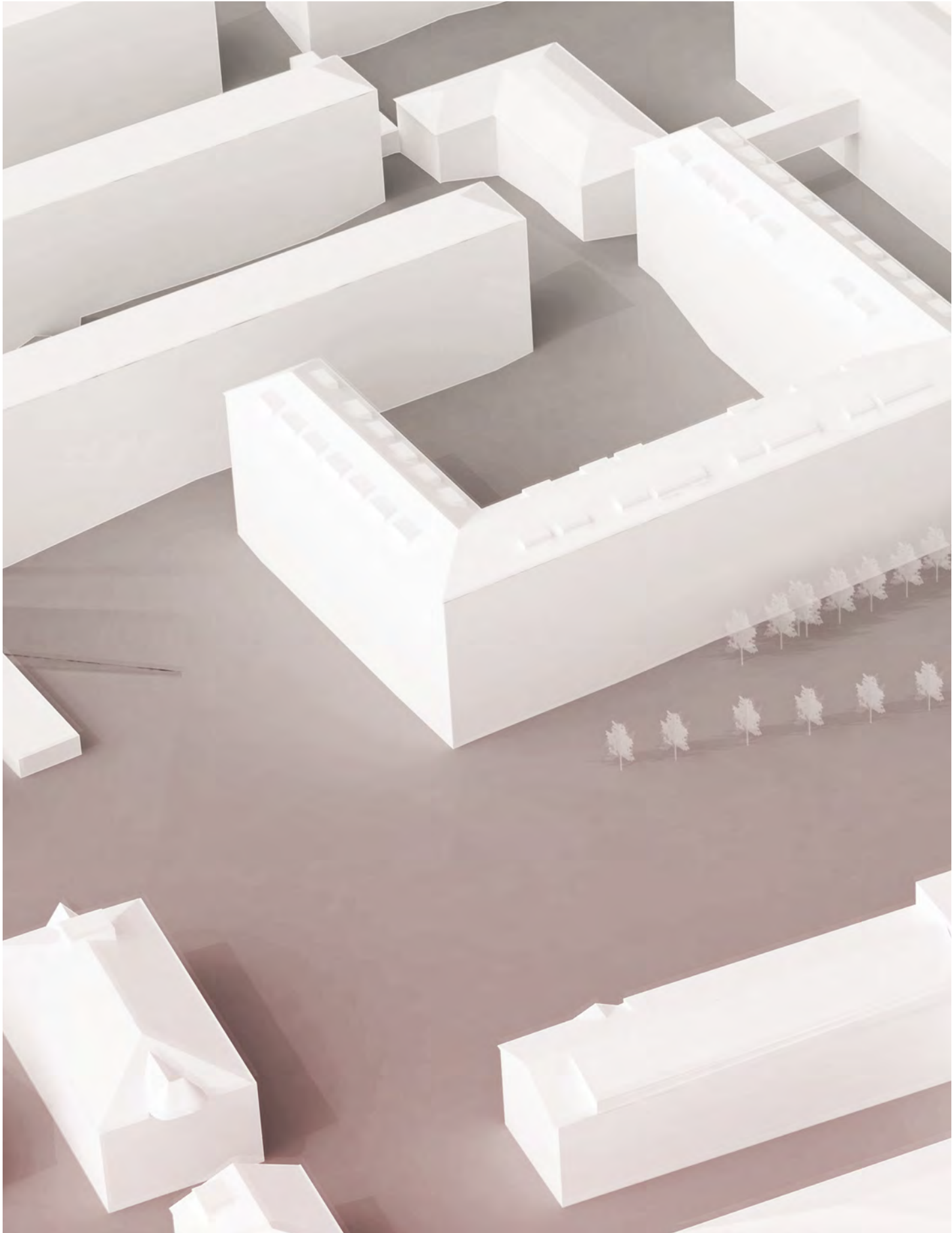
0 | 2 M 1:20

B



C

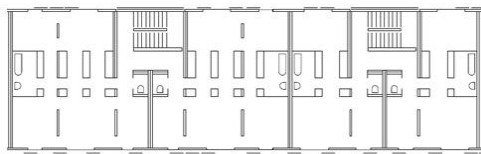
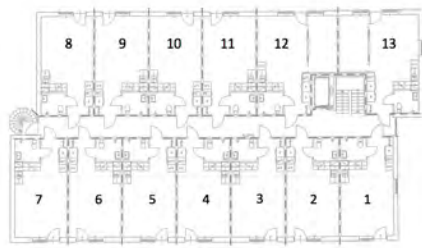
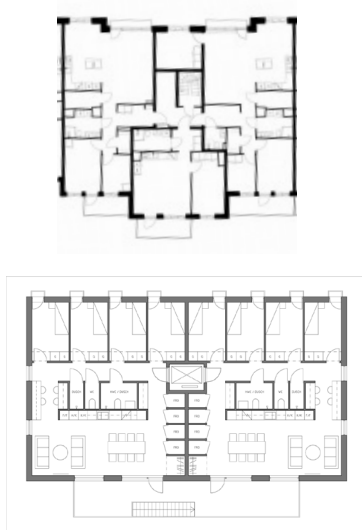




