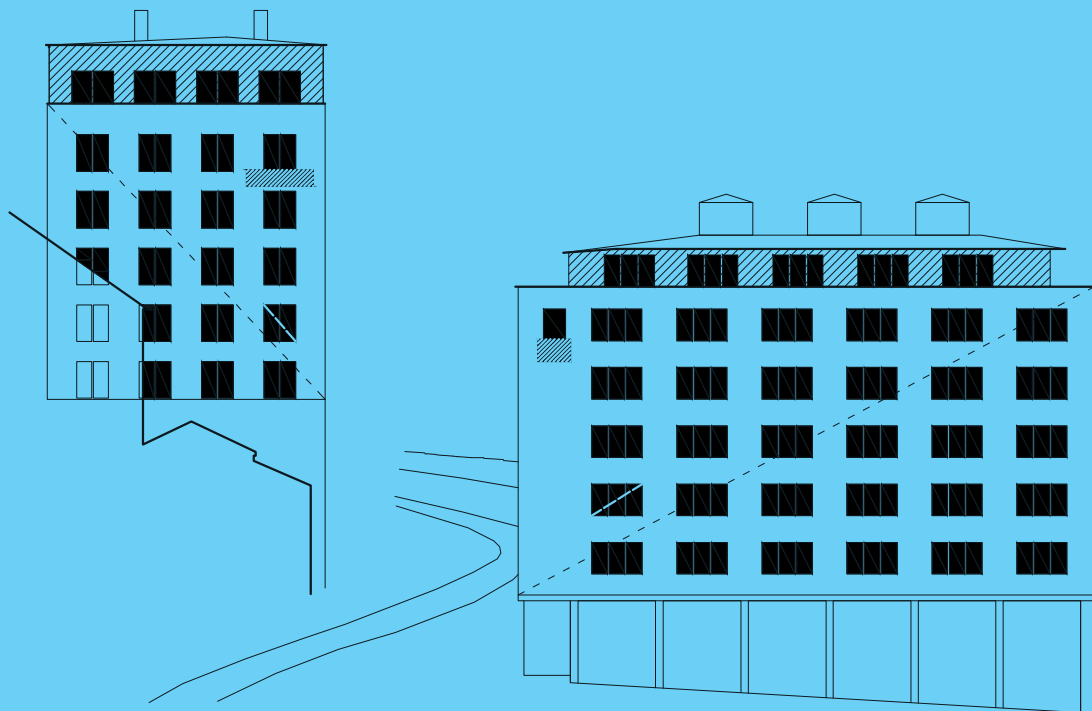


THE OUTPOST

Hugo Henriksson



*Chalmers University of Technology
Department of Architecture and Civil Engineering*

*Examiner: Björn Gross
Supervisor Mikael Ekegren*



CHALMERS

2022

*The Outpost
Hugo Henriksson*

*Chalmers University of Technology
Department of Architecture and Civil Engineering*

*Examiner: Björn Gross
Supervisor Mikael Ekegren*

TABLE OF CONTENTS

Introduction

- 4 Student Background
Abstract
- 5 Thesis Question
Academic Framework
 - Objective
 - Method
 - Delimitations

Site Analysis

- 6 Stigbergsliden vs Gothenburg
- 8 The site vs Stigbergsliden

Analysis and proposal

- 12 The proposal
- 14 Plans
- 22 Internal qualities and reference
- 24 Interior Perspective
- 26 Facades and Sections

Aftermath

- 34 Discussion
- 35 Reference List

STUDENT BACKGROUND

2020 and onward	- Master of Science in Architecture, Chalmers
2018 and onward	- Solo practice in Architecture
2019 - 2020	- Internship at Ferrum Arkitekter, Gothenburg
2016 - 2019	- Bachelor of Science in Architecture, Chalmers

ABSTRACT

This master thesis seeks to investigate the visual and spatial conditions for building design in the context of the complex cultural and urban landscape that we, as architects, find ourselves practicing in. Specifically, it is a design project for a residential building, aiming to achieve a sense of continuity with both the immediate surroundings of the site, and the general typology of urban dwellings.

Design choices are based primarily on questions of what is city-like, house-like and finding a balance between curiosity vs conformity.

Keywords: typology, continuity, influence, gesture

ACADEMIC FRAMEWORK

THESIS QUESTION

How can a new building be designed to achieve visual and cultural continuity, yet act as an individual of integrity, in a complex urban context?

This is the question investigated through the design of a residential building along the slope of Stigbergsliden, the hairpin passage that marks the border between downtown Gothenburg and Majorna. The site is chosen for its complexity and curiosity, and the inevitable visual impact of any proposed project. Whatever is built here, will make a mark in the urban sequence, actualizing the research question even further.

METHOD

Research by design is the practice of accumulating knowledge through iteration and evaluation. In the case of this thesis project, the evaluation of the result in relation to the objective is somewhat subjective - just like a great part of architectural experience itself. Our understanding of architecture is culturally conditioned, as proven by the fact that design preference varies throughout the world, within societies and between generations, just like with the other arts. As I evaluate my result, which I do continually for every design decision made, I represent my own cultural orientation and architectural preference, along with the input of peers and tutors, which is a rather narrow representation of possible positions.

OBJECTIVE

The objective of this work is to produce a architectural proposal that investigates and suggests an approach to architectural design that draws influence in both the physical context of a site, and the cultural context of the given building typology. The ambition is to achieve a design that *fits* in the immediate surroundings, while being consistent with a deeper sense of what a residential building is, which in turn should result in an architecture of adequate general acceptance. For this thesis, continuity in the urban landscape and tradition, is key.

Conformity is the word that sums up the objective mentioned above. The second objective is to achieve qualities of *curiosity*, an architecture of possibilities.

DELIMITATIONS

For this thesis project, and the specific design assignment I have chosen to investigate the research question, several delimitations have been made. As I focus solely on the visual and spatial qualities of an architectural situation, while questions of ecological sustainability, aswell as with innovation in technical and social aspects of housing, will not be considered in the work.

As for the volume and program of the building, the starting point is guided by a local government approved building permit for a residential building at the same site. In this thesis, my result will not be compared directly to the already permitted building, which is to be built, but act merely as a guideline to overall building size. As the design develops, I allow the project some definite deviations from the city plans, although personal judgement is used to stay within what would have been reasonable alternative regulations to the site.

PHYSICAL CONTEXT

STIGBERGSLIDEN VS GOTHENBURG

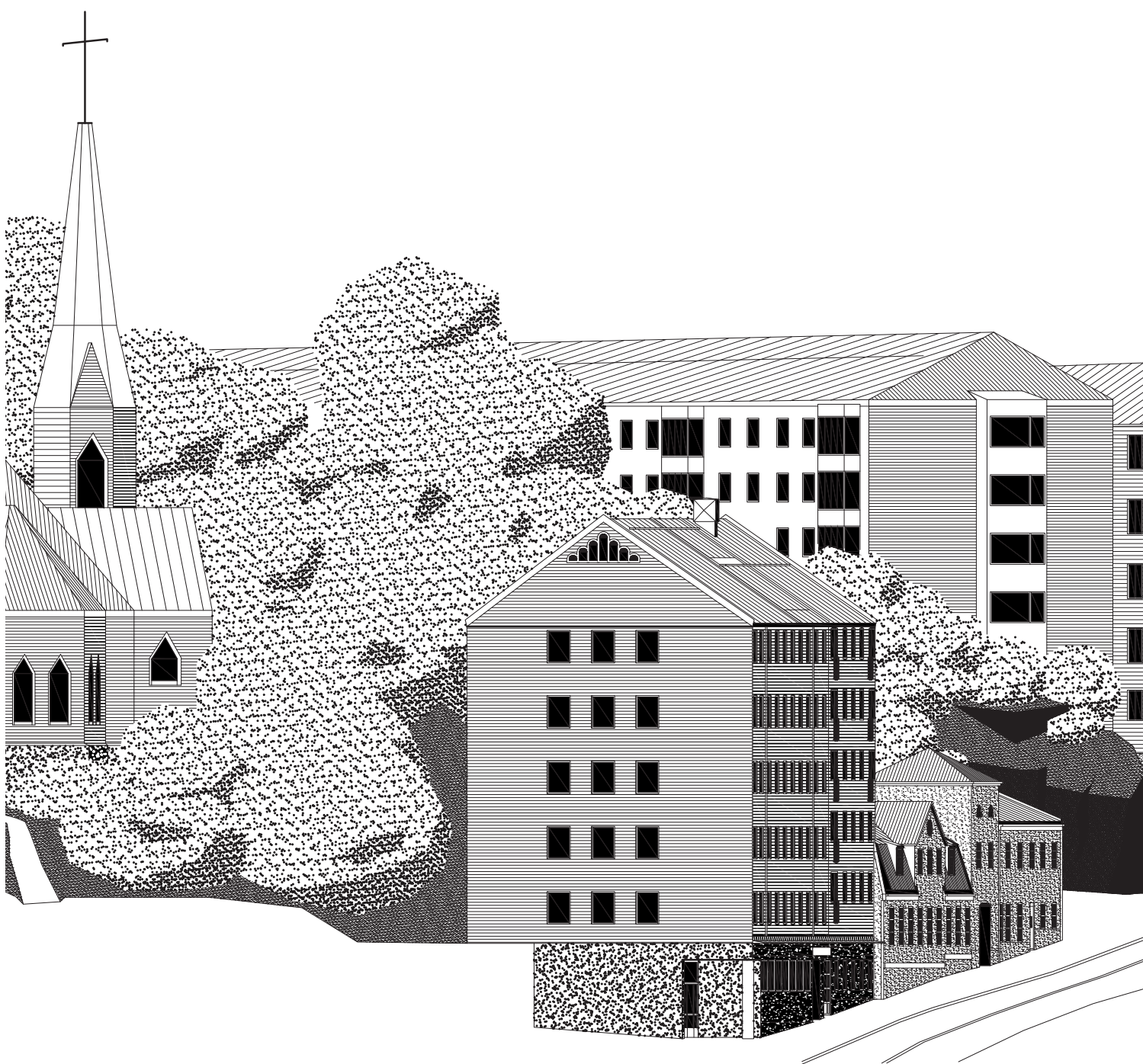
To describe the context of the site, one must start with the overall location within the city. It is important to the site analysis as the theme of the immediate area or district in relation to the rest of the city must affect the designed proposal, given our current thesis research question.

