

**! RYTHM,
! PATTERN &
! REPETITION**

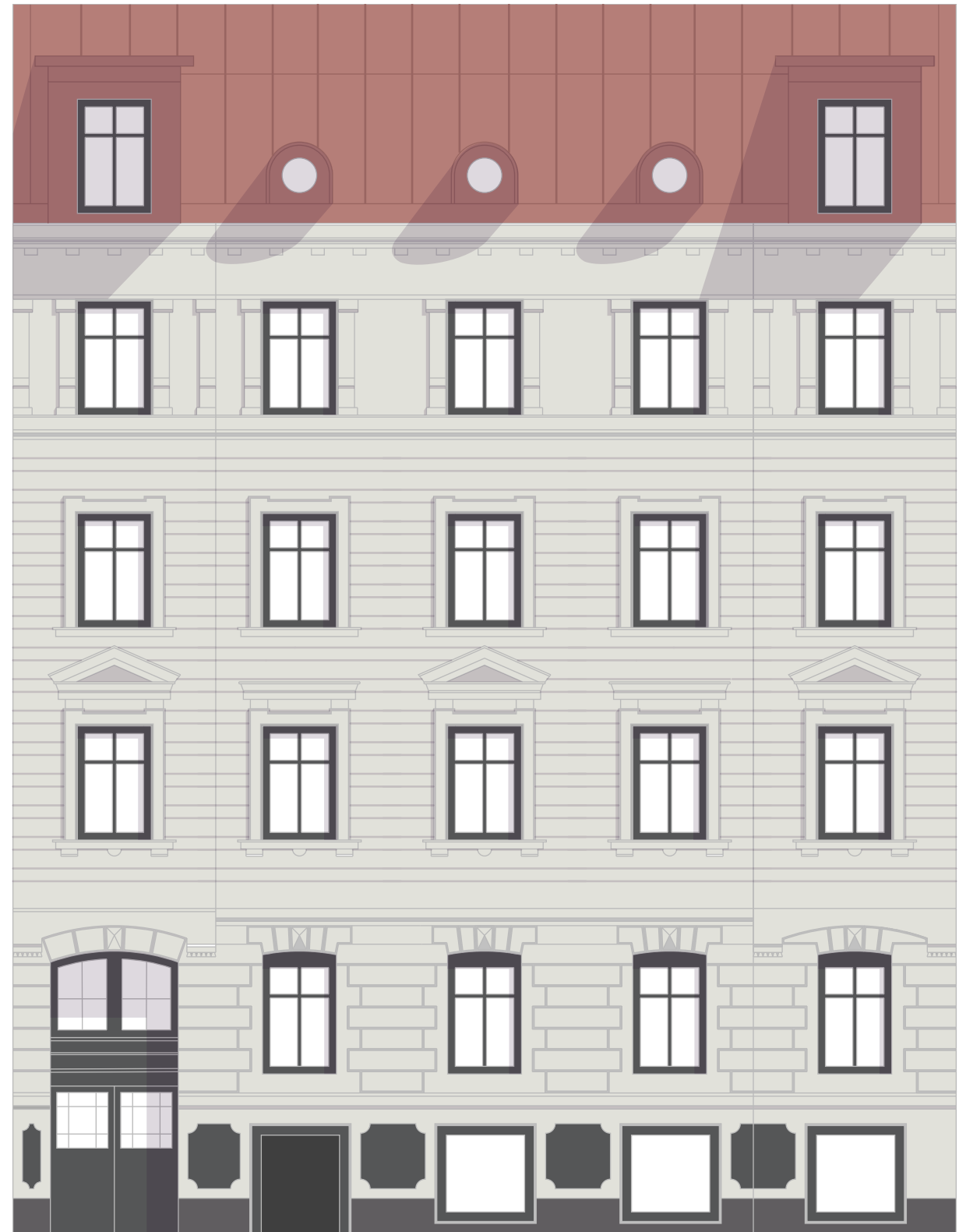
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2022-01-11

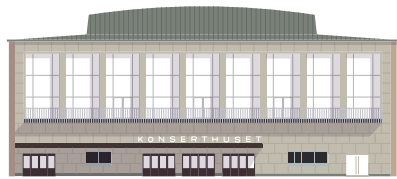
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MODULE 1

As I walked through the streets of gothenburg, frustrated that I couldn't figure out what I wanted to explore, I began to look on the facades of the buildings surrounding me. I suddenly felt that the facade of the building I looked at corresponded to the music in my headphones, the rhythm of the drums matched the repetitions in the facade's dense window placement in a strange way. This realization got me thinking of rhythm in architecture, can one find rhythm, repetition or hidden patterns that identifies a particular type of building style? As soon as I figured out what I wanted to explore I set up a plan for my work, to get started I went out and photographed buildings all over the city. The goal was to get a varied library with different types of buildings in different parts of the city. When I had collected enough pictures, I illustrated each facade in illustrator. With an illustration of each facade, I could start mapping rhythm, pattern & repetition.





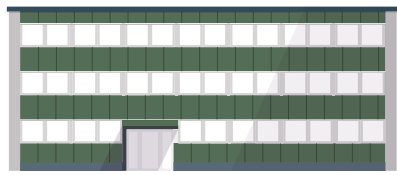
Konserthuset



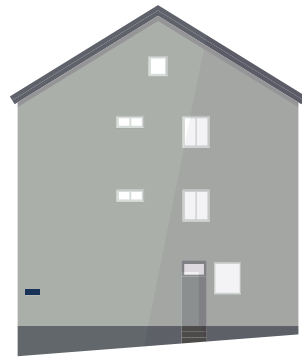
Kungsporsavenyen 23



Kristinelundsgatan 10



Volrat Thamsgatan 12



Gyllenkrooksgatan 37



Engdahlskatan 10

MAPPING: WINDOWS & DOORS

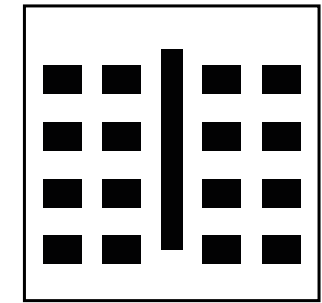
My first mapping method was to map window arrangements in the facades by marking them with a black color. I got the idea that you could give each building a special window placement ID by scaling everything down to a square so that each buildings window placement has a common factor. This created specific patterns that helps to explain parts of the buildings which we may not notice by just looking at them. Later on i did the same procedure with door placements.



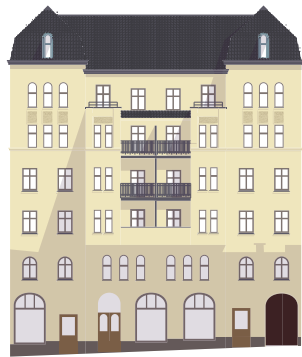
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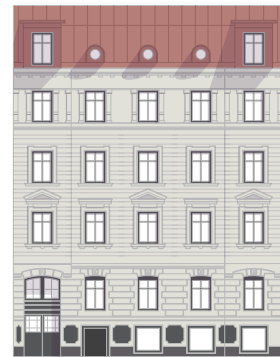
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Aschebergsgatan 36