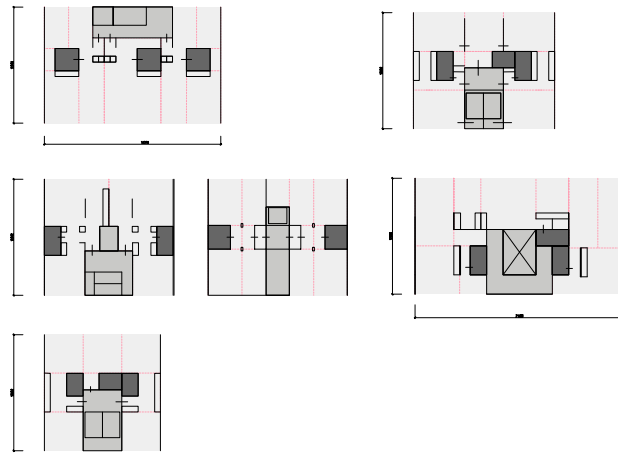


4 / PROCESS

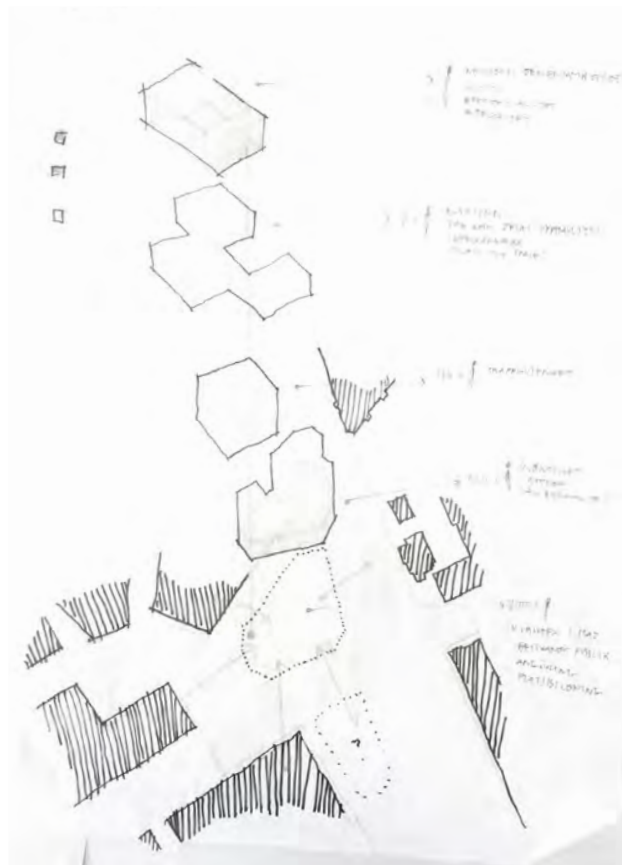
PROCESS



Early references - solutions to single person household



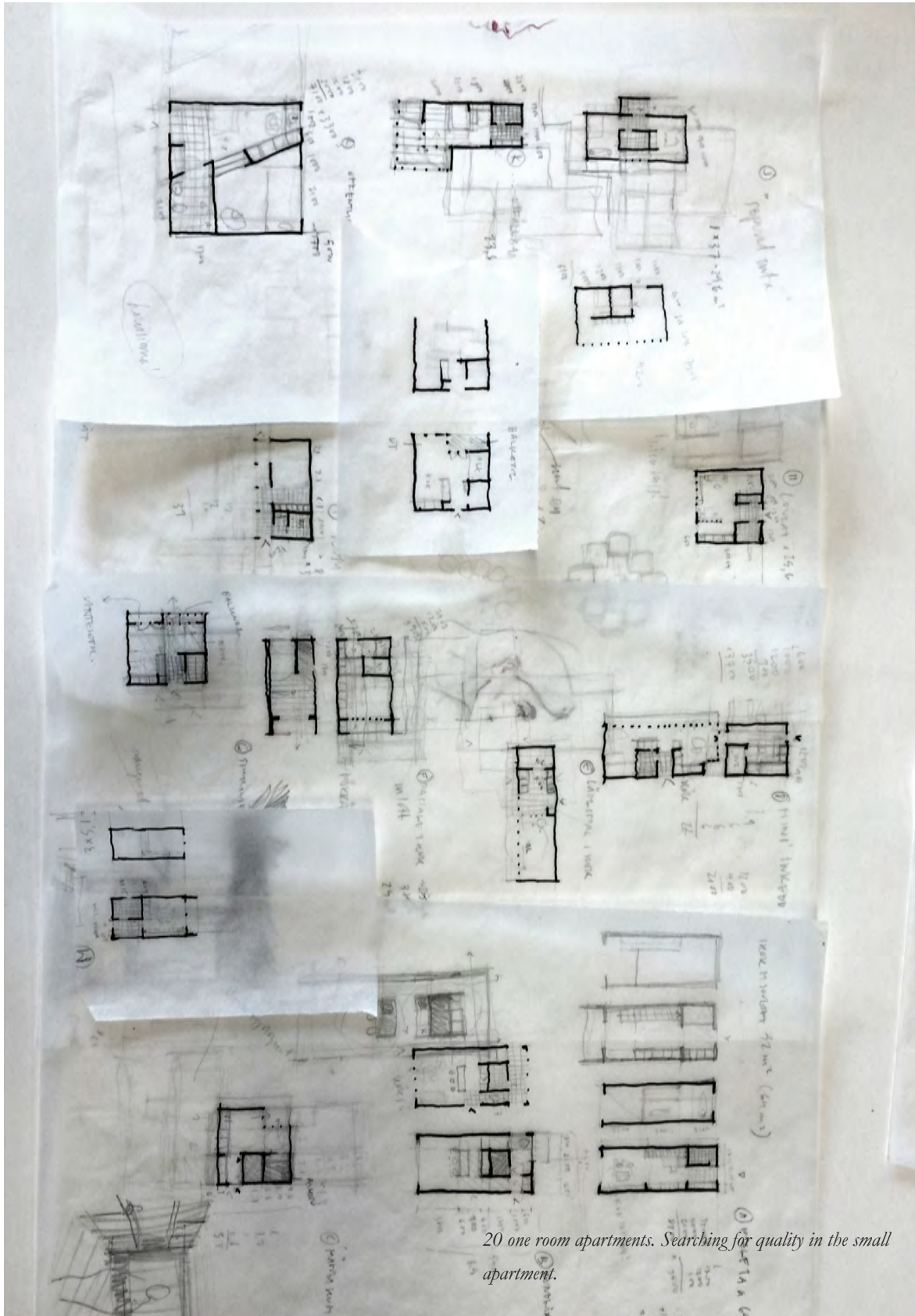
Comparing different ways to wall of without walls, comparing layouts of functional core