In this case, I will start to define the location of the neighbourhood as a kind of borderland between Majorna and downtown Gothenburg. Because of Gothenburg's topographical situation, hills and valleys naturally tend to enhance the definition of different districts and neighbourhoods in the city. The downtown areas of the city can be seen as the main valley, containing the city center, complemented with districts which have grown, at first, in the valleys radiating from the center, and later up and onto the hills, as easily developed flatlands became more and more scarce.

Majorna was an early expansion of the city outside of the main valley, as the harbour kept expanding westward. Stigberget is the hill that marks the definition of Majorna in relation to downtown, and Stigbergsliden, the street of our site, is the needle eye passage through which most people in Majorna must pass through everyday to access the city. When moving from the city center and outwards, the urban fabric is perceived as rigidly regular and commercially dense up until the point of this passage, where the street must start to adjust to the landscape. Along the street, gaps of vegetation and sightlines to the river and up onto Stigberget start to appear. The buildings along the street act like a set of guarding towers as the street tightens, exerting control over whoever will pass into Majorna. The street also starts to slope uphill, and finally opens up into the square







THE SITE VS STIGBERGSLIDEN

Continuing with the more immediate context, we arrive at the neighbourhood surrounding the specific lot. The neighbouring buildings can be summarized as a collection of compromises. None of them really fulfills the visual idea of their various given typologies. The apartment buildings do not entirely feel like apartment building, the offices not like offices and the commercial business are hidden deep into basements, rather than being given a proper place along the street, expressing an urban atmosphere.

Earlier in this text, I referred to the neighbouring building as the watchtowers of Stigbergsliden, which is only true in the sense of their respective volume. The motifs and perceived directions on the other hand, do not take advantage of this potential theme. The two buildings which, by chance or by will, actually face the direction from which you experience them, definitely add a lot to

the street sequence, providing faces to the buildings that greet you when ascending Stigbergsliden. My proposal, I feel, must do the same, strengthening the theme of Stigbergsliden as a gate between downtown and Majorna.

Although the above conclusion is that my proposal must face the city, when seen from the city's direction, it cannot be implemented on the building altogether. It is only rewarding for the top half of the volume, which is looking over the lower, neighbouring hostel. The bottom one or two floors, on the other hand, should accentuate the movement of the street, repairing and continuing the urban tendencies of the existing streetscape. It is key to define the break between the visual directions of the buildings street-part and tower-part.

Furthermore, the dominating material of the neighbourhood is yellow brick, which should be fitting to use for my proposal, both for the visual continuity of the area, as well as its tradition in Gothenburg architecture.





ANALYSIS AND PROPOSAL

The result of endless tests of volume and motif generated a sense of how an additional residential building in the neighbourhood, at this specific spot, can complement the sequence. A key realization was the relation to the building further down the slope, on ones left, when approaching the site. It is the only building along the street which produce the same effect as I wanted the project to embody, which means facing the city and act as a guardian of Stigbergsliden.

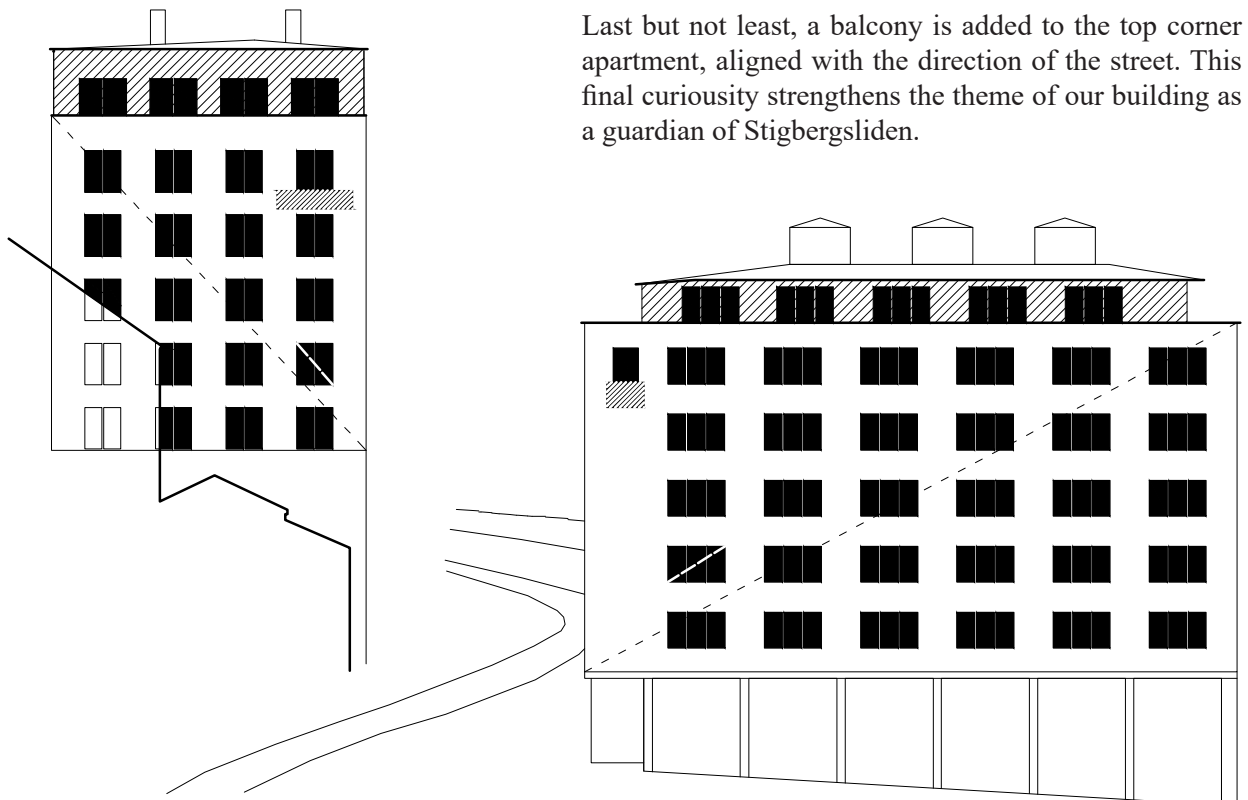


THE PROPOSAL

The proposal contains a set of praphrases to its older cousin. Starting with the overall volume, the proposal imitates the vertical facade division into three parts - top, base and main body, which is also a classical division associating largely to a european architectural heritage. The three parts also contains the same program in both buildings as the main body house the majority of the residential apartments, the top a slightly deviating residential floor, and the base as commercial space.

The horisontal division of the projects facade is a reduced version of its older cousin's. As the wider volume of the neighbour is six-parted, the new building is divided by four. The windows, in turn, have been given the same proportion as the main body of the overall volume, just like it's neighbours.

Last but not least, a balcony is added to the top corner apartment, aligned with the direction of the street. This final curiosity strengthens the theme of our building as a guardian of Stigbergsliden.