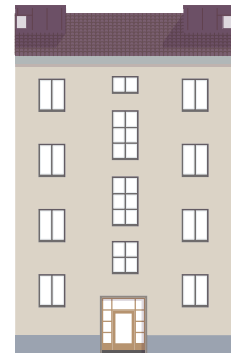
Erik Dahlbergsgatan 20



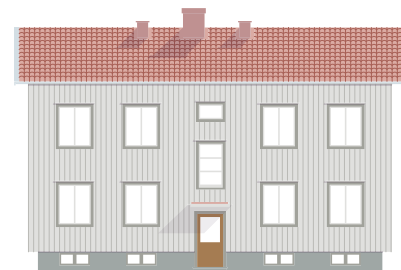
Älvsborgsgatan 15



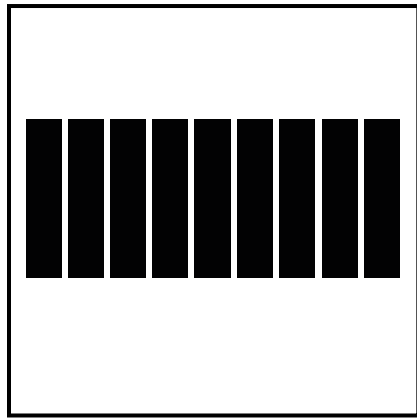
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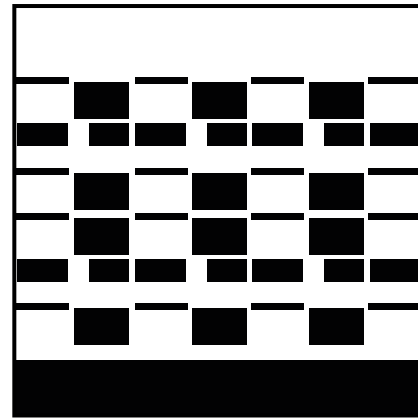
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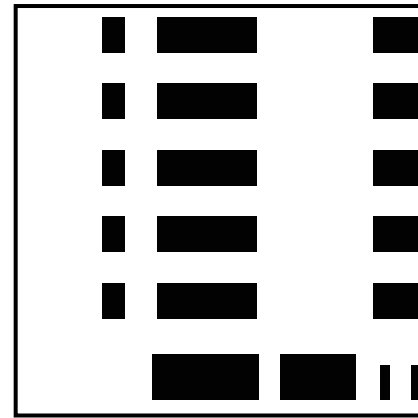
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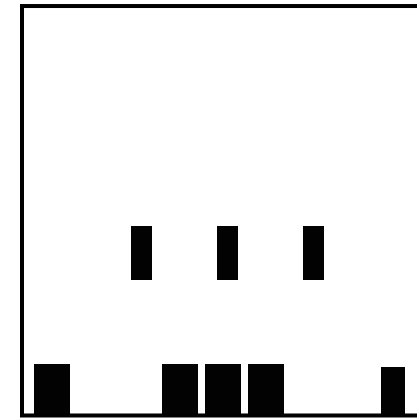
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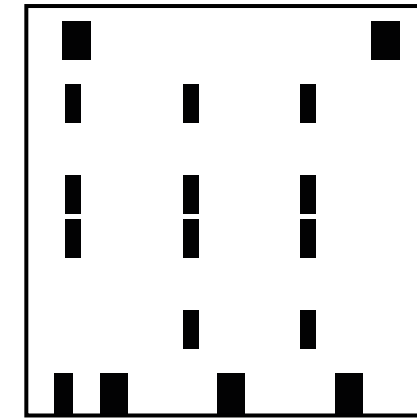
Kungsportsavenyen 23



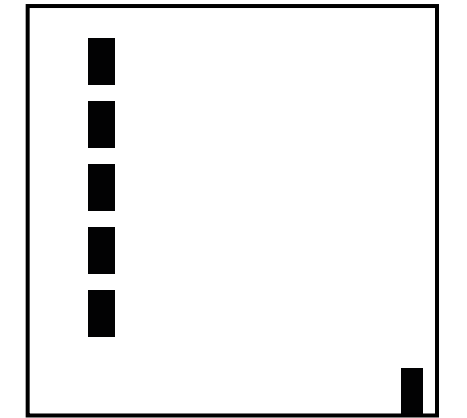
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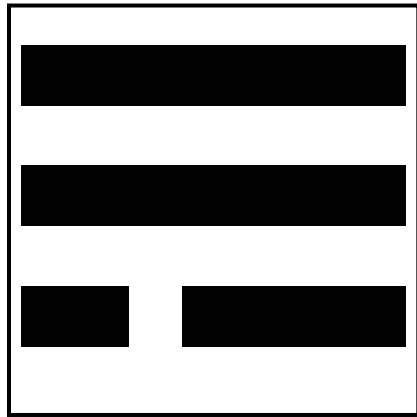
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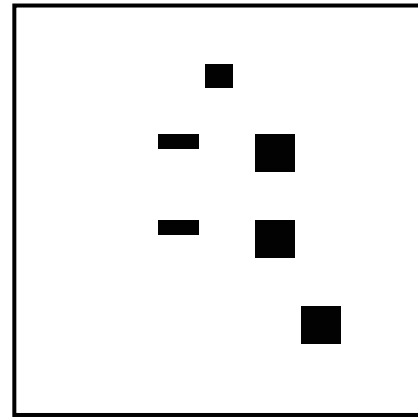
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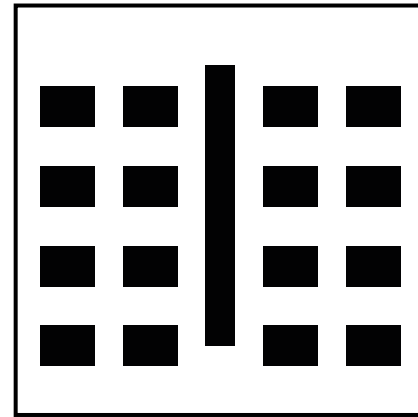
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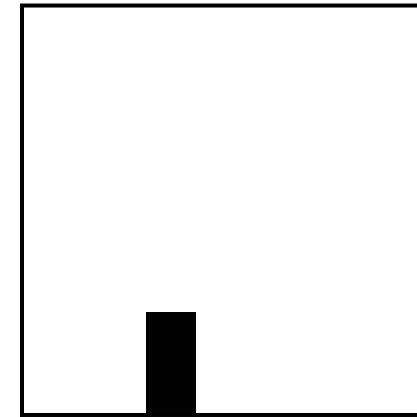
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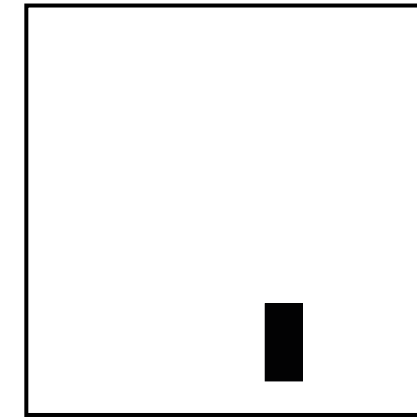
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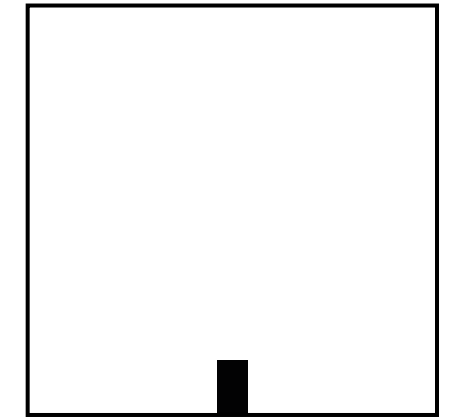
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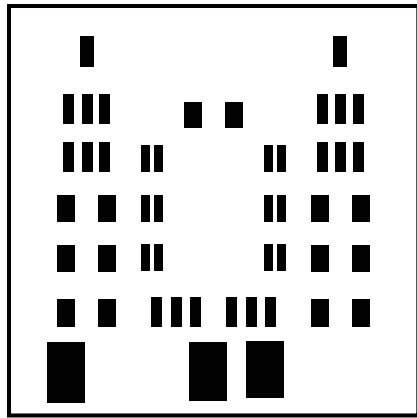
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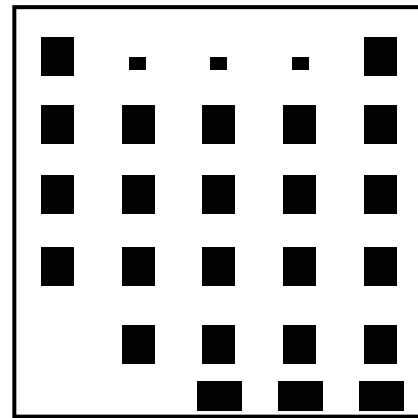
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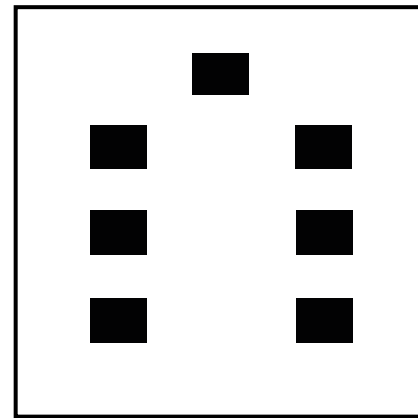
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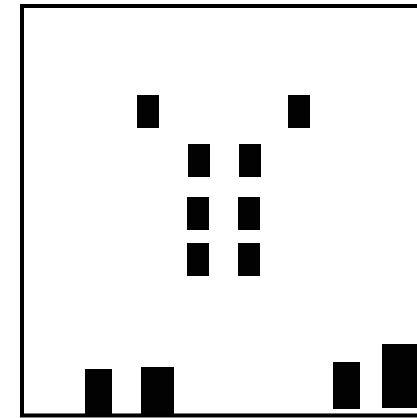
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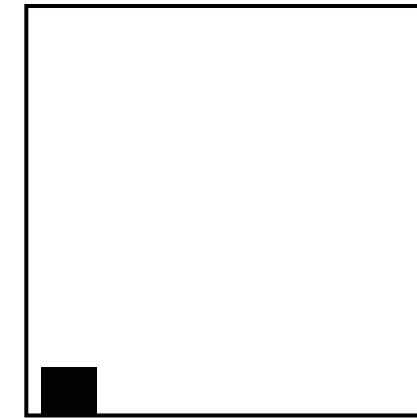
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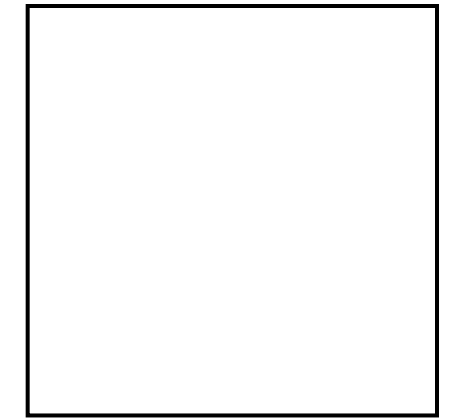
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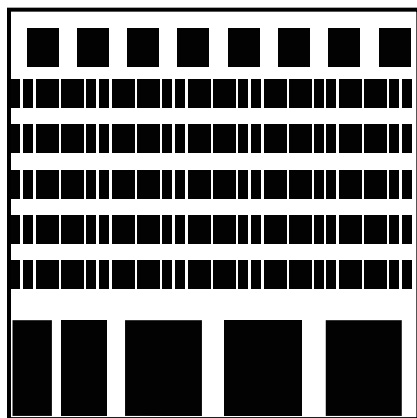
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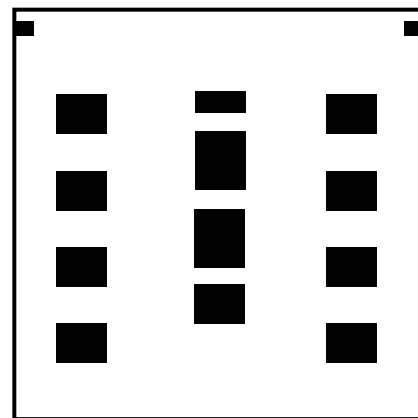
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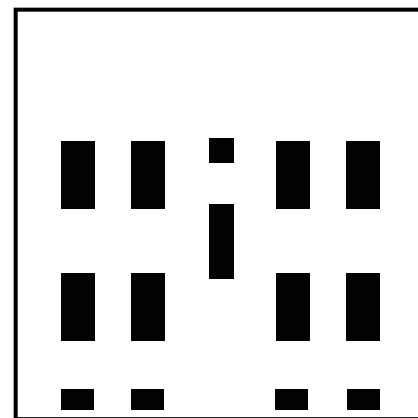
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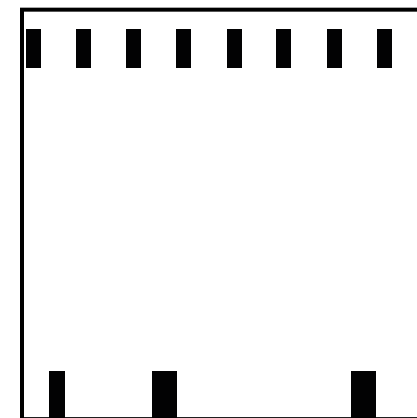
Kungsportsavenyen 33