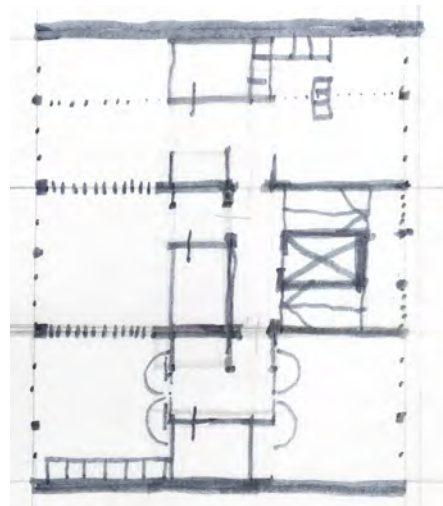
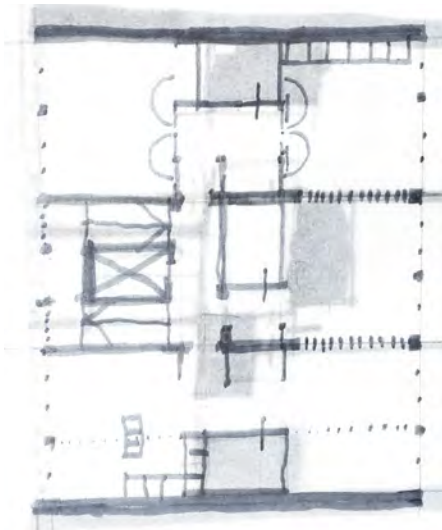
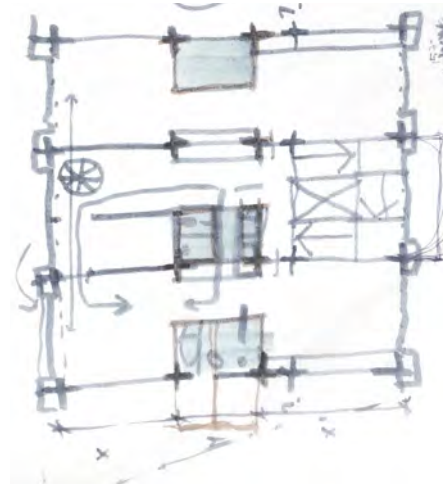
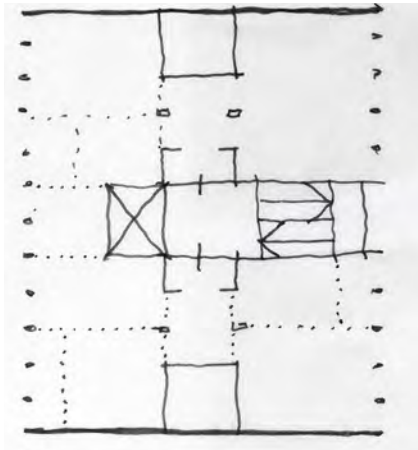
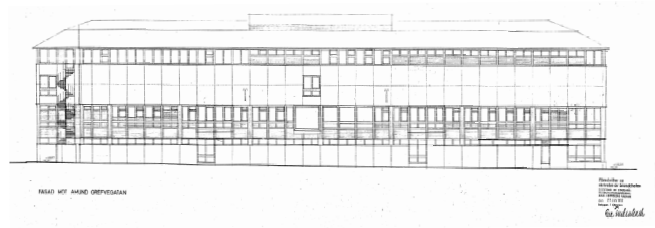
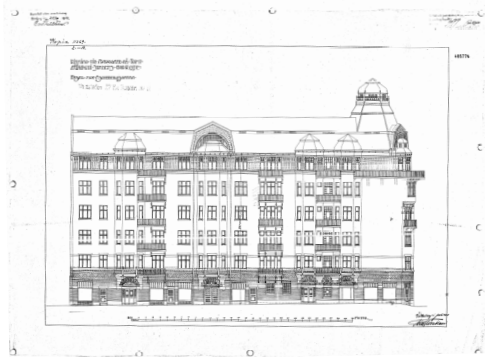
Early concept sketch

Starting off with thoughts on the single dweller, research and references influencing the work trying to find a good plan layout.