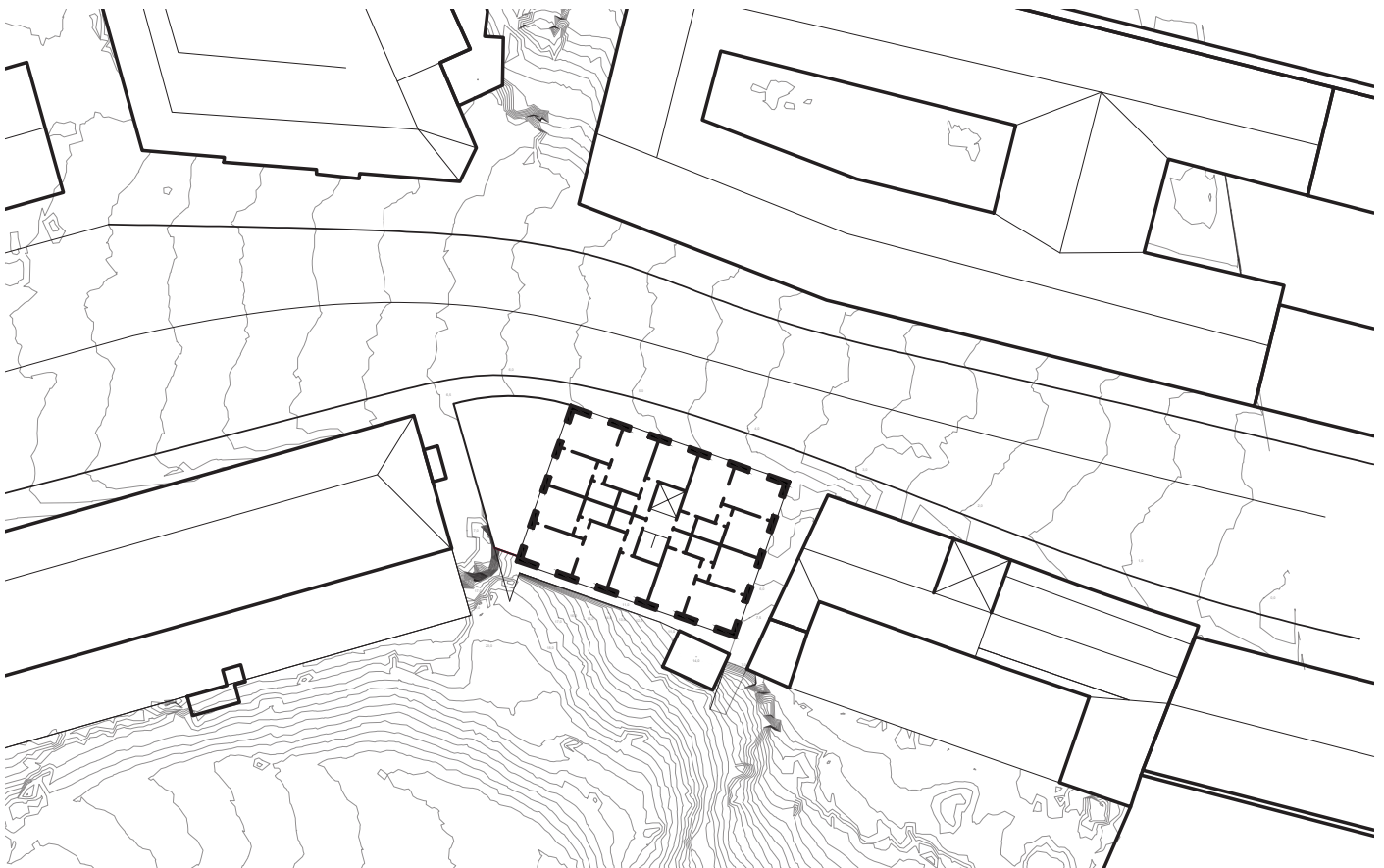


When it comes to the internal qualities of the residential apartments, the ambition is similar to that of the exterior. This means that a lot of work has been spent to find a balance between what is recognizable and relatable and what can bring a sense of curiosity to a space for dwelling. One must feel free to draw inspiration from all periods of residential architecture when facing the design of a new residential layout.

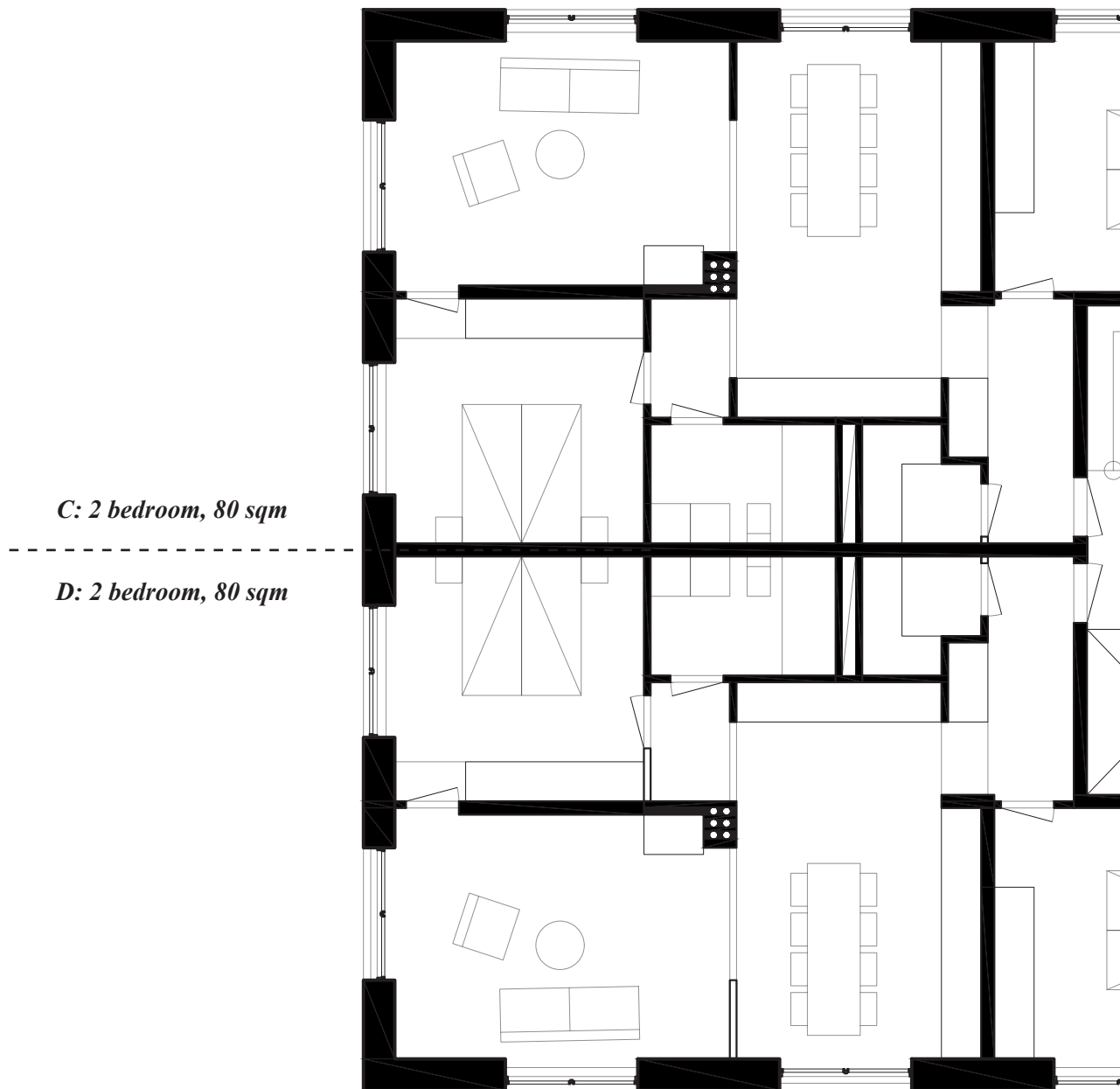
The initial idea of the plan springs from the position of the building itself in the urban sequence, acting as a sort of watchtower, monitoring the flow of local inhabitants passing the informal border between downtown Gothenburg and Majorna. As the building itself act as an outpost, I was intrigued to make each individual apartment amplify this overall theme by stretching over

and around the corners of the building. This in turn, makes each and every apartment have a continuous outlook, exerting visual control of its designated part of the surrounding environment, very much like the building as a whole. The apartments, in this way, are equivalent to the command bridge of a ship, although multiplied on all sides of the building, as the building is a static body.

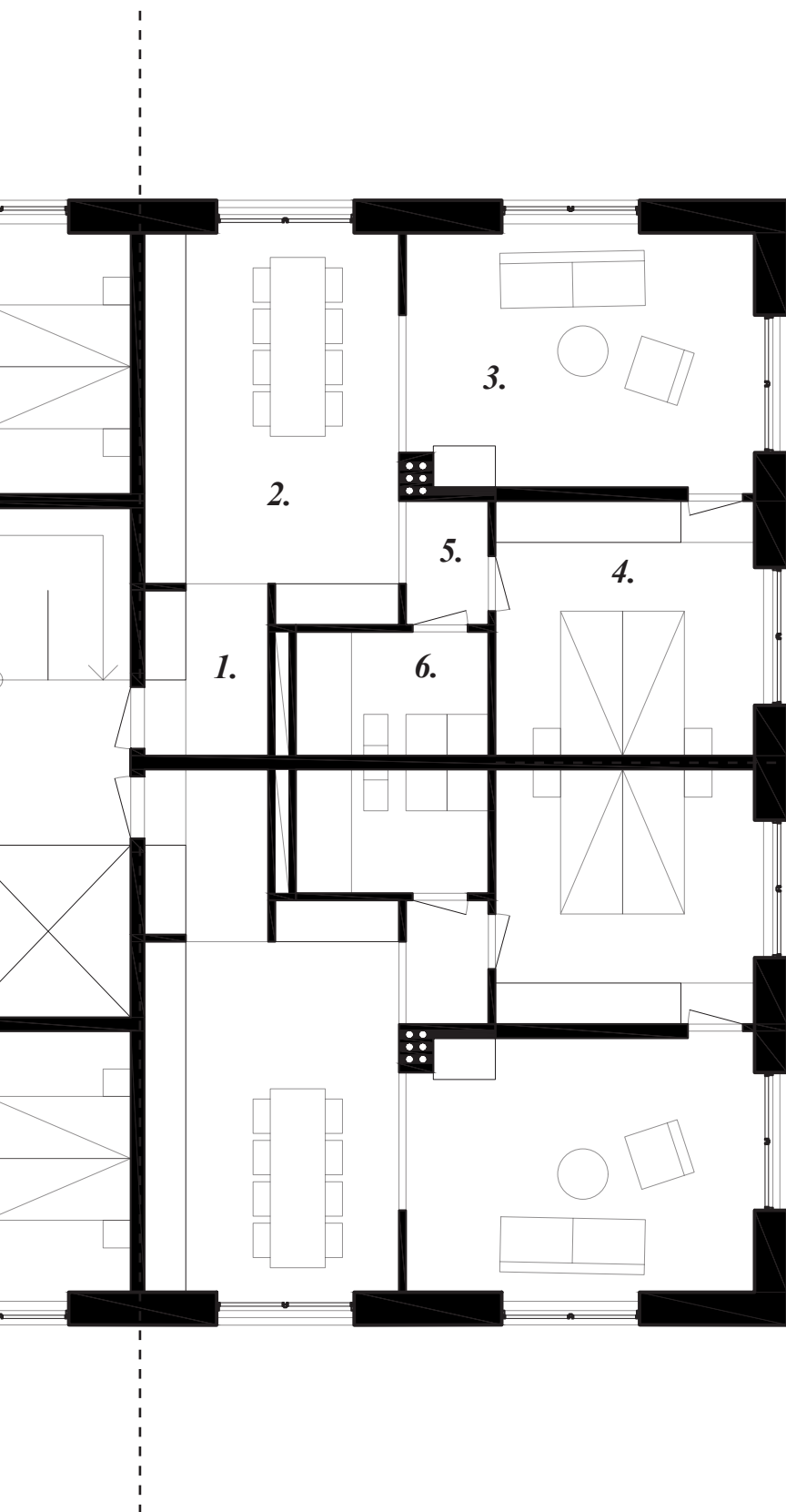
This whole approach is very much in line with what Miroslav Šik (Willenegger, 2018) describes as “[...] cityscapes that are coherently connected to the interior space”. In the same text, he also points to the need of adding something “transformative and more noble” when working closely with a local context.



