

STRANGE IDENTITIES

A Swedish Embassy Designed Through Form-Driven Contextualism

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Examiner: Jonas Lundberg

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CHALMERS

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Abstract

This thesis explores, through the design of an embassy, alternative ways of communicating and subverting national identity through architecture. It investigates how allusions to national identity can be made through turning familiar materiality into something unfamiliar and vice versa. The thesis looks to a form-driven contextualism as a means of fitting a design into an eclectic neighborhood, and to promote it as a non-nostalgic method of adhering to context.

Drawing upon Aldo Rossi's concept of *analogue architecture* (1976), architectural typologies in the embassy's neighborhood of Ballsbridge, Dublin, have been identified and tweaked with the goal of achieving a clear site-specificity driven by form. The facade design has drawn upon semi-circular arched openings and an exaggerated relief motif, while the interior organization is made up of a series of load-bearing walls, referencing the walled-in forecourts of the surroundings. The proposal is a two-story building relating to the surrounding townhouse typology, celebrating the varied architecture of the context while achieving a coherent expression.

Can one building alone speak for an entire nation? It is difficult to argue yes, but for the sake of this thesis, one building will have to do. Embassies are often designed to represent their countries of origin through an emblematic use of materials brought from home, applied on the facade of any architecture. This thesis aims to move beyond the use of familiar materiality as the only tool with which to achieve a sense of familiarity. The building has been designed through either turning familiar Swedish architecture or materials into something strange, or referencing Swedish handicraft or climate using unfamiliar materials. The design iterations have been evaluated regarding how well they balance this familiarity and strangeness. CNC-milling and vacuum forming have been used to cast material prototypes.

The thesis promotes a blunt and honest way of adhering to context, giving form the greatest impact on the design process. Hopefully it shows that designing architecture in an eclectic setting does not justify a disregard for the surroundings, and that familiar things can look strange at first glance.

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INTRODUCTION

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Academic Background

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2011–2014	Chalmers University of Technology B.Sc. Architecture & Engineering

Professional Background

2016–2017	White arkitekter, Gothenburg
2014–2015	Arkitema Architects, Stockholm

Today, there is no Swedish embassy in Dublin. The Swedish ambassador to Ireland works in Stockholm, and regularly visits Ireland. (“Ireland”, n.d.) This is undesirable from an environmental point of view (as she hardly takes the train) as well as a diplomatic one. This thesis has occupied itself with designing an embassy that acts as a building representative of Sweden, while offering a sense of familiarity to its Swedish users. It is also important that the ambassador feels at home in her new workplace, so the number of trips to Sweden are kept at a minimum.

This thesis aims to achieve this familiarity through references to Swedish architecture, craftsmanship and geographical properties. It is important to recognize that summing up all aspects of a country’s identity in one gesture is an impossible task. What this project aims to do is, among other things, to broaden the ways with which an allusion to a country can be made through architecture.

The thesis will, for instance, use digital manufacturing as a tool to construct a texture that feels familiar to the touch, but is carried out in an unusual material. This could be considered ‘fake’, but might also be in line with the self-image of Sweden: in *What is Sweden? Voices about Swedish National Identity*, Alf W. Johansson argues that Swedes generally shun the idea of being proud of their country, and only accepts nationalism if it has to do with technological advancements and other modern things. Johansson claims that Swedish national identity has become strongly linked to being avant-garde, that the rare instance of a Swede feeling pride is often in conjunction with their strong technical, humanitarian or social advancements. (Johansson, 2001)

Other architects tackling the same design tasks presented in this thesis tend to resort to the use of materials found in the ground of the embassy’s home country. For instance, Snøhetta’s Norwegian embassy

in Berlin that boasts a single slice of grey Norwegian granite, standing 14 meters tall. (The Royal Norwegian Embassy in Berlin. n.d.). Wingårdh’s Swedish embassy next door does the same, implementing black polished Brännhult diabase and white Norrvange limestone. (Wingårdh, G., Nanfeldt, M., & Ackerup, A., 2007).

This design project does not avoid this way of working, but aims to draw upon a broader spectrum of Swedish references to achieve familiarity.

Since the project is set in a context that is unfamiliar to the author, the project contains a second design challenge of adhering to the surroundings in a satisfactory way.

It is important to talk about context nowadays; in Sweden, the populist movement *Arkitekturupproret* is clamoring for beautiful architecture that fits in more with its surroundings. However, they generally promote copying historical styles down to a T. (“Om oss”, n.d.) While the argumentative approach of *Arkitekturupproret* can be considered shallow (they only ever talk about facades) the author believes that architects would benefit from expanding their range of arguments that deal with context. This thesis looks to promote contextualism as a method to fit in with the surroundings without resorting to nostalgia.

REFERENCES



Fig. 1. Screenshots from the 'Sweden A-Ö' video produced by the Swedish Institute (sharingsweden.se)

References

Nation Branding

Brand Sweden



Fig. 2. Concluding image in Design Principles for Physical Applications of Brand Sweden. (sharingsweden.se)

In a world ruled by market economy, there is a constant need for companies and brands to be seen and heard. This is no different when applied to nations. Nation branding is corporate marketing employed in the interest in improving the reputation of a country. This is of course beneficial in regards to international relations, tourism and the like. Practically all so called developed countries use nation branding.

The Swedish Institute is a public agency aiming to promote and research Sweden's reputation. They have developed *Sverigebilden 2.0*, guidelines on how to represent Sweden abroad. This describes what profile to adhere to when representing Sweden in for instance business presentations. The four areas that make up this profile are: Open, Caring, Authentic and Innovative. In *Sverigebilden 2.0* is a passage that seems to be in line with earlier mentioned Alf W. Johansson's take on Swedish national pride:

In a world of great challenges, Sweden's free and open society acts as a greenhouse of innovation and co-creation. (Swedish Institute, 2017)

The Swedish Institute has also produced a document titled *Design Principles for Physical Applications of Brand Sweden*. The document is to be used for expositions and the like having to do with Sweden and presents outlines for materials, food, decoration, illumination, et cetera. (There is even an official font, *Sweden Sans*, which is used in the headlines of this thesis). A passage in the document reads:

In order to achieve maximum consistency for Brand Sweden's identity, we need to pay attention to detail. It is important that you only use materials that are Swedish. We recommend birch wood and schist rock as your first choice. (Swedish Institute, 2017)

As mentioned earlier, this thesis will explore if it really is that important to only use Swedish materials.

Design principles for physical applications of Brand Sweden.

—

When implementing Brand Sweden's identity in a physical environment — such as an event or fair — use these principles as the basis of your work to create recognition and consistency.

Tip: Keep your concept seasonal. Decide if you want to create a feeling of spring, summer, autumn, or a crisp and cold Swedish winter.

Fig. 3. Title page of the Design Principles (...) document. (sharingsweden.se)



Fig. 4. Material mood board in the Design Principles (...) document. (sharingsweden.se)



Fig. 5. Miller & Maranta, Altes Hospiz, St. Gotthard, CH, 2010. (florisvanderpoel.wordpress.com)



Fig. 6. Valerio Olgiati, Atelier Bardill, Scharans, CH, 2007. (archdaily.com)



Fig. 7. Andrea Deplazes, ETH, Car dealership, Oerlikon, CH, 1987. (scppruft.blogspot.se)



Fig. 8. Quintus Miller, ETH, Eye clinic, Zürich CH, 1986. (espazium.ch)

Analogue Architecture = integration + alienation

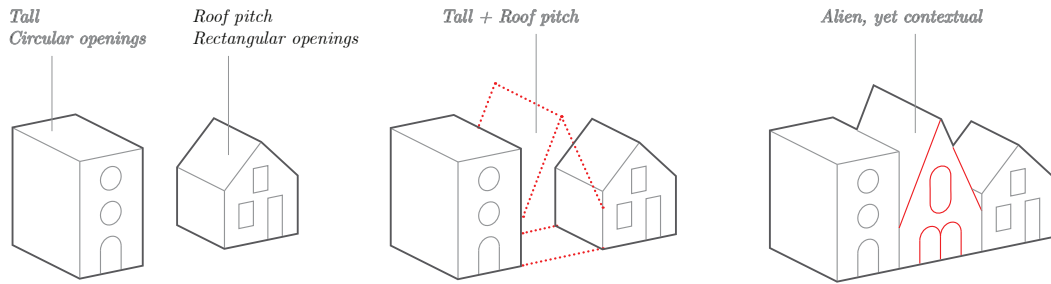


Fig. 9. The author's interpretation of Analogue Architecture.

In the 1970s Aldo Rossi, visiting professor at the ETH Zürich, developed the architectural concept of *Analogue Architecture*. The term is inspired by the theories of psychoanalyst Carl Gustav Jung, who defined logical thought as something directly expressed in words, and analogical thought as “sensed yet unreal, imagined yet silent; it is not a discourse but rather a meditation on themes of the past, an interior monologue”. (Nesbitt, 2005) I interpret this as Rossi wanting to reference an architectural historical context without nostalgically repeating it, but tapping into its character in some other way.

Rossi came to the ETH in 1972, where he developed his courses out of this line of thinking, only focusing on form and history. This was deeply different to how the ETH students were used to work, and Rossi's stay at the school was short-lived, but his ideas remained at the school through his teaching assistant Fabio Reinhart. Reinhart stayed at the ETH and continued to teach ways of looking at ordinary places in the city and relating to them to come up with contemporary architectural works. They called this *Analogue Architecture*, which became the name of an entire studio chaired by Miroslav Šik at the ETH. (“Miroslav Šik. Architecture 1988–2012.”, n.d.)

In 1987 Šik and his students held an exhibition called *Analogue Architecture*, showing up student works as well as projects of Šik himself. Adam Caruso calls this “a high point in the activities of the ETH and in Swiss German architectural practice in general”, and laments that the great contemporary Swiss practices seem to have forgot all about it. He admits that some works by Olgiati, Miller & Maranta and Kerez can be considered analogue architecture. (Caruso, 2009)

My crude description of analogue architecture would be that it picks up on a contextual typology and tweaks it to give it an alien property. A form of integration into the surroundings while exaggerating or changing a certain aspect, setting it apart from the context. An example



Fig. 10. Unknown, Venice facade ?. (textures.com)

Fig. 11. Zucchi, Housing, Venice, IT, 2002. (aguidetocarchitecture.wordpress.com)

of *Analogue Architecture* is Atelier Bardill by Valerio Olgiati, where the form of the building comes from the surrounding context, but is alienated by its totally different materiality.

The value this adds, in my opinion, is a clearly contextual architecture that avoids being nostalgic. Relating to and drawing spatial qualities from the context is a very important architectural tool. Hopefully the application of *Analogue Architecture* in the project expands the approaches to contextualism represented in architecture today.

References

Art

Estrangement



Fig. 12. Meret Oppenheim, *Table with Bird's Feet*, 1939 (wright20.com)

References

Art

Estrangement



Fig. 13. Marcel Marien, *L'Introuvable*, 1937 (highlike.org)

The project has the ambition to come up with unfamiliar ways of referencing something familiar, in this case that familiar thing is Sweden. There is a technique in art called estrangement, or defamiliarization, that presents common things in strange ways to enhance the perception of the familiar. For instance, *L'Introuvable* by Marcel Marien, articulates how a pair of glasses usually comes with a glass for each eye. This notion of presenting something familiar in a strange way has been the main strategy for referencing the Swedish materiality in the project.

This might also explain why I am fascinated by analogue architecture: the alien appearance of the architecture heightens the perception of the familiar around it. The tweaking or re-interpretation of the context contrasts and brings attention to the normal.



Fig. 14. Swedish Embassy, Berlin (Hedqvist, H. & Lindman, Å. E., 2010)

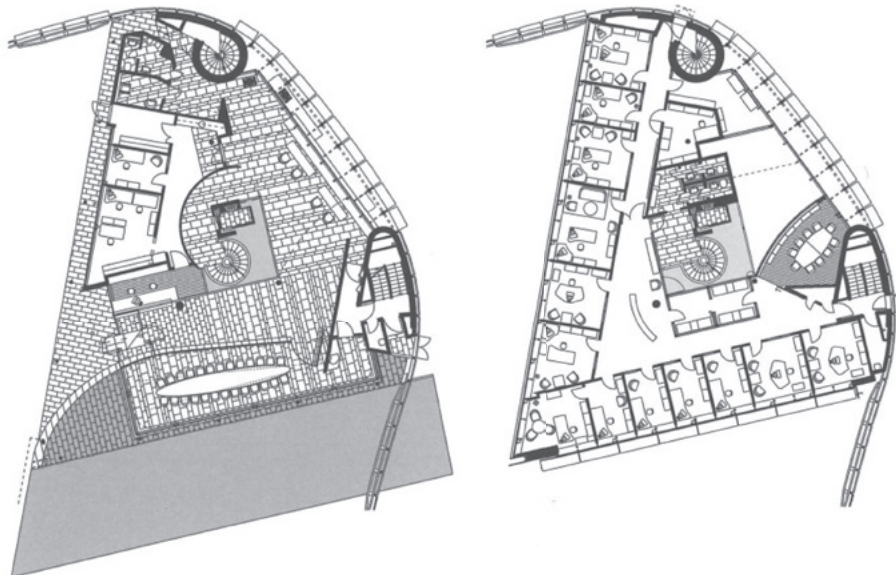


Fig. 15. Ground floor and first floor, 1:500. (Wingårdh, G., Nanfeldt, M., & Ackerup, A., 2007)

References

Architecture

Swedish Embassy, Berlin, DE. Wingårdhs, 1999.



Fig. 16. Aerial view, Berlin (Google Maps)

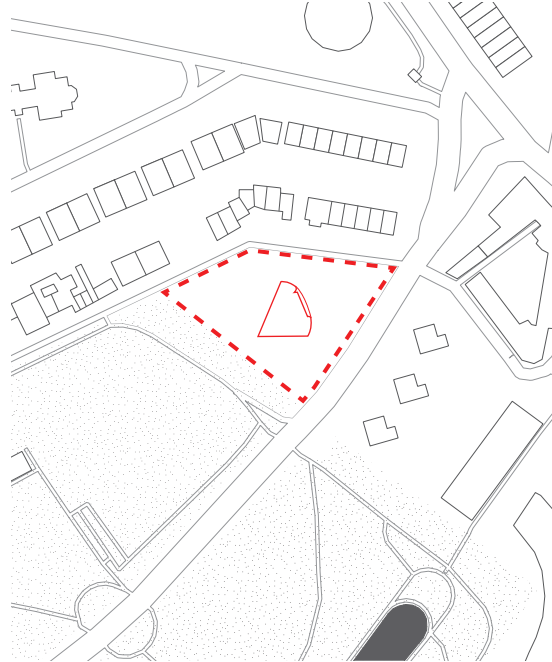


Fig. 17. Superimposed on Dublin site, 1:2 000

Entrance

The entrance is found through first entering the main gate that all Nordic embassies share: a transparent glass wall with a cloud-like canopy protecting it. Then, the entrance to the Swedish embassy is located in the southwest corner of the building, where the volume is inset, making the first floor a protective roof.

Another aspect that signals the entrance is a continuous, curvy block of limestone that stretches from the courtyard into the reception. It separates the reception from the large, exposed conference room situated next to the entrance.

Boundaries

The main gate is the most defined boundary separating the embassy from the city. Standing at the main gate the connection to the embassy is next to non-existent: it can merely be glimpsed in the distance. Having passed this, the boundary between the ground floor and the courtyard is loose, almost inviting. The transparent conference room and entrance expose a lot of what happens on the ground floor. The spaces for visitors and the more private working areas are separated since they are located on different levels.

Organization

The embassy is centered around a courtyard that is exposed towards the city through a louvered wall. On the ground floor, the courtyard houses the public functions: waiting area and reception. The courtyard is linked to the other three floors and the basement through a spiral staircase, around which the elevator and toilets are centered as well. Meeting spaces centered Offices line the façade walls on all floors.

Representational spaces

The ground floor can be considered the representational

area of the embassy, with its waiting area and large conference room, both of which are light and generously large spaces. The ambassador's office is the largest of the offices, located in the corner of the top floor overlooking the courtyard.

National identity

The embassy represents its country of origin by symbolically employing Swedish materials: black polished Brännhult diabase on one façade, limestone from Norrvange, Gotland on the other. (Wingårdh, G. et. al., 2007) Waxed birch panels dominate the interior, lining basically all walls as well as the central spiral staircase. (Hedqvist, H., & Lindman, Å. E., 2010)

In addition to this, Mark Isitt claims that the transparency of the conference room on the ground floor “symbolizes the notion of the transparency of Swedish democracy.” (Wingårdh et. al., 2007) I do not agree with this metaphor, as the complex in itself is walled-in, but the relationship between the courtyard and conference room, with the reflecting pool in the middle, is quite stunning.



Fig. 18. OMA, Embassy of the Netherlands, Berlin, DE, 2004. (El Croquis, 2006)

References

Architecture

Dutch Embassy, Berlin, DE. OMA, 2004.

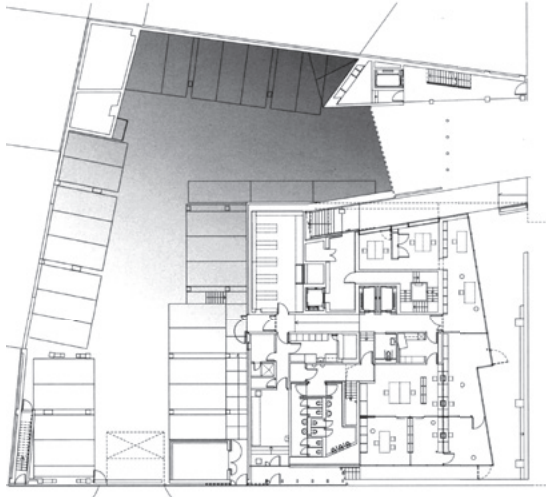


Fig. 19. Ground floor. (El Croquis, 2006)

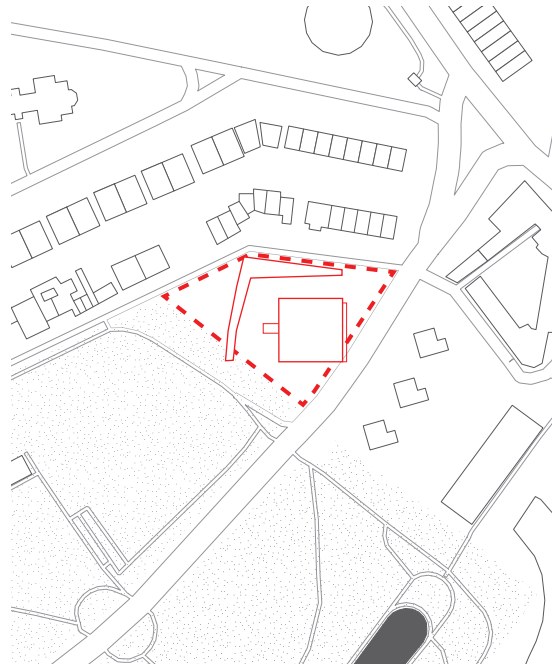


Fig. 20. Superimposed on Dublin site, 1 : 2 000

Entrance

There are two entrances to the embassy: one for consular purposes (visa applications) and one main entrance, which is found by entering the dark corner between the building and the car ramp and going up a staircase. The entrances are easy to reach from the street, but the building does not signal where the entrances are in any way. The ceiling height of the ground floor is the lowest of all the floors.