PROCESS

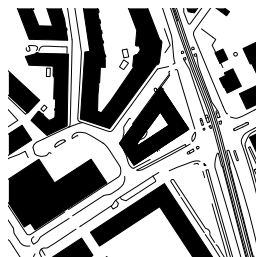


PROCESS



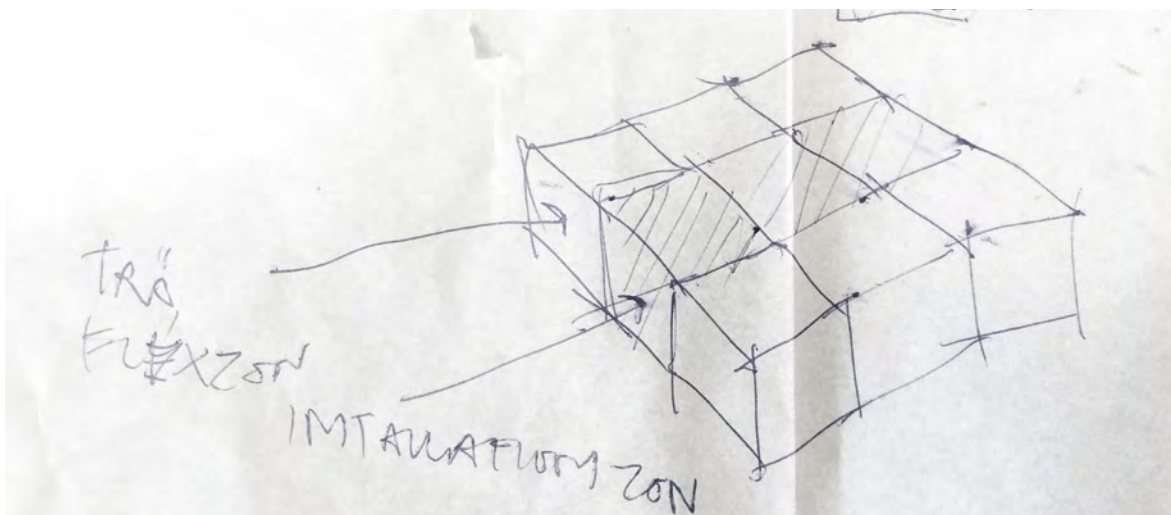
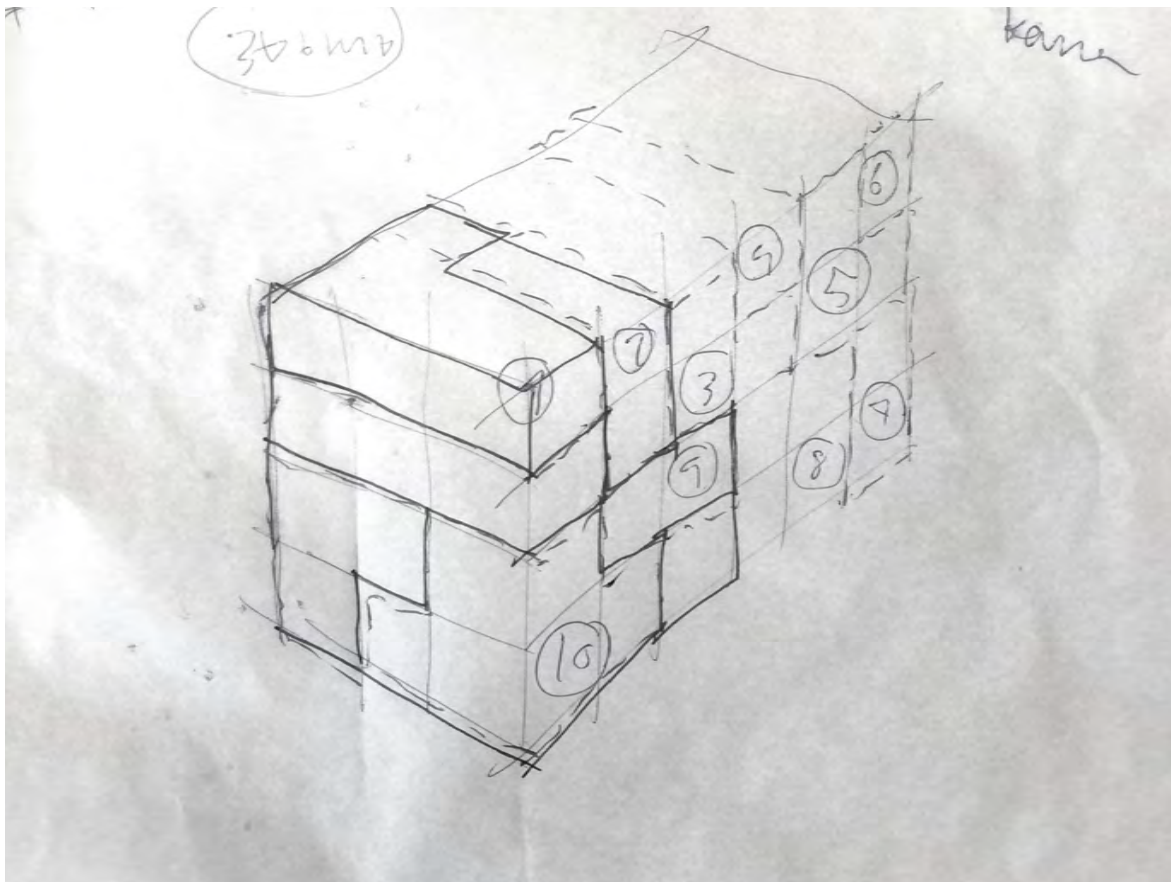
Spatial layout and quality in a small apartment