STREETSIDE



YARDSIDE



5th to 7th floor, 1:100

1. Entrance

2. Kitchen

3. Livingroom

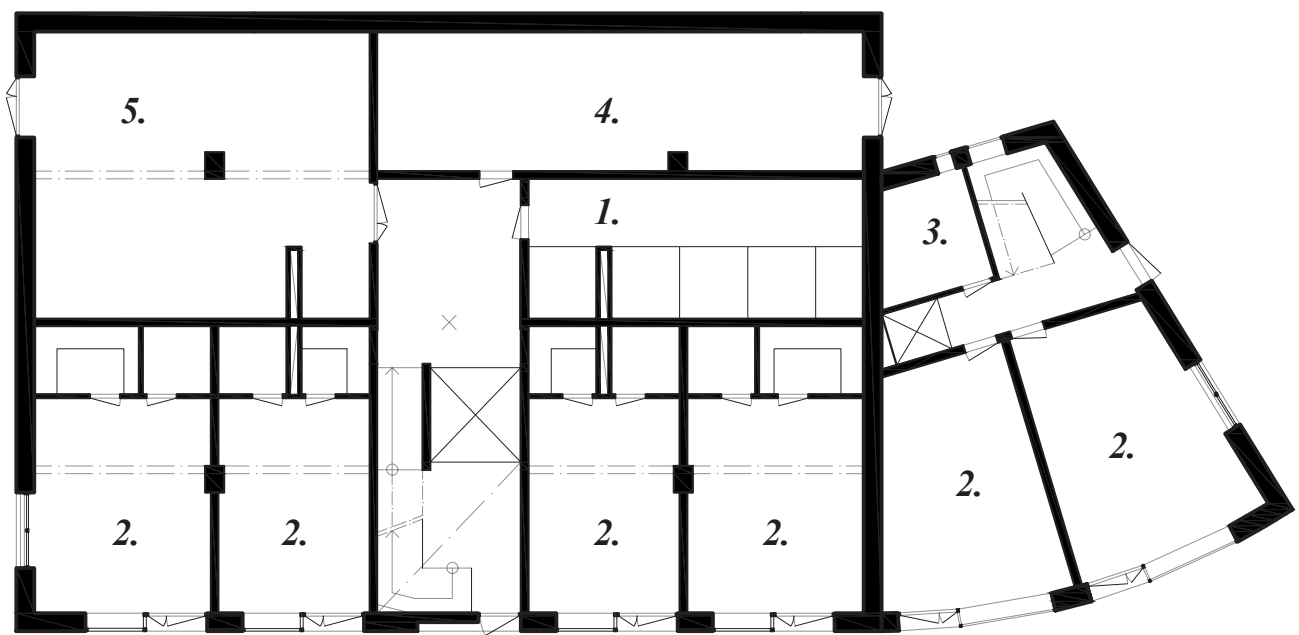
4. Bedroom

5. Hallway

6. Storage

A: 1 bedroom, 65 sqm

B: 1 bedroom, 65 sqm



1st floor, 1:200

1. Storage

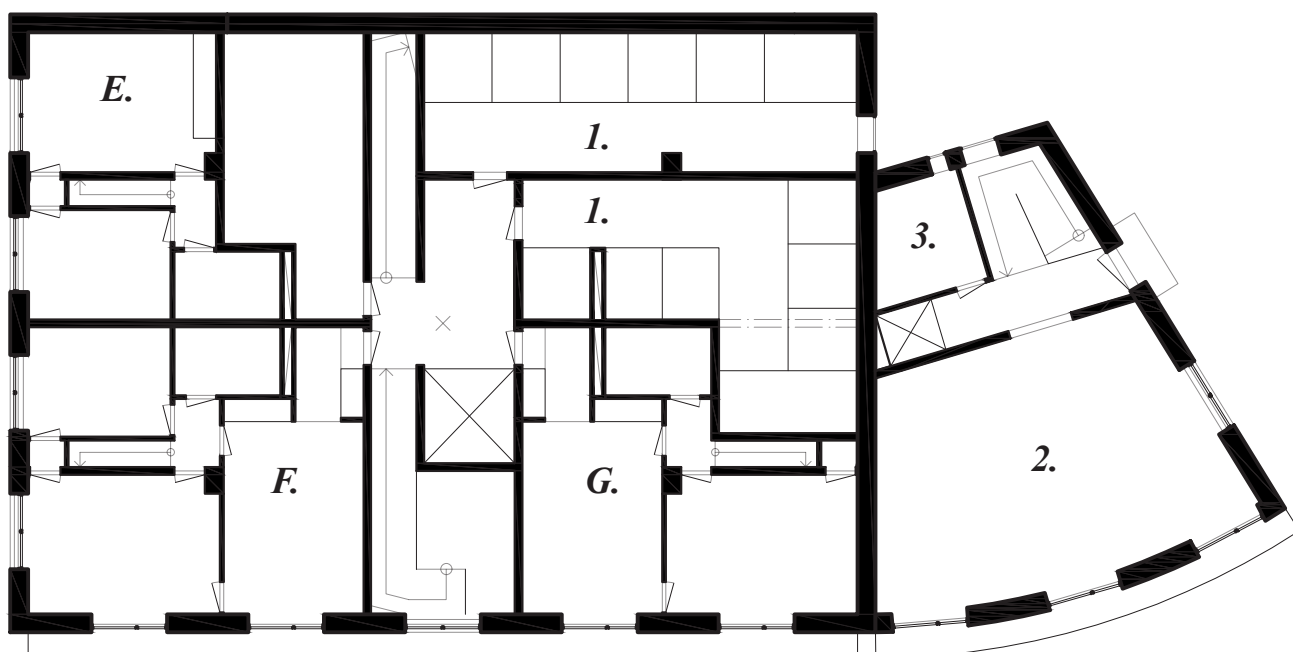
2. Commercial space

4. Common laundry room

5. Bicycle room

2. Commercial space

3. Bathroom



2nd floor, 1:200

E. Apartment 105 sqm

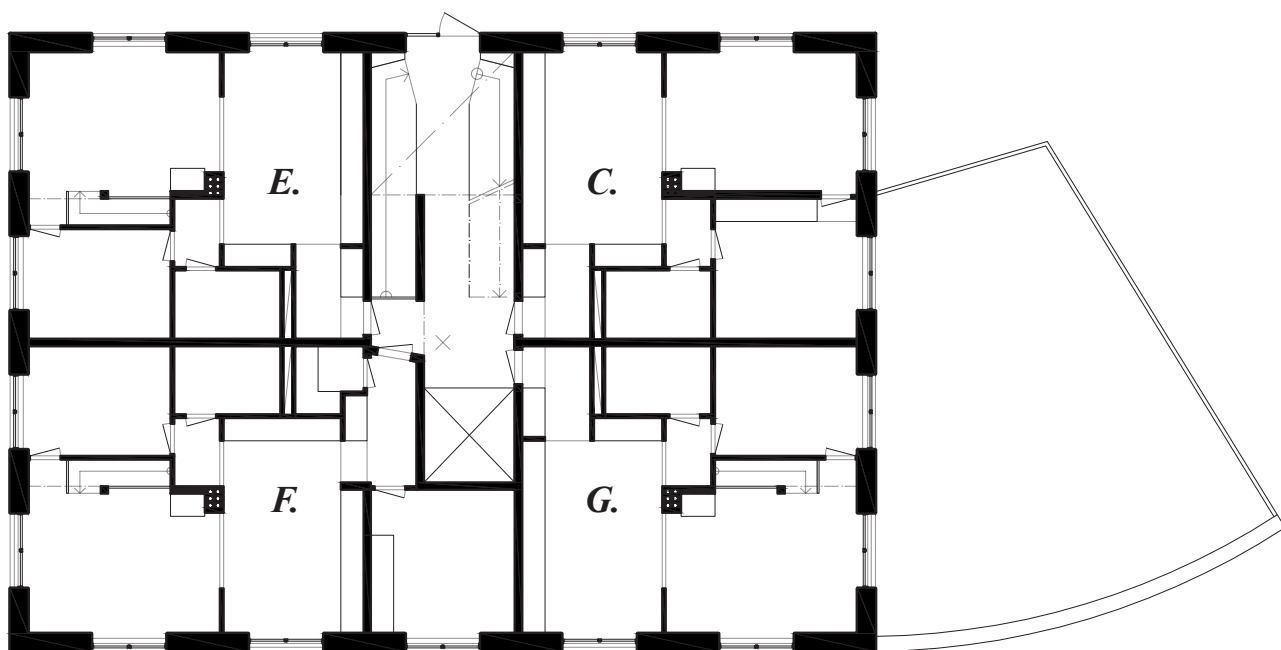
F. Apartment 145 sqm

G. Apartment 120 sqm

1. Storage

2. Office space

3. Bathroom



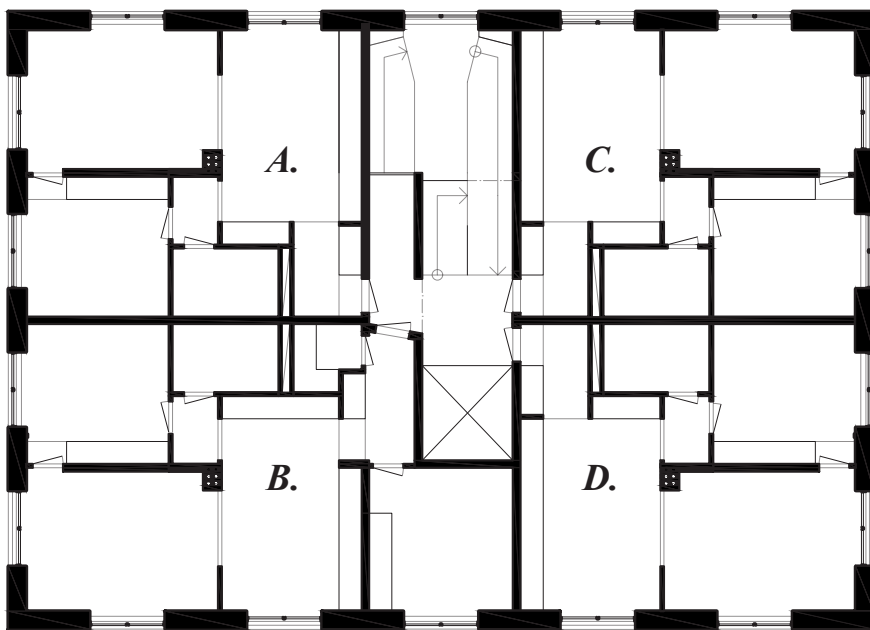
3rd floor, 1:200

C. Apartment 65 sqm

E. Apartment 105 sqm

F. Apartment 145 sqm

G. Apartment 120 sqm



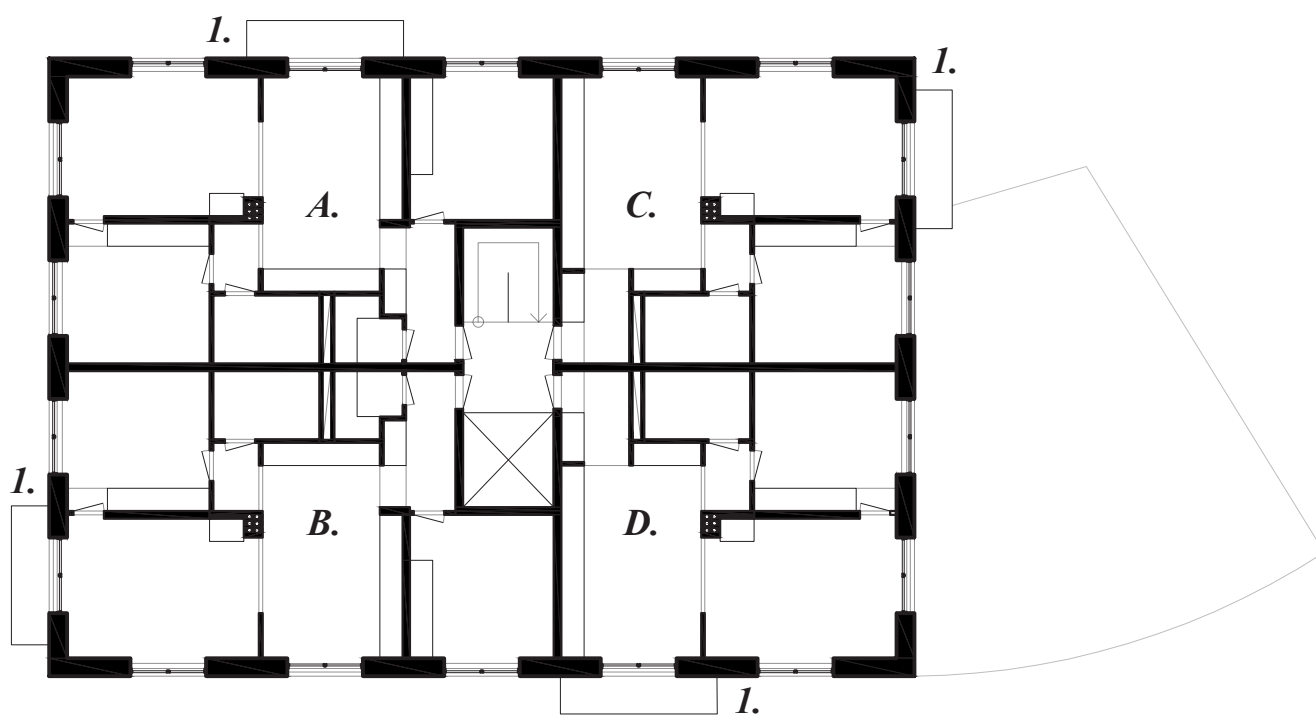
4th floor, 1:200

A. Apartment 80 sqm

B. Apartment 80 sqm

C. Apartment 65 sqm

D. Apartment 65 sqm



5th-7th floor, 1:200

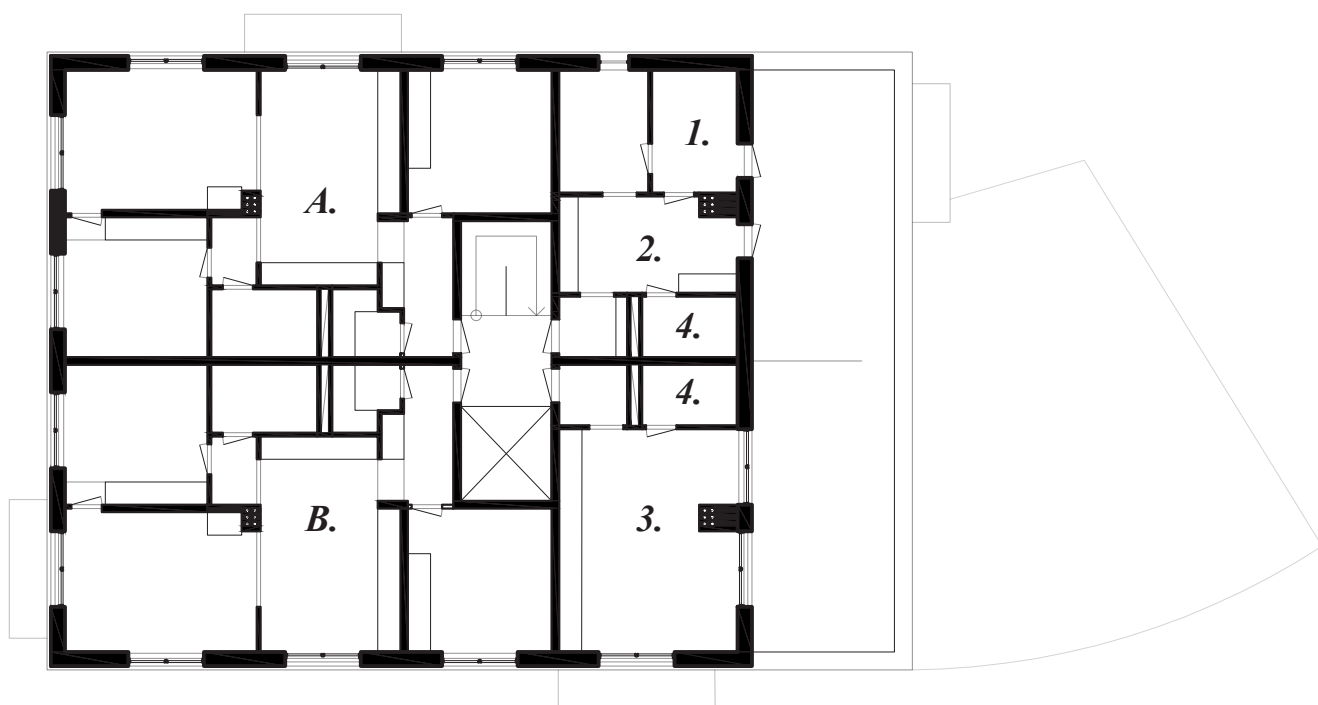
A. Apartment 80 sqm

B. Apartment 80 sqm

C. Apartment 65 sqm

D. Apartment 65 sqm

1. Balconies at 7th floor



8th floor, 1:200

A. Apartment 80 sqm

B. Apartment 80 sqm

1. Sauna

2. Dressing room and showers

3. Common space and kitchen

4. Bathrooms

INTERNAL RESIDENTIAL QUALITIES