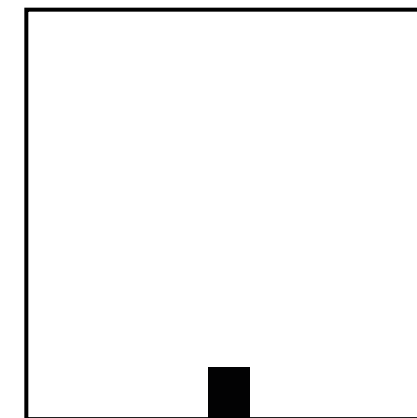
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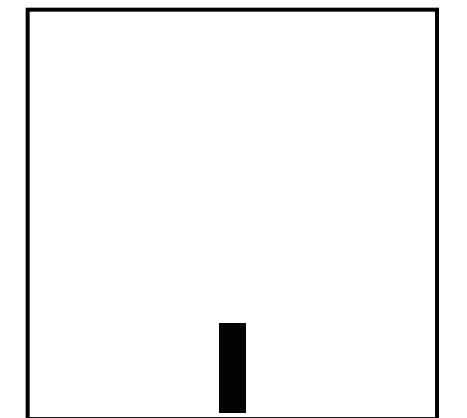
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Kungsportsavenyen 33



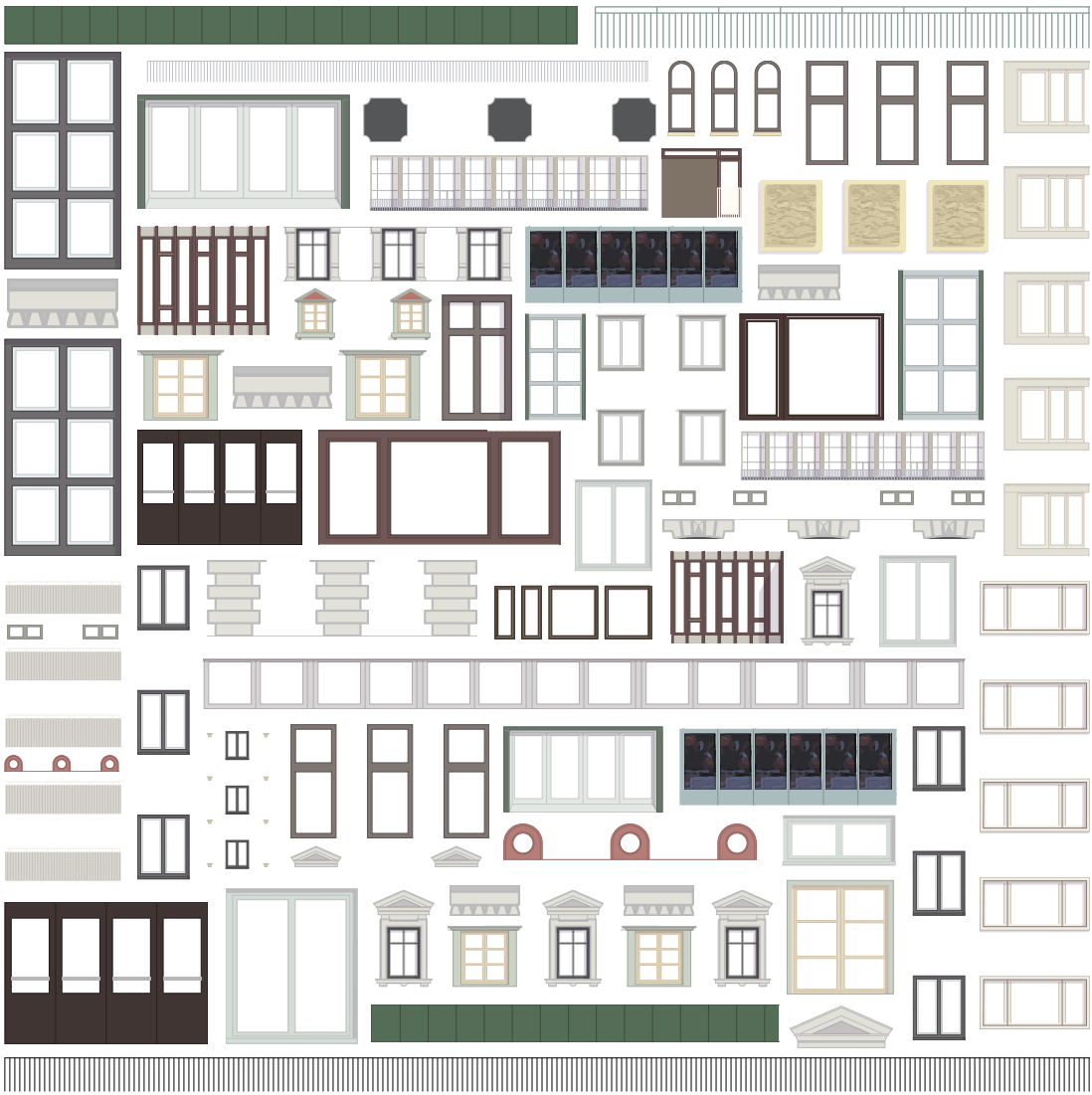
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Gyllenkrooksgatan 18

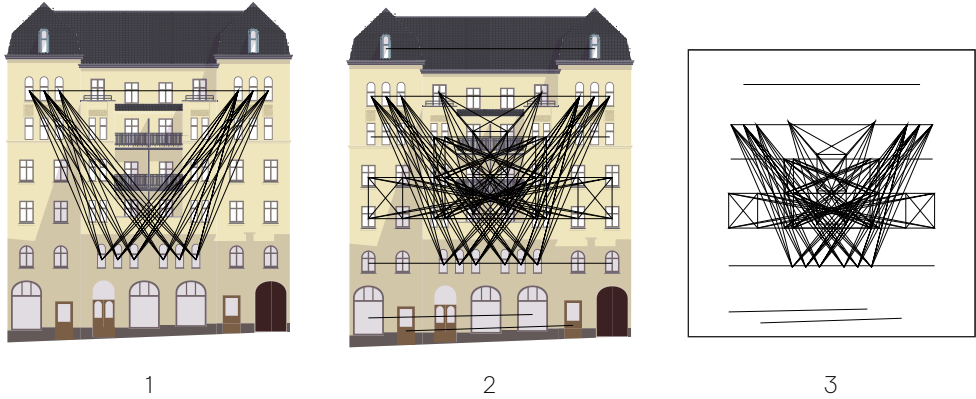
REPETITIVE COMPONENTS

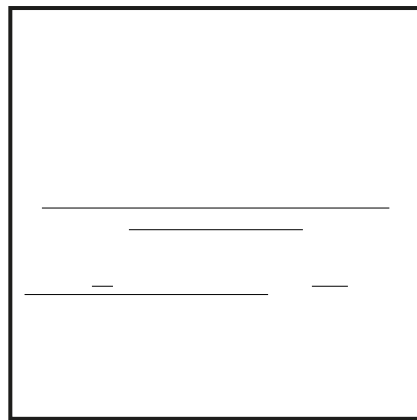
the more time I spent analyzing the facades, the more interested I became in the repetitive components of each facade. Therefore, I decided to isolate and archive some of these components from each facade. In my work I chose the repetitive components that are most distinctive for the character of the facade.