PROCESS



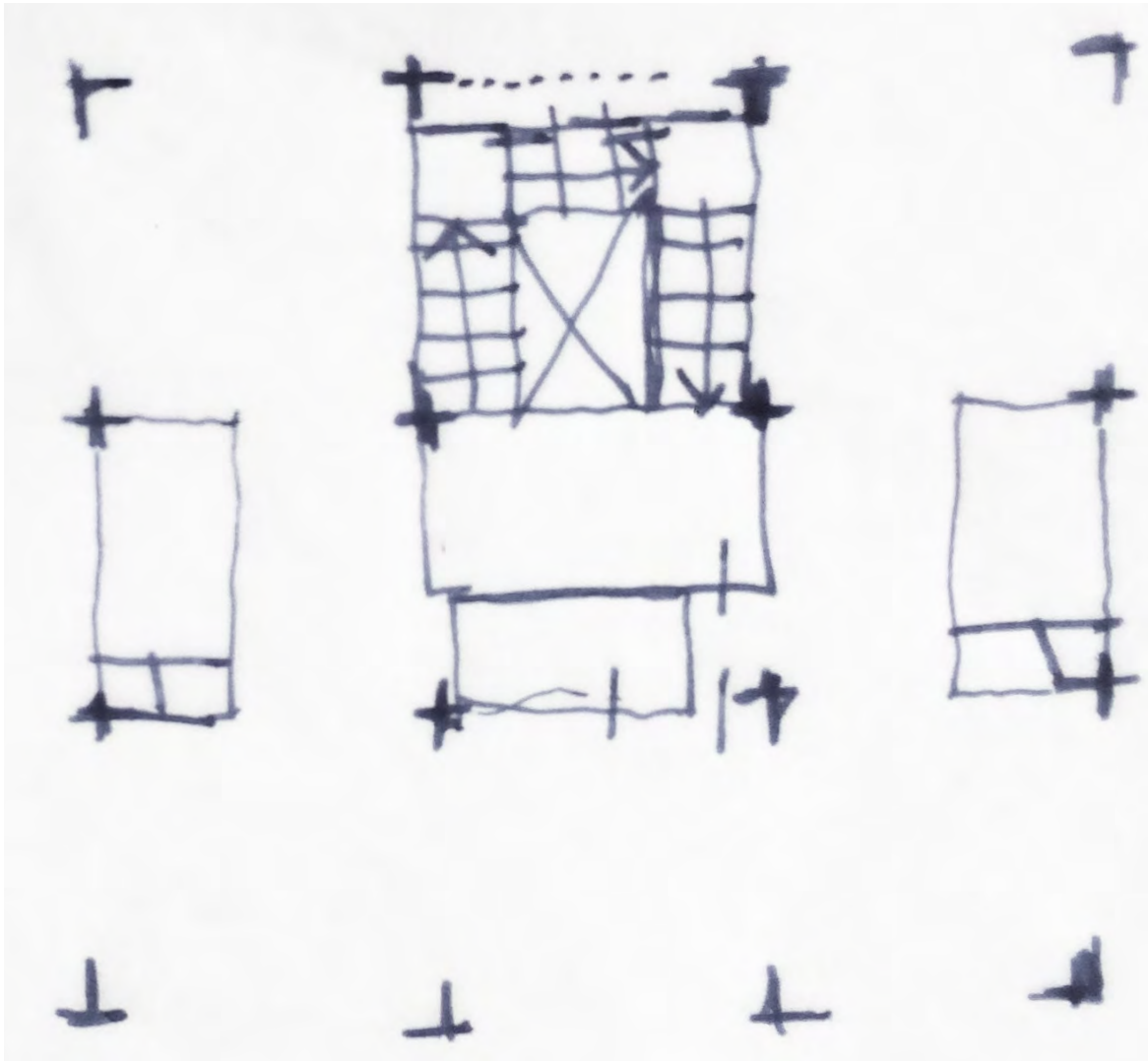
Deciding to go for the closed block, investigating footprint alternatives

PROCESS

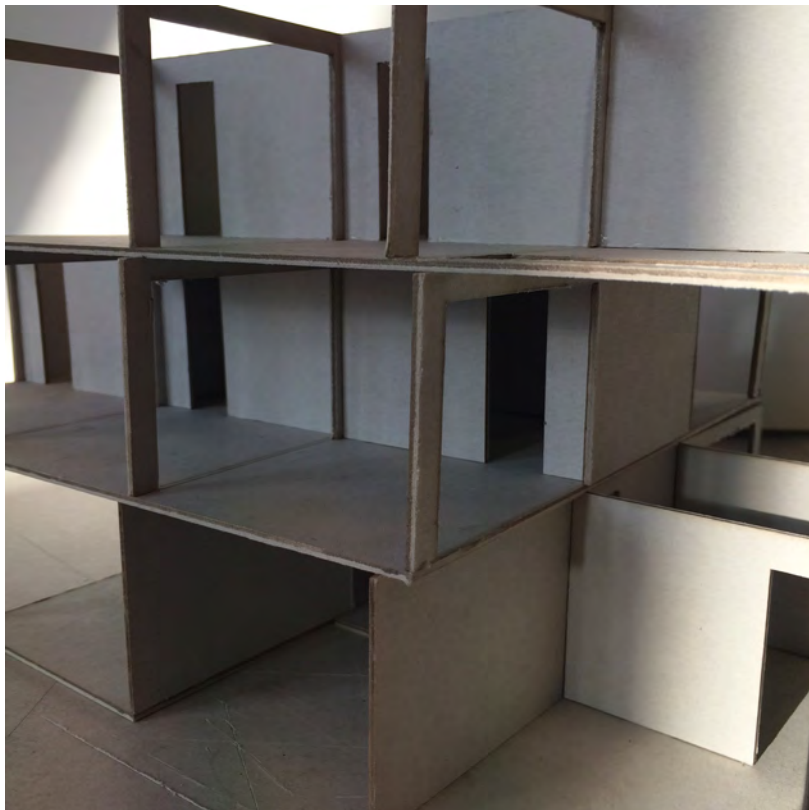


*Working on model parallel to analysis, trying to find a suiting
typology layout, regarding flexibility, interchangeability, core
funtions*

