

MATERIAL  
STRUCTURE  
MOVEMENT

OBJECTS OF NOSTALGIA



Pic: Götaälvbron. Gunnar Lindström [1976]  
Göteborgs stadsmuseums bildsamling



Pic: Götaälvbron. Fotograf okänd [1940]  
Göteborgs stadsmuseums bildsamling

DEMOLITION OF BRIDGE —————> NOSTALGIA 'DISTANCE FROM HOME'

INVENTORY —————> PHOTOGRAPHIC MATERIAL

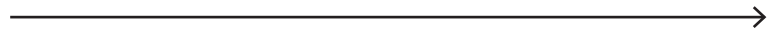


MATERIALIZED INVENTORY



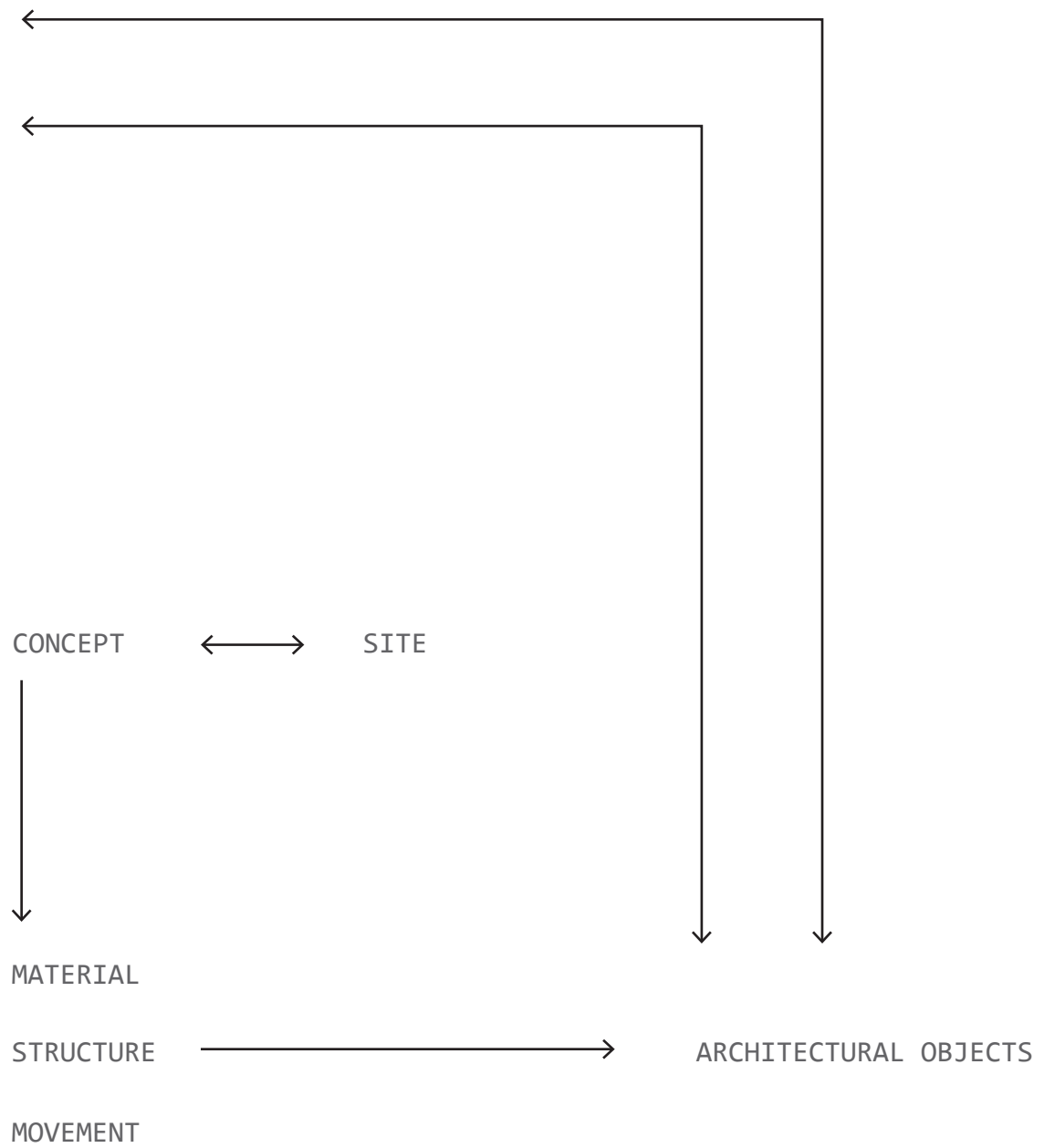
LAB FORMFINDING

LAB PHYSICAL  
TRANSLATIONS



LAB NOSTALGIA





## OUT OF THE CONTEXT OF DEMOLITION INTO NEW ONES

### Speculatively:

Parts of the bridge are transported to hillsides overlooking the original site of the bridge, creating new built structures.

### Why:

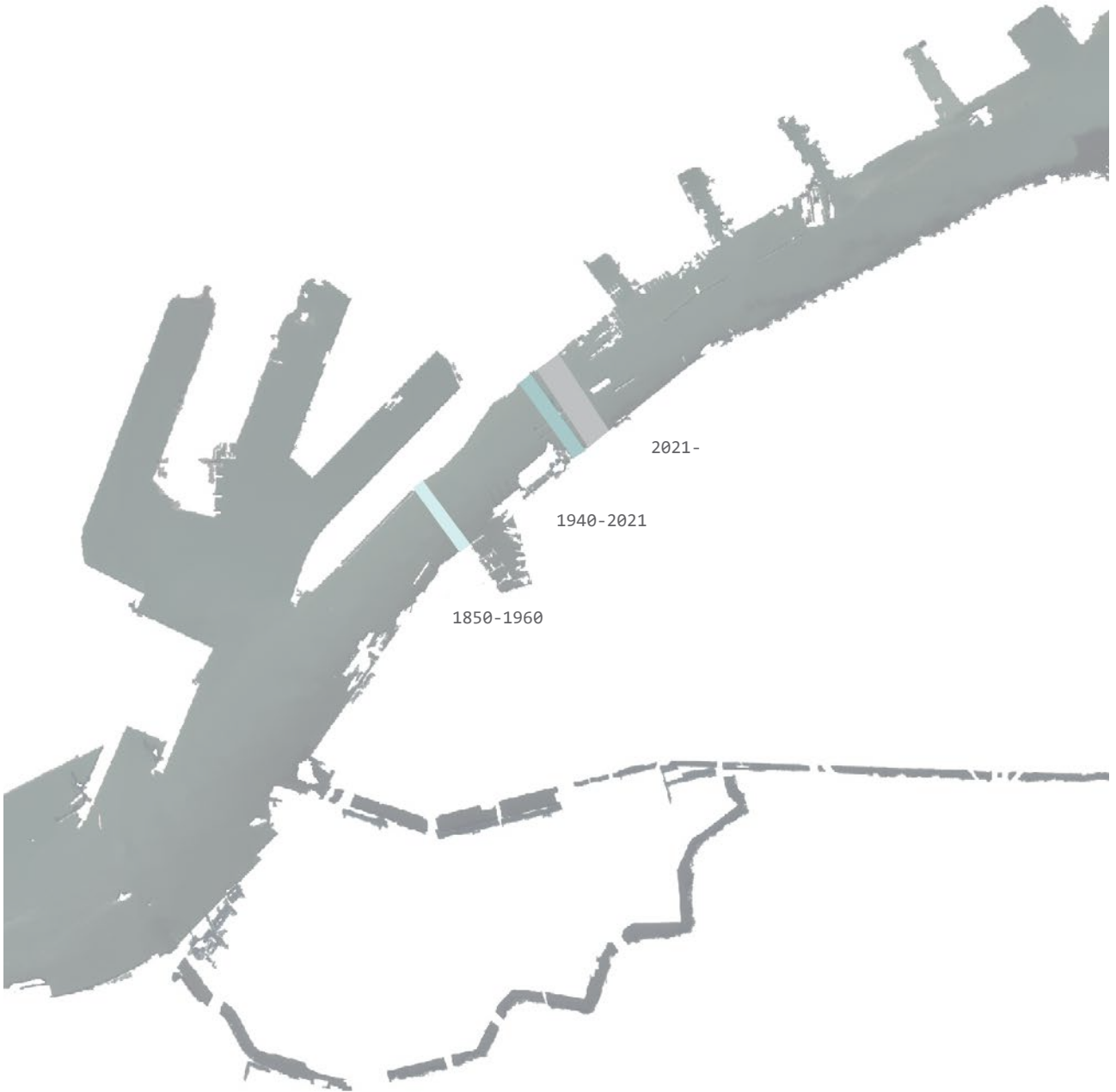
These can be used to discuss the reuse of building material of specific local buildings and infrastructures.