Within each apartment, a circular spatial flow is enabled, accentuating the plans orientation along each corner. This, in turn, reminds one of the bourgeois parade apartments of 19th century Gothenburg, where living rooms, dining rooms and bedrooms are placed in a sequence along the main street facade, allowing sightlines and movement along a light and formal axis, complemented with the possibility of informal movement using an internal dark corridor connecting the formal rooms to the purely functional spaces, as described in *Svensk Bostad 1850-2000* (Nylander, 2017). In those times this meant to hide away the kitchen, storage and servants bedrooms. Translated into contemporary conditions, we want to treat a messy entrance and bathrooms the same way.

Another reference which might be even more relatable, speaking of circulation in residential architecture, is the traditional four-part plan of rural Sweden, where four connected rooms are rotated around a brick chimney, minimizing the need for space dedicated to communication altogether, and providing a freedom of movement, which also means allowing circulation of heated air.

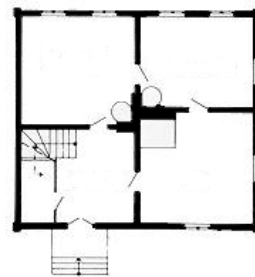


Fig 1. Historical four-part plan. Rooms rotated around a central chimney.

Fig 2. Bourgeoise apartmentment from 1891, showing servant spaces and formal rooms clearly defined.