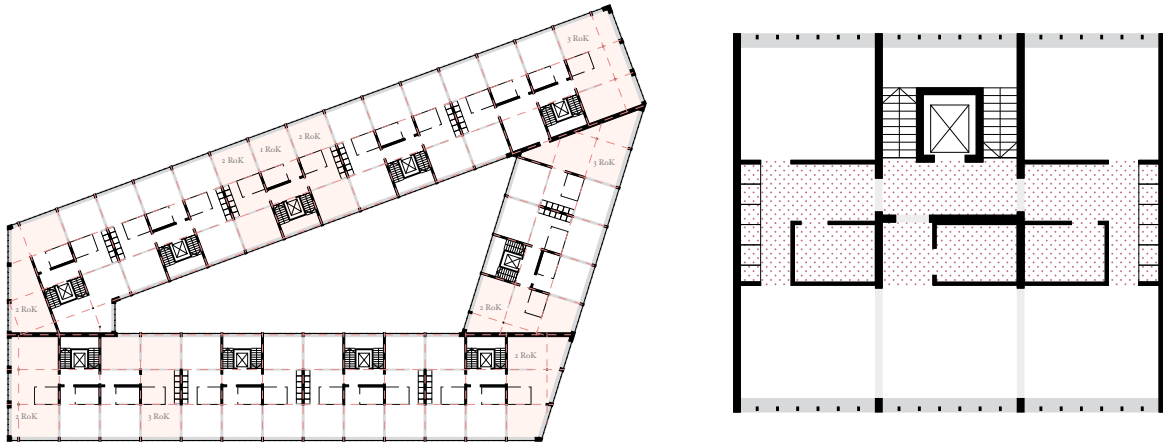
PROCESS



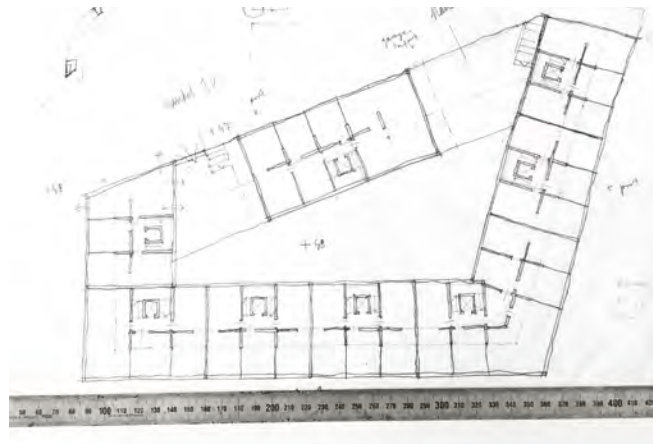
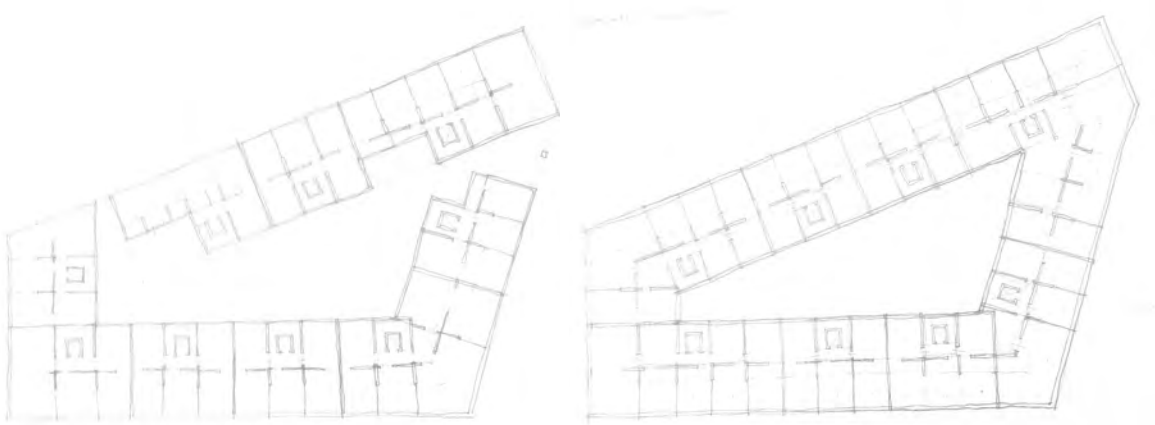
PROCESS



PROCESS

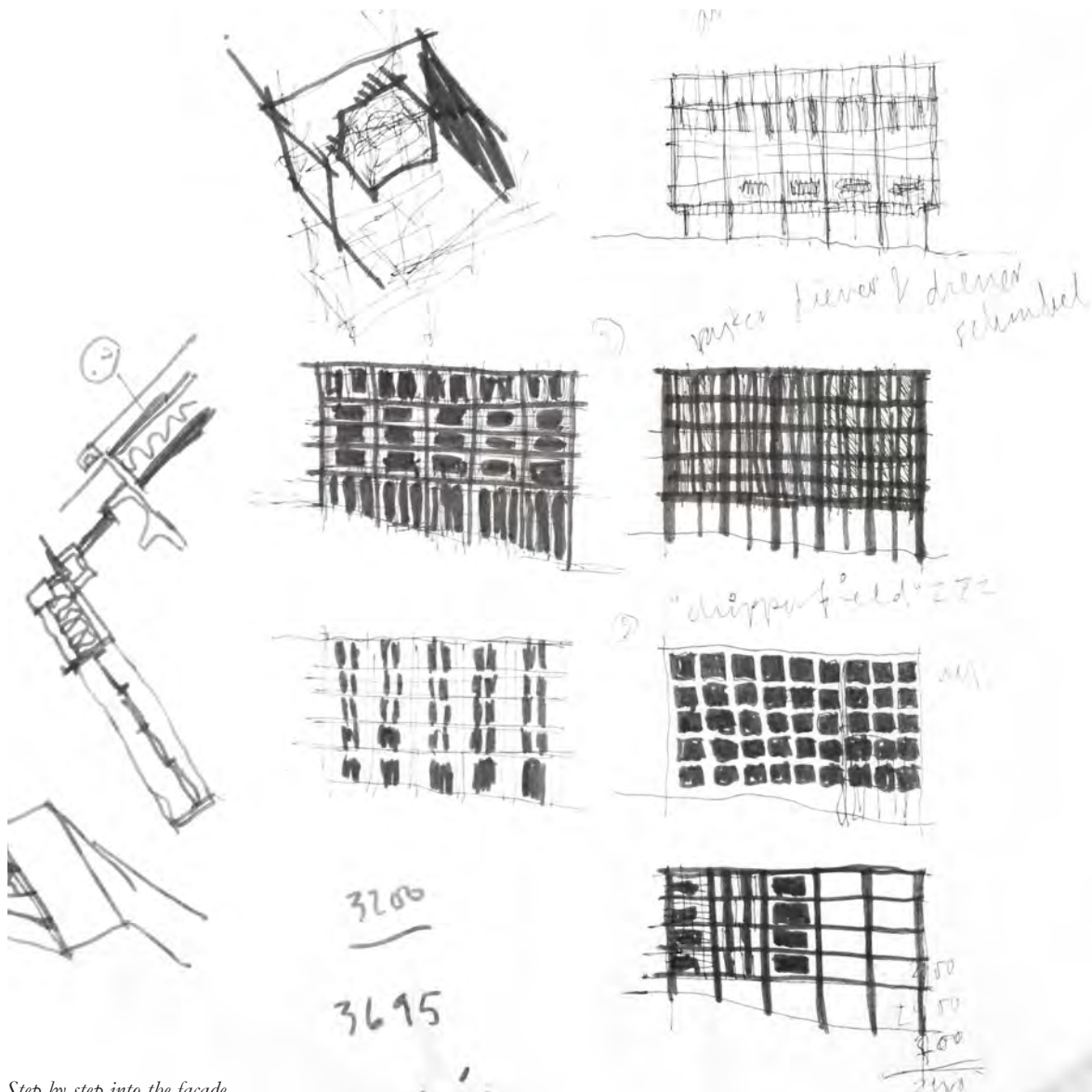
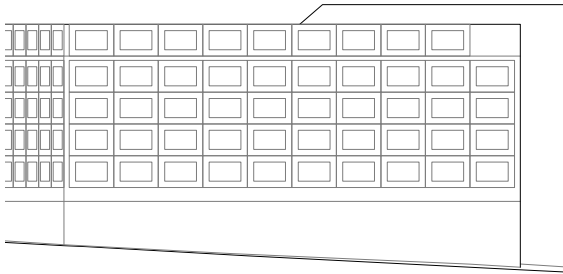