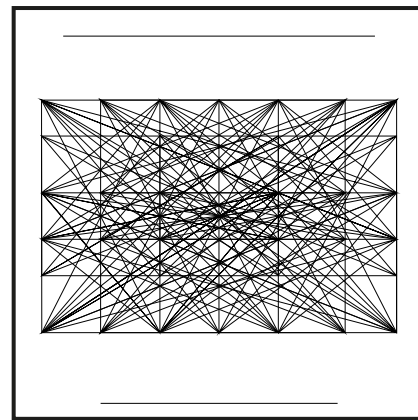
MAPPING: REPETITIVE COMPONENTS

With my collected archive I started to map all the repetitive components with each other to see if I could find hidden patterns. By drawing lines between similar components, different patterns were created. One can clearly see a connection in the patterns. Buildings with a strong horizontal repetition get horizontal lines, those with a strong vertical repetition get vertical lines and those with both horizontal and vertical repetitions get more of a spread-out pattern.

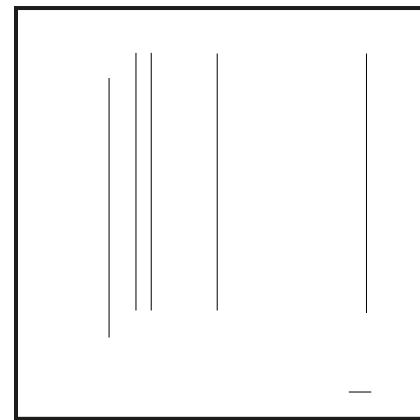




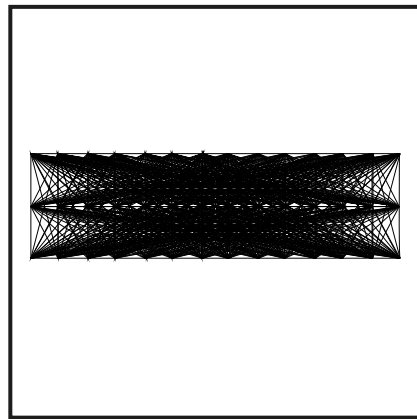
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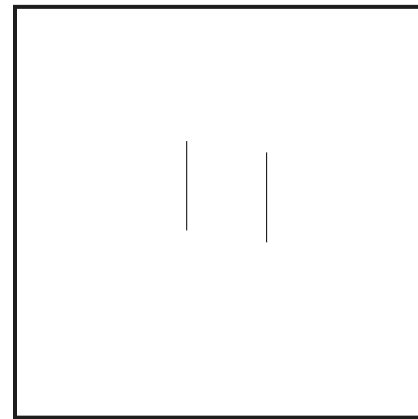
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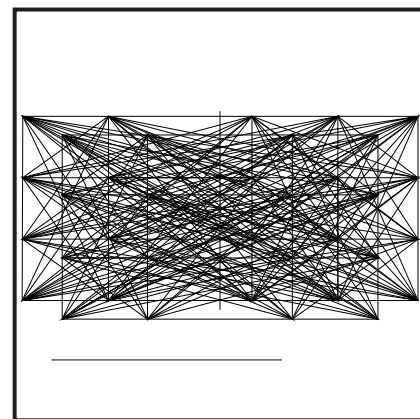
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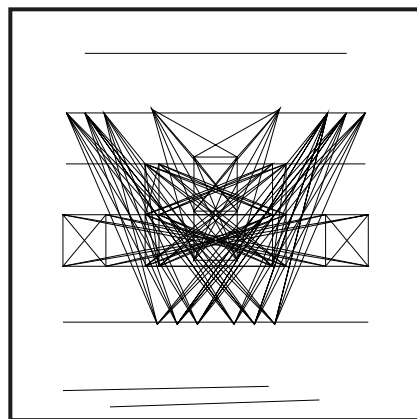
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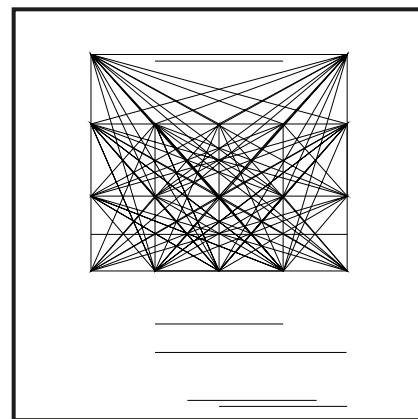
Gyllenkrooksgatan 37



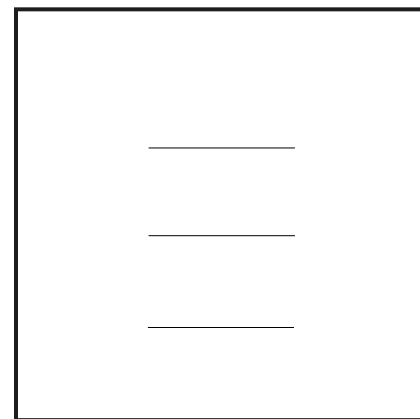
Engdahlgatan 10



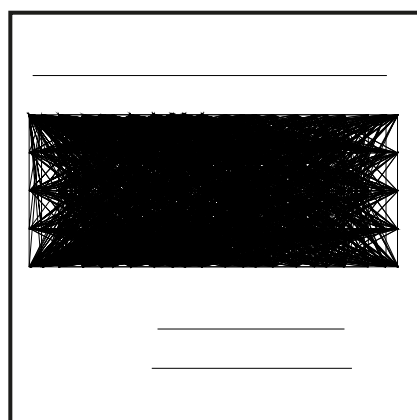
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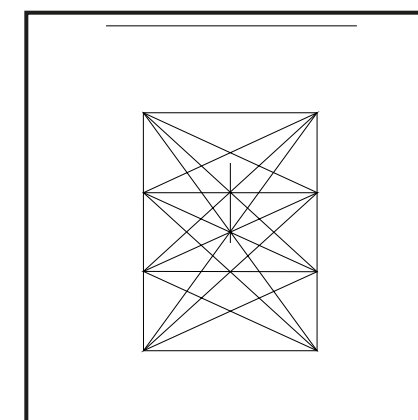
Erik Dahlbergsgatan 20



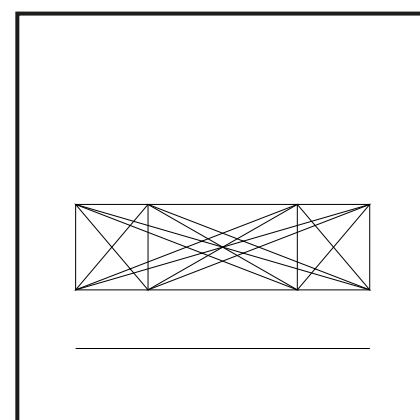
Älvsborgsgatan 15



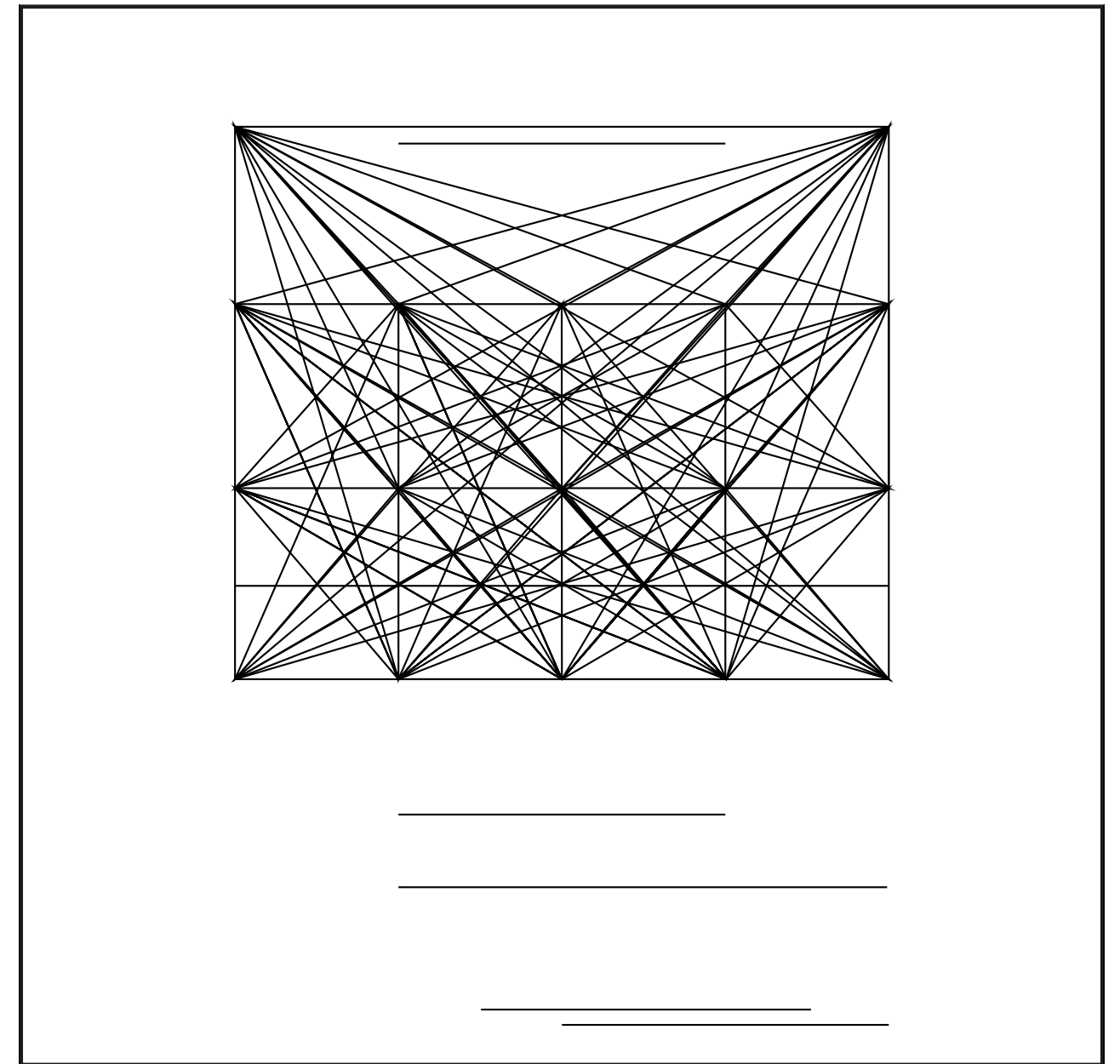
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Gyllenkrooksgatan 35