Boundaries

For an embassy, the building has refreshingly few boundaries between the street and the building. Steel pillars line the sidewalk to make sure that only desired cars can enter the premises, and a guard is posted outside, but besides this there is little that prevents anyone from waltzing into the building. Besides the difficulty of locating the entrance, that is.

The boundary between public spaces and working spaces is achieved through developing a clear public trajectory through the building, and having an alternative, less apparent, circulation for the private working spaces. The residences of the diplomats is clearly set apart from the embassy, as it is situated in a separate volume.

Organization

The trajectory, around which the public functions (library, restaurant, roof terrace) are located, is the key element regarding the organization of spaces. It takes care of the internal communication and the offices are located in the leftover space that remains after the trajectory has been carved out of the building. It also functions as a ventilation channel, being slightly over-pressurized.

Representational spaces

The most symbolic space of the building is without

a doubt the trajectory itself. It is the space that has been given the most care regarding façade exposition, organization and relation to the context. The trajectory has been designed to look out over the Fernsehturm and Spree and is, together with the auditorium and a cantilevering conference room, the only space that can be identified in the façade.

National identity

Dutch national identity seems to be absent from the project. OMA claim that the project “combines conventional civil service security with Dutch openness” (El Croquis, 2006), but other than that this is a project that mainly deals with circulation, and to some extent, context.

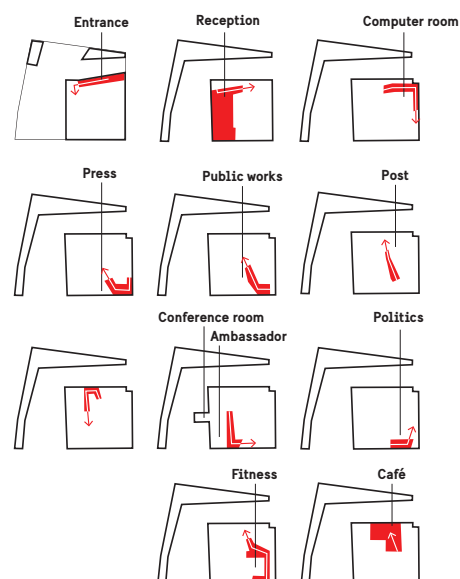
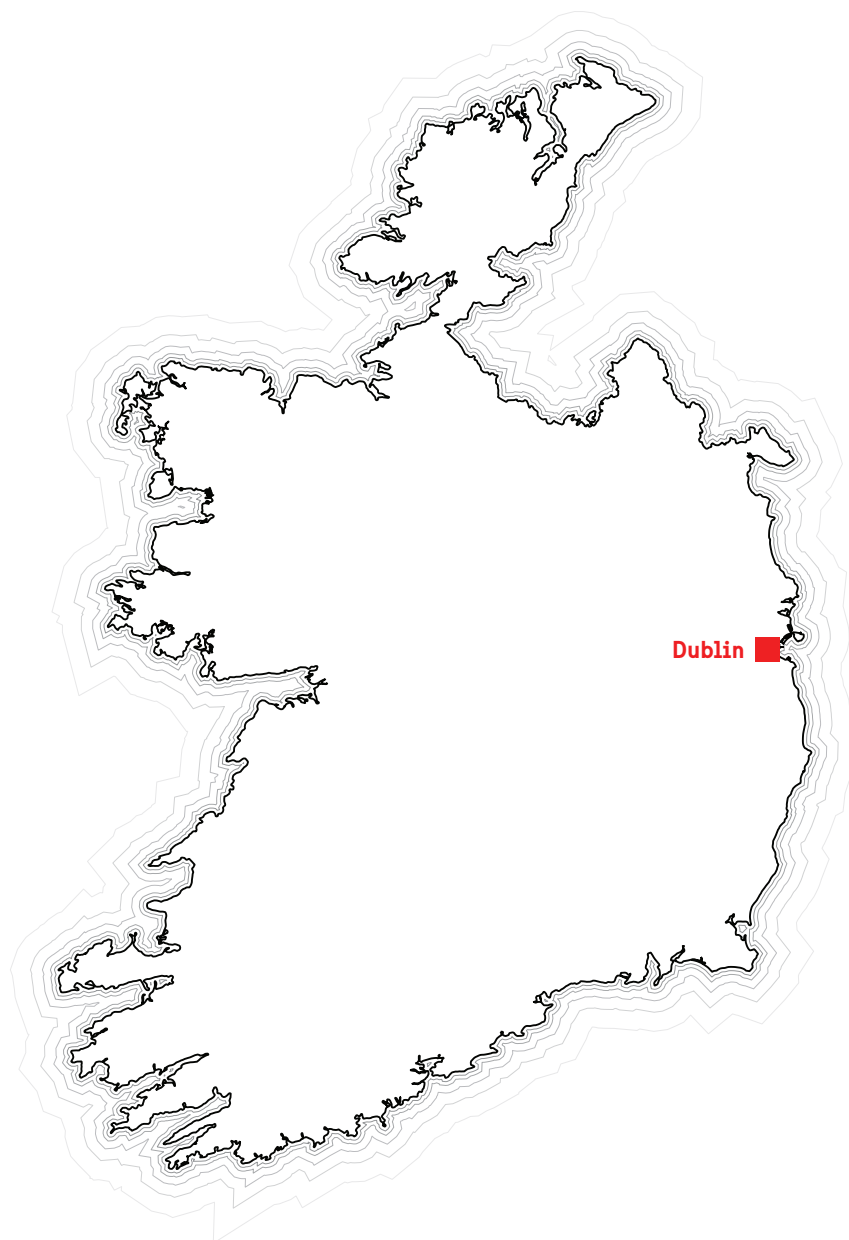


Fig. 21. Functions relating to the trajectory (in red). (Redrawn from El Croquis, 2006)

CONTEXT



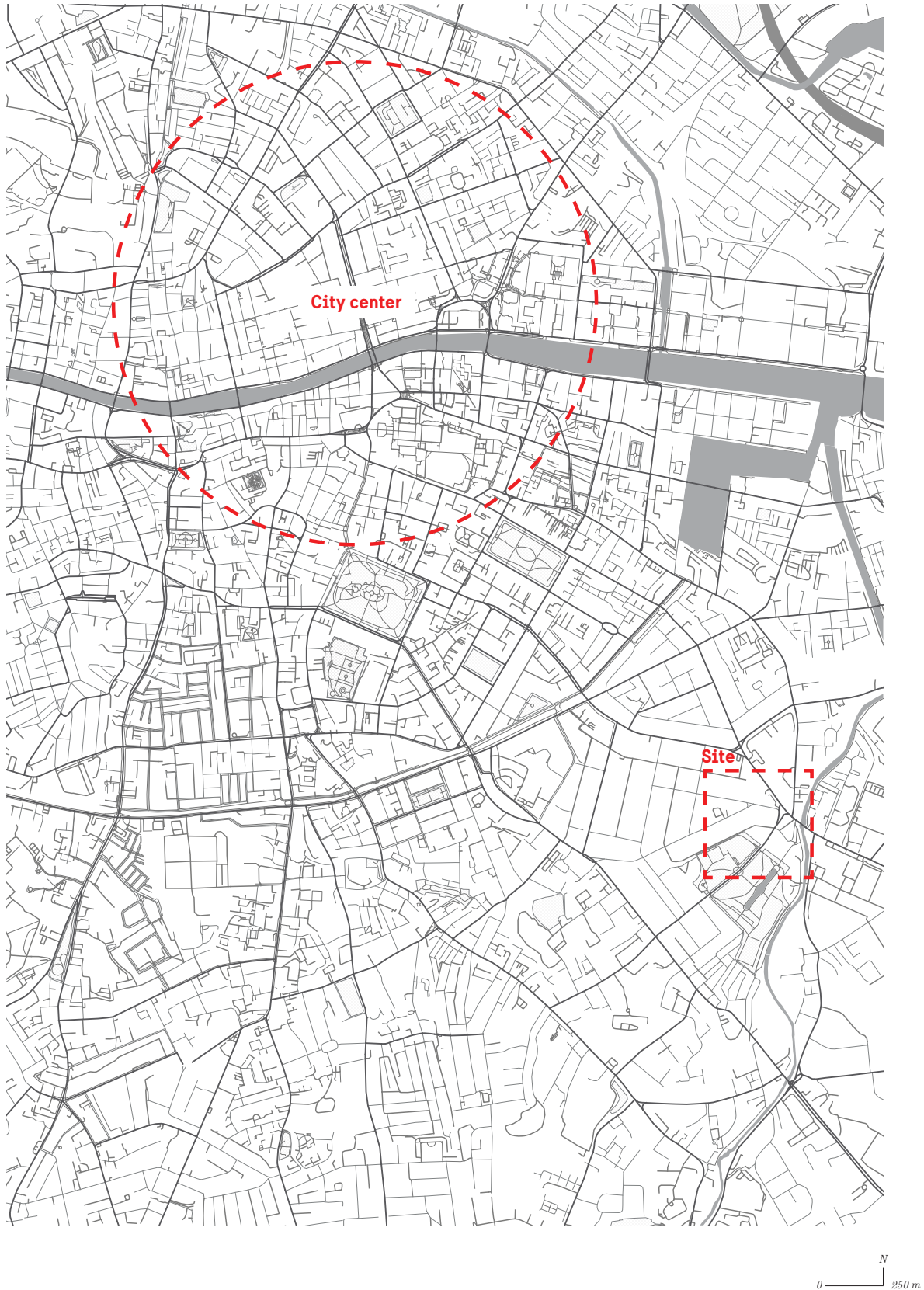


Fig. 23. Dublin, 1 : 25 000. GIS Data: bbbike.org

Context
Ballsbridge
Site visit



A



B



C



D



E



F

Fig. 24. Ballsbridge, Dublin. Author's own copyright.

Context
Ballsbridge
Site visit



Fig. 25. Promenade path. GIS Data: bbbike.org

The site for the embassy is Ballsbridge, Southern Dublin, where the diplomatic village of the city is located. To get there takes about 15 minutes from the city center. The architecture of the area is dominated by two- to three-story Georgian townhouses. The townhouses are juxtaposed by an eclectic mix of more recent small-scale residential development, as well as big commercial buildings. At the time of the site visit, the male national soccer team of Ireland faced Moldova in the World Cup qualifiers at Aviva Stadium, a mere 500 meters away.

Since this thesis is to use typological sampling as a design method, the detailing of the buildings was paid close attention and documented meticulously. Walking around the neighborhood, one can perceive the streets lined with Georgian townhouses as quite homogenous, though it is interesting to stop and squint to figure out which country's embassy each building houses. One must squint since each building has a forecourt. These courts are often restricted by way of fencing, but occasionally by a wall structure instead, which can be enjoyable when made up of several material layers as in picture (A).

The Georgian facades are made up of brick, resting on a stone base, having elevated entrances with semi-circle arches resting on stone columns. (B) The window openings are also arched, albeit subtly so. Some facades have white stone insets, giving the façade a horizontal accentuation. Characteristic for each window frame is its white paint coating, present in nearly all buildings in the area.

All townhouses have several chimneys, some as many as six. The chimneys rise distinctly above the roofs, higher than what is commonplace nowadays. The top of each chimney is capped by a small metal cage of sorts, probably to prevent birds from nesting in them. (C) At first, the chimneys were to have a greater influence in the project, so this cage detailing could have been important in the detailing of the embassy.

Passing from the broad street lined by the Georgian

townhouses onto the street behind them, one will notice that the brick only makes up half of their façade expression; the back façade is covered in a beige render, making for a very different look. Some sketches were made on how to incorporate a sampling of this into the project, but were quickly discarded as it made for a too disjointed look.

The center part of each building protrudes, creating two recessed areas at the outer ends of the street façade. (D) This kind of relief motif will be important in the project, as it is prevalent in other areas of the neighborhood.

Moving on to the back street, it is lined by Herbert park on one side, and the eclectic small-scale houses on the other. All their forecourts are walled off, but one can still see a myriad of different roof lines and façade expressions. (E) This variety in expression should be manifested in the silhouette of the embassy.

Coming to the end of the street, one will face three three-story villas with a strangely recessed gable façade. (F) This, coupled with the set-backs of the Georgian façades is what makes the motif of recesses important in the project.

On the following page follows line drawings on three of these buildings, highlighting what has been referenced in the project.

Context
Site
1 : 1 000



Fig. 26. Site. GIS Data: bbbike.org

N
0 2 m



Fig. 27. Contextual Input 1



Fig. 28. Contextual Input 2

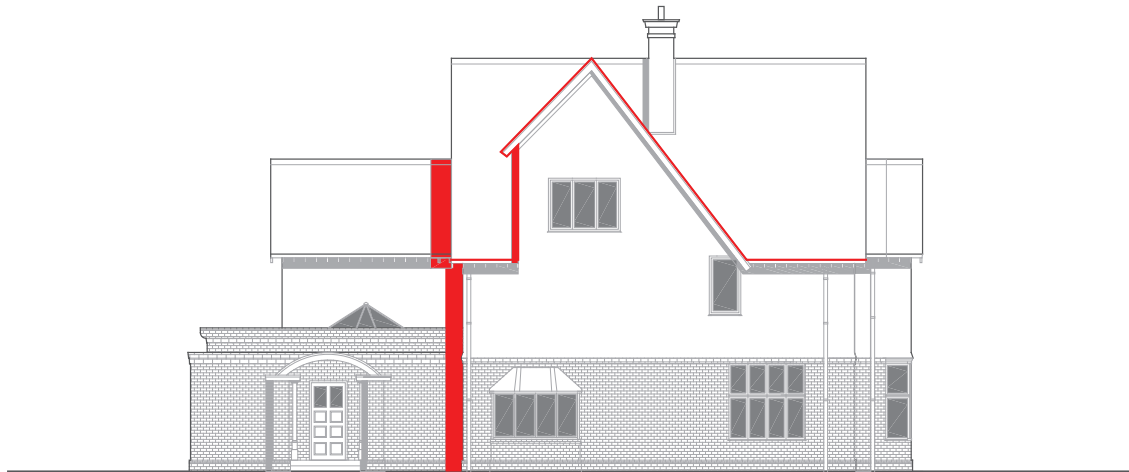


Fig. 29. Contextual Input 3

Context
Site

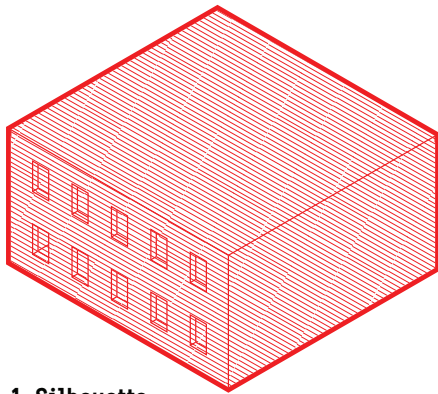
Bird's eye view



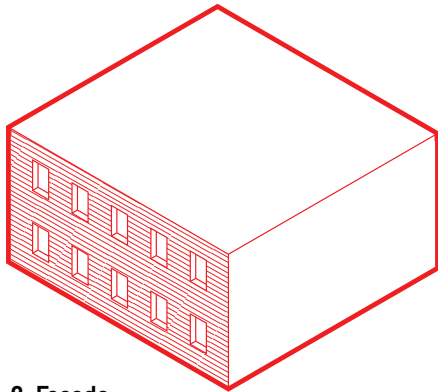
Fig. 30. Aerial of site. (Bing Maps)

METHOD

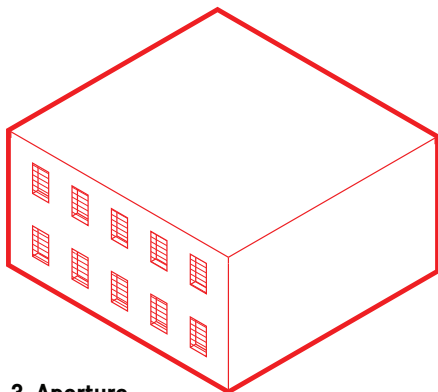
Method
Three Scales



1. Silhouette



2. Façade



3. Aperture

The project aims to develop at three scales in parallel: silhouette, façade and aperture. The goal is to create a rich visual experience for passers-by approaching the building. My conviction is that architecture should present a fine detailing at several scales, which will make exploring the building a joyous and convincing experience. It is important that both large and small-scale design is perceived as coherent, so that the architectural gestures made will be interpreted as deliberate.

The scales that have been explored are silhouette, façade and aperture, and the chapters following will contain documentation on how the design iterations have progressed.



The inspiration for the project stems from my investigation into precedent embassy architecture, and finding that it mainly dealt with the use of materials specific to a certain country. Especially the Swedish embassies fit this description. This thesis wants to explore alternative ways to channel identity through architecture. It will tweak and twist familiar materiality into something unfamiliar and vice versa, always with the goal of alluding to Swedish identity. These allusions have to do with Swedish architecture, materials, nature, phenomena and handicraft.

Even though the thesis doubts that identity is inherent only to the materials of a region, typical Swedish materials will be used in conjunction with more creative material investigations.

SILHOUETTE

Silhouette
Model Investigation
Evaluation criteria

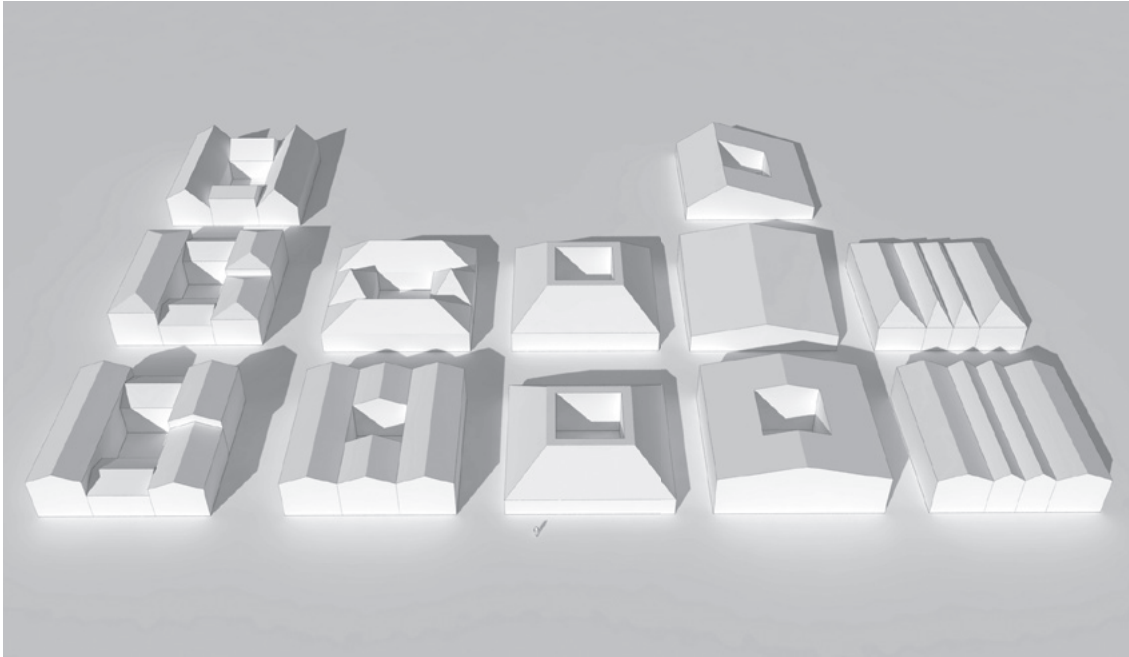


Fig. 31. 3D model iterations.