Mid Crit: How to make the building work in the narrow site?



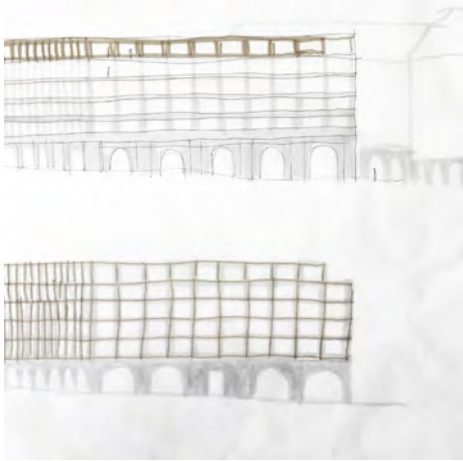
Deciding on a new layout

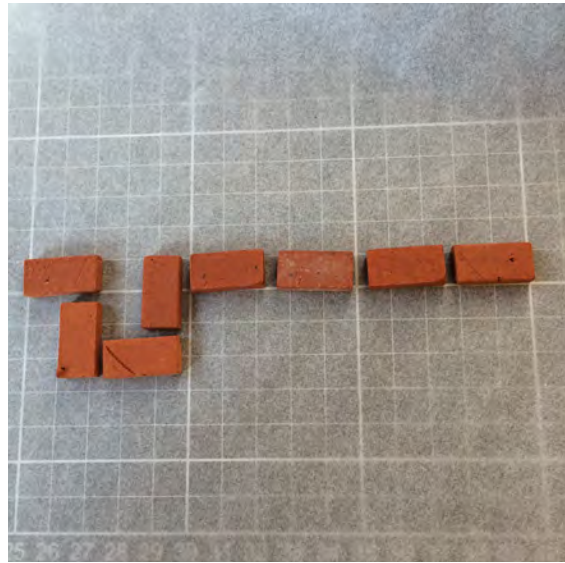
PROCESS



Step by step into the facade

PROCESS





5 / CONCLUSION

CONCLUSION

RESULT

The result of this thesis is a design project which discusses the current issue of high numbers of people living alone, through making a design specific for the group. An important starting point was to not regard living alone as something negative, but rather consider it something wished for and intentional.

The biggest insight working with this thesis, is how little material that exist regarding the lone dweller, and that there is, perhaps, a lack of awareness or respect for this group. Looking for references, all I found was student housing project or minimal space solutions, but I don't see why the single dweller should be the factor balancing the equation. I found a numerous group, greatly represented in all ages, but no alternatives other than family apartments or student housing. Hopefully, the outcome of this thesis can arise some interest for this matter.

This project has also been about the chosen site. I wanted to make a thorough site analysis, trying to capture the spirit of the place and to interpret it into a project suited to the location. As a result of morphological analysis, deciding on wanted spacial qualities of the urban space, investing materiality and character through site visits and study of original drawings. I have been careful to analyse results and use them in the design process to inform my choices.

CONCLUSION

DISCUSSION

The project should be the focus of discussion, how well it responds to the problem and how well the problem is formulated. There are many different sides to why we dwell alone, and not all could be addressed in this thesis. I chose to focus more on the project, even though I at some early stages spent time learning about Swedish individualization, independence and the societal background and effects of it.

Discussing the subjects from a project point of view, the first issue is space usage. The suggested solution is similar in size to many apartments currently being produces -2 room at 43 sqm - but the dweller would also have to pay for common areas located on the entrance floor and the roof top. There are also more staircases than average, as a way to avoid uninspired corridor solutions. The unrealistic space usage is a problem not quite solved in this thesis, even though one could reason that to some extent, the rational grid layout might keep down costs, and that the general and flexible spaces adds durability to the project.

In the article by Casanova and Hernandez mentioned earlier, they state that the apartment or house is unique, since it is both an object of consumption with a market value, but also has a big influence in our way of living. And living should be if not great, at

least decent. I believe minimum space apartment are not a sustainable solution for the individual, and that a lasting neighbourhood would benefit from more generous and flexible apartments. *How* generous they could be depends on what subgroup of the single dweller group your aiming at, as a part of the result is the insight that this is such a wide user group. It would not be fruitful to assume that all needs could be fulfilled by, for example, student apartments.

Emancipation and independence can't be re-winded, and it must be stated as a positive direction for the general community. But it is obvious that the housing stock could change and be appropriated to these new times. This project shows one way this could be done, but it should really be seen as one option investigated and evaluated next to many others. Since I made a choice to also make it suitable for the whole user group, in a way that you can choose the size and layout after needs and economical possibilities, it also becomes hard to discuss on the basis of individual cases. I'm showing a couple of different plan layouts, but I think that it is self-explanatory that the options are endless and that there no longer is such a thing as a standard situation, if there ever existed one.