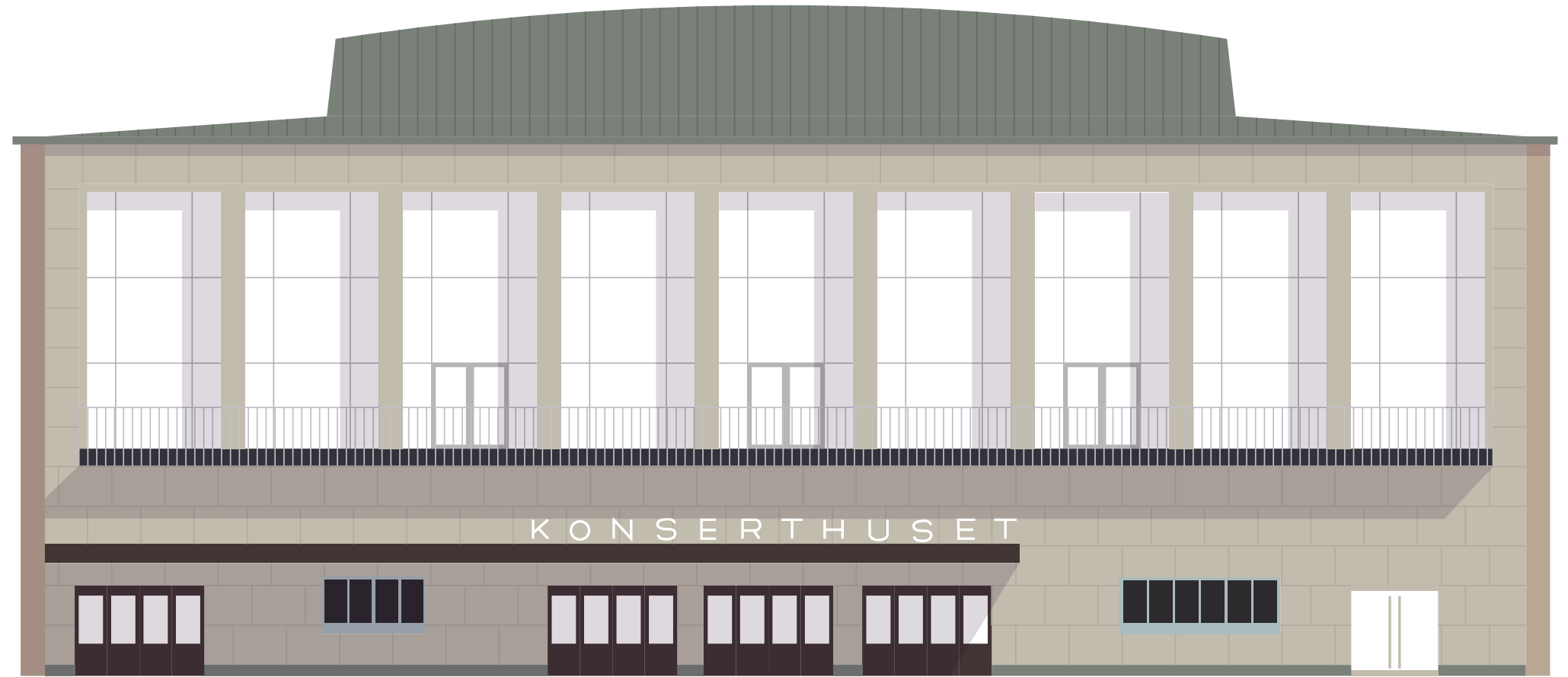
Gyllenkrooksgatan 18



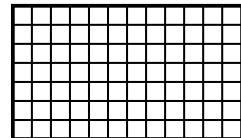
The image above shows the mapping of repetitive components of the facade at Erik Dahlbergsgatan 20. the horizontal lines describe horizontal repetitions, components that repeat diagonally get diagonal lines and those that repeat themselves vertically get vertical lines. Each facade has been given a unique ID that describes its repetitions and thus hidden patterns in the expression of the facade.

MAPPING: RYTHM

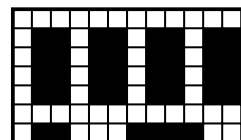
in this mapping method I wanted to try to describe the rhythm of the facades, I limited myself to a grid where I painted up my perception of the facade's repetitions. To then get a rhythm of the whole thing, I duplicated the facade and placed several copies in a row. My thought was that you would get a clearer idea of the rhythm with several repetitions. Similar to when you feel the rhythm in a bass loop that just goes on and on.



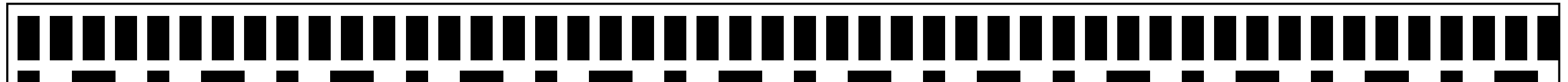
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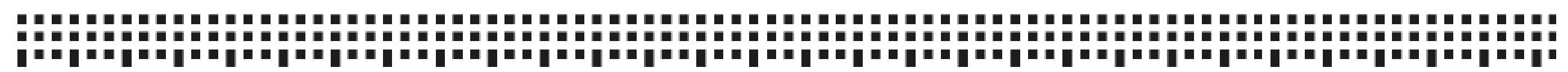
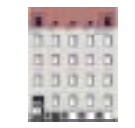
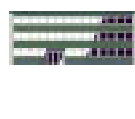
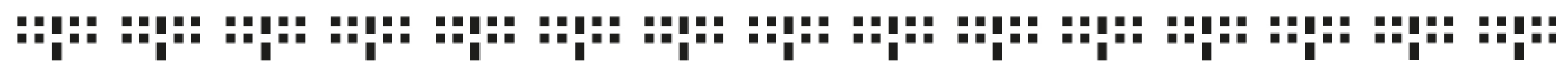
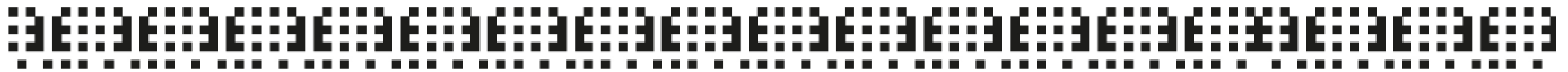
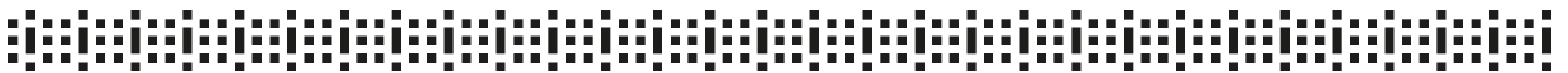
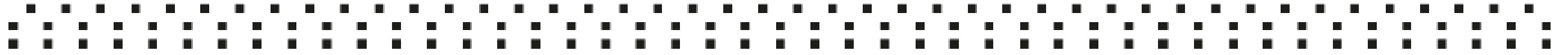


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MODULE 2

The first thing I did in module 2 was to continue exploring the patterns that arise from window placement. I applied the different mappings of window placements that I had done in module 1 to other facades in Gothenburg. I wanted to see if certain combinations worked better together, and if so, try to analyze why. Later in the module I've made further laboratory work with rhythm, when does a facade lose its rhythm? How much of it can you take apart before it loses its rhythm? As a final experiment I searched a site for repetitive elements and added them together to construct a new facade, a facade that expresses the site and its architectural elements.

APPLY FACADE PATTERN

The first thing I did in module 2 was to continue the exploration of patterns that arise from different window arrangements. I applied the mappings of window arrangements that I had done in module 1 to other facades in other parts of Gothenburg. My aim was to explore which combinations works best together and later on, try to analyze the reason behind it.