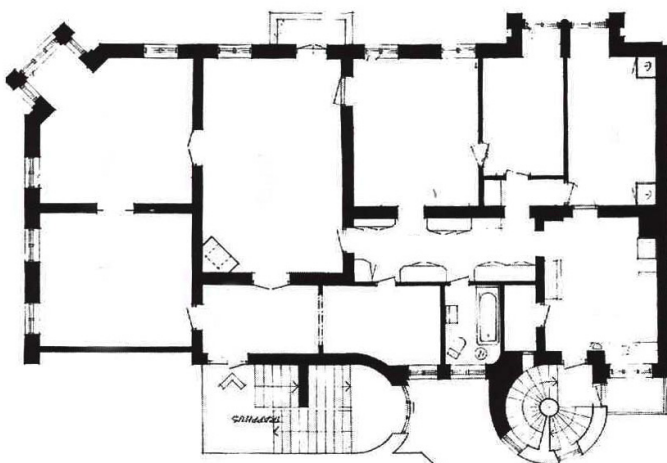
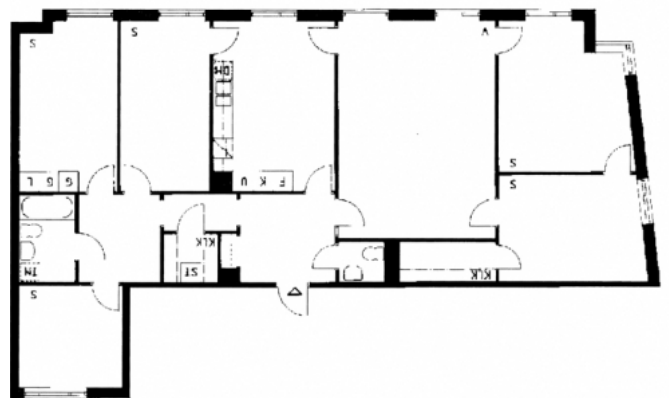


Fig 3. One of the apartments of Prinsen (1994) by Johan Celsing arkitektkontor, applying the historical theme of plan-wise spatial circulation.



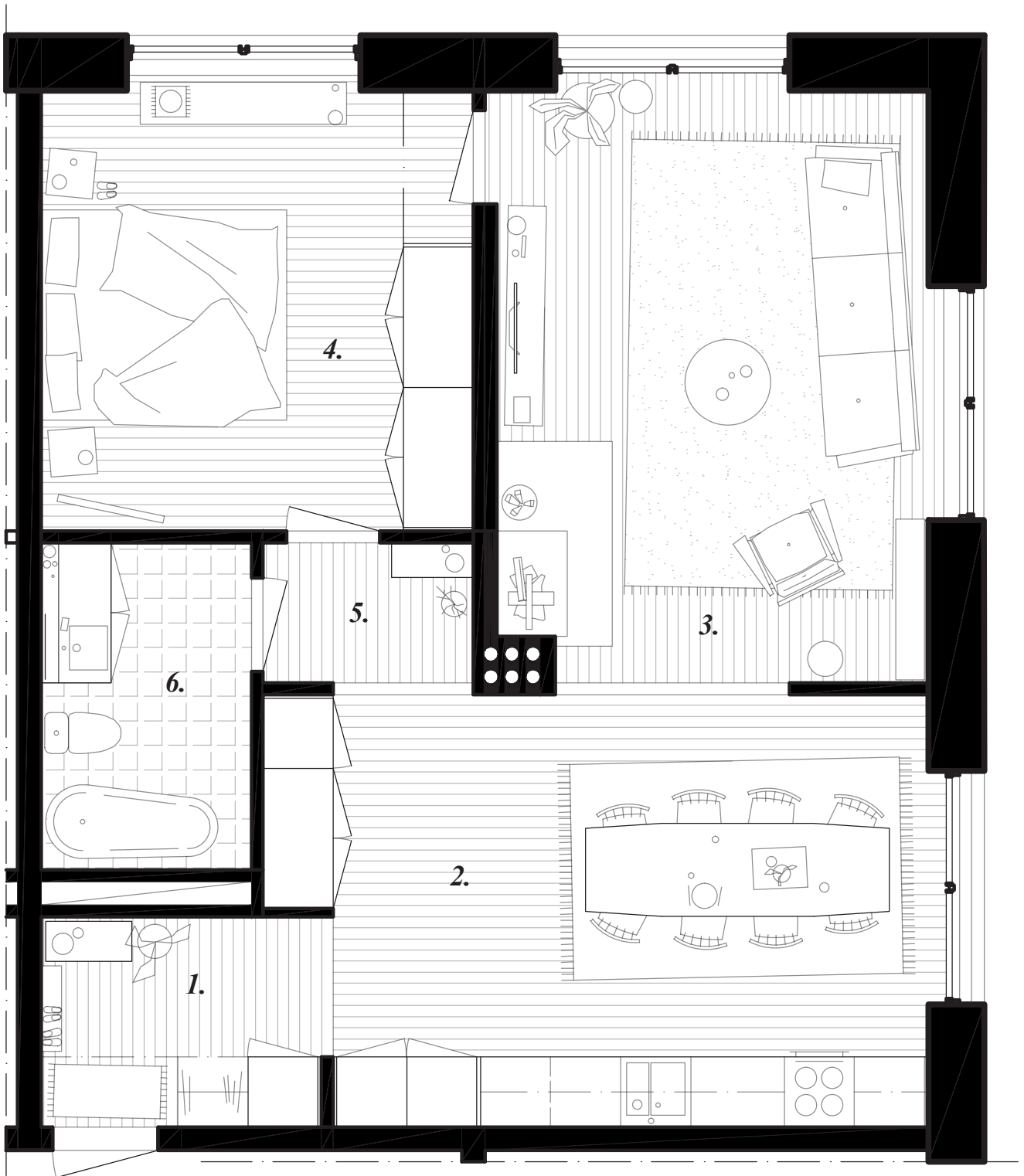


Fig 4. The result: plan of the thesis one-bedroom apartment, which shares the basic layout of the larger apartments. 1. entrance, 2. kitchen, 3. living room, 4. bedroom, 5. passage and 6. bathroom.