CONCLUSION

REFLECTION

My biggest challenge in this project has been to balance research, applying results to use in a suggestion for housing and bring it to a high level of detail. The concept of the lone dweller could have been pushed further and made more experimental, but within the time frame, I thought a more coherent project would be delivered if I chose a somewhat classic typology, even though I used an unconventional plan layout structure.

During the semester, my point of view has changed regarding the single dweller. The first weeks I saw it as a problem, from an emotional point of view. How alone they must feel, how vulnerable they must be, and how much I can do to help them! It only took me a week or so to realise that, since there is a backside, there are also a lot of positive effects, being an emancipated society, not being bound to the family as a woman, being free to realize yourself - a truly happy way of life.

That is - if you have people around you. Because no one wants to be completely alone. Offering the perfect solution on how to live together, inside or outside the four walls of home, is a grand task with as many different outcomes as there are individuals....

Through the project, I have reflected upon my choice to connect the project to a site, and whether this has weakened the result. I have been trying to achieve a project interesting and useful to address a current issue, but also trying to fit it to a site, in a modest and refined way. Perhaps there is a point in cladding experimental plans in a conventional shell - making it more accessible and decreasing the look of "experimental housing". In the end, it probably comes down to me being attached to the thought of making a project that is "beautiful" in my own eyes - a superficial motivation stemming to how things look. With this said, it has been pleasant working with a grid, informing the strict facade while also fitting the addition in its context.

A P P E N D I X

List of references

Written:

Axelsson, J. (2014) Together on our own - the meaning and position of the residential community. Göteborg : Chalmers University of Technology

Olsson, Sören, Cruse Sondén, Gerd & Ohlander, Marianne (1997). Det lilla grannskapet: gårdar, trapphus och socialt liv. Göteborg: Centrum för byggnadskultur i västra Sverige

Online:

Casanova, Helena and Hernandez, Jesus (2008). Housing Identity & individualization. De Architect Magazine. 2008-04. (<http://www.casanova-hernandez.com/downloads/W004.pdf>) (Accessed 2015-11-10).

Statistic research:

All information on page 12-13 extracted from the web site of Statistiska Centralbyrån.

Image Sources according to page:

- 18. Aerial photography courtesy of Stadsbyggnadskontoret, Göteborg.
- 19A Aerial photography courtesy of Stadsbyggnadskontoret, Göteborg.
- 19B Aerial photography courtesy of Stadsbyggnadskontoret, Göteborg.
- 26A Historical city plan extracted from the archives of Stadsbyggnadskontoret, Göteborg
- 26B,C,D Historical city plans from Kulturmiljöunderlag, Göteborgs Stadsmuseum
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- 27A,B,C,D Photographs from the online gallery of association Landalapojkarna, Accessed from: <http://galleri.landalapojkarna.se/#!/home>
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- 28A Accessed from: [http://www5.goteborg.se/prod/fastighetskontoret/etjanst/planbygg.nsf/vyFiler/Centrum%20-%20Utveckling%20av%20Chalmers%20Johanneberg%2C%20Mossen%20och%20Landala-Program%20-%20samr%C3%A5d-Ny%20version%20publicerad%2017%20oktober%20-%20Underlag%20och%20F%C3%B6rdjupning/\\$File/Underlag_fordjupwebbny.pdf?OpenElement](http://www5.goteborg.se/prod/fastighetskontoret/etjanst/planbygg.nsf/vyFiler/Centrum%20-%20Utveckling%20av%20Chalmers%20Johanneberg%2C%20Mossen%20och%20Landala-Program%20-%20samr%C3%A5d-Ny%20version%20publicerad%2017%20oktober%20-%20Underlag%20och%20F%C3%B6rdjupning/$File/Underlag_fordjupwebbny.pdf?OpenElement)
- 28B,D Image of Underlag och fördjupning. Program för Chalmers Johanneberg, Mossen och Landala. Accessed from: [http://www5.goteborg.se/prod/fastighetskontoret/etjanst/planbygg.nsf/vyFiler/Centrum%20-%20Utveckling%20av%20Chalmers%20Johanneberg%2C%20Mossen%20och%20Landala-Program%20-%20samr%C3%A5d-Ny%20version%20publicerad%2017%20oktober%20-%20Underlag%20och%20F%C3%B6rdjupning/\\$File/Underlag_fordjupwebbny.pdf?OpenElement](http://www5.goteborg.se/prod/fastighetskontoret/etjanst/planbygg.nsf/vyFiler/Centrum%20-%20Utveckling%20av%20Chalmers%20Johanneberg%2C%20Mossen%20och%20Landala-Program%20-%20samr%C3%A5d-Ny%20version%20publicerad%2017%20oktober%20-%20Underlag%20och%20F%C3%B6rdjupning/$File/Underlag_fordjupwebbny.pdf?OpenElement)
- 28C Image of Studier av Landala Torg, Fakta, Önskemål och Visioner. Accessed from: [http://www5.goteborg.se/prod/fastighetskontoret/etjanst/planbygg.nsf/vyFiler/Centrum%20-%20Utveckling%20av%20Chalmers%20Johanneberg%2C%20Mossen%20och%20Landala-Program%20-%20samr%C3%A5d-Landala%20Torg/\\$File/LandalaTorg.pdf?OpenElement](http://www5.goteborg.se/prod/fastighetskontoret/etjanst/planbygg.nsf/vyFiler/Centrum%20-%20Utveckling%20av%20Chalmers%20Johanneberg%2C%20Mossen%20och%20Landala-Program%20-%20samr%C3%A5d-Landala%20Torg/$File/LandalaTorg.pdf?OpenElement)
- 29 A,B,C,D,E Drawings extracted from the archives of Stadsbyggnadskontoret, Bygglövsarkivet in Gothenburg.

All other images and graphics are by the author.

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