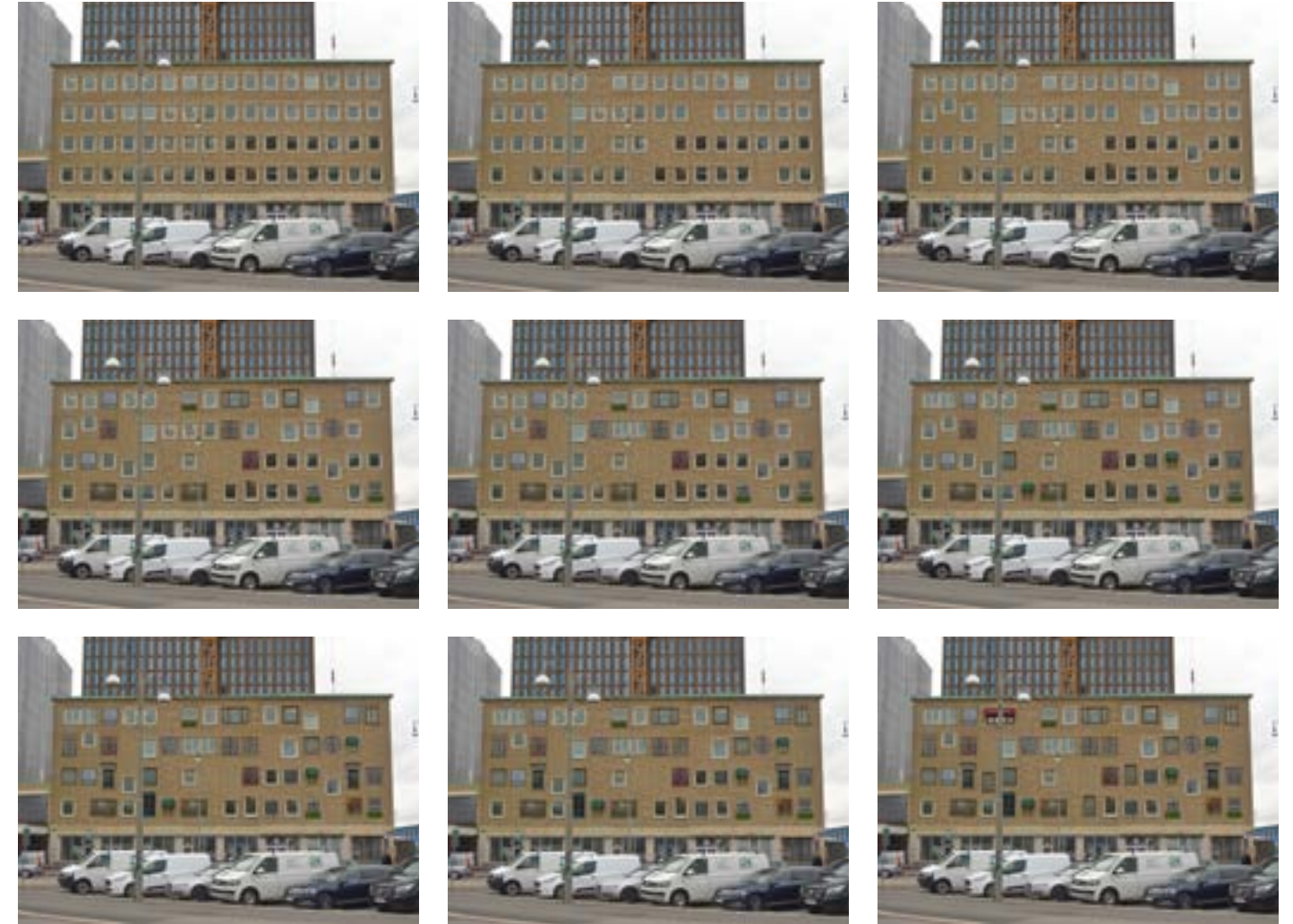
Some of the facades that were modified became almost futuristic. An example is the modification of Norra Hamngatan 8, where the window sections have become elongated and the rest of the facade is bare and expressionless. The window placement makes the building's interior difficult to read.



The modification on Norra Hamngatan 6 feels more realistic. This may be due to the fact that the facade has already been renovated once.

DISASSEMBLY OF REPETITION, PATTERN & RYTHM

In this part of the process I wanted to explore the boundaries of rhythm and pattern in a facade, how much of it can you subtract from it before it loses its pattern or rhythm? I started by subtracting details and ornamentation, but this wasn't enough. So, I started to erase the windows, evidently the facade lost its pattern. But the rhythm was still there, even after I moved the windows vertically. I realized that this was because the same window type is still being repeated throughout the facade. I made another attempt (page 23) on a facade near Järntorget, this time I replaced the windows with other windows in the area. And in the 5th or 6th image I would say that the rhythm has vanished.



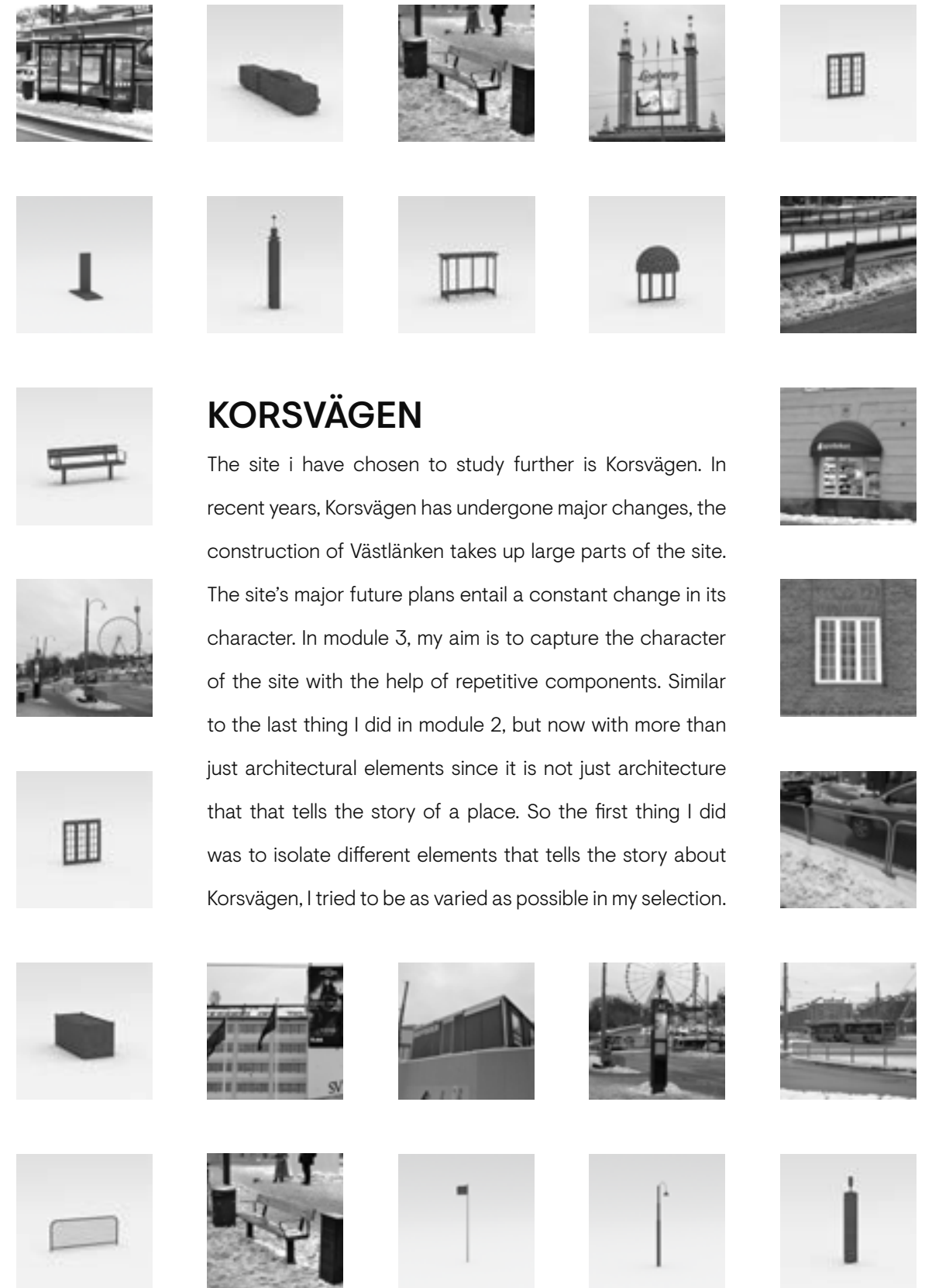
ADDITION OF REPETITIVE COMPONENTS

The last thing I did in module 2 was to add repetitive components together into one facade. I decided to choose Kungstorget as site for my experiment. Kungstorget is a perfect site as it is surrounded by several different building styles. The final product became a facade that does not take building style into account but merely reflects its surrounding.