As the massing of the building was developed, the iterations were evaluated according to certain guidelines considered important for the context.

Most importantly, the design of the building were to celebrate the eclectic neighborhood, so a silhouette that seemed to suggest several buildings was considered more appropriate than a homogenous form.

The scale of the building was allowed to be greater than the surroundings as long as it did not become too imposing on the other buildings.

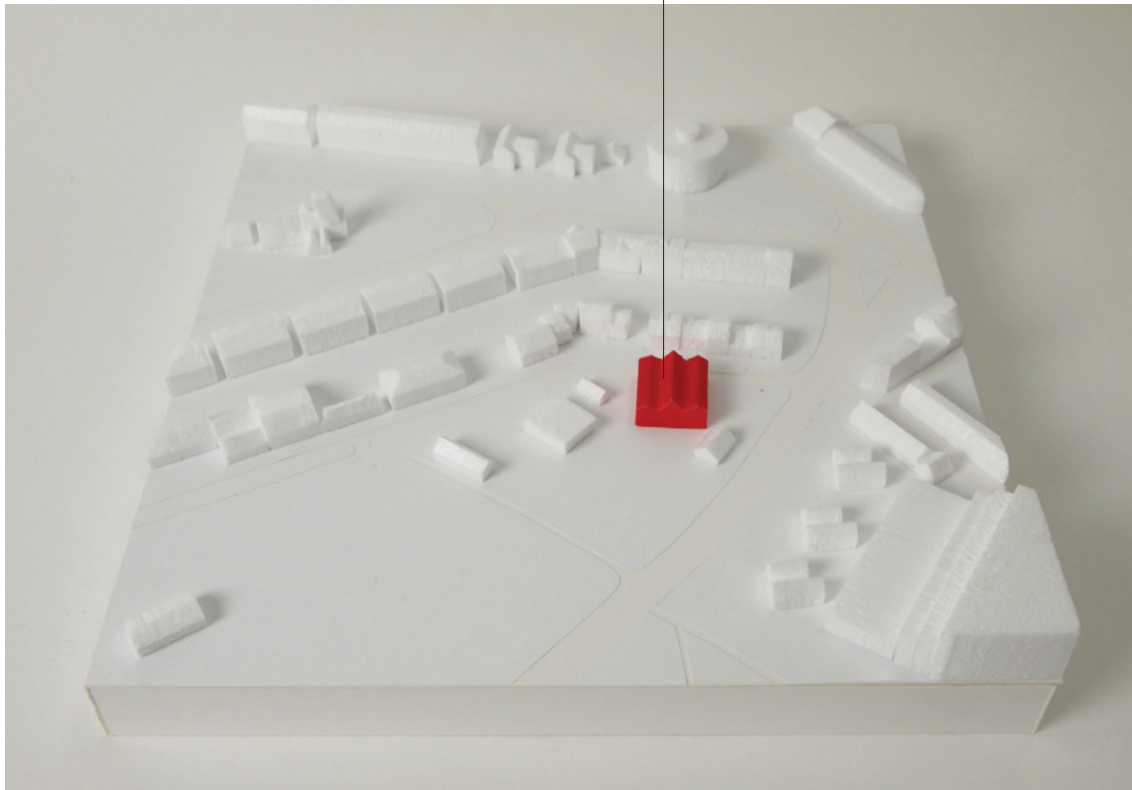
While a homogenous silhouette was considered undesirable, the institutional program of the embassy should be able to be perceived from the massing. This meant that making a copy of the small townhouses was not considered.

Another important design property was the proportions of the gable façade that were to face the street. As embassies are surrounded by a secure perimeter, the entry façade would be the most accessible for passers-by, and is therefore the most important one.

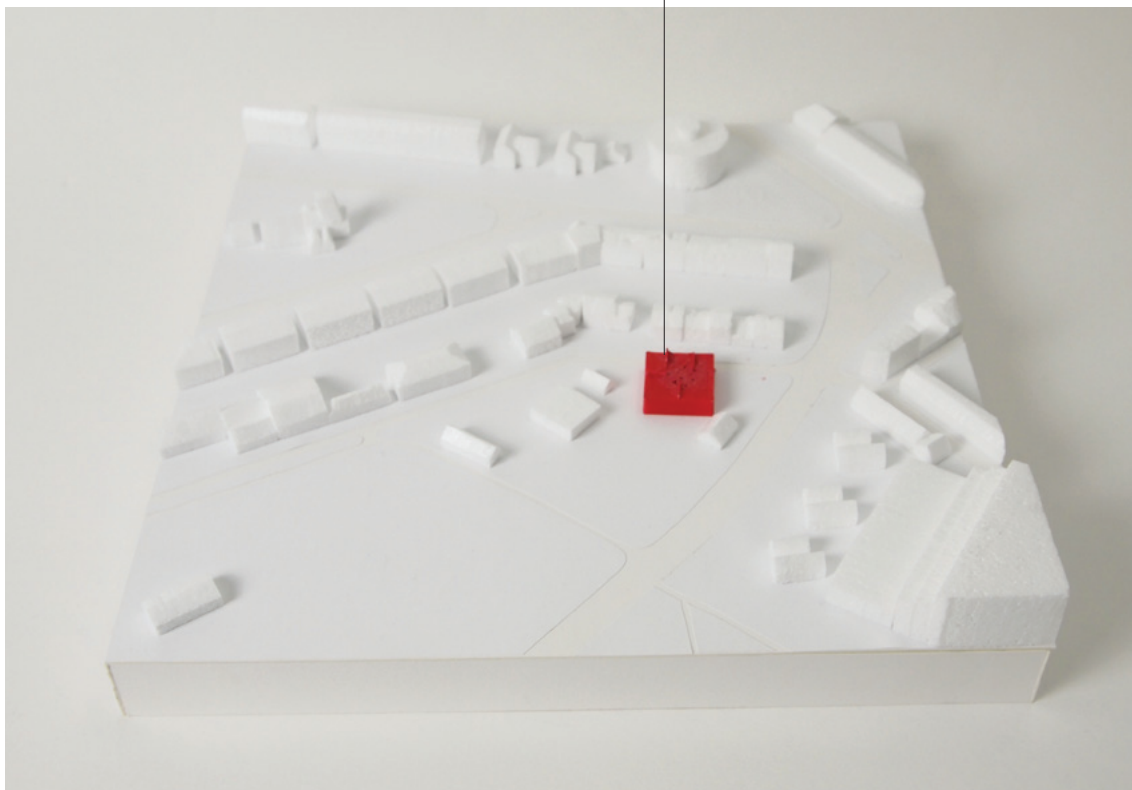
On the opposite page follows a documentation on how the placement on site was determined.

Silhouette
Model Investigation
1:1000

This gabled building is ca. 14 m tall which feels a bit too much for the immediate surroundings.

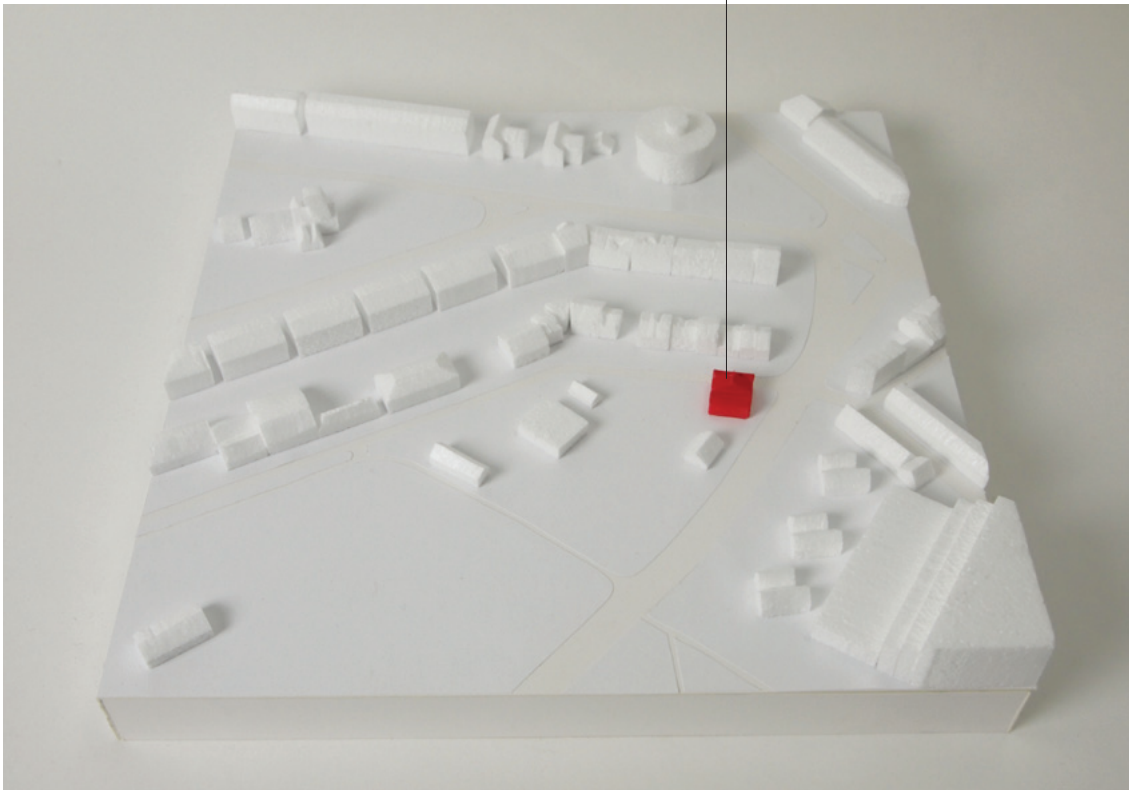


Without the gables the building is 8 meters tall, which feels less imposing on the surroundings. Perhaps the gables should be re-introduced on this lower massing to make it feel less boxy.

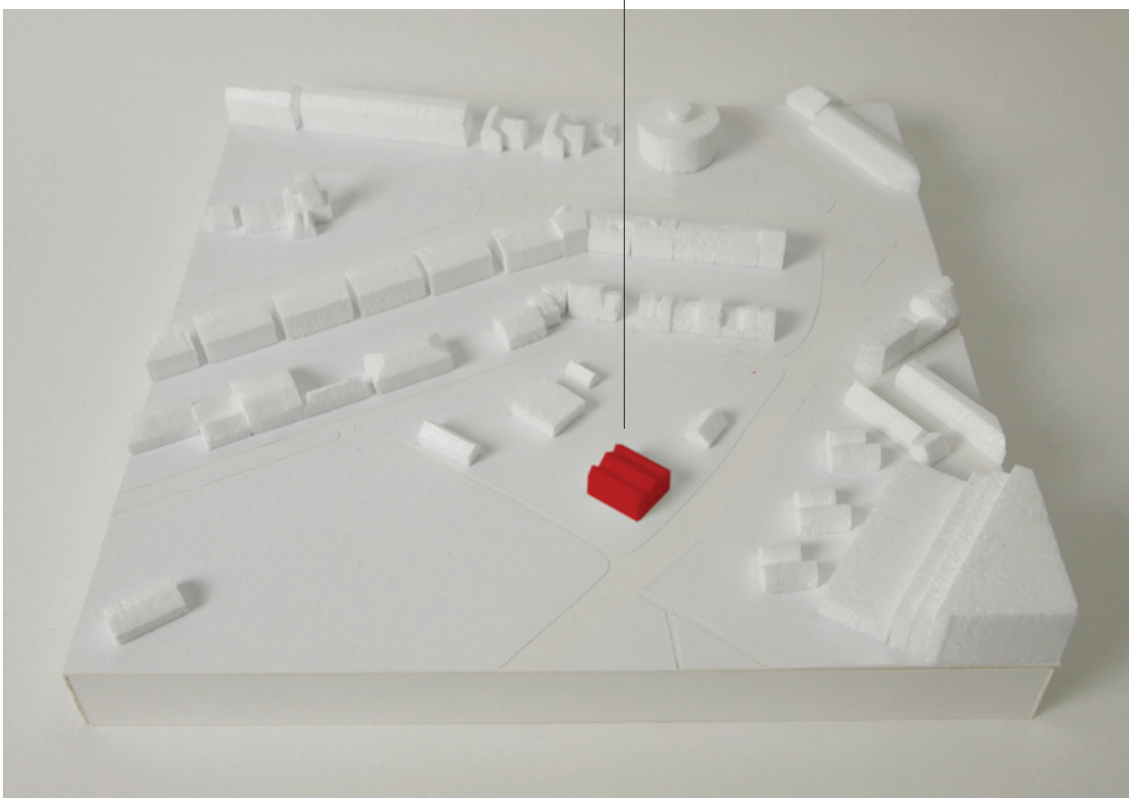


Silhouette
Model Investigation
1:1000

This massing was presented at the midterm seminar, but was considered awkwardly positioned on site, as well as too small.



The final iteration is put closer towards the park and offset from the street.



Silhouette

Model Investigation

3D – Midterm seminar and final proposal

This silhouette was to act as a condensation of the eclectic housing block surrounding the site. The roofline of the middle roof was considered difficult to perceive from street level.

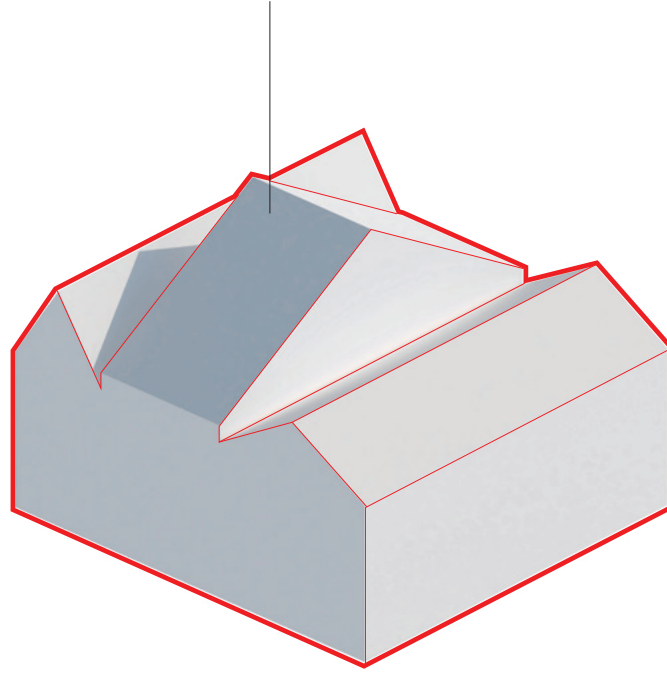


Fig. 32. Midterm seminar massing proposal.

With the three gables facing the street the building's intention of representing the eclectic townhouses is easier to read. Behind the two smaller roof pitches lie the office hallways.

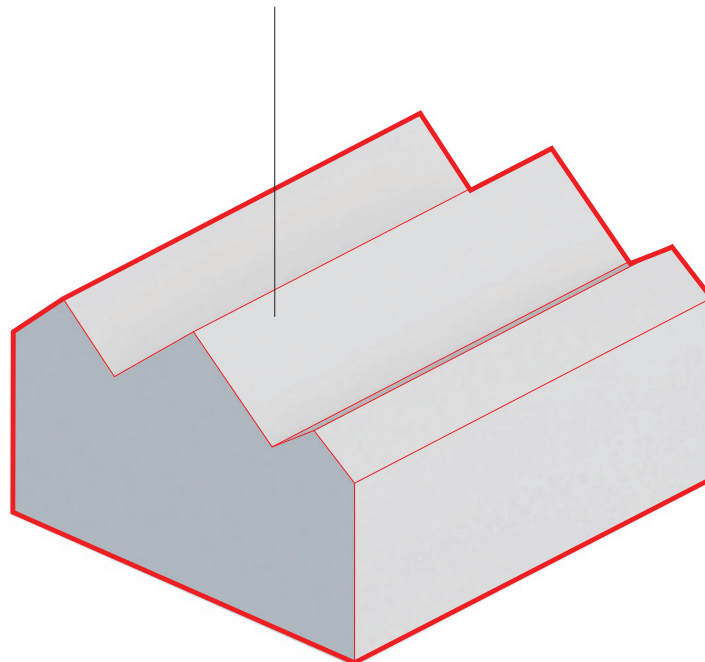


Fig. 33. Final seminar massing proposal.

The silhouette has gone through several iterations throughout the project and I am pleased with the way it has turned out in the end. I have mainly sketched the silhouette in 3D and by hand. I think I could have done more to investigate this in physical models as well.

Starting out, I envisioned the building way too big, and the silhouette presented at the first interim seminar was a very boxy elongated rectangle, two floors with a big footprint. I also wanted to let the building face the residential street, which would have made for a pretty awkward entry point from the street.

At the mid-term seminar the building had instead become unnecessarily small. The site had shifted to the corner of the residential street and the larger street running towards the park. This situation was also a bit awkward, as one would find oneself at the entrance to the embassy immediately after crossing the street. The silhouette acted as a condensation of the eclectic residential neighborhood, with three pitched roofs, the middle one being laterally oriented, the two others longitudinal. The middle roofline was hard to perceive from the street, and created an awkwardly big roof height in the middle of the upper floor which did not really correspond to where the most generous spaces were envisioned to lie.

The final iteration the building grew again, with a roofline that boasts three pitched roofs running in parallel, although their size varies, to stay true to the context.

FAÇADE

Façade
Model Investigation
3D

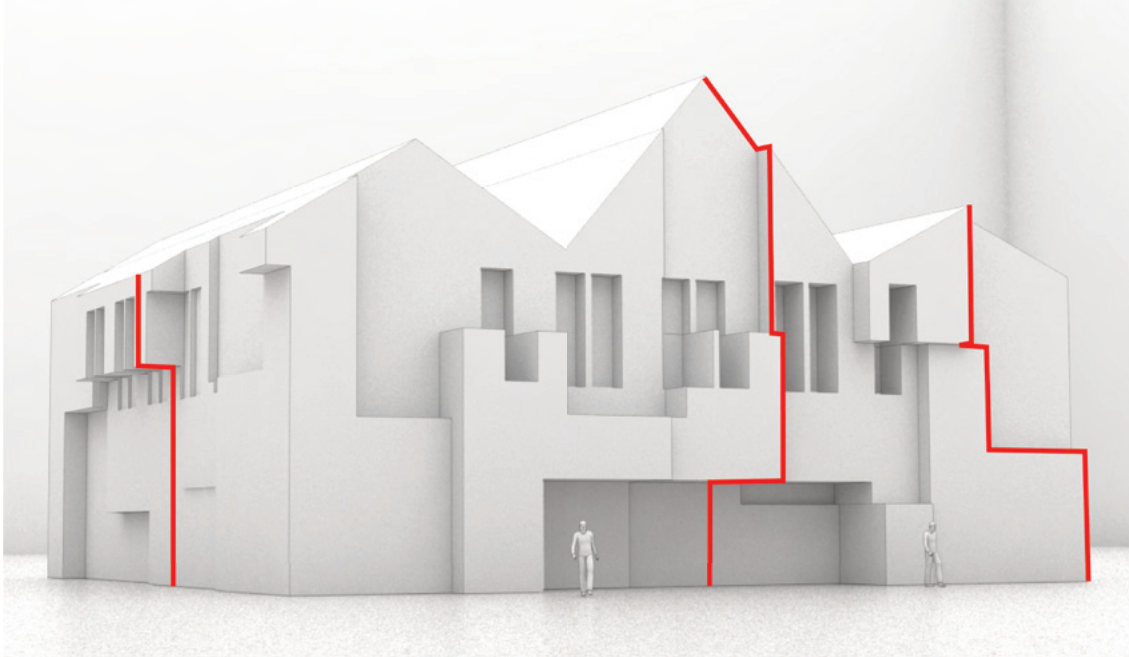
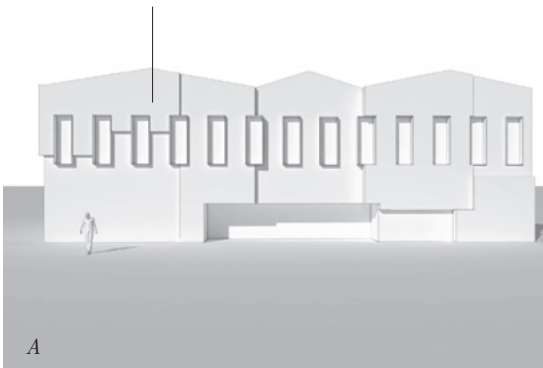
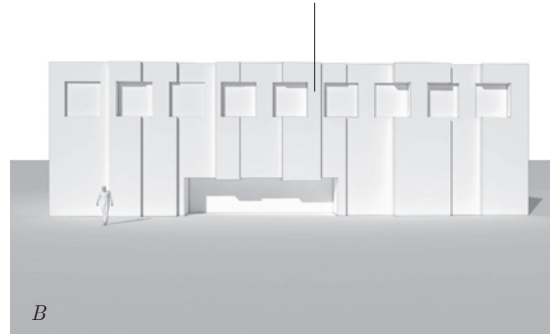


Fig. 34. Early conceptual 3D model. Its silhouette and exaggerated recess motif is sampled from the context.