### Context:

Gothenburg recently announced a circularity strategy where the building industry and its waste is specifically targeted and one of the recommendations is to visualize the conversion to circularity. Conversion is visual when a large infrastructural object is under demolition. People stopping to watch something physical is rare today but they frequently watch the bridge change. I would like this process to continue.

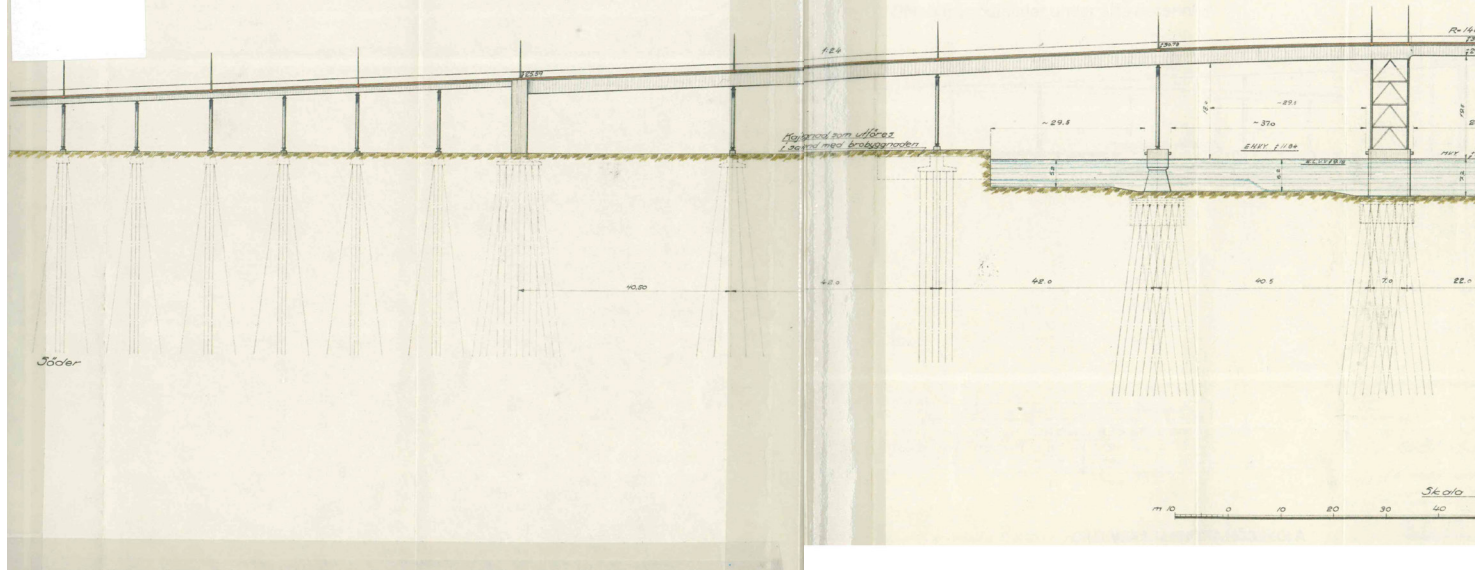
### Nostalgia:

The demolition of the Götaälvbridge can be seen as the distance required for experiencing nostalgia or the transition out of context. This work will investigate how nostalgic experiences of a public memory and everyday object can be translated into architecture.

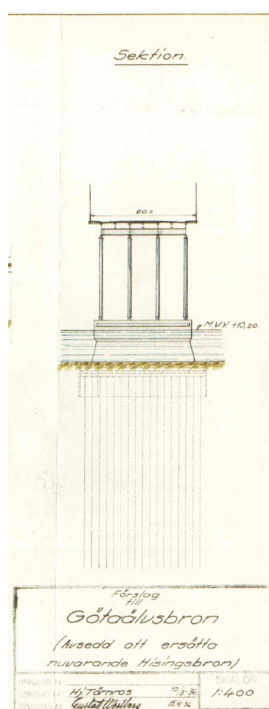
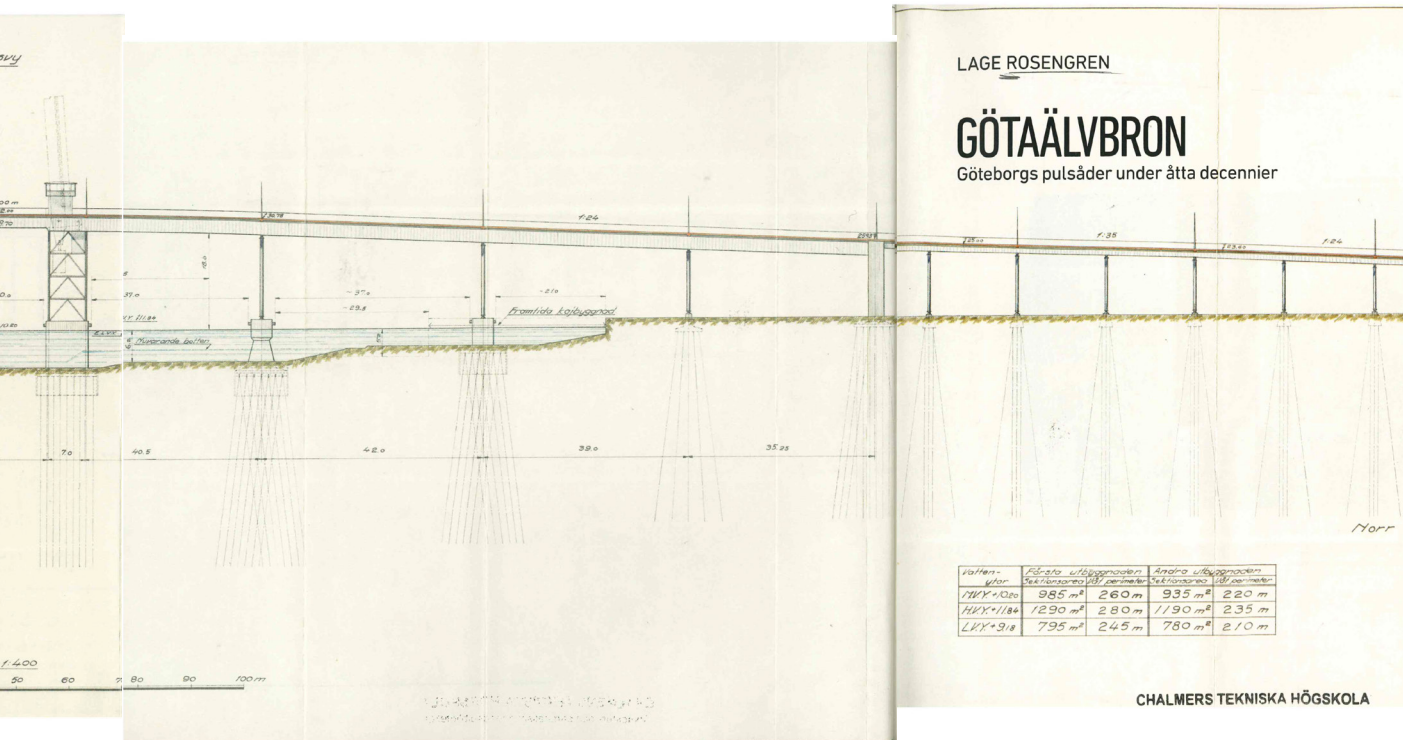


Chalmers Tekniska Högskola  
Arkitektur- och samhälls-  
byggnadstekniker

72.03(485)616j



Scanned drawing: Götaälvbron  
[1936] H. Törnros,  
G. Westberg, Göteborg stad  
trafikkontoret. Publicerad  
i Götaälvbron, Göteborgs  
pulsåder under åtta decennier  
av Lage Rosengren



The tools of demolition is determined by the material and the size is determined by the dimensions of a container. Sometimes cranes are used to support the materials during the demolition. The crushed rests of the walkway are used in the current construction of a tunnel in Gothenburg.