MODULE 3

in this module I chose to develop the method that was tested at the end of module 2. I have worked with recurring components at my site to describe the essence of it,. To take it a step further some historical research of the site was done to gain a deeper understanding of its origin and character. A large part of the process has involved various form studies using 3d modeling, the theoretical research and the form studies has given me a form that tells the story about the site. a large part of my work has been about producing as much material as I can to create a large selection. In this way I was able to accurately and analytically select the perfect form.



KORSVÄGEN

The site I have chosen to study further is Korsvägen. In recent years, Korsvägen has undergone major changes, the construction of Västlänken takes up large parts of the site. The site's major future plans entail a constant change in its character. In module 3, my aim is to capture the character of the site with the help of repetitive components. Similar to the last thing I did in module 2, but now with more than just architectural elements since it is not just architecture that tells the story of a place. So the first thing I did was to isolate different elements that tell the story about Korsvägen, I tried to be as varied as possible in my selection.



The electric scooters are a clear example of recurring components that tell something about Korsvägen today. They can be seen as a symbol of modern transport, something that is in line with the identity of Korsvägen.

MERGING METHOD

When I had gathered enough components, I decided to merge them into a common shape. My hope was that the common shape could give a representation of the place. I chose not to put the components together at random, but to set up different rules that affected the merge. Below is an example of one of the methods I used to merge the shapes, where I rotated each one twenty degrees more than the next before merging them. Other methods used in the merging were height differences and scaling of the components.



After looking at old photos of Korsvägen, I realized that I needed to include old components to capture the true identity of the site. My selection consists of a tram model M5, decorative poster holders outside the Swedish fair, lampposts at Lisebergbadet and a trolley from the old cable car that was built at the anniversary exhibition in 1928.

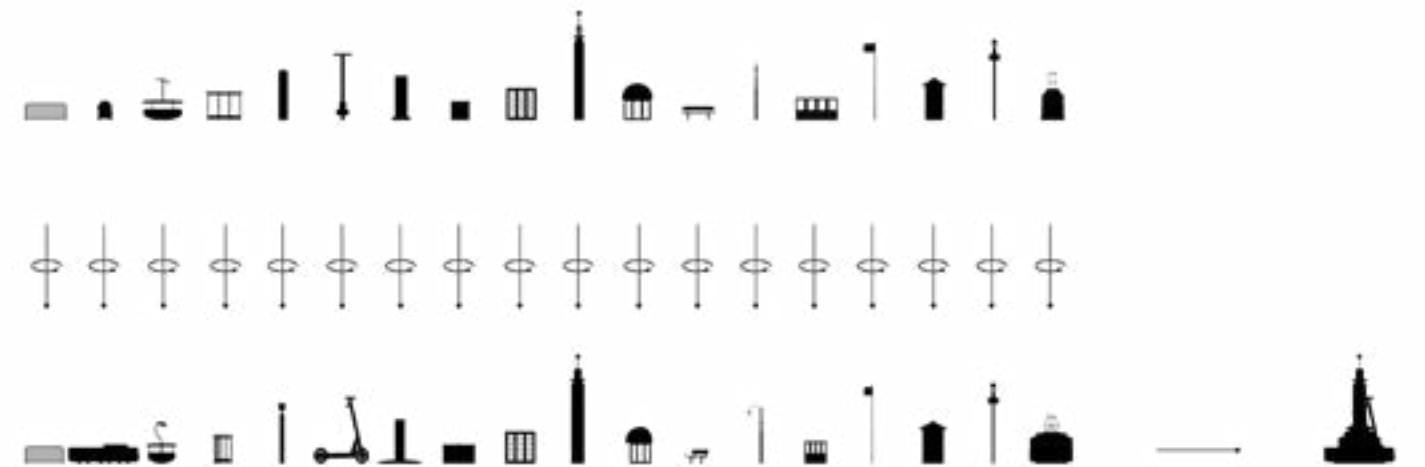
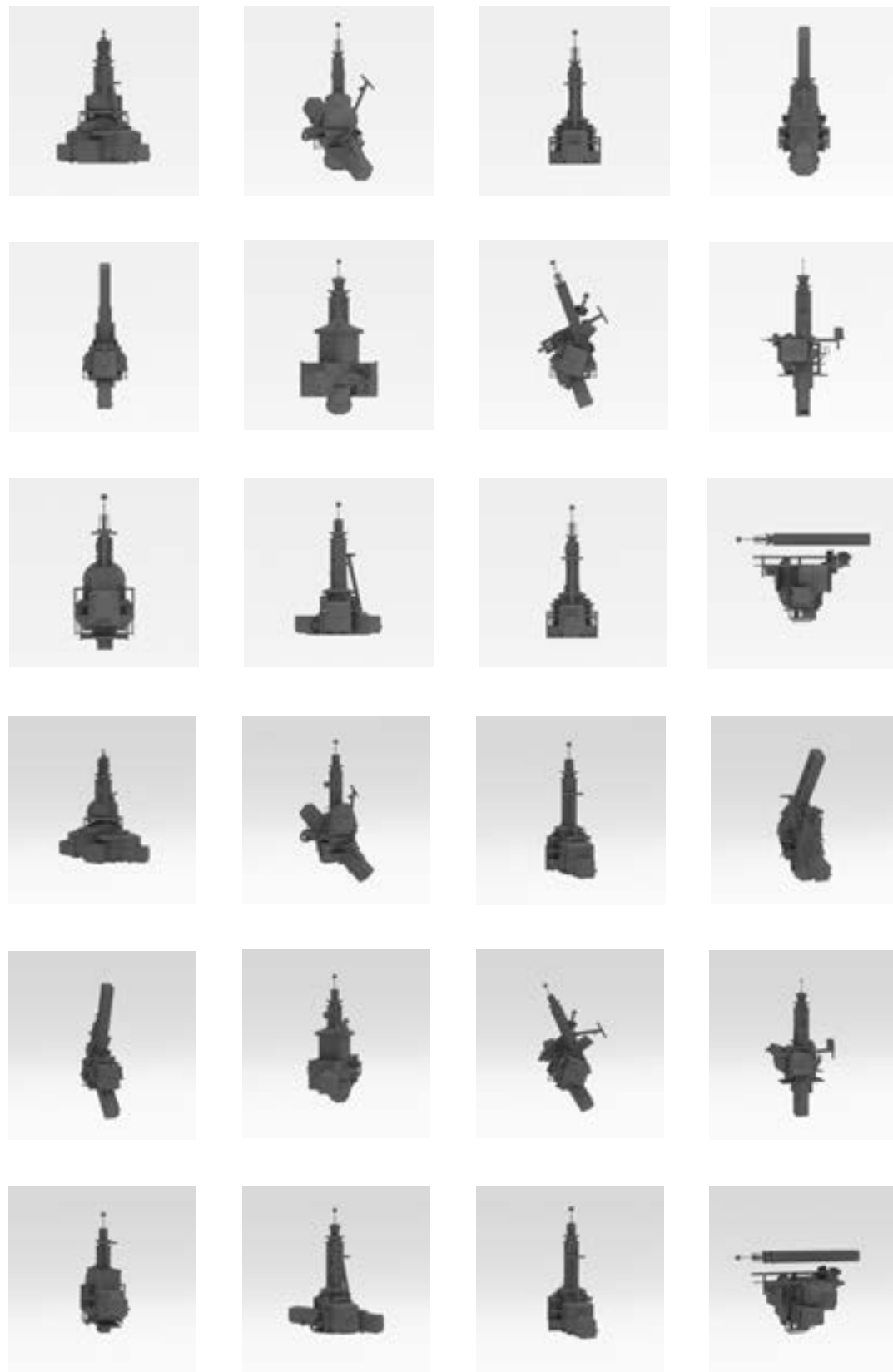


Figure 1 (top left): Klassisk Göteborgsvagn med långbänkar. (Västtrafik.se 2021-01-21)

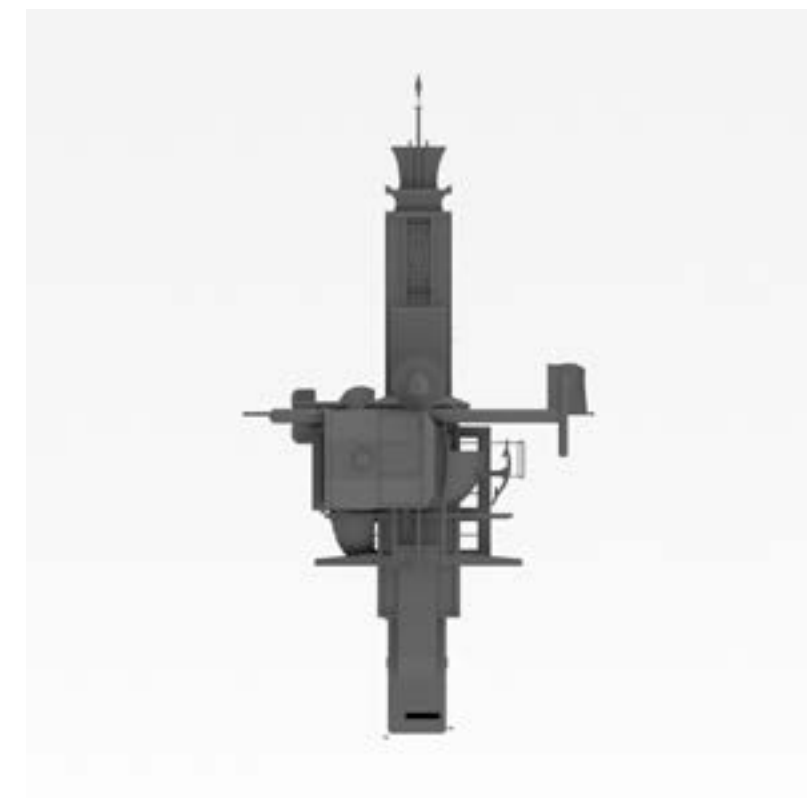
Figure 2 (top right): Svenska mässan. (Smsveteraner.se)