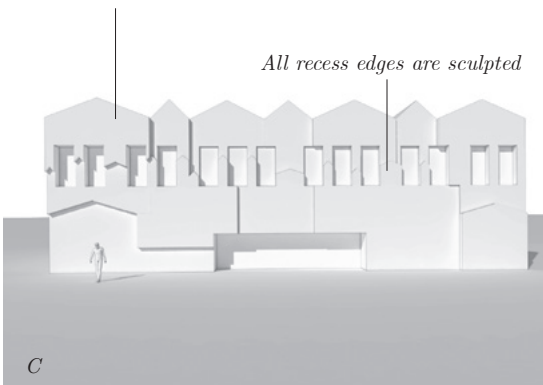
*Roofline suggests several buildings
Both horizontal and vertical recesses*



*Roofline suggests single building
Only vertical recesses*

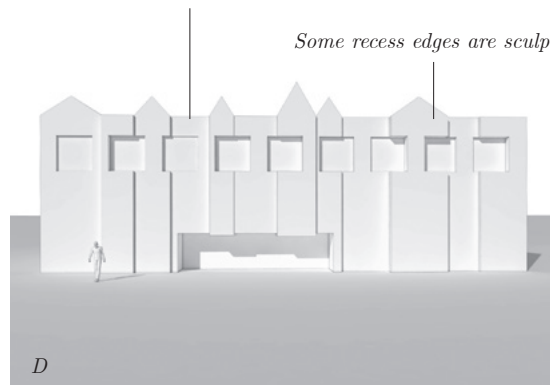


*Roofline suggests too many buildings, you read it as just one
Both horizontal and vertical recesses*



All recess edges are sculpted

*Roofline suggests single building
Only vertical recesses*



Some recess edges are sculpted

Fig. 35. Design explorations of roofline and recess layout.



Fig. 36. Contextual Input 2 from the surroundings, 1:100.

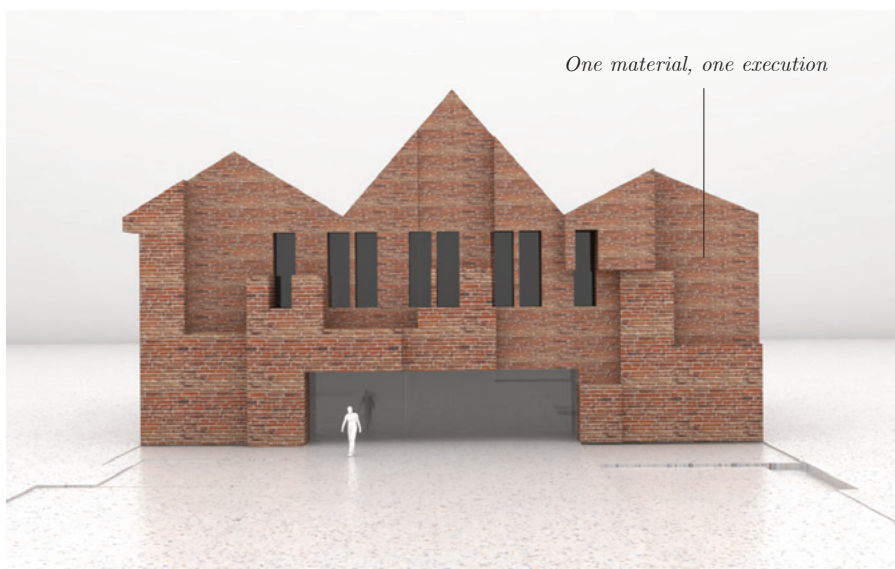
The façade was from early on developed to be a motif made up of recesses. The inspiration for this comes from the way the many small townhouses vary in height and how their façades either protrude or are recessed from each other. As can be seen in Contextual Input 2, there are also instances where a part of the façade of a single building protrudes from itself.

The aspects of the façade that have been considered most important are a sufficient level of detailing, to make the façade interesting to approach, and that a coherent whole is achieved. So a fragmentation of large façade portions have been encouraged, but not uncritically so.

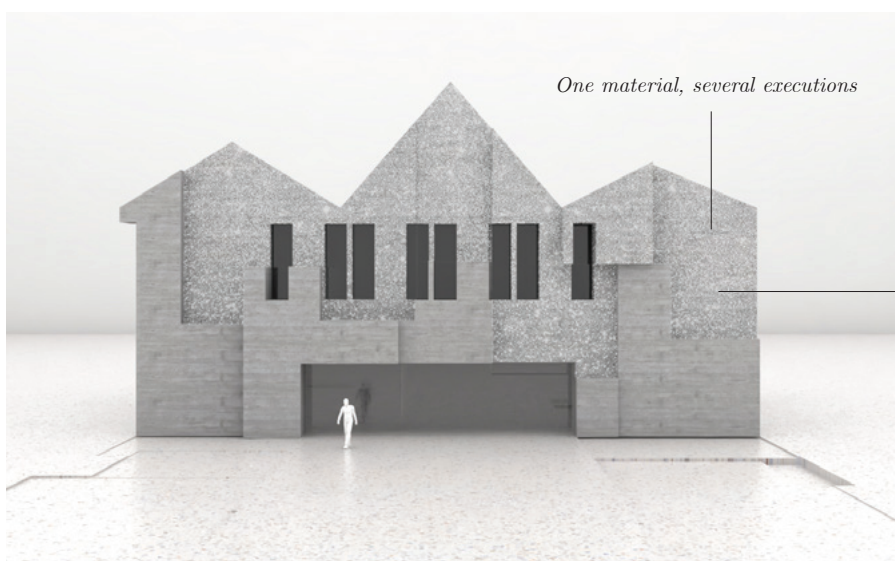
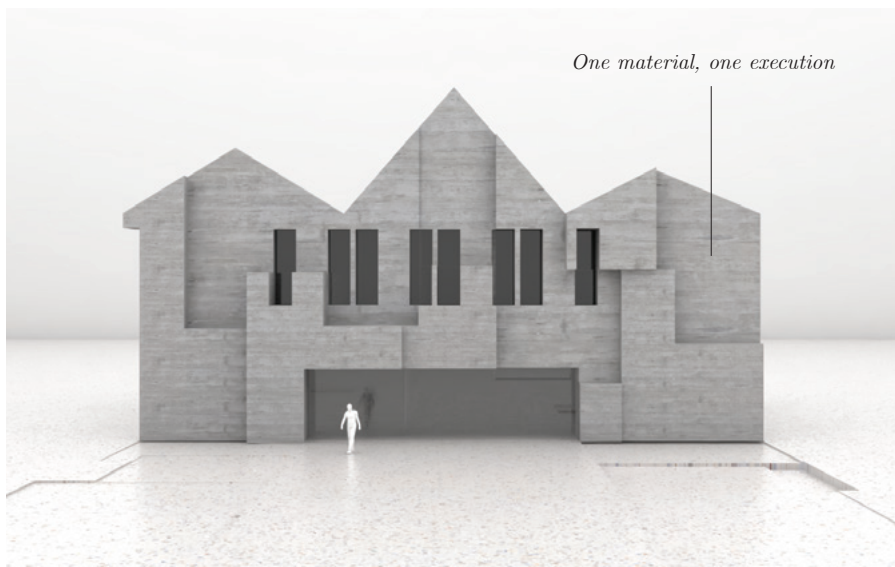
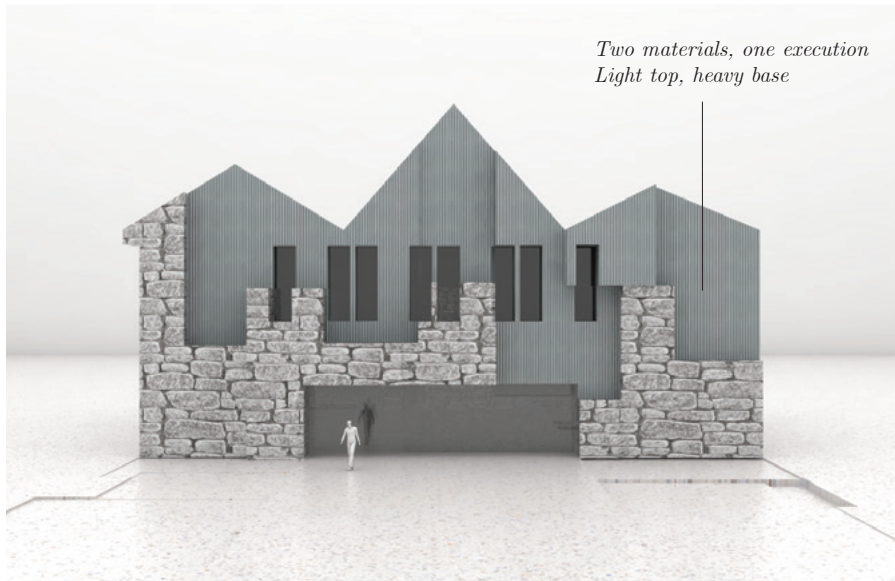
On the opposite page are early-stage façade sketches that mainly explore whether the recess motif should be strictly vertical (which is the most common recess in the neighborhood), or both vertical and horizontal.

Iteration (A) was considered to be the most promising, as the roofline makes a probable claim of representing more than one building, and the size of the recesses is more pleasing than in the other cases.

Façade
Materiality Studies
3D



Façade
Materiality Studies
3D



This approach was considered favorable as long as a clearer contrast between top and base was introduced.