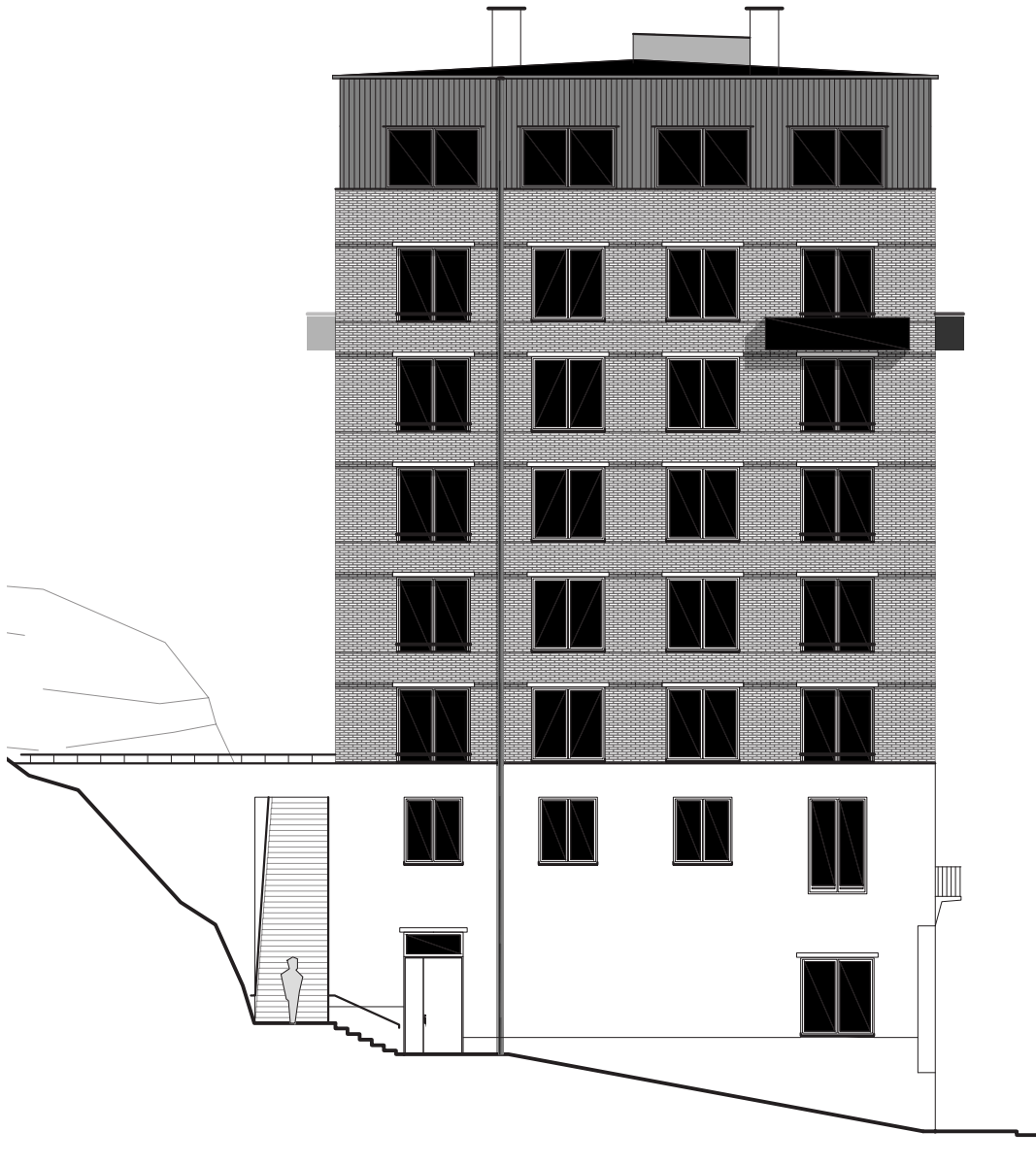


Elevation facing north
1:200

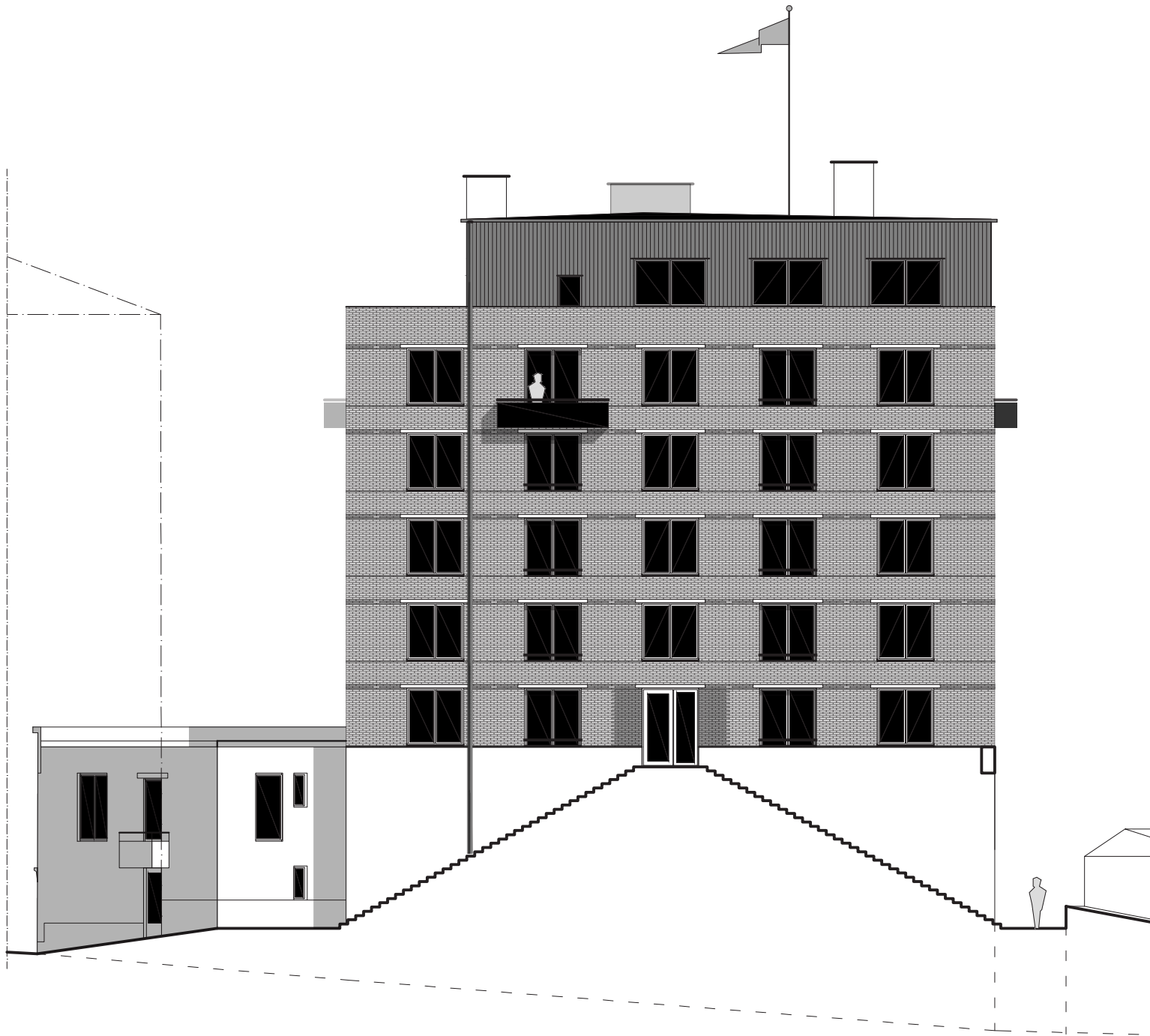




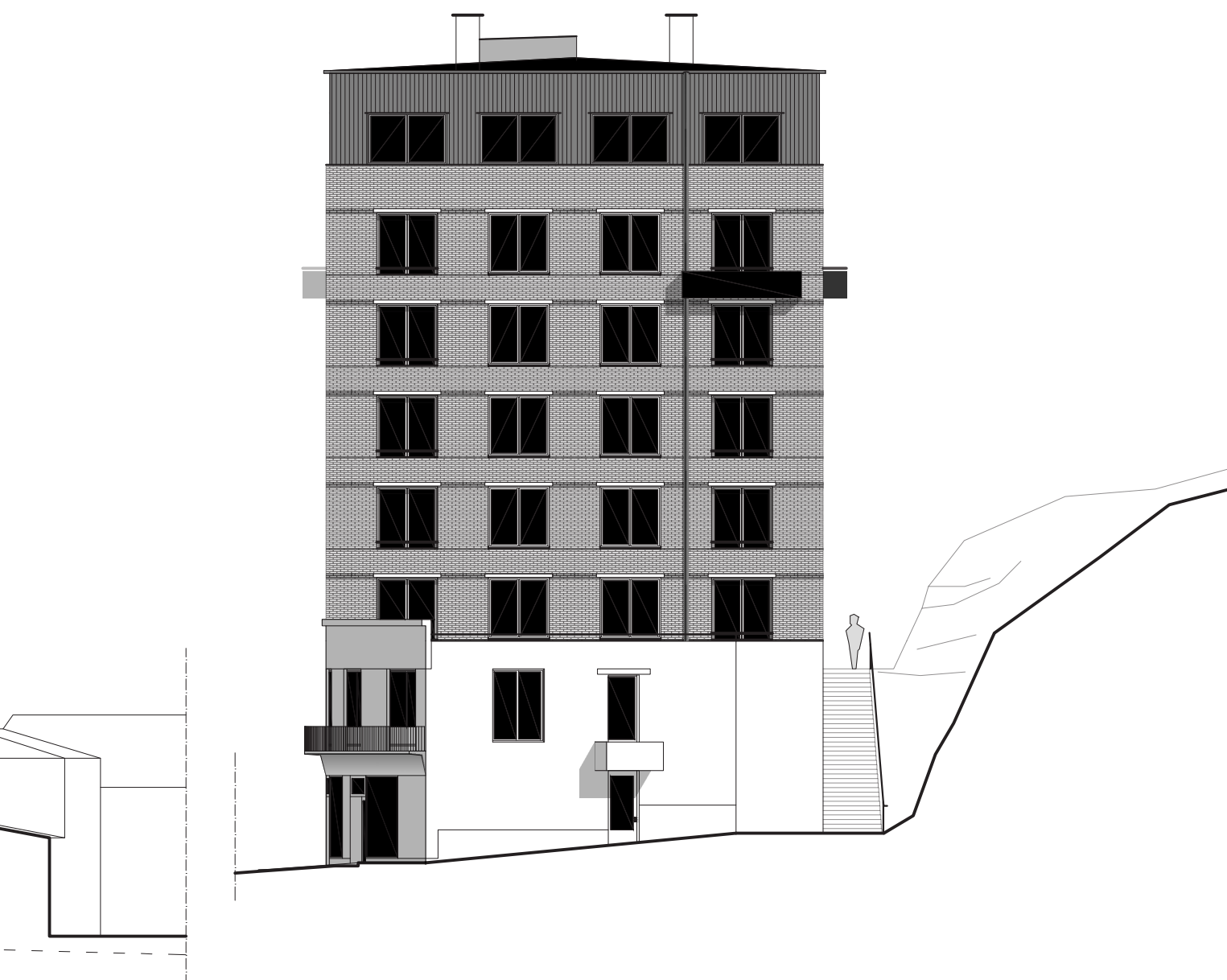
Section 1:200



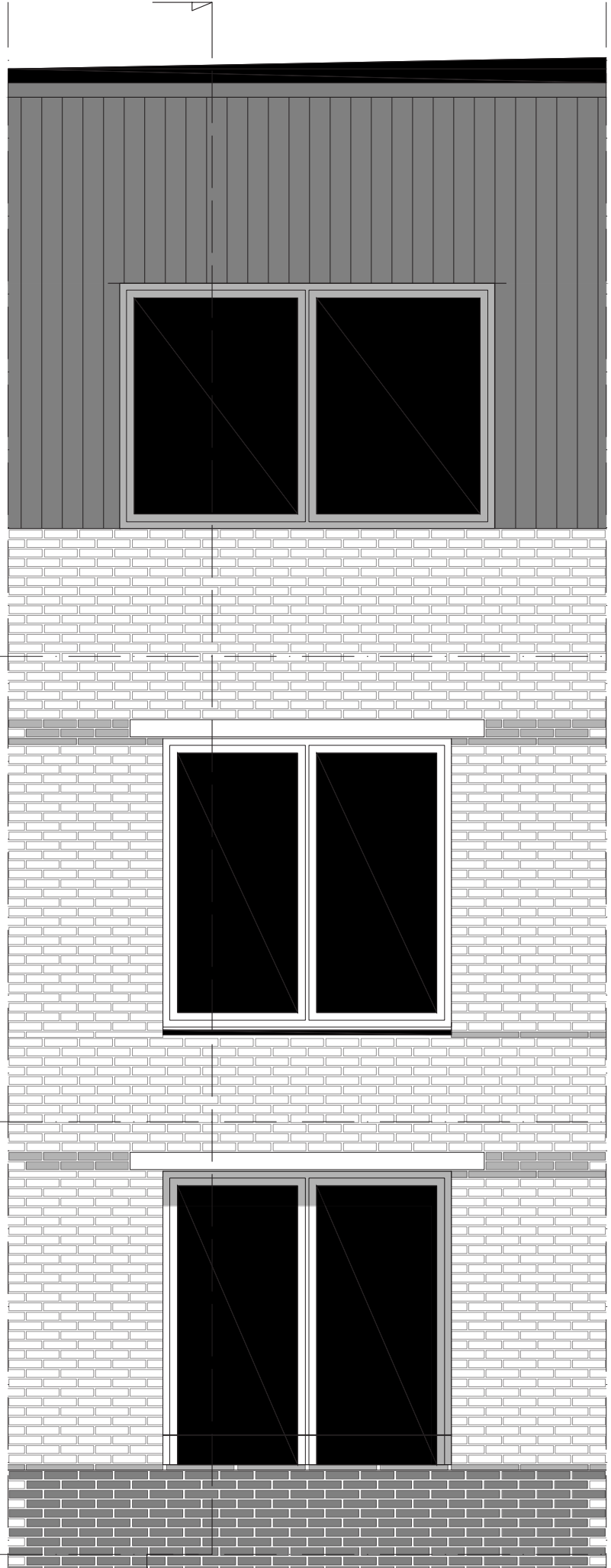
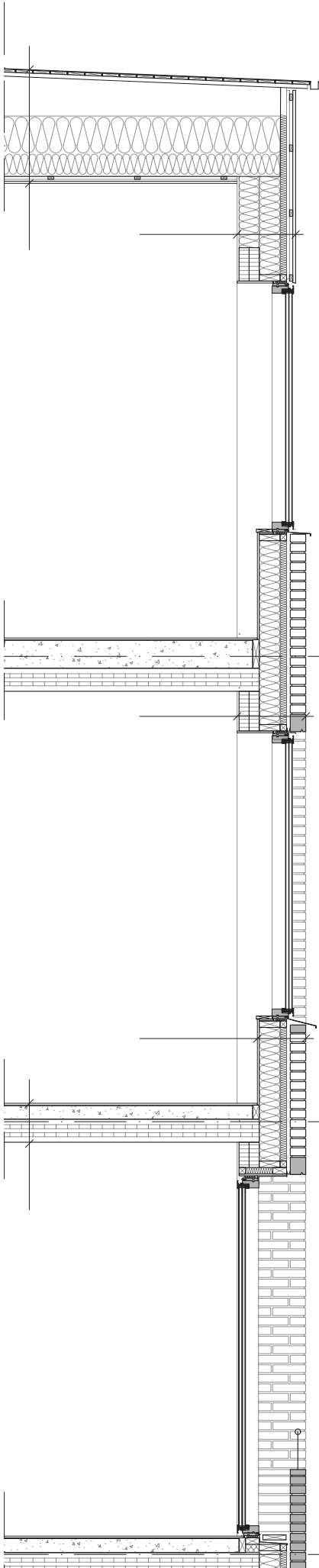
Elevation facing east