Material: Thin sheet metal  
 Tool: Scissor on an excavator  
 Traces: Twisted



Material: Thick sheet metal  
 Tool: Cutting tool  
 Traces: Tilted edge with burnt gradient



Material: Reinforced concrete and plywood  
 Tool: Excavator and magnet  
 Traces: Large chunks of crushed material



357,75 m



126 m



144 st



36 st



3 st



2 st

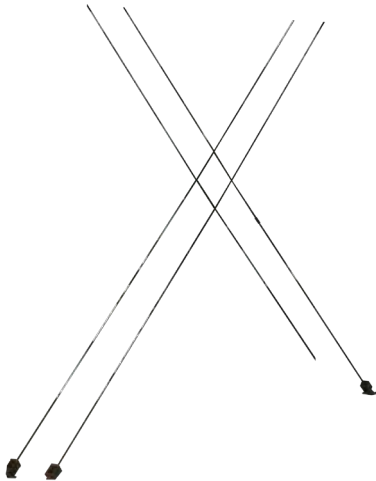




36 st



126 m



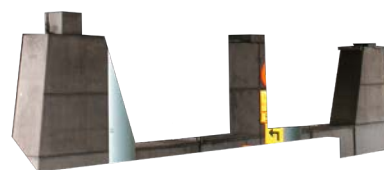
36 st?



1 st



2 st



2 st?



Beams



Beams



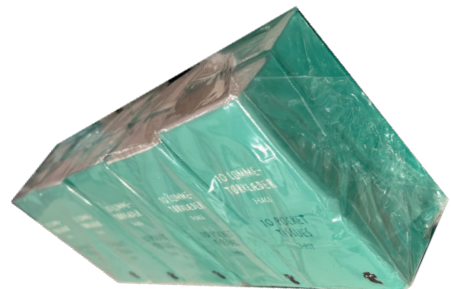
Pile of pillars



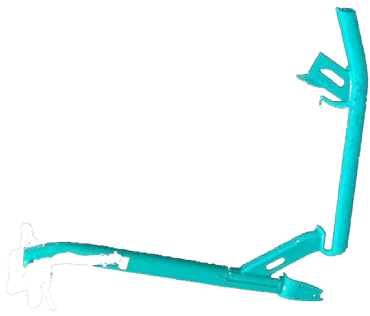
Pillar



Specific parts



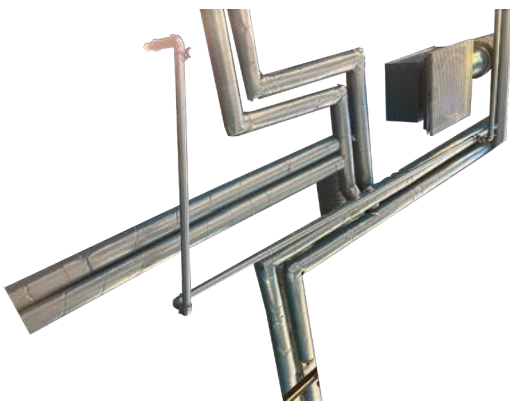
Beams



Rod



Walkway



Installations



staircase



Fundament



Fundament

One day I was at the mall and started to photograph things I associated with the parts of the bridge. What does similar colours as the characteristic turquoise of the bridge signal today?

Freshness

Technology

Neutrality

Healthiness

Playfulness

Mediterranean

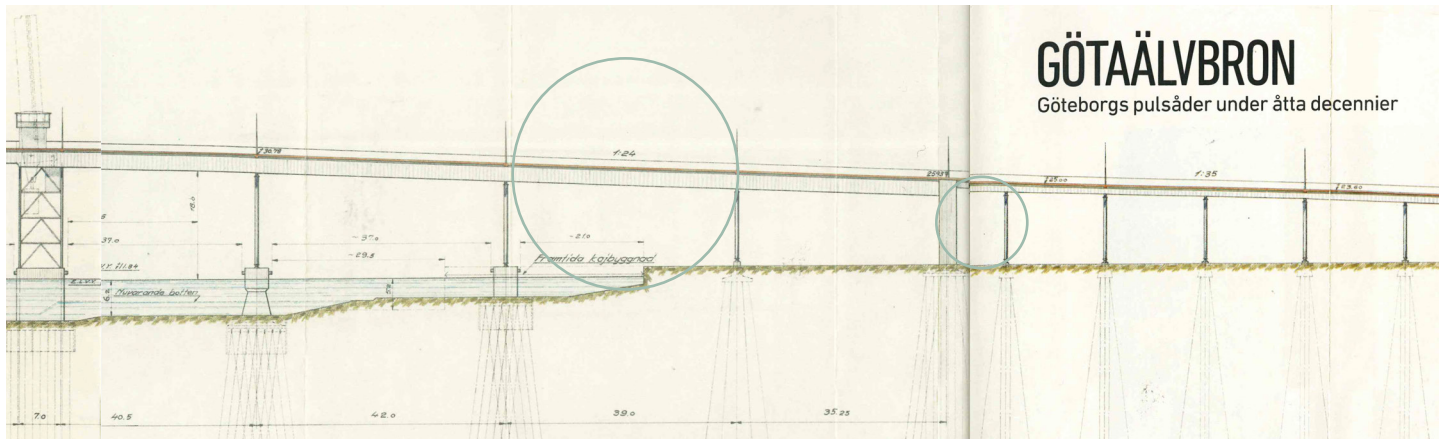
Transportation

## REFLECTION

The first module has made me personally reflect on how and what I perceive in my everyday life. Very interesting to realise how other people view their surroundings compared to myself. It is also a sort of tool in the "post-pandemic" state. My situation is very much a result of the references and perspectives from the sustainability course that is parallel to this one. Also a result of a longing to do something that reflects the artistic side of architecture. I want to continue narrowing the project down in order to do something specific. Both in regards to focus and theory. This is something I have earlier had a hard time doing so it would be positive for my development. Also, I am excited towards the representation process as a mix of physical and digital material and to recognize it as the part of creating design it actually is. During the pinup I was very inspired by other students in their doing and free association, that is something I am bringing with me to the next module. There is a big value in taking part in other projects, processes and references.