Façade

Model Investigation

1:50 – First interim seminar proposal

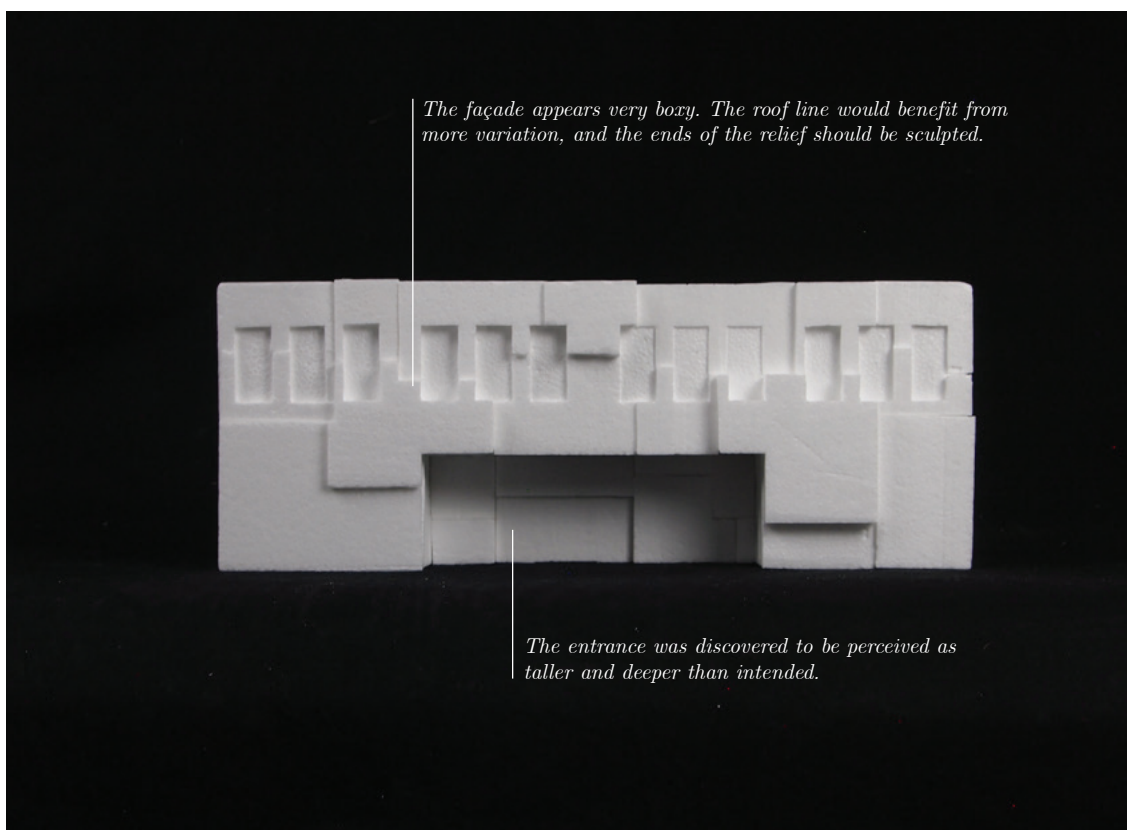


Fig. 37. *First interim seminar proposal*

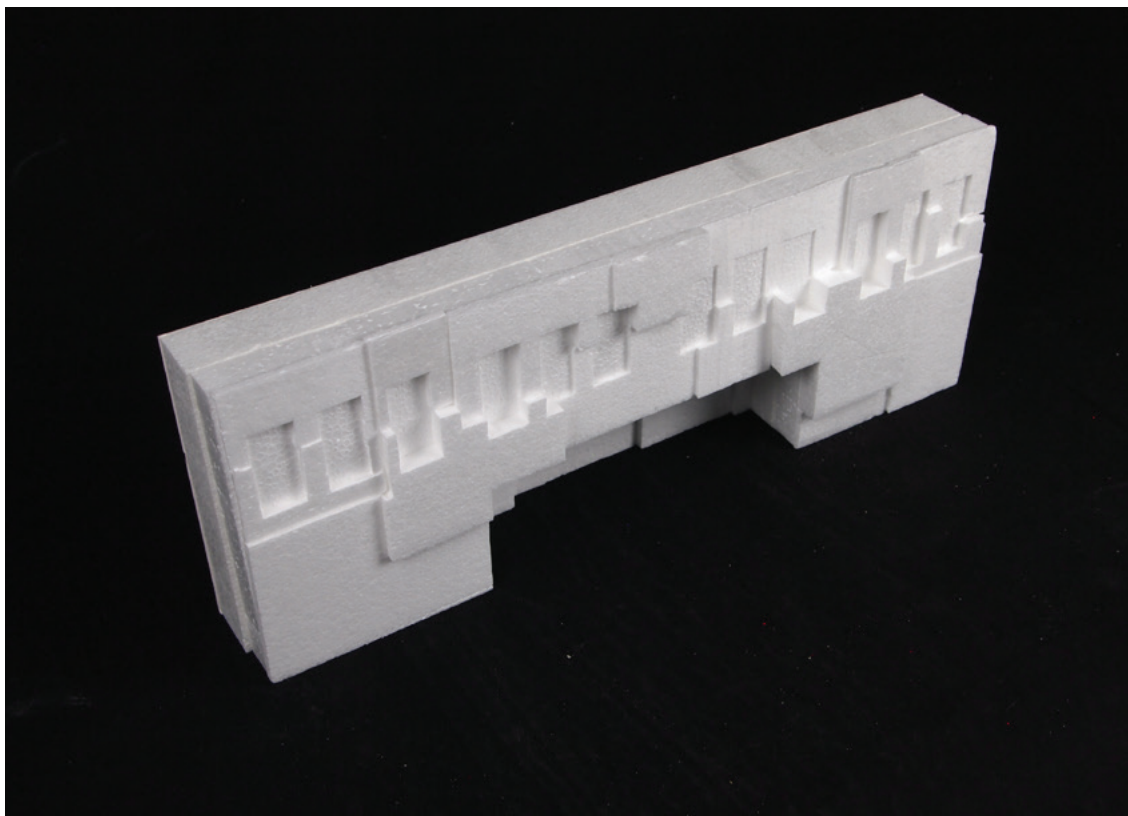


Fig. 38. *First interim seminar proposal*

Façade

Model Investigation

1:50 – Midterm seminar proposal

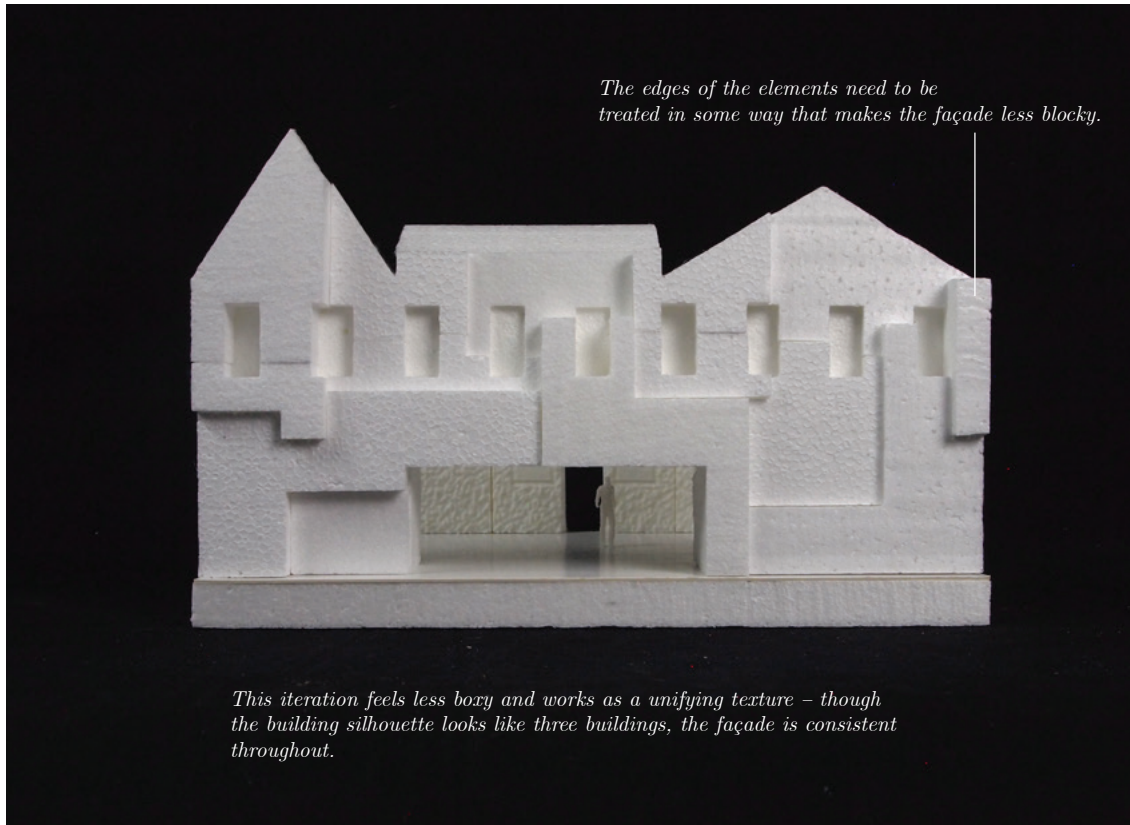


Fig. 39. Midterm seminar proposal

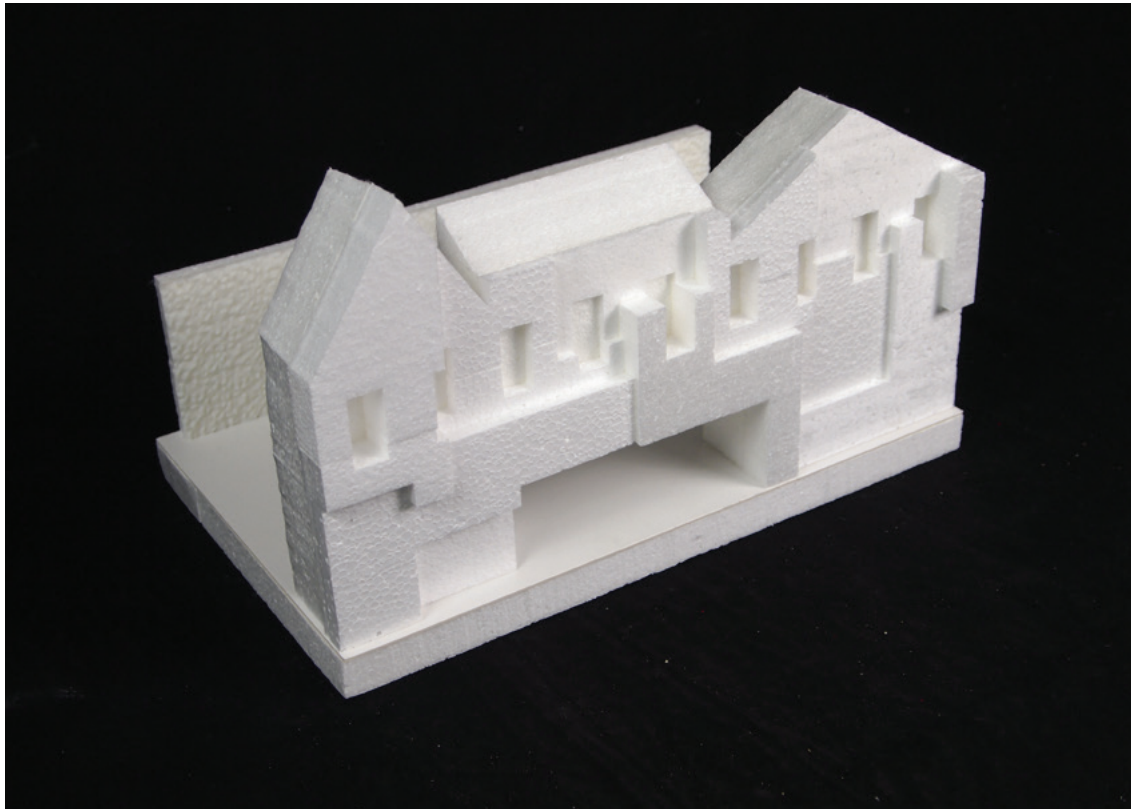


Fig. 40. Midterm seminar proposal

Façade
Collage

Midterm seminar proposal

The concrete cast against clapboard creates an impression of a familiar element, evoking a sense of familiarity without bringing the familiar element to the site.

The is painted to contrast the top element as well as to approach the surrounding brick architecture.



Fig. 41. Midterm seminar proposal

The final iteration. The design makes use of the semi-circle apertures present in the surroundings and apply their shape to both the windows and the elements.



Fig. 42. Final proposal

Façade
Interior

Reception – Final seminar proposal





The façade investigations have been extensive, and basically the starting point of the entire project. The start of the thesis focused a lot on investigating the surroundings to come up with a design in line with the analogue architecture approach. Many of the typologies explored in the neighborhood had to do with the façade, so that made it natural to start sketching in that end.

The façade sketches have been made through hand sketching, 3D modelling as well as physical models. To sample and exaggerate the recess motif from the surroundings entered the project at an early stage, but I was not really pleased with the look of it in the beginning.

At the first interim seminar the façade looked very uninviting and blocky, and that did not change very much at the mid seminar, where the recesses were fewer but a bit deeper, but still very boxy and blunt.

Some material investigations had taken place, though, since this is important for the façade expression. These investigations were carried out through rendered perspectives, exploring what would happen if the base were made from a lighter material than the top, if brick were to be included in the façade, et cetera. In these investigations I found I liked the idea of using the same material for both the top and base, but that there should be a clear difference in the treatment of the material, for contrast. I also realized I wanted to stay away from the use of wood, as I felt it would be too literal of a way to reference Sweden. In the end I settled for concrete, as it can look very different depending on mixture and formwork. It is easy to add color to concrete, which was a property I wanted to work with as well.

I had the ambition to make the façade less busy and uninviting for the final iteration, and I feel I achieved this in the end, when the façade elements and windows were given a semi-circular end. However, I have mostly worked with the façade facing the street, since that is the only façade exposed to the public. I have sketched the façade facing the park as well, since that is the second most exposed.

APERTURE



Fig. 43. Façade close-up



Fig. 44. *Aperture input, 1:200. (Author's own copyright)*

The third and smallest scale, the aperture, is present in the project through windows or entrances in the façade, as well as openings and doors inside the building. The façade windows were early on decided to be rectangular and oriented vertically, with the aim of giving each room several windows rather than one large. The windows are arranged symmetrically in an almost classical layout, regardless of the space beyond the façade. This uniformity of the windows signals to the exterior that even though the façade is busy and painted in two different colors, the building houses only one program.

Since the façade is very rich in expression and materiality, the aperture does not include any additional elements or materiality but is polished to contrast the elevation and reflect more light into the building.

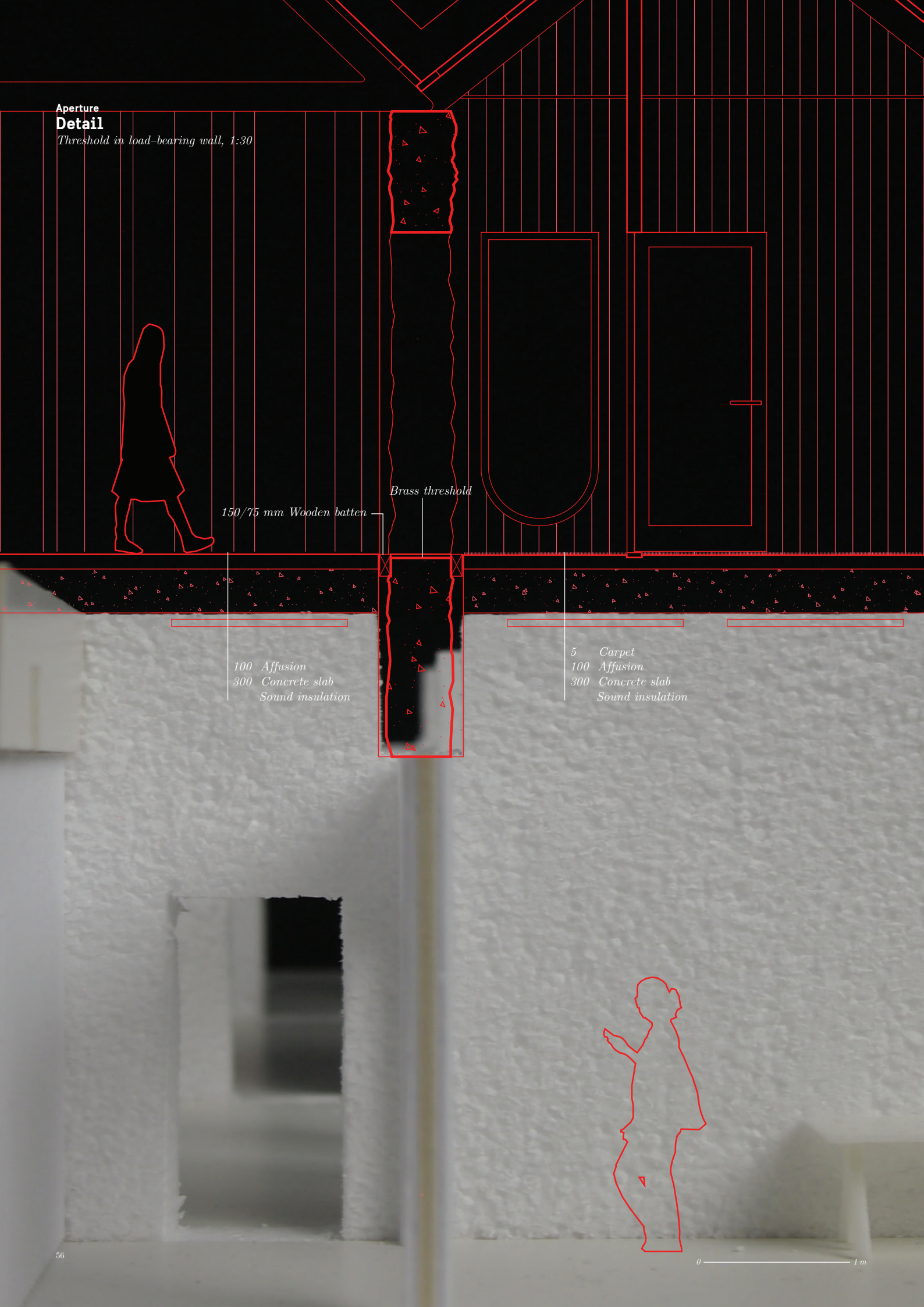
The interior apertures come in three varieties: as openings in the load-bearing pine concrete walls, as doors and windows in the undulating wood walls, and as openings in the floor slabs.

The concrete wall apertures are left exposed to show the contrast between the rugged surface and clean cut. Surrounding the aperture is a concrete impression of Swedish vernacular door casings.

The undulating wood apertures are covered by a wooden frame (as seen on the following spread) that extends beyond the wall in both directions. This is a common way of treating apertures in undulating surfaces.

Aperture
Detail

Threshold in load-bearing wall, 1:30



150/75 mm Wooden batten

Brass threshold

100 Affusion
300 Concrete slab
Sound insulation

5 Carpet
100 Affusion
300 Concrete slab
Sound insulation

The door and window are set in frames that protrude beyond the undulation, and are also sunk into the flooring:

Aperture
Model Investigation
3D

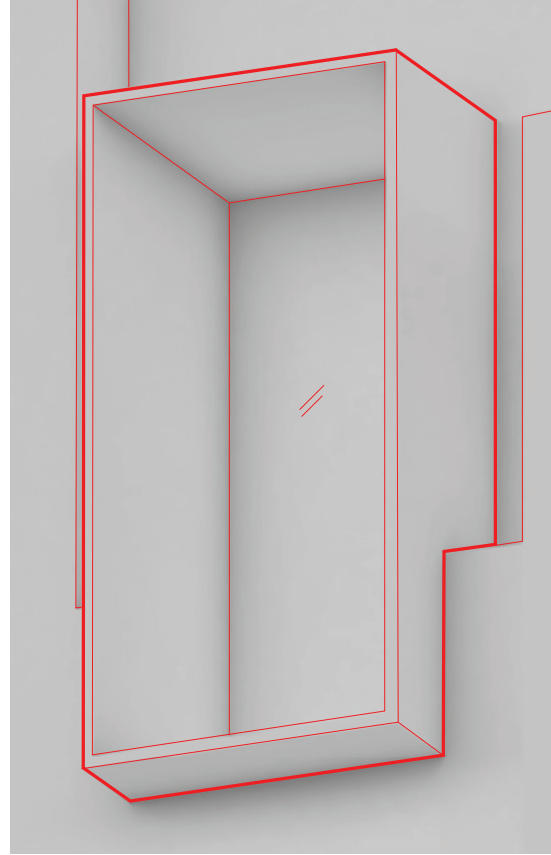


Fig. 45. The frame concept did not turn out as nice as expected, since the facade is busy.

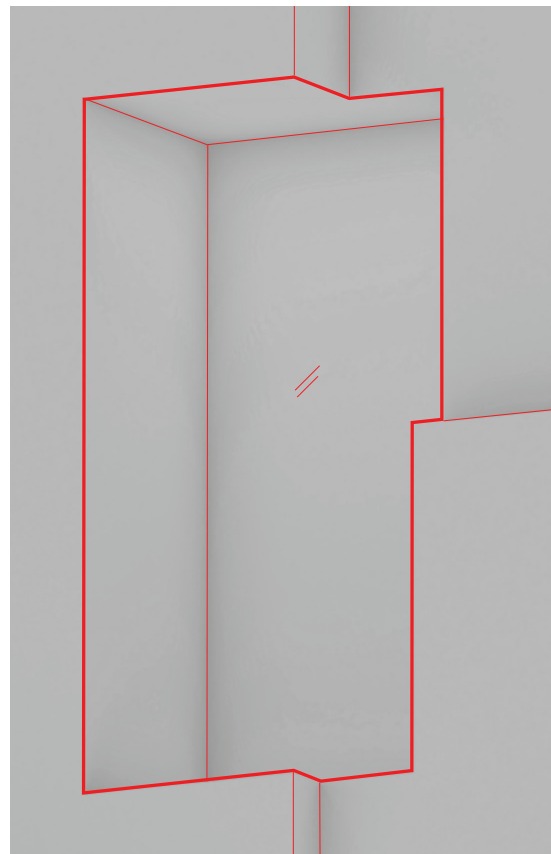


Fig. 46. Midterm seminar proposal. The white accentuation is transmuted into a white paint coating of the apertures.

The aperture aspect is, throughout the project, the least explored scale of the three, partly due to the interior design work starting quite late (very little of the interior was designed at the mid-term seminar).

At first the aperture design focus was to be the sampling of the white Georgian window frames. The frames were to be exaggerated and stretched out to protrude beyond the recessed façade. Before the midterm seminar this idea was considered to make a busy façade even busier, and was dropped in favor of a minimalistic interpretation of the frames, as a white coating of the apertures. The overly rectangular façade expression was in part due to the apertures being rectangular openings, which made it necessary to sample the semi-circular shape from the Georgian townhouses instead of their window frames.

At first the concrete wall apertures were to be covered with a metal frame in a similar fashion, but this was dropped as it would be similar to the undulating wall apertures, and it is nice to see the cut.

MATERIALITY AND IDENTITY

Materiality and Identity
Pine Concrete
Concept



Fig. 47. CNC-milled Styrofoam positive. (Author's own copyright.)



Fig. 48. Vacuum-formed PET negative. (Author's own copyright.)



Fig. 49. Finished concrete prototype. (Author's own copyright.)

Materiality and Identity
Pine Concrete
Concept



Fig. 50. Conceptual rendering. (Author's own copyright.)

The embassy is made up of load-bearing concrete walls that make up the zoning of the building. Since these walls are important for the embassy both structurally and programmatically, their design has been thoroughly investigated to reflect this importance.

The pine tree is common in Sweden: it makes up about 40% of all tree species. Thus, the texture of pine bark would be familiar to a person having lived in Sweden. The walls are carried out in concrete, however, so their materiality together with the bark texture would cause a sensation of unfamiliarity.

The design of the pine concrete was developed in 3D by image sampling a pine bark texture. Then the appropriate resolution of the texture was explored through material prototypes. These were manufactured by CNC-milling a positive out of Styrofoam (XPS), around which PET plastic was vacuum-formed to create a mould. This process could be scaled up to cast the load-bearing walls in many separate elements which are then joined together, but a more promising approach would probably be to use a retarder on the concrete (so it does not cure too fast) and sculpt the texture on site. Herzog & de Meuron did this on the Schaulager in Münchenstein, to achieve a façade that looked like rammed earth.

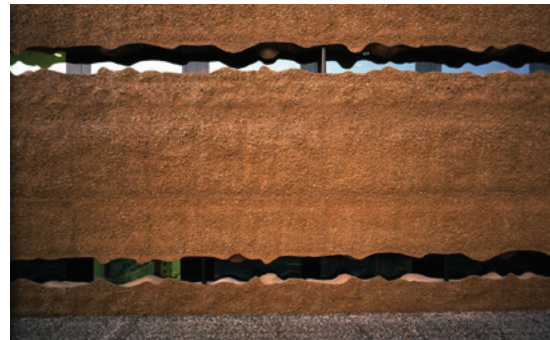


Fig. 51. Herzog & de Meuron, Schaulager, Münchenstein, CH, 2003. (afasiaarchzine.com)



Fig. 52. Pine trunk (Wikimedia Commons).

Materiality and Identity
Clapboard Concrete
3D model investigation



Fig. 53. Concrete cast in clapboard formwork. (Author's own copyright.)

Materiality and Identity
Clapboard Concrete
Concept



Fig. 54. Clapboard façade (woodshms.com).

The base of the building is made from pigmented concrete cast against formwork built up like a clap-board façade (fjällpanel in Swedish). This gives a more rugged base to contrast the smooth top and creates a façade texture that is familiar and unfamiliar at the same time. Familiar in the way that the façade surface is horizontally textured, with a saw-toothed profile. Unfamiliar in that this gives the negative of a clap-board façade and is carried out in a material very different from wood.

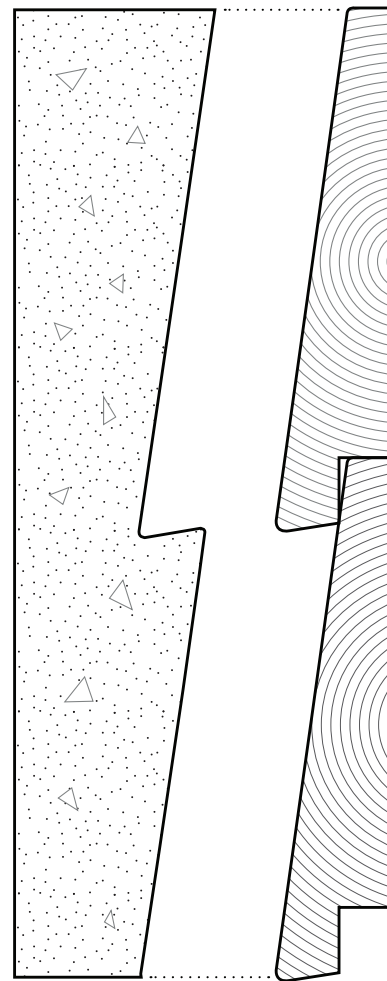


Fig. 55. Concrete cast against clapboard formwork.



Fig. 56. Undulating wood partition, ambassador's office.



Fig. 57. High tech assembly line (Wikimedia Commons).