Figure 3 (down left): Lisebergbadet 1952. (Erik Liljeroth) (CC-BY-NC-ND)

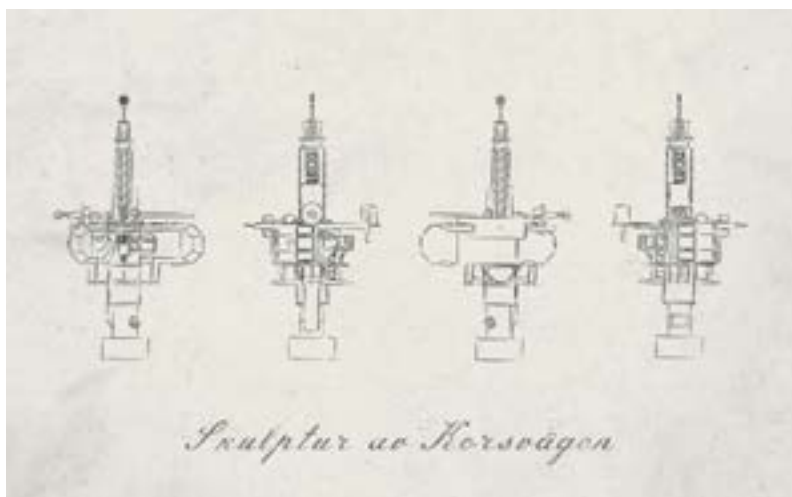
Figure 4 (down right): Gamla Linbanan. (Smsveteraner.se)



Above is the result of all the mergers, the different methods gave a great variety of shapes. Some are reminiscent of other objects and some are pure in their own form.



Eventually I stuck to a shape. It stood out from all other ones with its elongated character. It is monumental and parts of it are reminiscent of the minarets built at the anniversary exhibition in Gothenburg in 1923.

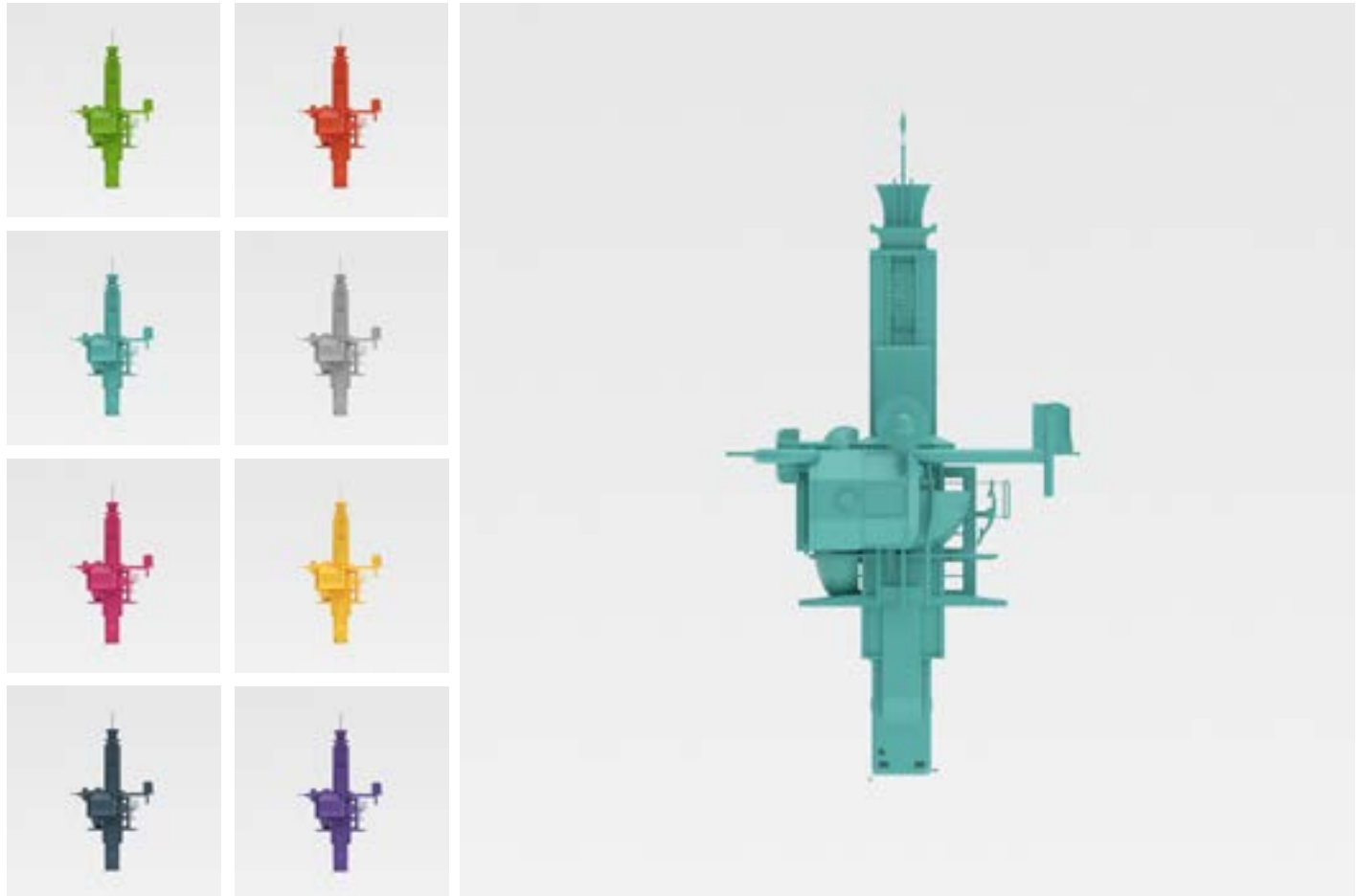


To strengthen the sculpture's connection to the site, an alternative reality was created. Where old photographs and drawings testify to the sculpture's historical connection to the site. The left image shows the sculpture in an early photograph of Korsvägen and the right image shows drawings of the sculpture.

Figure 5: Örgrytevägen mot Svenska mässan. (Smsveteraner.se)

COLORS

since many of the older components I have chosen come from the anniversary exhibition, I wanted to link the sculpture to the new 400th anniversary. I managed to find the intended color palette for the 400 year anniversary on goteborg2021.com. The color I chose to apply to the shape is a blue-green color that can be found on the Göta-älv bridge, among other things.



MAIN COLORS

CHOSEN COLOR



the picture shows the sculpture in its current state. You can clearly see that it has been in place for a long time due to the rust stains. In the sculpture you can see all the different components that tell the story of korsvägen, from then to now.

FINAL REFLECTION

the studio in matter, space, structure has really made me grow in my methods of artistic research. At first I felt a certain frustration about not having a clear end goal for my studies, but the further I got into the process the more I learned to follow my thoughts without having a result in mind. a large part of my creative process has been about setting rules for myself. Through this methodology, I have forced myself to find new creative paths that I would not normally have tried. A clear example of this is how I finally landed in repetitive components, and chose to use only them to describe my site. The studio has given me an increased interest in the concept of context and how it is linked to architecture. In my work, I have chosen to describe the context with repetitive components, but in reality I think the context should be described with more factors than that. There are many aspects that I would have liked to continue working on if I could. During my research I got an insight into what gothenburg looked like in the past, this was a part of my work that I really appreciated. Much of the material I took part in made me realize how little I know about Gothenburg's past. I touched a little on the history of my site, if I were to continue working with my project, the future could also have been speculated.

FIGURES

Figur 1: Klassisk Göteborgsvagn med långbänkar. (Västtrafik.se 2021-01-21). <https://www.vasttrafik.se/globalassets/media/bilder/bloggbilder/m5.jpg?format=webp&width=775&quality=80>

Figure 2: Svenska mässan. (Smsveteraner.se). <http://www.smsveteraner.se/wp-content/uploads/2016/11/Svenska-M%C3%A4ssan.20.jpg>

Figure 3: Lisebergsskutan 1952. (Erik Liljeroth) (CC-BY-NC-ND). <https://i1.wp.com/media.gamlagoteborg.se/2019/07/NMA.0028622.jpg?w=1007&ssl=1>

Figure 4: Gamla Linbanan. (Smsveteraner.se). http://www.smsveteraner.se/wp-content/uploads/2016/11/Linbanan.Gbg_.1923.1.jpg

Figure 5: Örgrytevägen mot Svenska mässan. (Smsveteraner.se). <http://www.smsveteraner.se/wp-content/uploads/2016/11/%C3%96rgryte%C3%A4gen-Korsv%C3%A4gen-Svenska-M%C3%A4ssan.jpg>