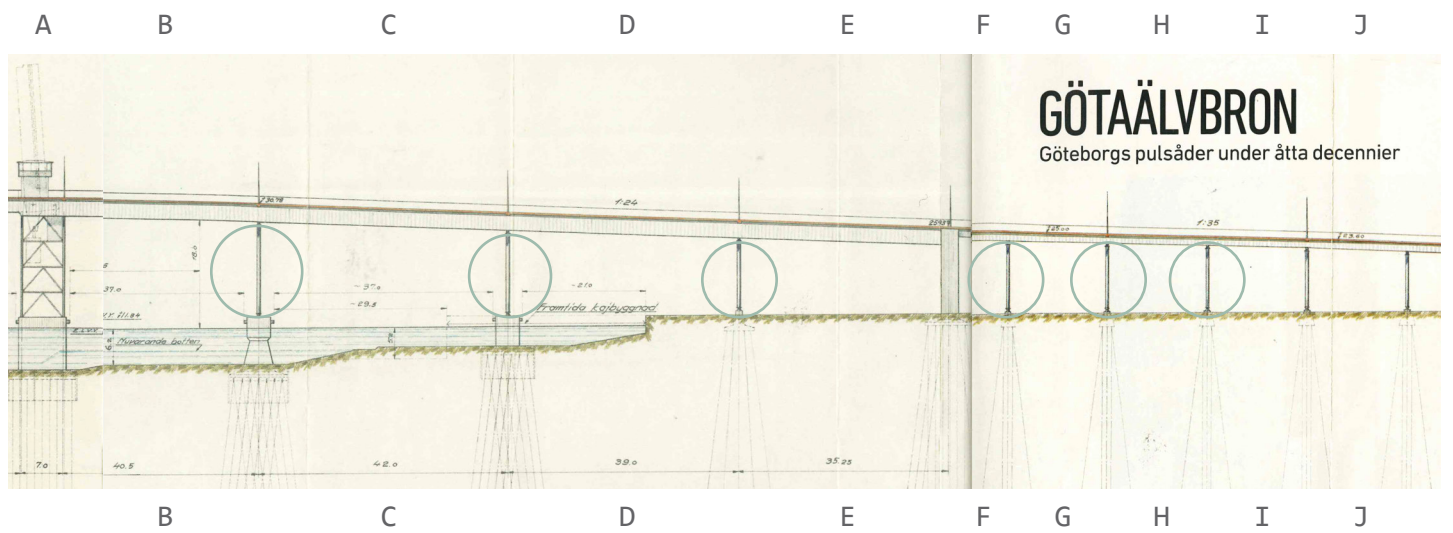
ARCHIVE

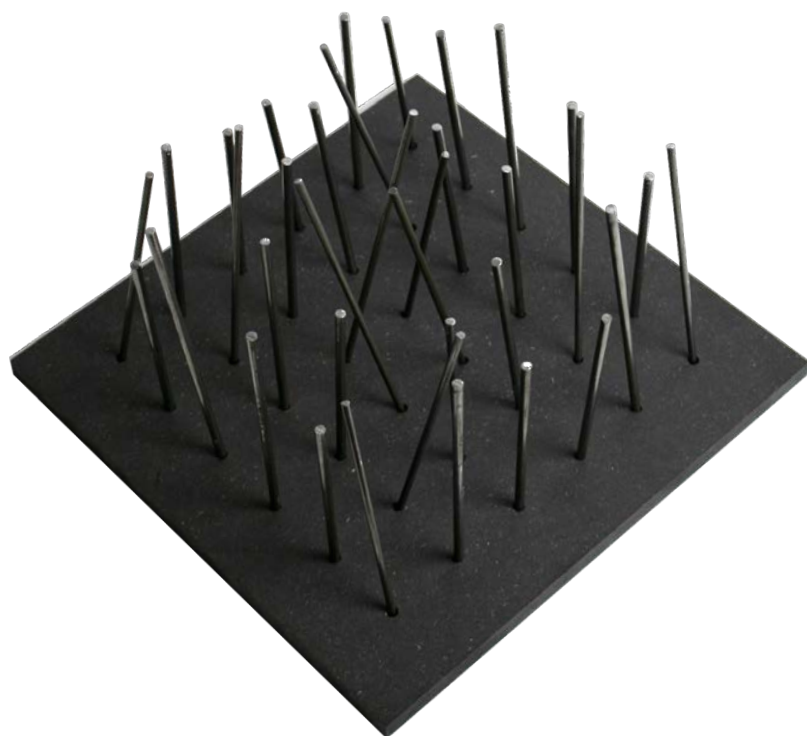
Göteborgs pulsåder under åtta decennier











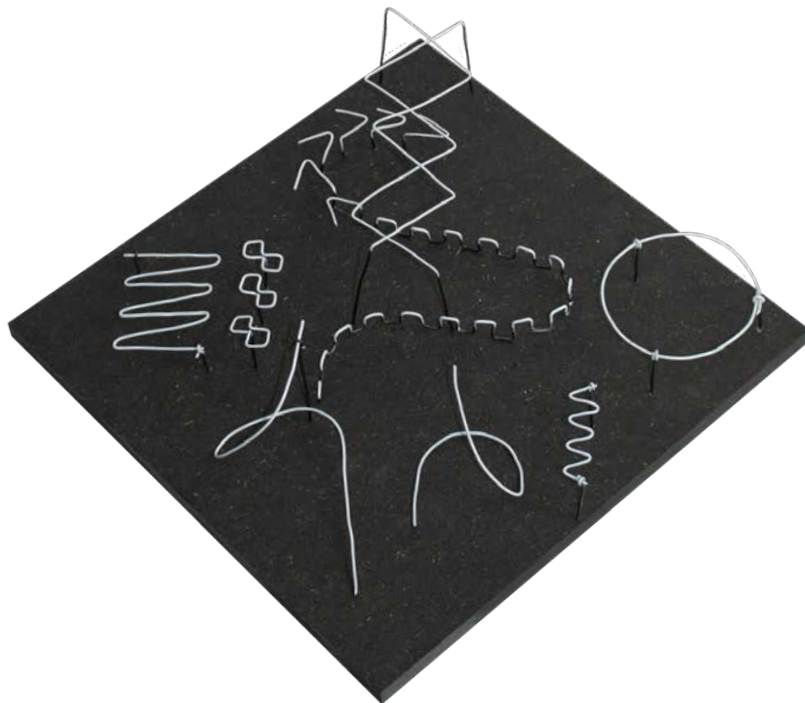
Interpretation of graphics that choreograph our movements on the bridge.

It interests me how this system of lines, signals and sound tells us how to move in the built environment.

Also how it is shaped by movement and that the organic forms are quite different from that of the parts of the bridge.

This language is also not so different from graphics in an architectural drawing.

A friend complained about how flat the new bridge is, the organic movements of the old bridge has disappeared with it.



## REFERENCE CHOREOGRAPHY OF LIGHTS

Madeline Hollander for BMW Group

06.10.2021 | ID: P90401556

Madeline Hollander, 5 Live Calibrations, 2019,  
Performance, Théâtre des Champs-Élysées, Paris,  
France, Louvre Abu Dhabi, Abu Dhabi, UAE,  
Los Angeles Dance Project, Los Angeles, CA.  
(09/2020)

<https://www.press.bmwgroup.com/canada/article/detail/T0348072EN/madeline-hollander-unveils-%E2%80%9Csunrise/sunset%E2%80%9D-as-part-of-bmw-open-work-site-specific-installation-to-premiere-at-frieze-london-2021?language=en>

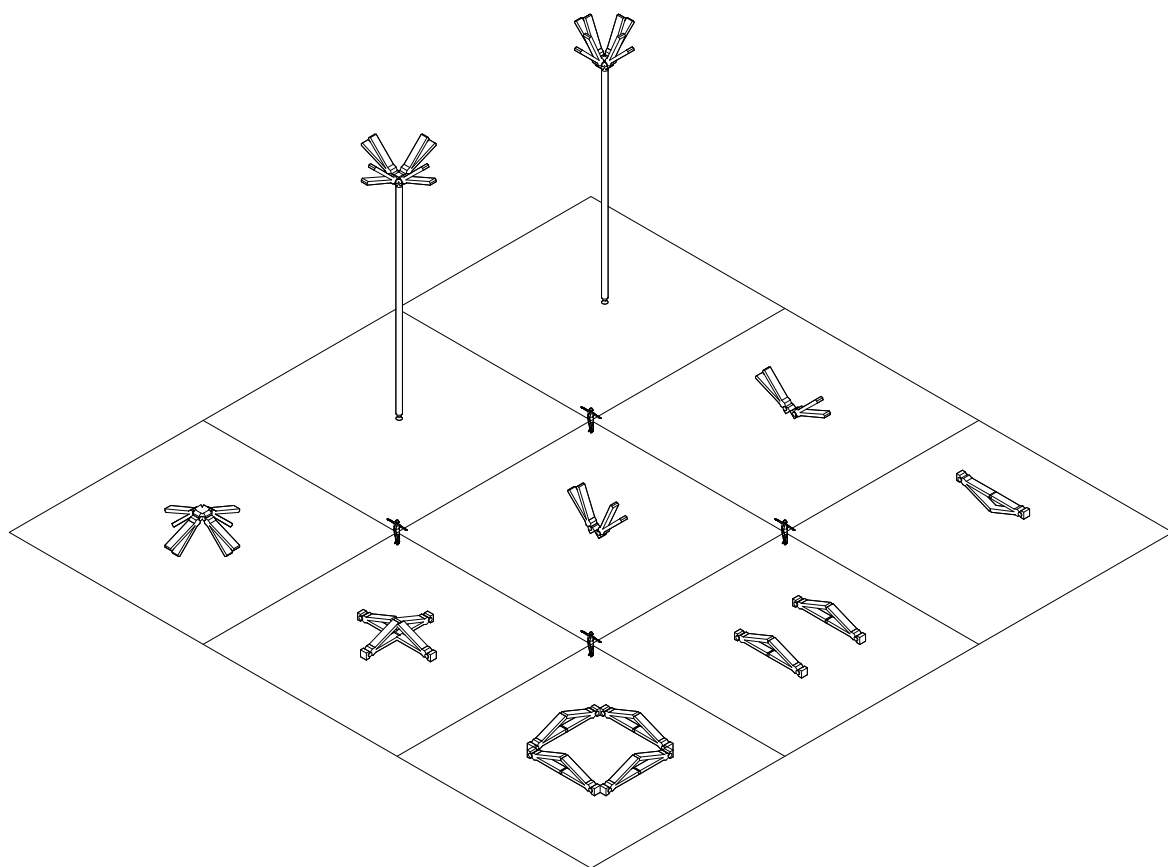
Madeline Hollander for BMW Group

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Madeline Hollander, 5 Live Calibrations, 2019,  
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Los Angeles Dance Project, Los Angeles, CA.  
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<https://www.press.bmwgroup.com/canada/article/detail/T0348072EN/madeline-hollander-unveils-%E2%80%9Csunrise/sunset%E2%80%9D-as-part-of-bmw-open-work-site-specific-installation-to-premiere-at-frieze-london-2021?language=en>