In *What is Sweden?*, Alf W. Johansson argues that Swedes generally shun the idea of being proud of their country, and only accept nationalism in relation to modernity. Johansson argues that Swedish national identity has become strongly linked to being avant-garde, that the rare instance of a Swede feeling pride is often in conjunction with our strong technical, humanitarian or social advancements. (Johansson, 2001) Thus, the partitional plywood walls have been heat-formed to clearly show that they are unique and custom-made for the embassy, with the aim to achieve a high-tech look.



Fig. 58. Window casing detail on load-bearing wall.

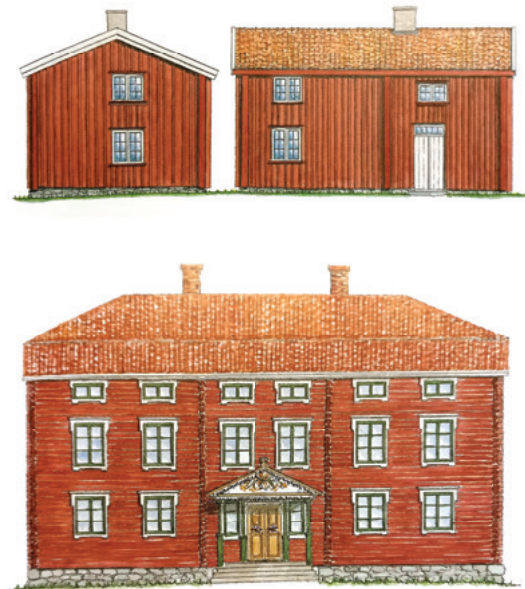


Fig. 59. Window casing references from *Landskapshus* (Ohlsson-Leijon & Reppen, 2001)

The apertures in the load-bearing walls are framed by the negatives of Swedish vernacular window casings, as if the wall had been cast against a cottage, for instance. The motifs have been inspired by the book *Landskapshus* by Karin Ohlsson-Leijon and Laila Reppen, where they write about one characteristic building type from each of Sweden's 25 provinces.

Materiality and Identity
Swedish References
Concept



Fig. 60. Patterned metal railing.



Fig. 61. Gästgivars wallpaper (Wikimedia Commons).

This wallpaper is originally located in a room in *Gästgivars*, a farm in the Swedish province Hälsingland. The farm is on the UNESCO World Heritage list. The pattern has since been copied and turned into a wallpaper product and is prevalent in many Swedish homes (my own included). In the embassy it is translated into a texture in the metal railing.



Fig. 62. Sparkling concrete.



Fig. 63. Frosty surfaces outside architecture school (Author's own copyright).

In winter, Swedish surfaces get frosty as the temperature drops. This makes them shimmer and sparkle as you walk past them. The facade of the embassy is given a permanent frosty look by applying crushed glass as concrete aggregate, which will create a similar shimmering effect as passers-by approach the embassy.

PROGRAM

Program
Functions
Outline

Street

Security gate

Public program

Reception/waiting area	visitors consular errands : visas etc	70 m ²
HWC x 1		4 m ²
(Interview room + photo station)		10 m ²
Total		84 m ²

Security gate

Private program

Chancery
(Kansli)

Back office		8 m ²
Secondary entrance		20 m ²
Offices	0.8 per person + 1 spare office = 20 offices à 12 m ²	240 m ²
Conference rooms	Room for about 10 people	2 x 18 m ² 36 m ²
Meeting rooms	Two small, two large	2 x 5 + 2 x 8 26 m ²
Common representational area		30 m ²
Kitchen + dining area		40 m ² ?
Common seating area (poufs etc.)		15 m ²
Coat room		4 m ²
Toilets	3 (1 HWC incl. shower)	9 m ²
Printers		10 m ²
Server room		10 m ²
Storage		14 m ²
Archive		25 m ²
Total		487 m ²
Garage/parking		

Private/professional barrier

Residence
(Residens)

Living room		20 m ²
Bedroom x3		32 m ²
Kitchen + dining area		20 m ²
Storage		7 m ²
Bathroom		4 m ²
Total	83 m ² x 5	415 m ²

Fig. 64. Program outline based on correspondence with Eva Jacobson, interior architect at the Ministry for Foreign Affairs.

Program
Functions
Room diagram

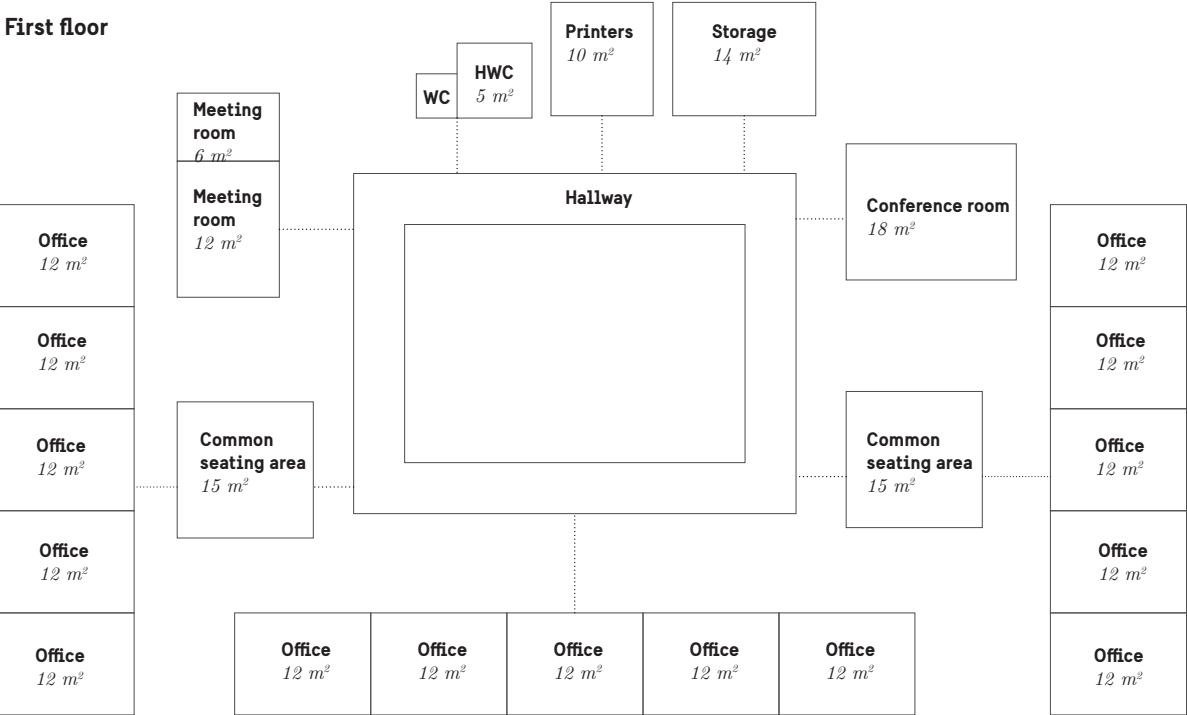
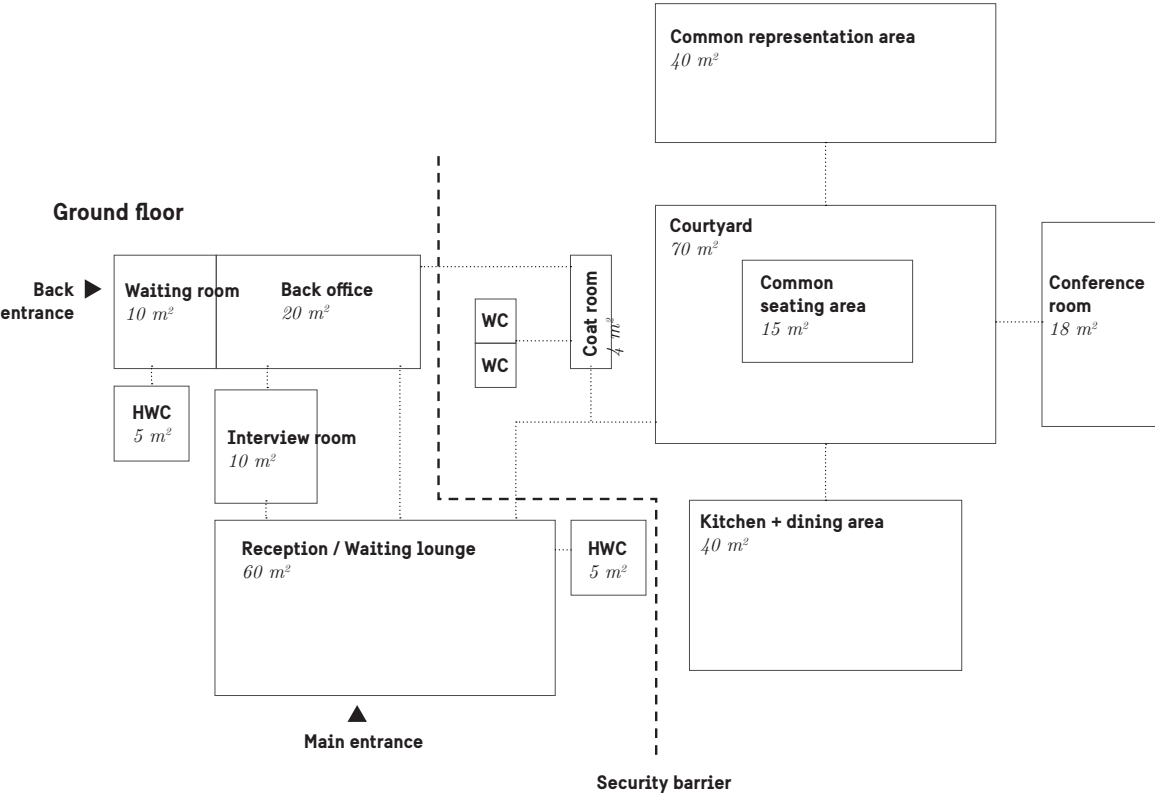


Fig. 65. Room configuration sketch by the author.

MODELS

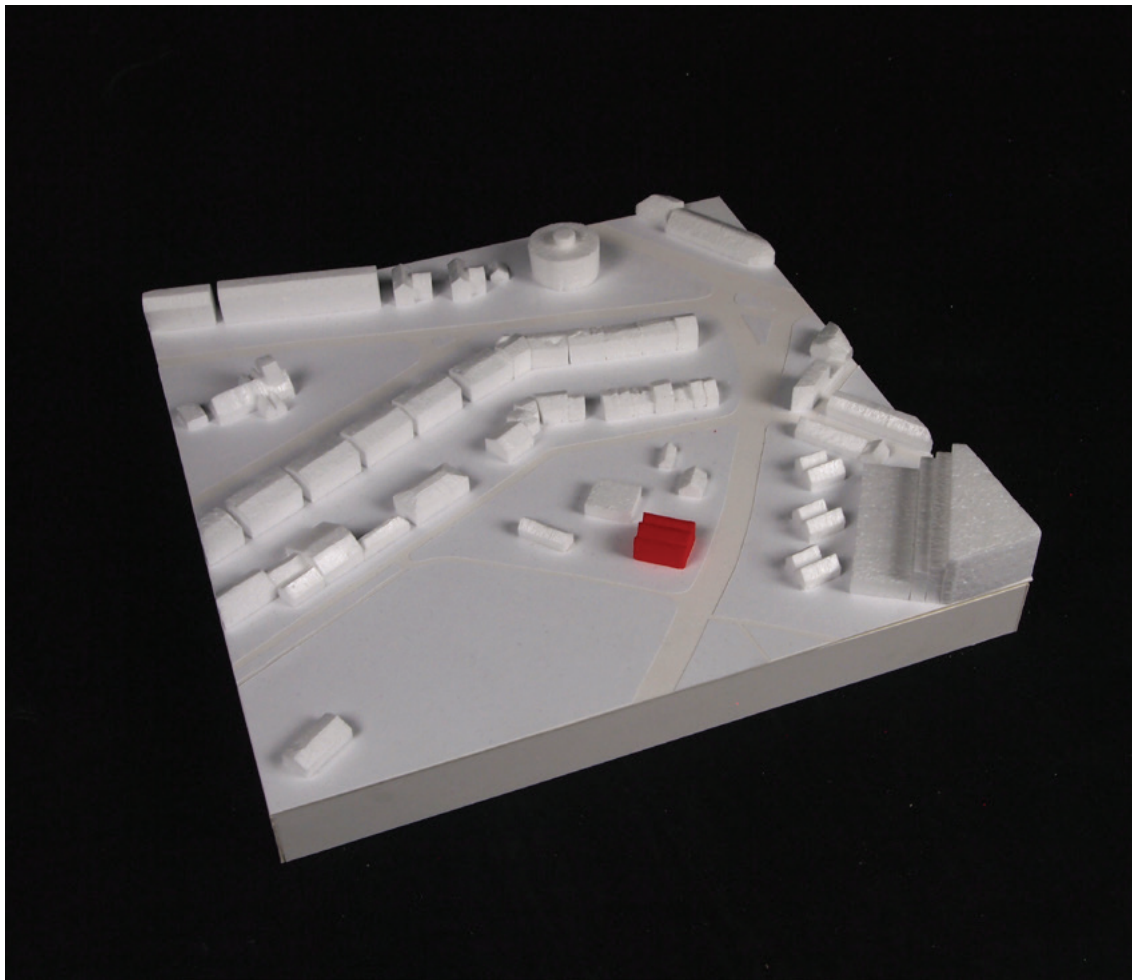


Fig. 66. *Site model 1:1000*

Models
Facade
1:40



Fig. 67. Plaster model

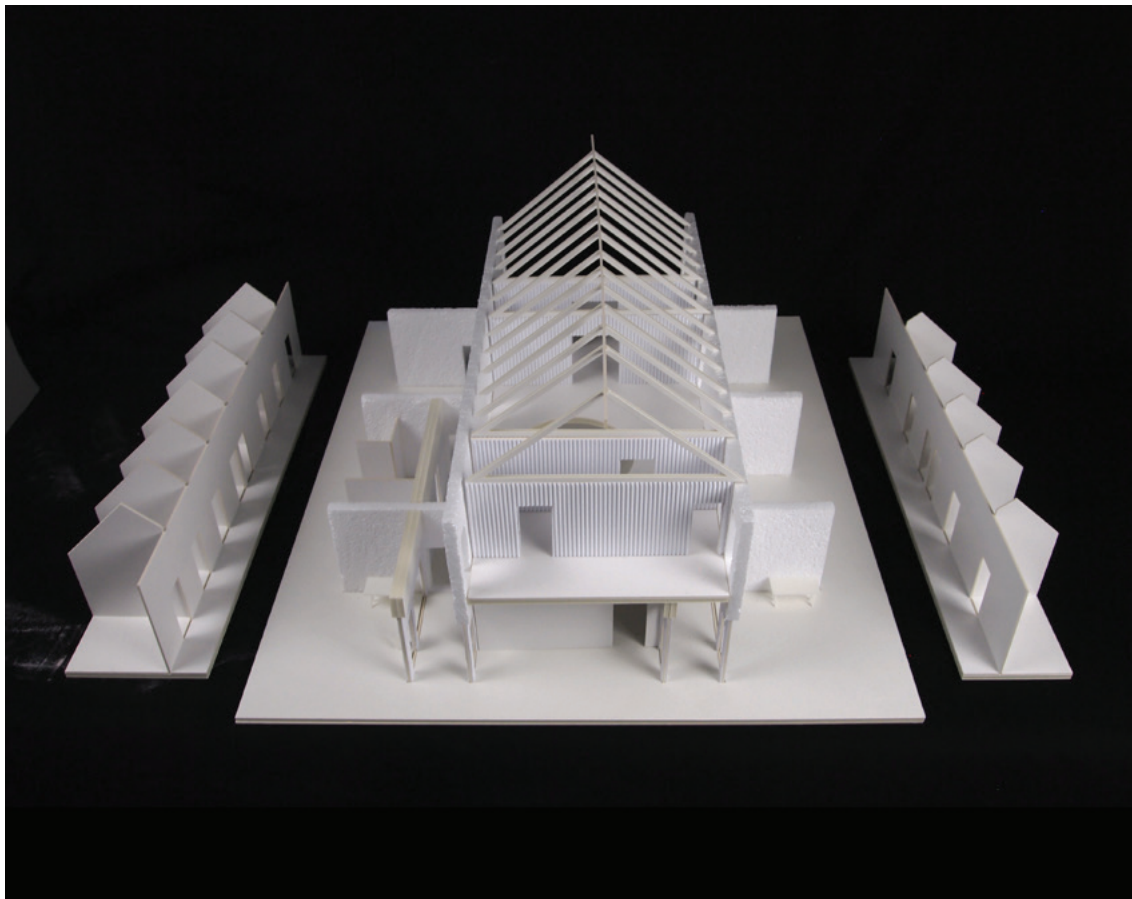


Fig. 68. Making of facade elements, CNC-cut formwork out of foamcore cardboard.