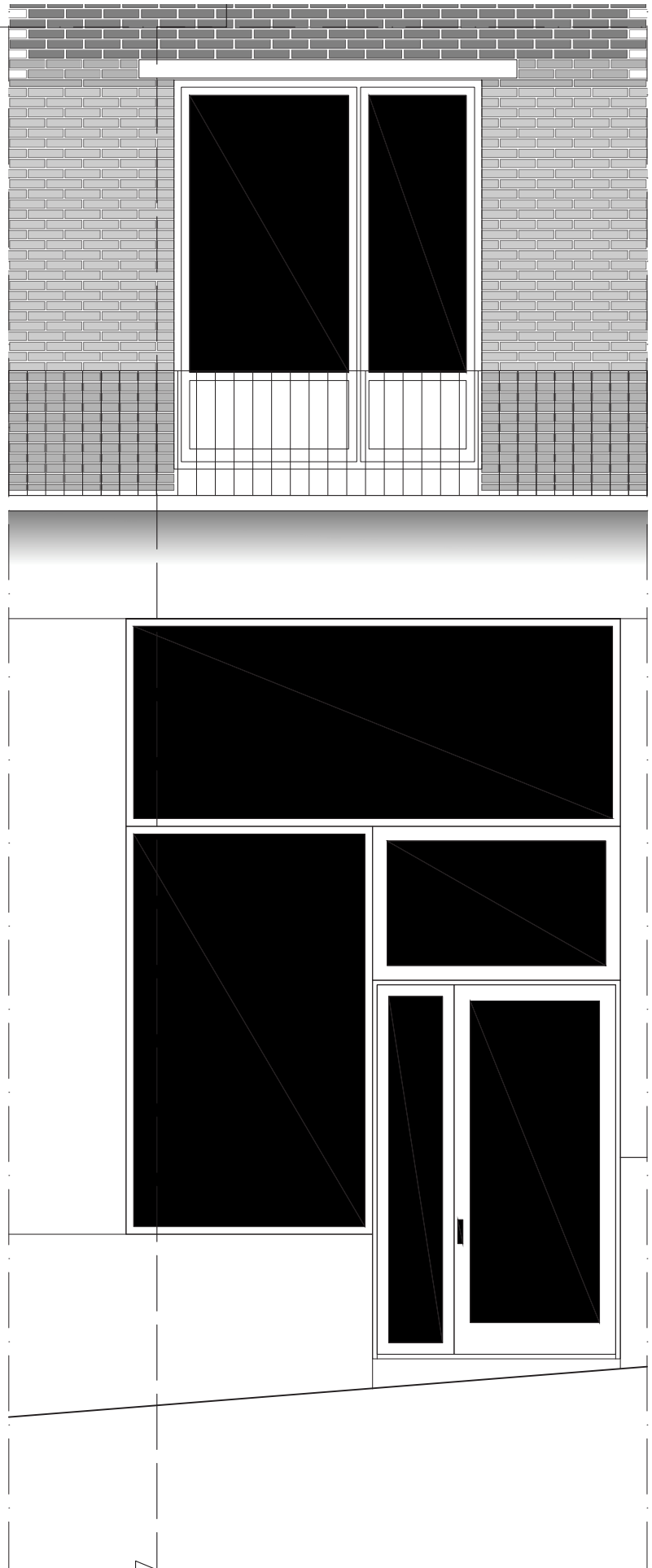
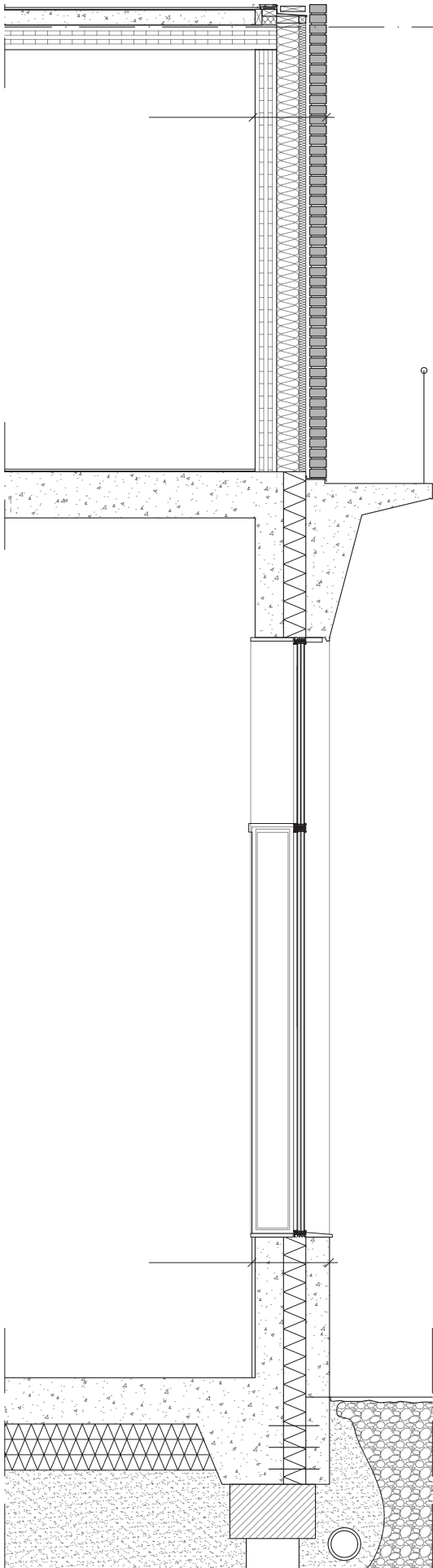


Elevation facing south



Elevation facing west





DISCUSSION

As the time has come to reflect on the result of this thesis, I want to start by evaluating the thesis question itself as a starting point. The choice of an urban apartment building as typology to be used as a subject for a thesis was in itself quite an arbitrary decision for me. And I have come to question the said choice many times during this process as I have experienced that there has been a friction between the nature of the apartment building and the nature of a master thesis project.

The urban apartment building is, in my world, just one of many humble buildings in the urban sequence, meant to express a sort of resting position, as it houses its resting inhabitants. It is merely the backdrop of the urban life, as opposed to the theater, museum, train station or university building, which are meant to be proud and expressive in their very nature, claiming their space and importance in the city.

My idea of what an adequate design oriented master thesis is supposed to be, has more in common with the latter of the buildings mentioned, aiming to bring a design its full way, given a certain concept or theme.

This is the conflict that generated my thesis question, effectively condensing the friction of these competing ideas. And the research question proved to deliver a worthy framework throughout the process, as it is true to my general ideas on architecture. We always face the problem of arbitrariness in design as most choices we make will typically not be of the nature that they can be clearly decided by a guiding concept, chosen at the start of a project.

When it comes to the actual result in relation to the thesis question, it still contains its fair share of arbitrary parts. A question as broad as mine could be applied to the very smallest detail, if one bothered. The balance between continuity, which draws its worth from the value of association and relatability, and curiosity, the stuff that can awake our appreciation for the everyday experience, could be applied to everything between a door handle and a city plan.

In the case of my project, it produced a building which I would summarize as a curious composition using traditional and contextual materials and motifs. The building strikes an expressive pose which is not one that is new to the eye, but has many predecessors in the history of architecture. In this case, the pose is building upon a theme of the surrounding buildings, enhancing the feeling of Stigbergsliden as a sort of gateway between defined districts.

The interior plans also answer well to the thesis question at many times, striving to seek a balancing dynamic between age-old and contemporary influences, when looking at the resulting apartments. For the servant spaces and stairwell of the building, on the other hand, I did not find the time to solve the puzzle with the same ambition, and these spaces remain underdeveloped, in my perspective. This goes for the yard and the two alleyways produced as well, which were intended to be given more love during the process.

Altogether, I feel satisfied with the result on the parts which were given time, mixed with some disappointment about not being able to follow through on all parts of the building with the initial ambition. The research question has been a rewarding companion in all stages of the design, proving to be very relevant in relation to the typology of the urban residential building, given my general perspective on architecture.

Thank you!

REFERENCES

Willenegger, E., & Imhof L. (2018).
Analogue Oldnew Architecture. Quartz Publishers.

Nylander, O. (2018).
Svensk bostad 1850-2000. Studentlitteratur AB.