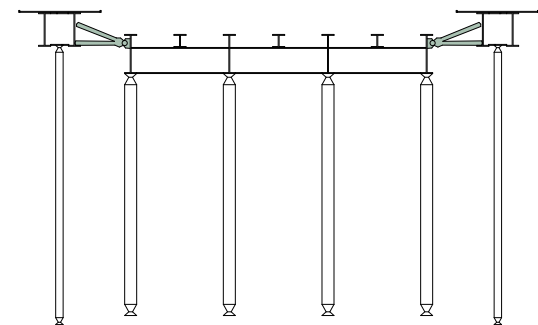
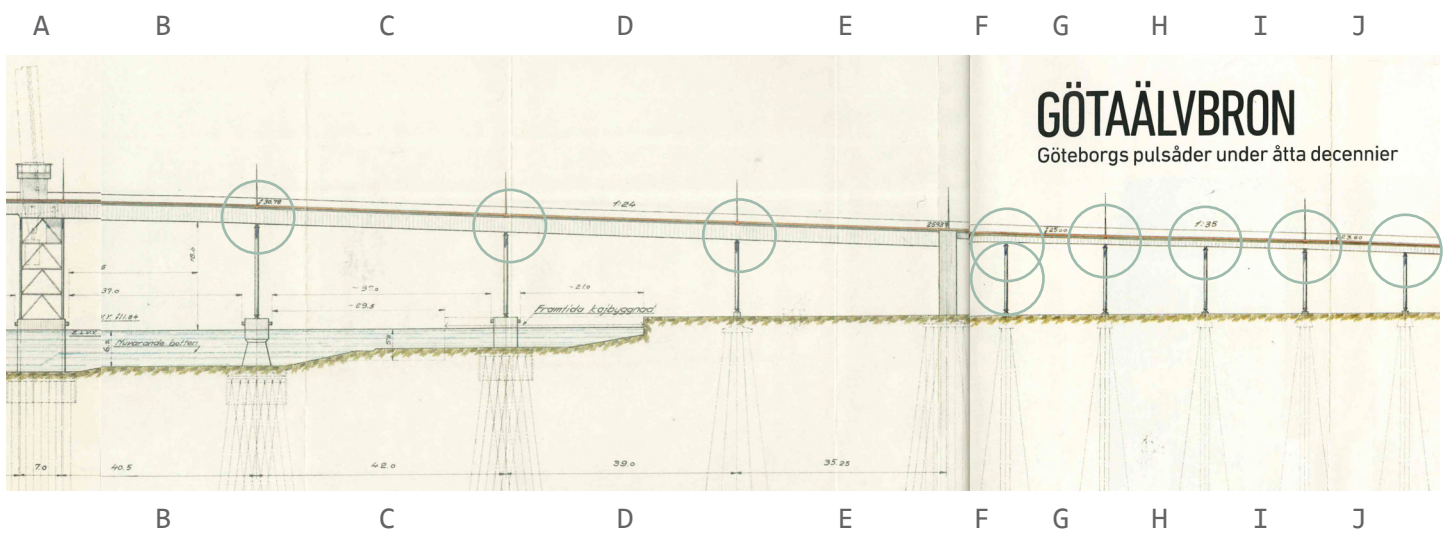




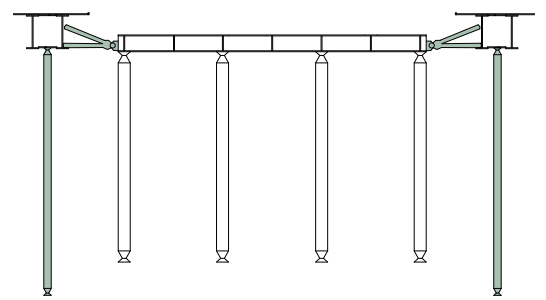
LAB: 1  
THEME: SMALL

COMMENTARY:

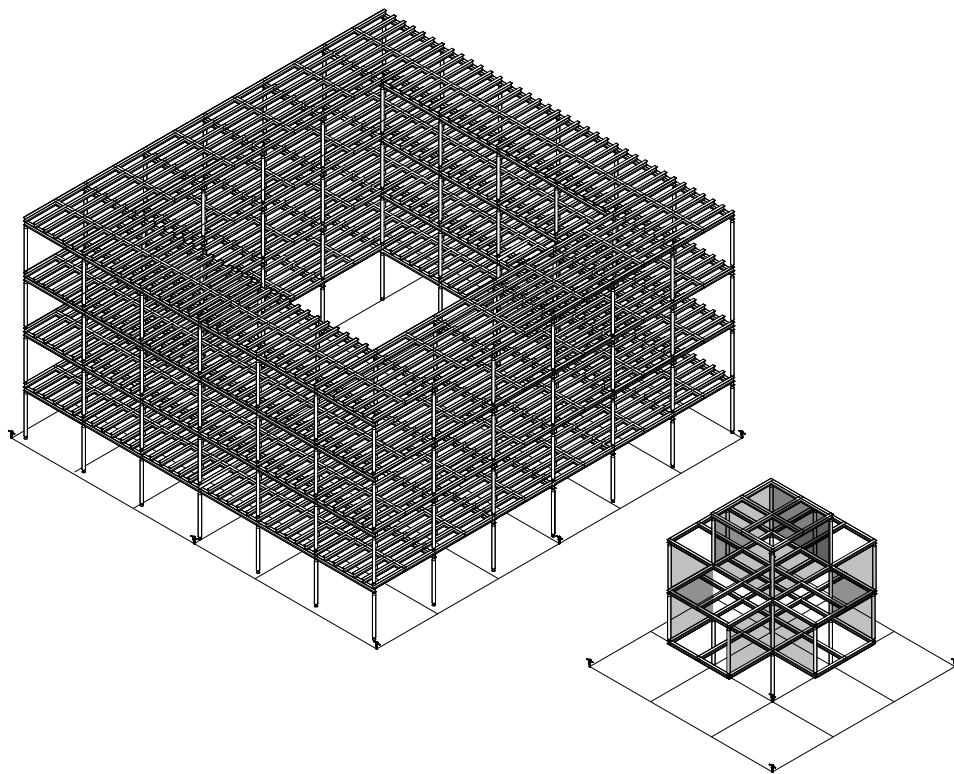




GENERAL SECTION 1



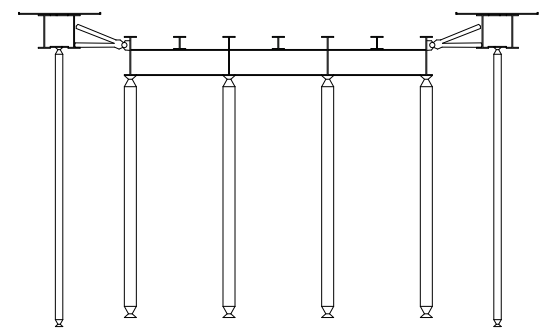
GENERAL SECTION 2



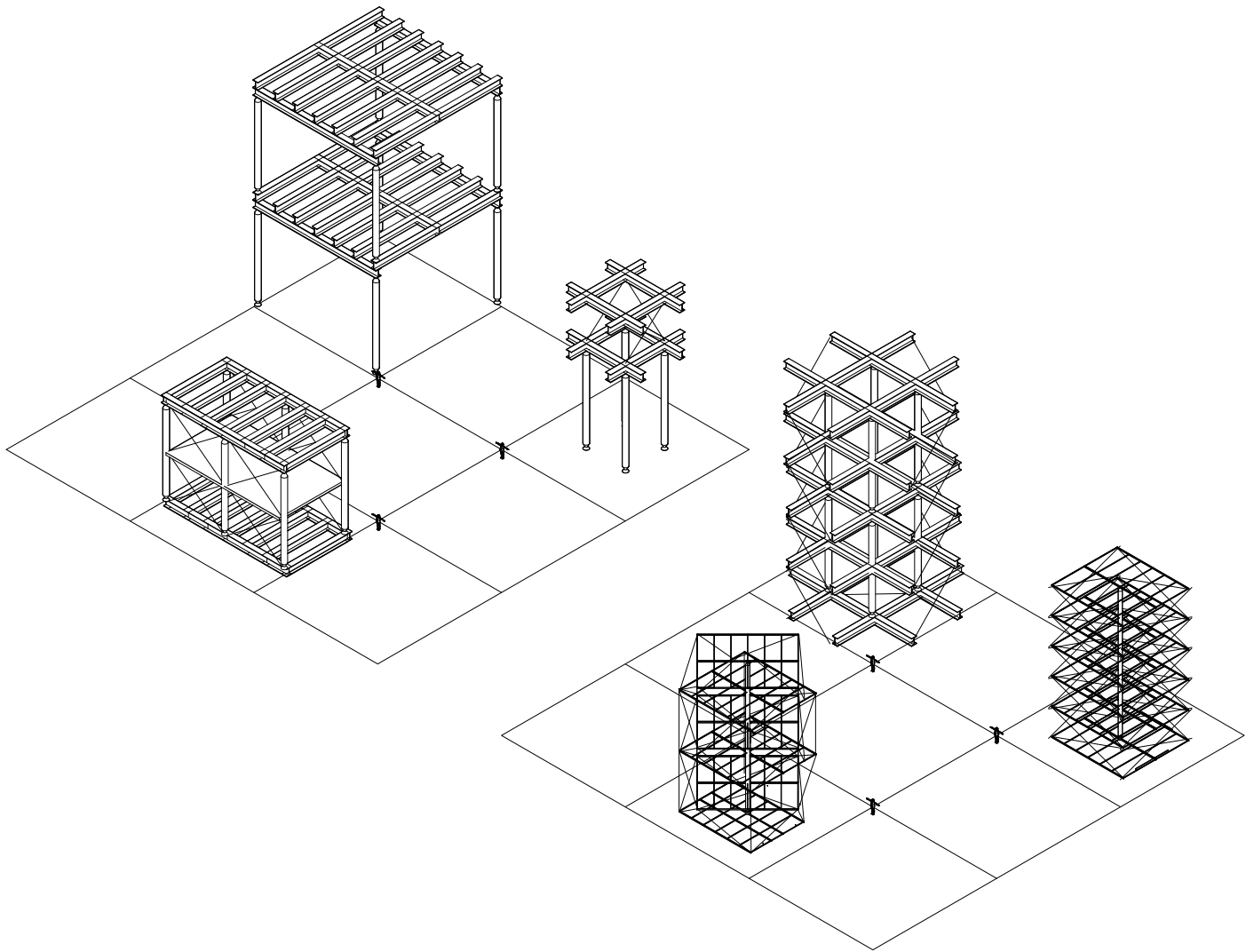
LAB: 2  
THEME: BIG

COMMENTARY:  
The first one suggests a structure  
with the maximum ammount of pillars.  
Width of 16 meters

Göteborgs pulsåder under åtta decennier



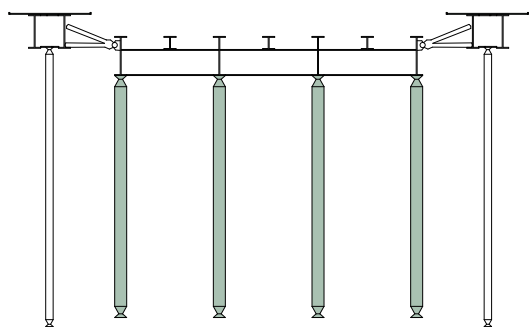
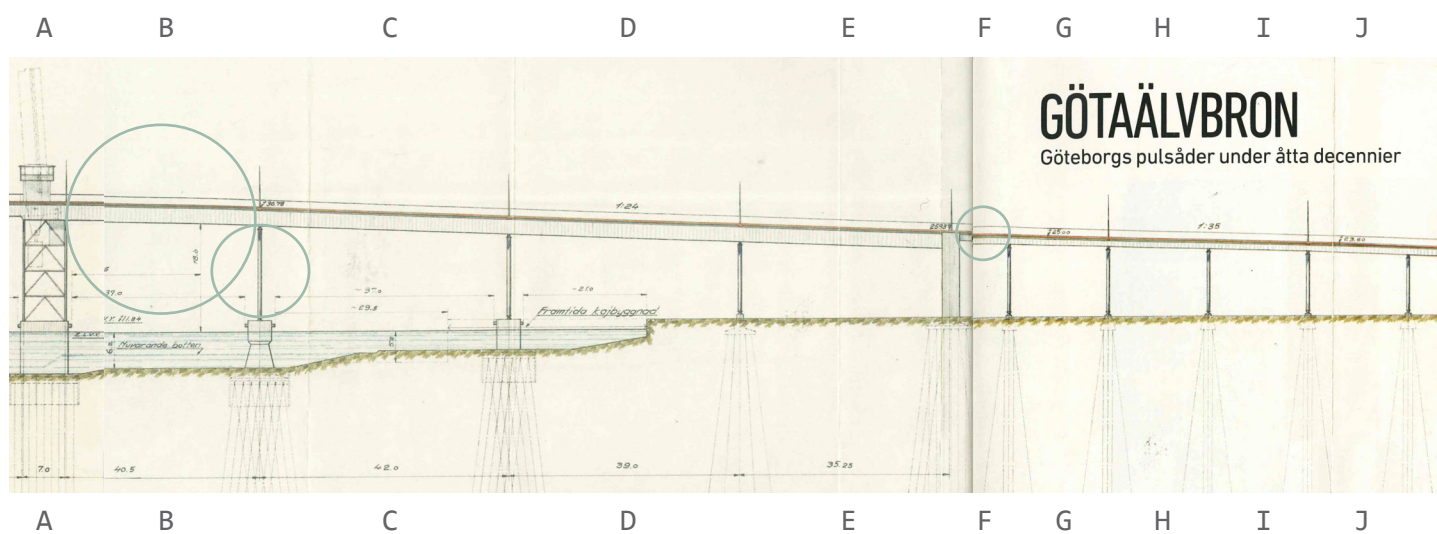
A schematic diagram of a continuous beam system. The beam is represented by a horizontal green bar divided into five equal segments. It is supported by four vertical green columns. At each end of the beam, there is a hinge support, indicated by a small circle with a triangle. The beam is subjected to a uniformly distributed load, represented by a series of downward-pointing arrows along its entire length. The supports are labeled with letters: 'A' at the left end, 'B' at the first column, 'C' at the second column, 'D' at the third column, 'E' at the fourth column, and 'F' at the right end.



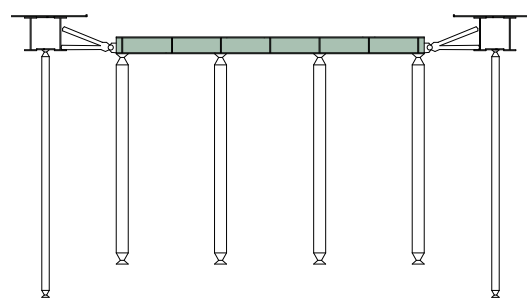
LAB: 3  
THEME: VERTICAL

COMMENTARY:

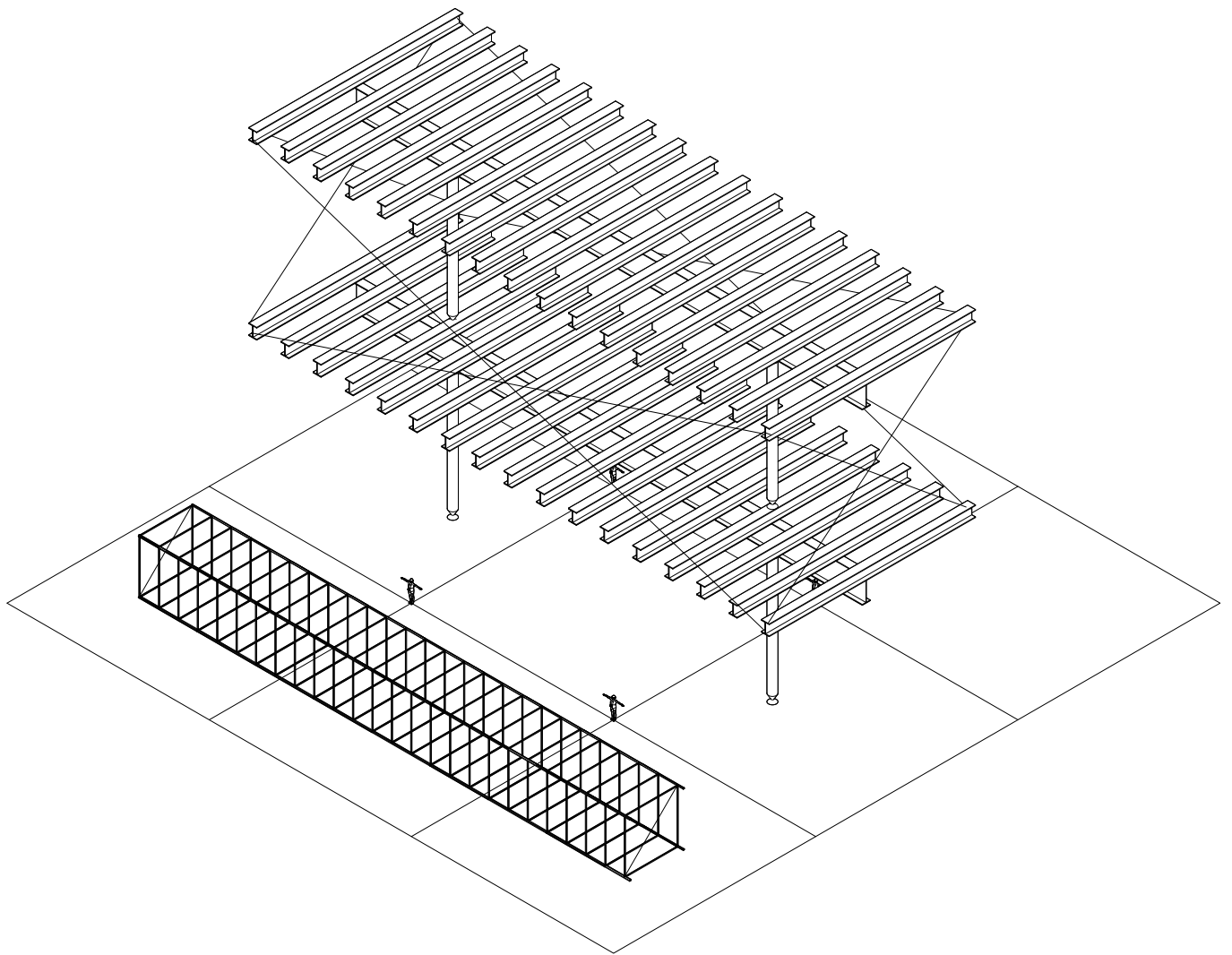
The goal was to create vertical structures with a human scale.