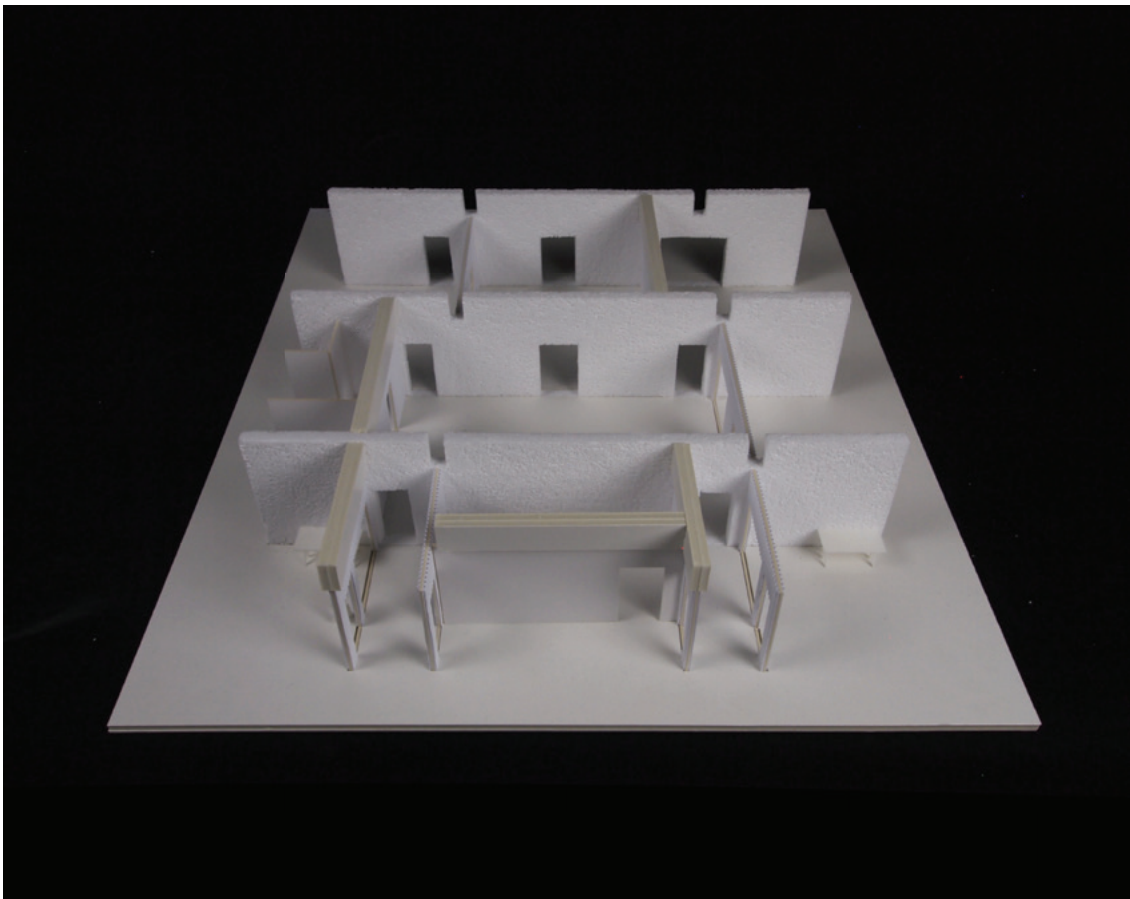
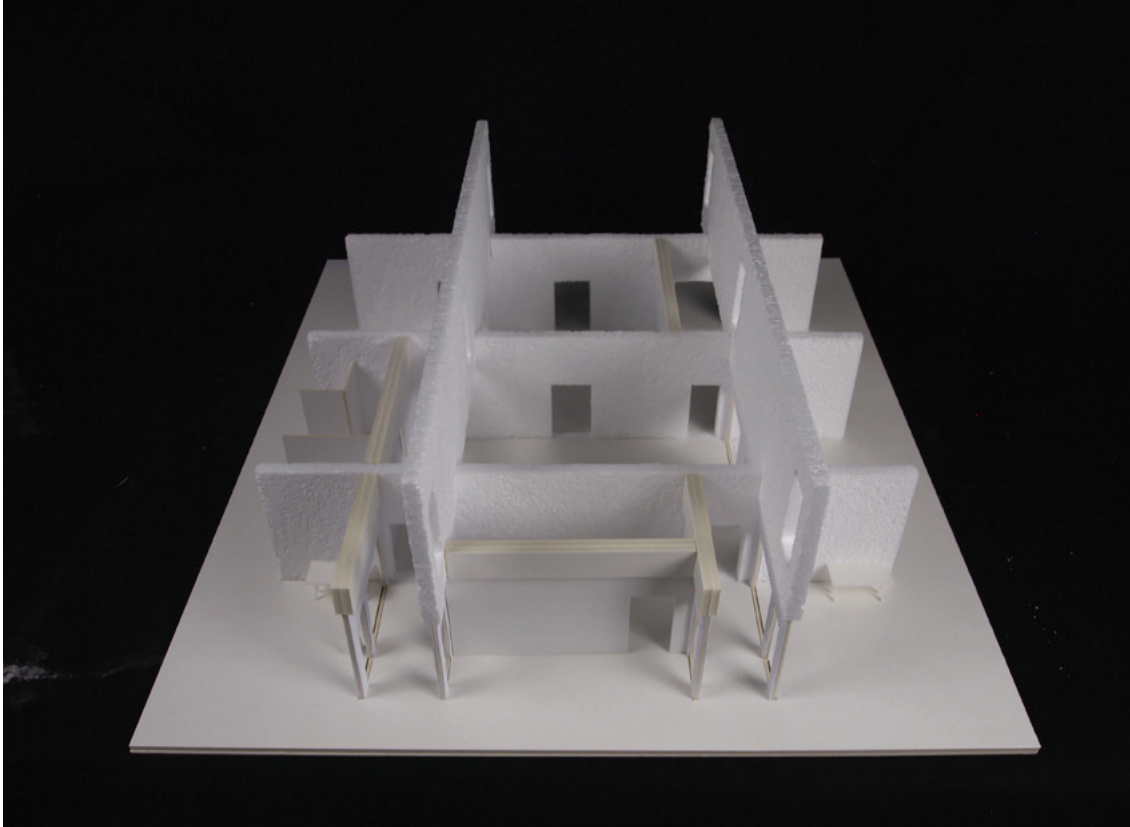


Fig. 69. Spray-glued glitter in the formwork transfers onto the element.

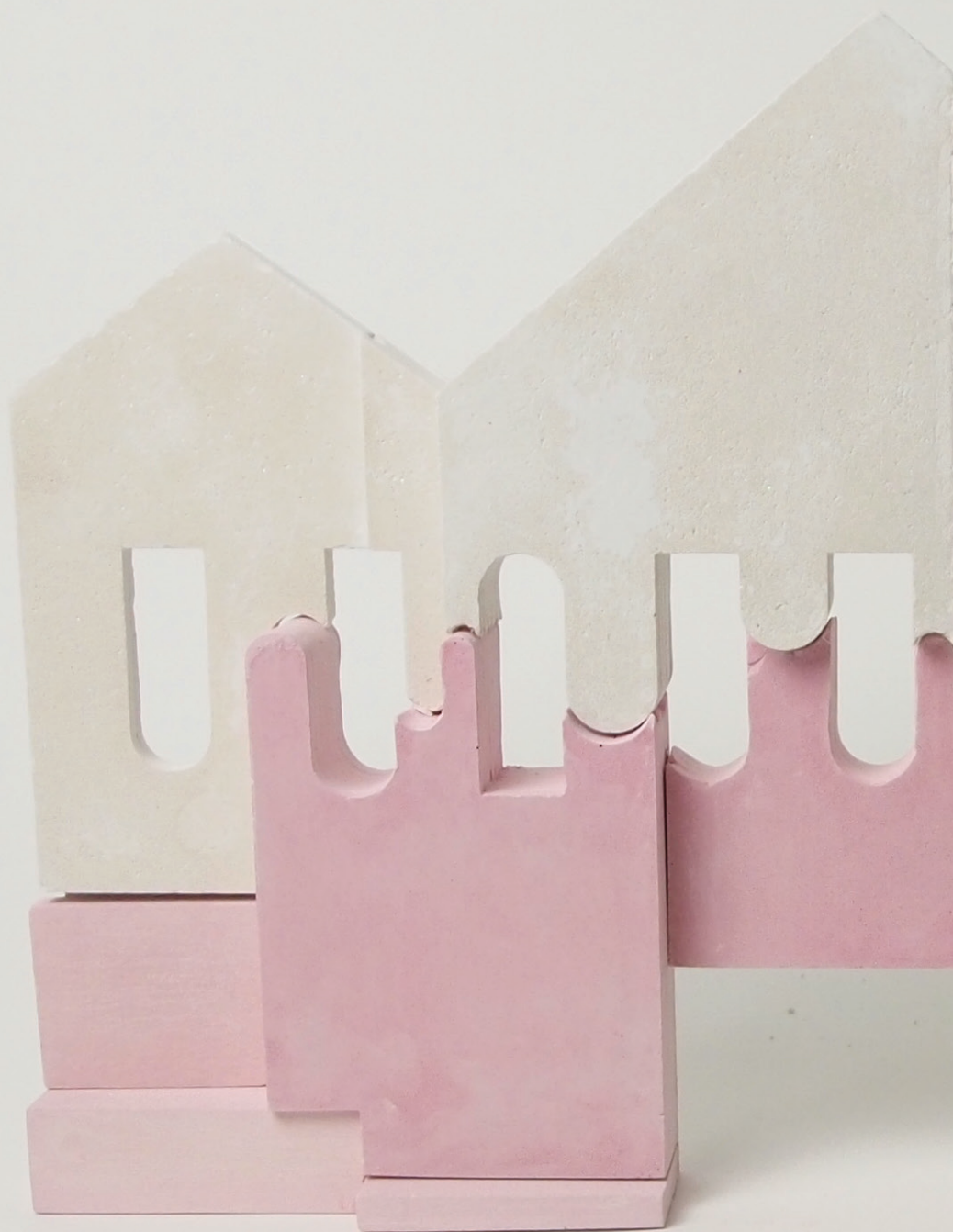
Models
Interior Configuration
1:40

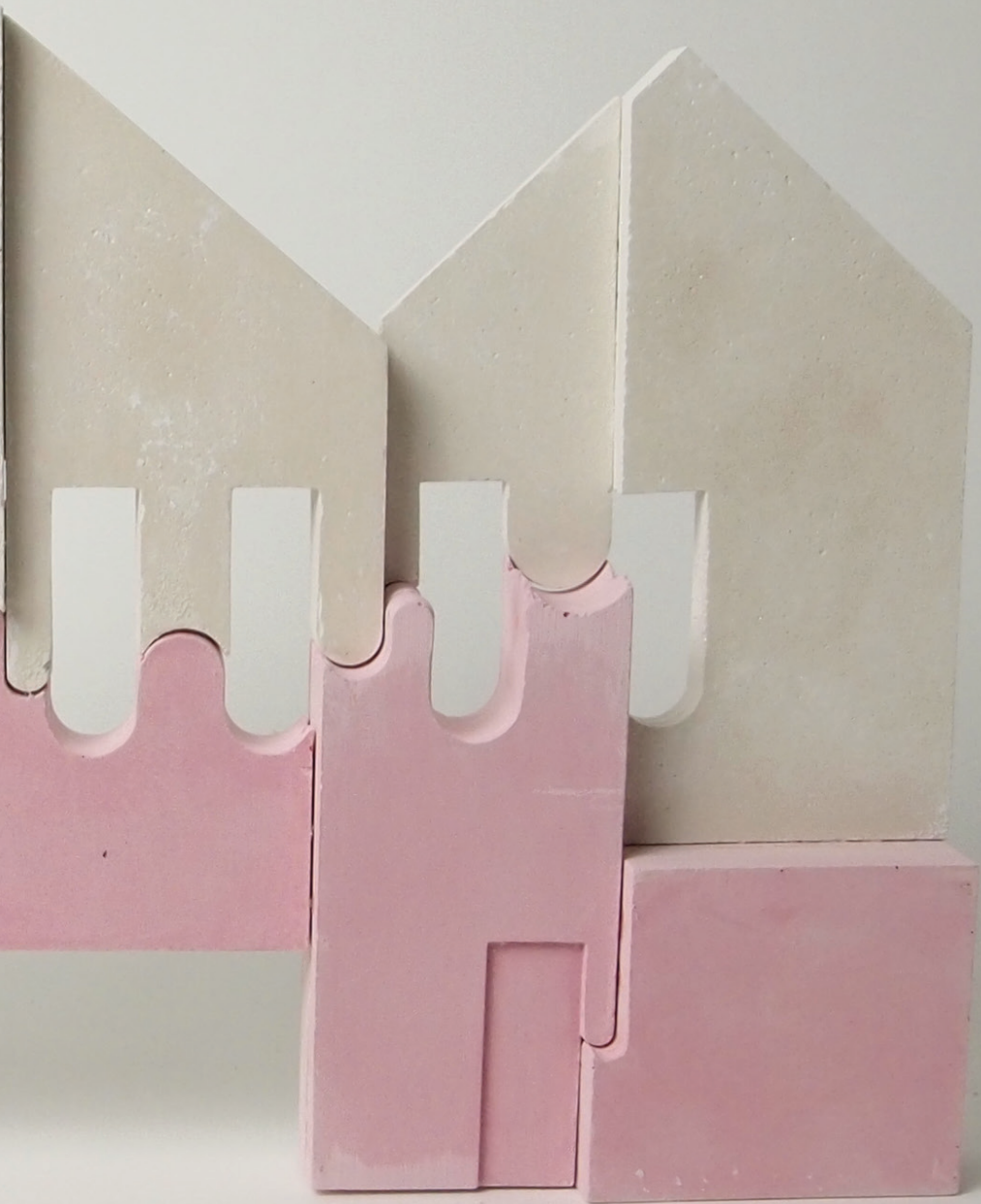


Models
Interior Configuration
1:40



Models
Facade
1:40





Models
Material Prototypes
1:1



Fig. 70. CNC-milled Styrofoam (XPS).

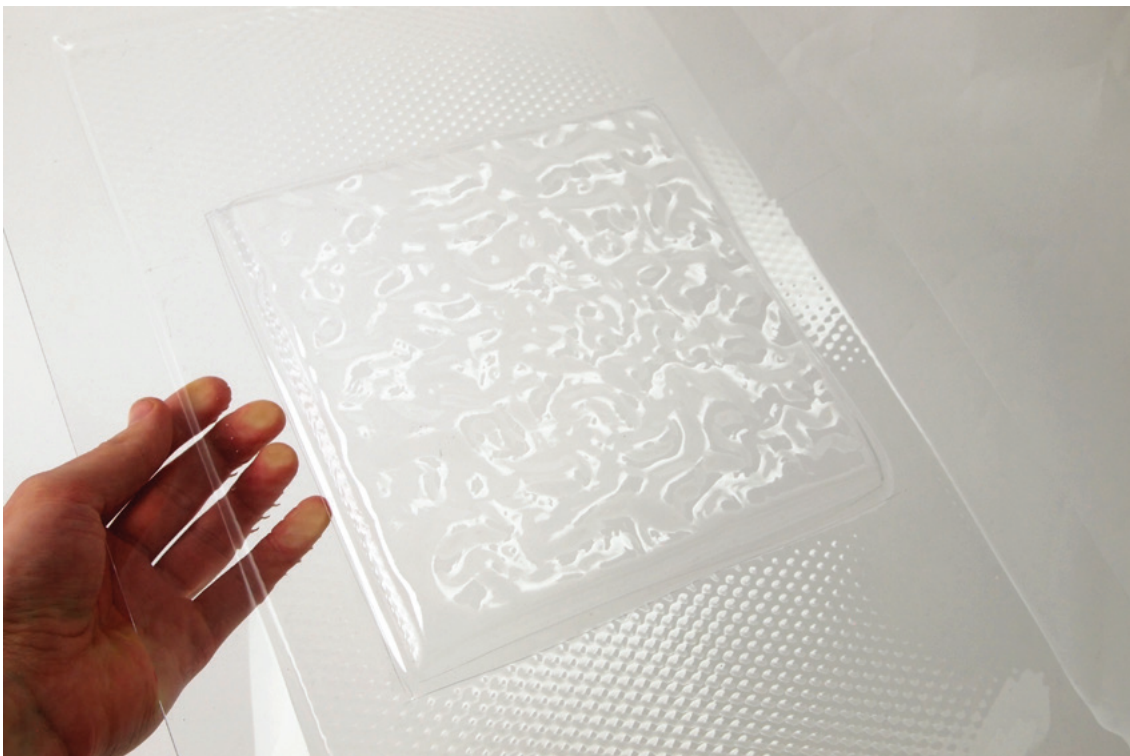


Fig. 71. Vacuum-formed PET (not related to the milling in Fig. 66).

Models
Material Prototypes
1:1



Fig. 72. Material prototype, concrete (not related to the mould in Fig. 67).

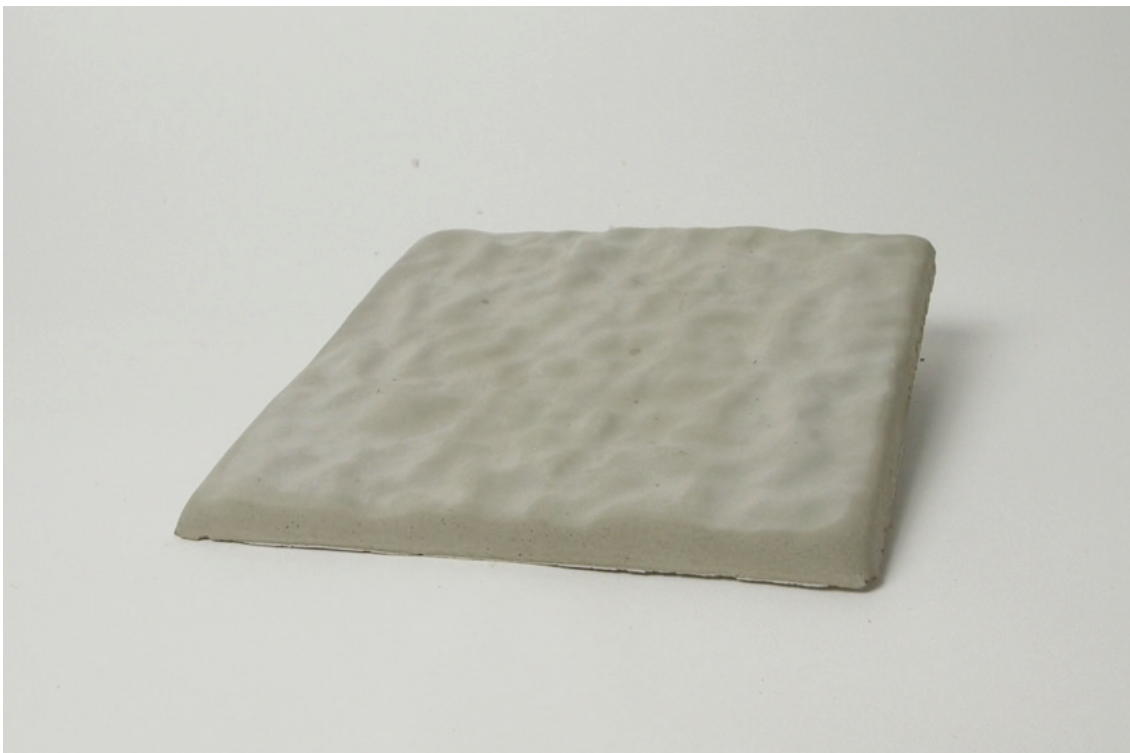


Fig. 73. Material prototype, concrete (from the mould in Fig. 67).

DRAWINGS

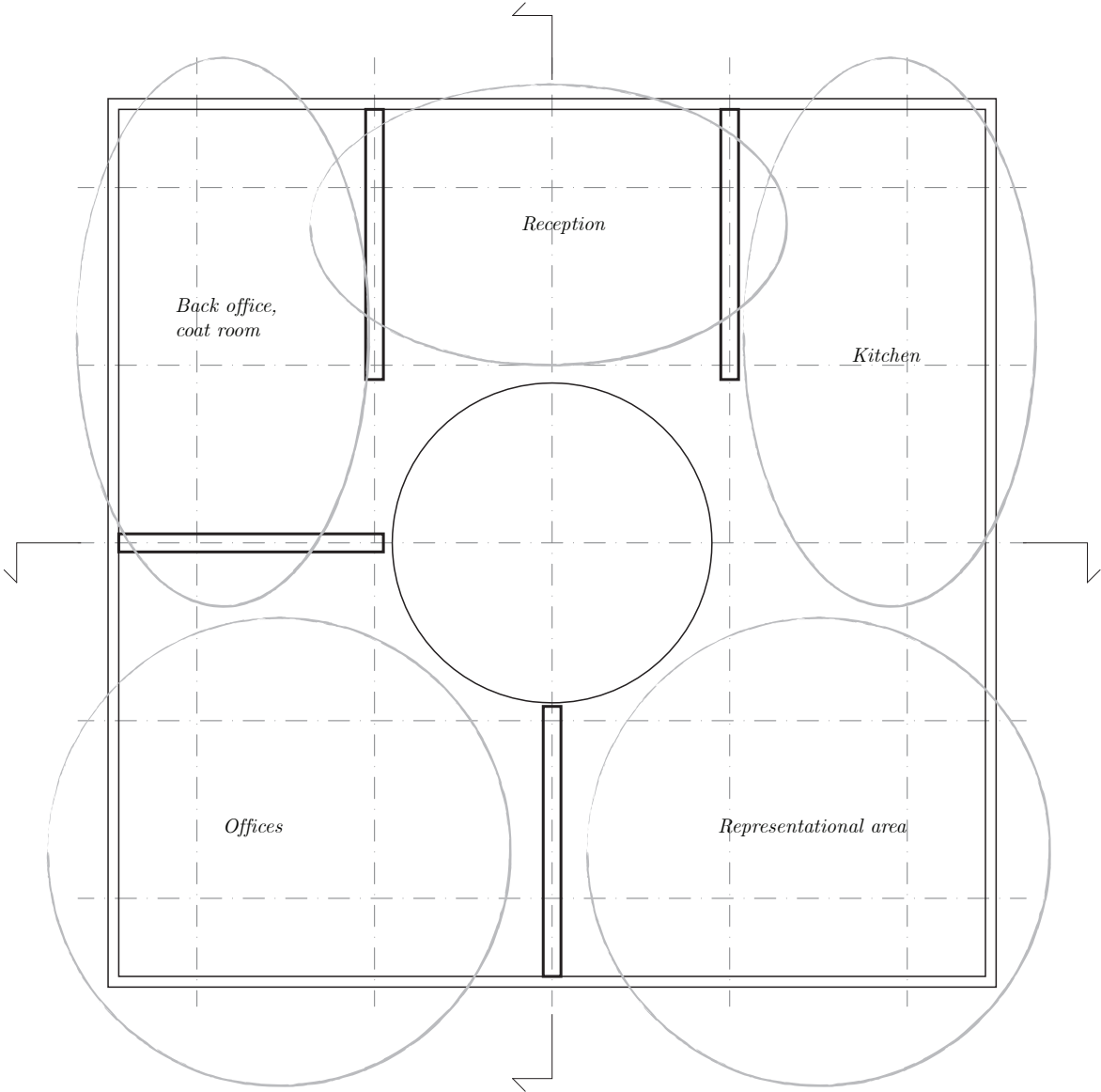


Fig. 74. Ground Floor

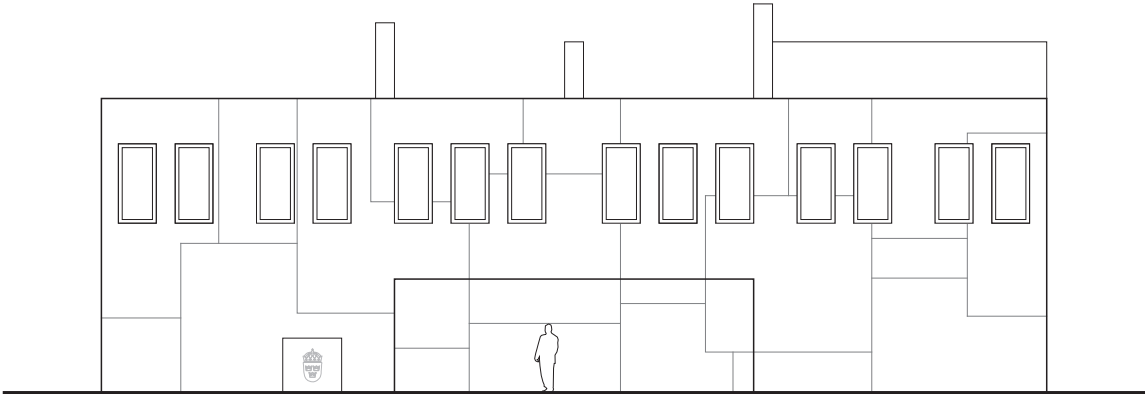


Fig. 75. East Elevation

N
2 m

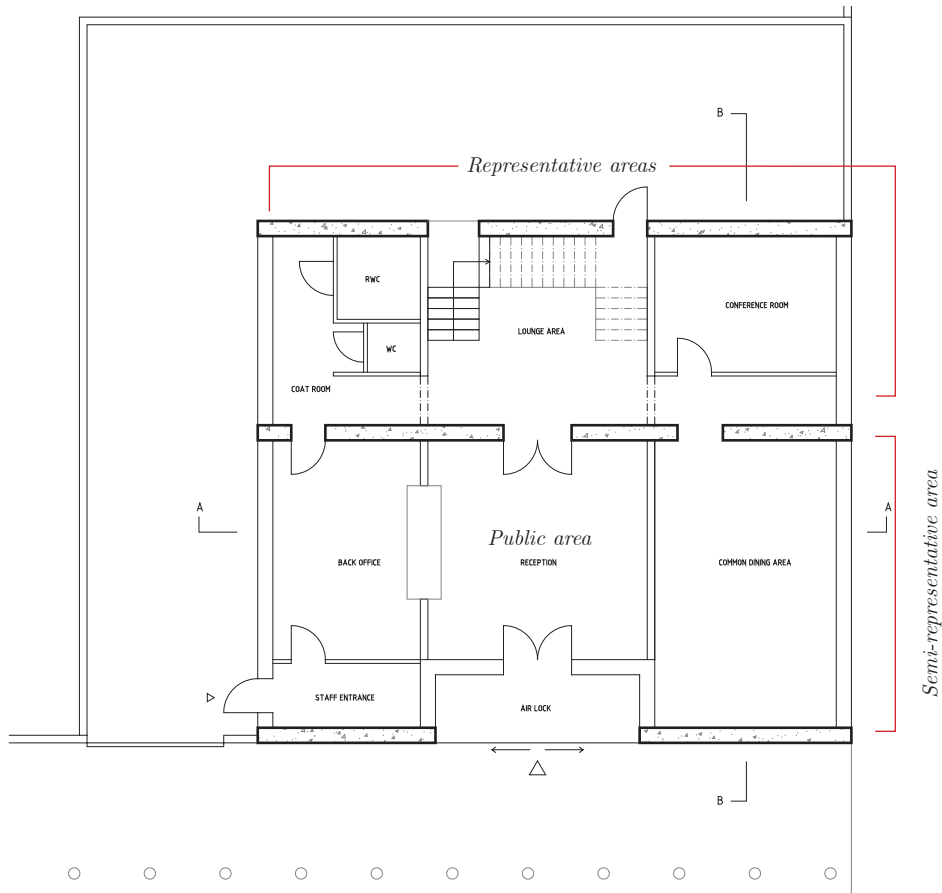


Fig. 76. Ground Floor

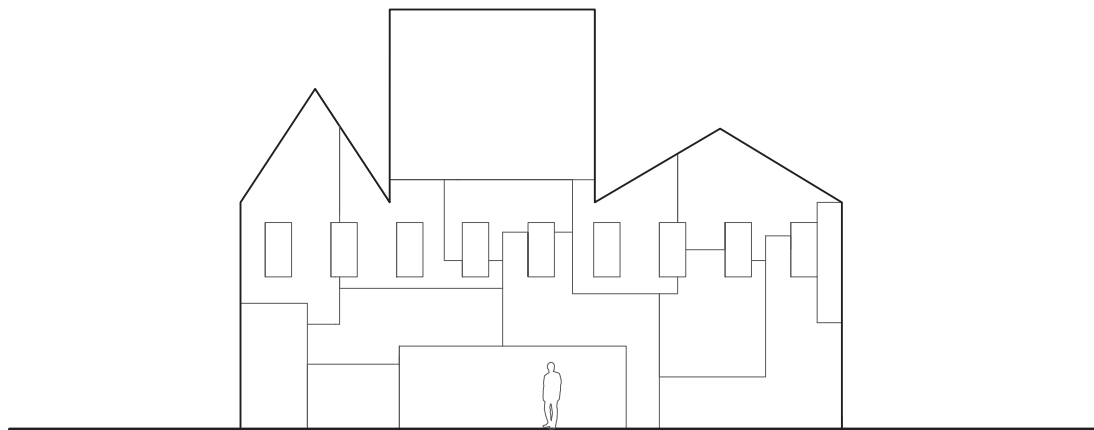
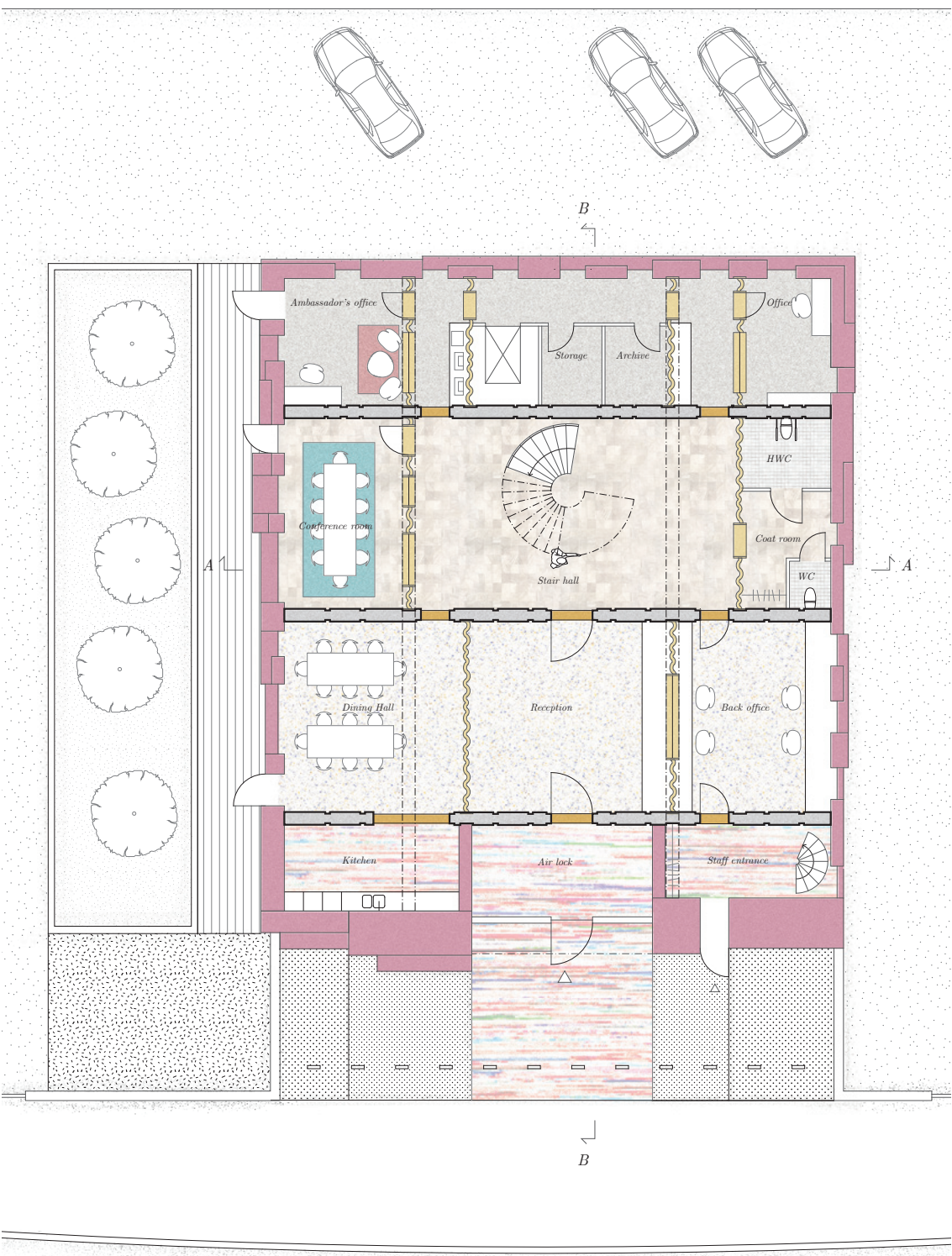


Fig. 77. East Elevation





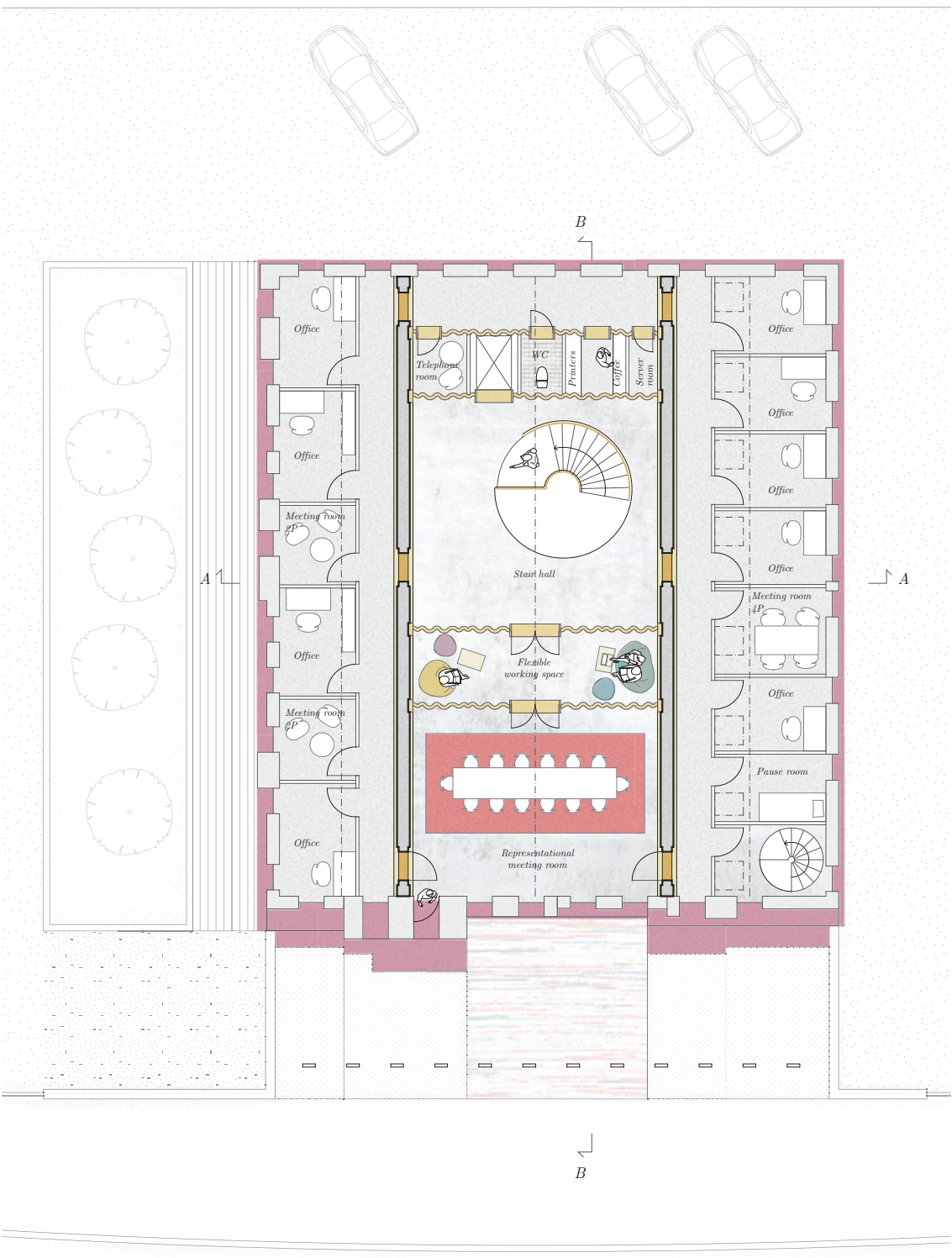




Fig. 78. Section A



Fig. 79. Section B

0 ——— 2 m



Fig. 80. East Elevation

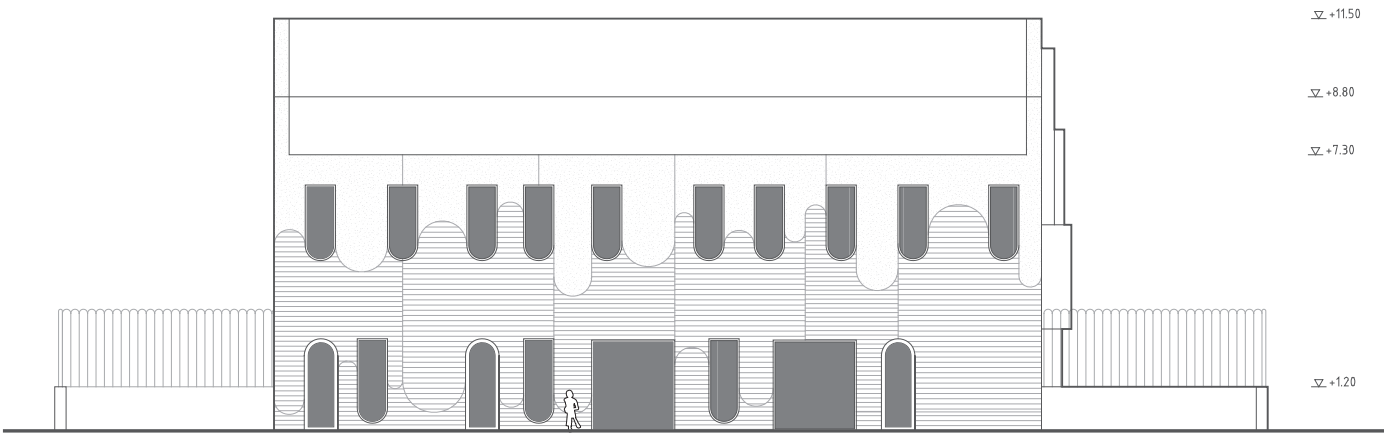


Fig. 81. South Elevation

0 — 2 m



Fig. 82. Upper stair hall



Fig. 83. Representational conference room



Fig. 84. Reception



Fig. 85. Ambassador's office





SUMMARY

Summary

Conclusion

Discussion and reflections



Fig. 86. Exhibition layout

Getting started with the thesis, I had the ambition to come up with a proposal with a broad range of detailing, that also takes the context into consideration. And since I also wanted to explore the subject of national identity through designing an embassy, the workload of this project was bound to become large. Thus, some delimitations had to be made, as is common in all projects. I think the proposal is well-balanced in that it has not been designed in detail all over, but all relevant scales have been addressed. I would have liked to spend more time on the disposition of the courtyard, but it was rightfully given a lower priority in the design process.

I would argue that my aim of promoting analogue architecture as a contextual tool has been fulfilled; critics and fellow students have been positive and intrigued by this way of working. One fellow student mentioned that he would like to incorporate analogue architecture in his own master's thesis, which of course is promising. The application of the analogue architecture, the façade design, has been thoroughly investigated through a research by design approach. I am content with the way the façade references the surroundings while achieving an innovative expression. I find the façade design process to have struck a good balance between being both an application of architectural theory and a specific architectural composition. The parti of giving the base one color and the top another comes from looking at what is best for this particular architecture, rather than staying true to the theory.

The exploration of national identity in the project has been centered on defamiliarization as a means of subverting traditional allusions to a country, which I claim to be through the use of materials. Since these kinds of iconographical references rely on the observer being able to recognize what has been defamiliarized, an effort has been made to allude to things that many Swedes would perceive as a reference. Of course, it has been of equal importance that this creates an exciting expression. During the final seminar there was a discussion regarding if defamiliarization works well or not

when applied to national identity. I admit that I, too, would have trouble identifying some references as Swedish had I not been the author of this thesis. This is not the most intuitive way of approaching the subject, but I would argue that the thesis has added to the discussion for that exact reason.

Due to the bipartite aim of the thesis, exploring both form-driven contextualism and national identity, the interior and exterior expression of the embassy are very different. I would have liked to make them approach each other, for example by applying the recess motif on the interior as well. However, I focused first and foremost on making a good and conceptually strong organization of the interior spaces and accepted that the embassy design would, just like the thesis, focus on two different things.

All in all, I am content with the result; I feel pleased that the project has not been influenced by a lot of references to previous architectural works. Instead, the project has been designed with only the thesis aim in mind, which is why the project bears no apparent resemblance to a specific architectural style. I think this is one of the greatest merits of the project. A friend and colleague dubbed the project “the most beautiful postmodernism he had ever seen”, which to me is a great compliment.

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