GENERAL SECTION 1

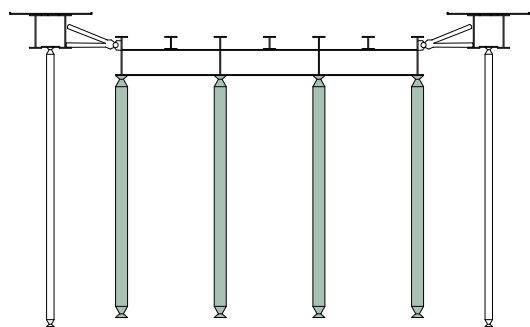
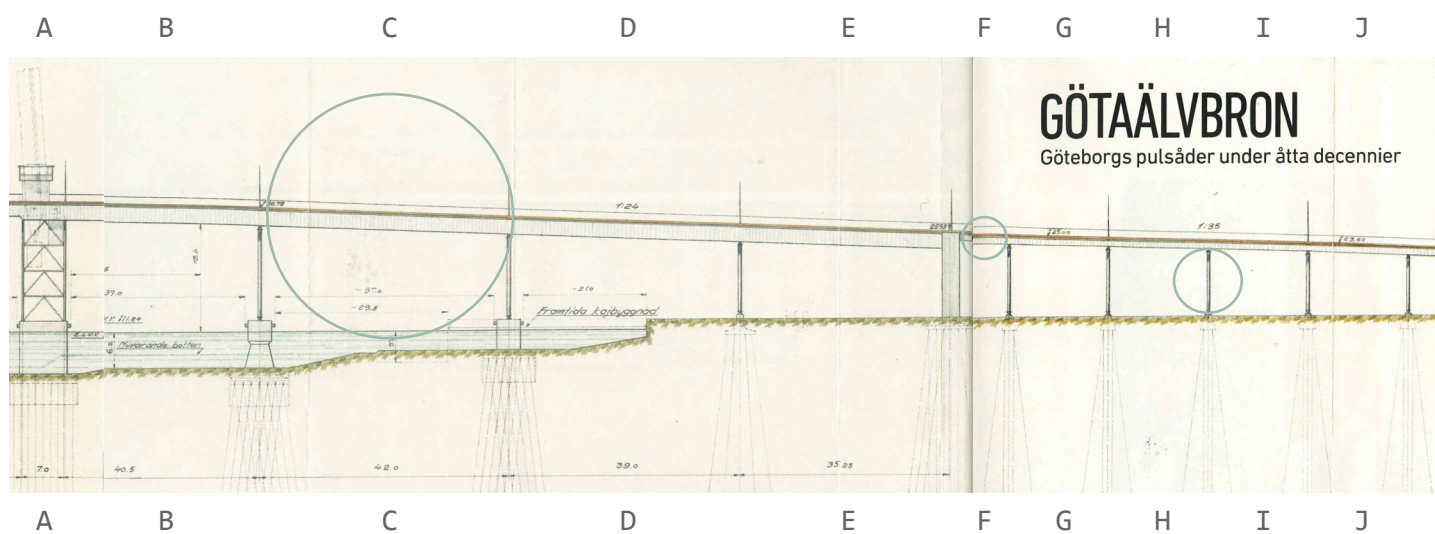


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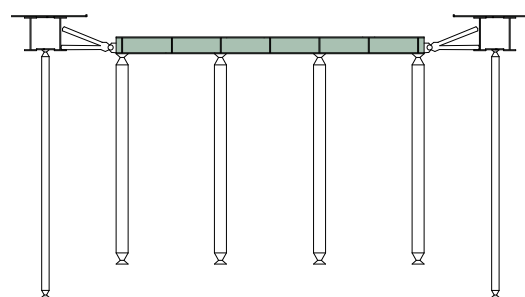


LAB: 4  
THEME: HORIZONTAL

COMMENTARY:

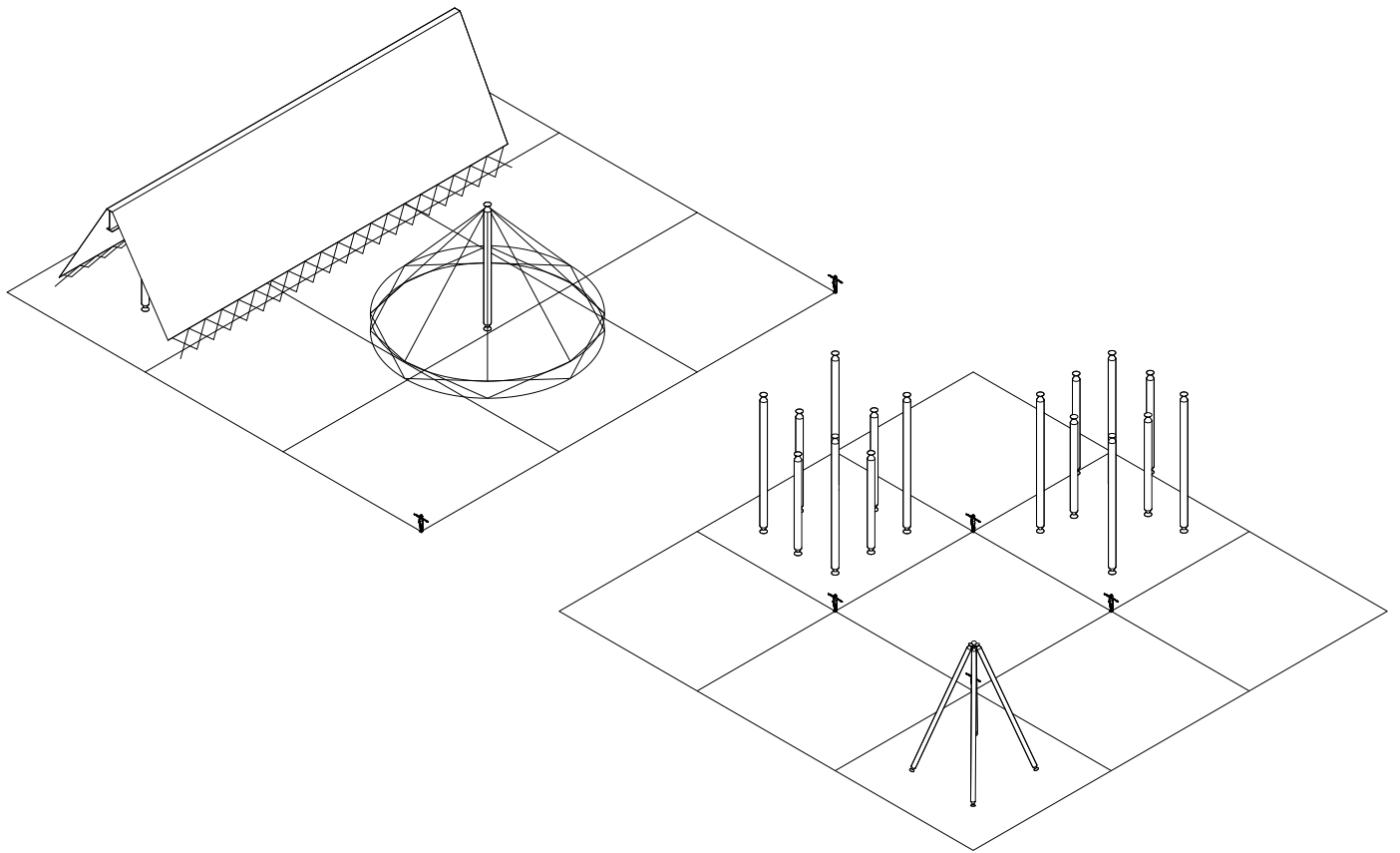


GENERAL SECTION 1



GENERAL SECTION 2





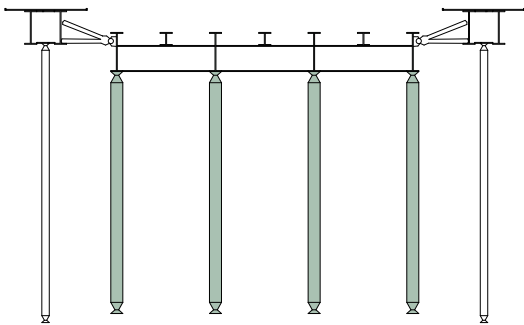
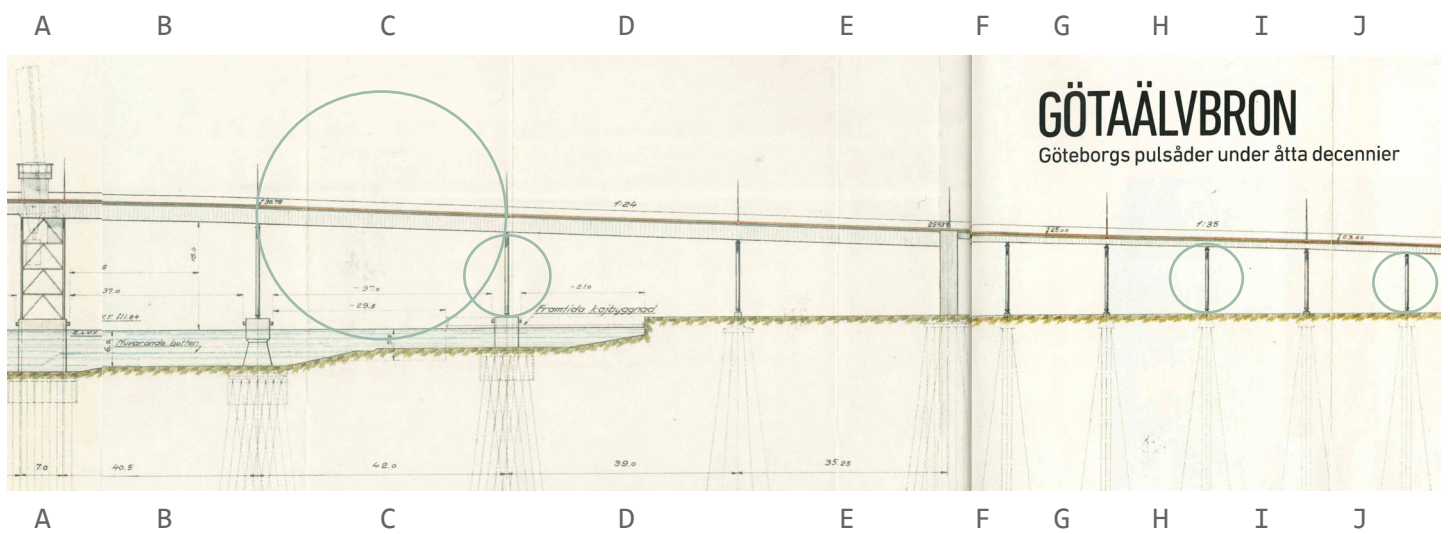
LAB: 5  
THEME: SPECIFIC PARTS

#### COMMENTARY:

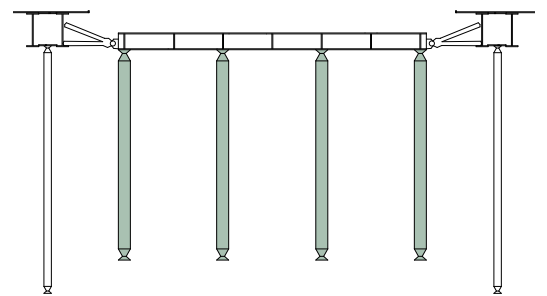
The pillars of varying height can be used to terrain adaptation and variation of plans.

Wire can be used to stretch textile constructions aswell as a stabilizer.

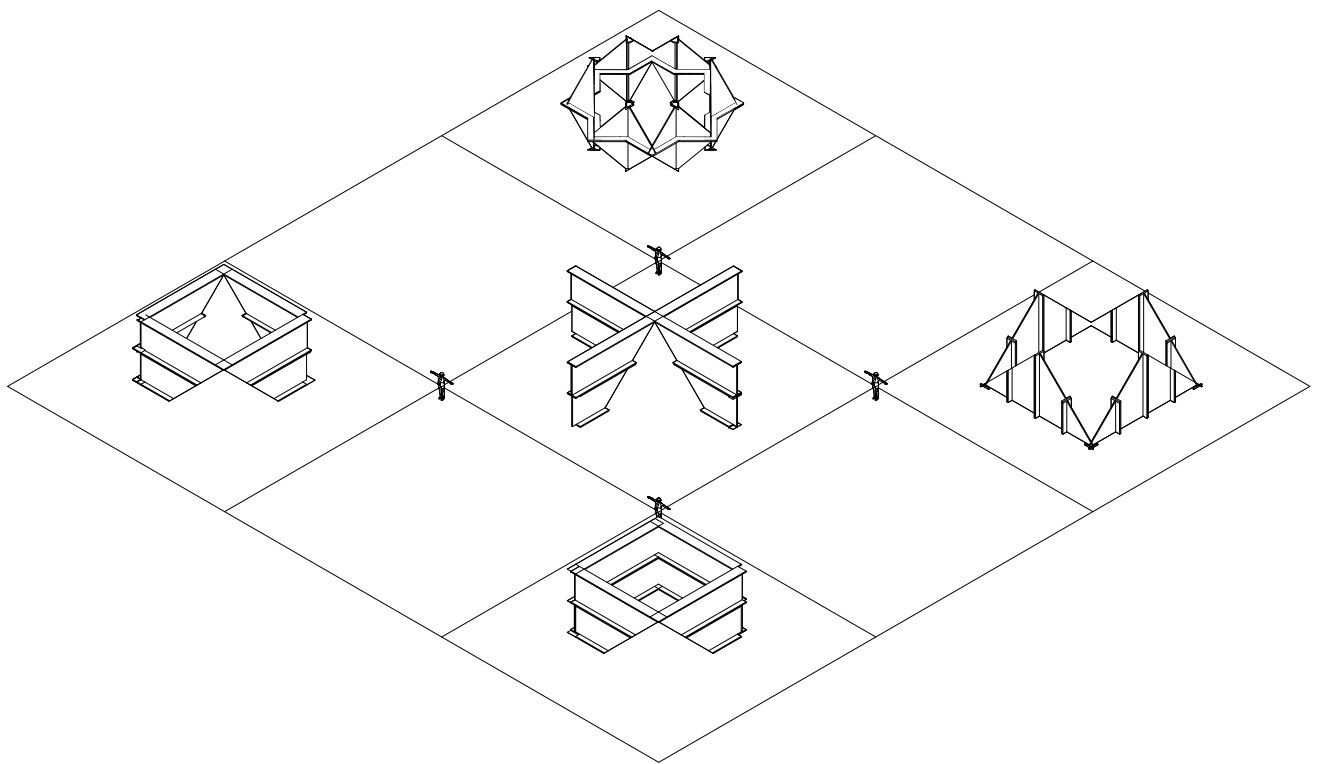




GENERAL SECTION 1



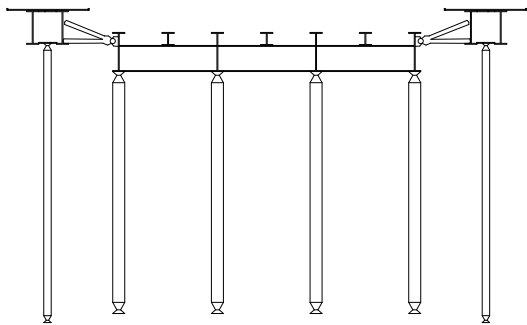
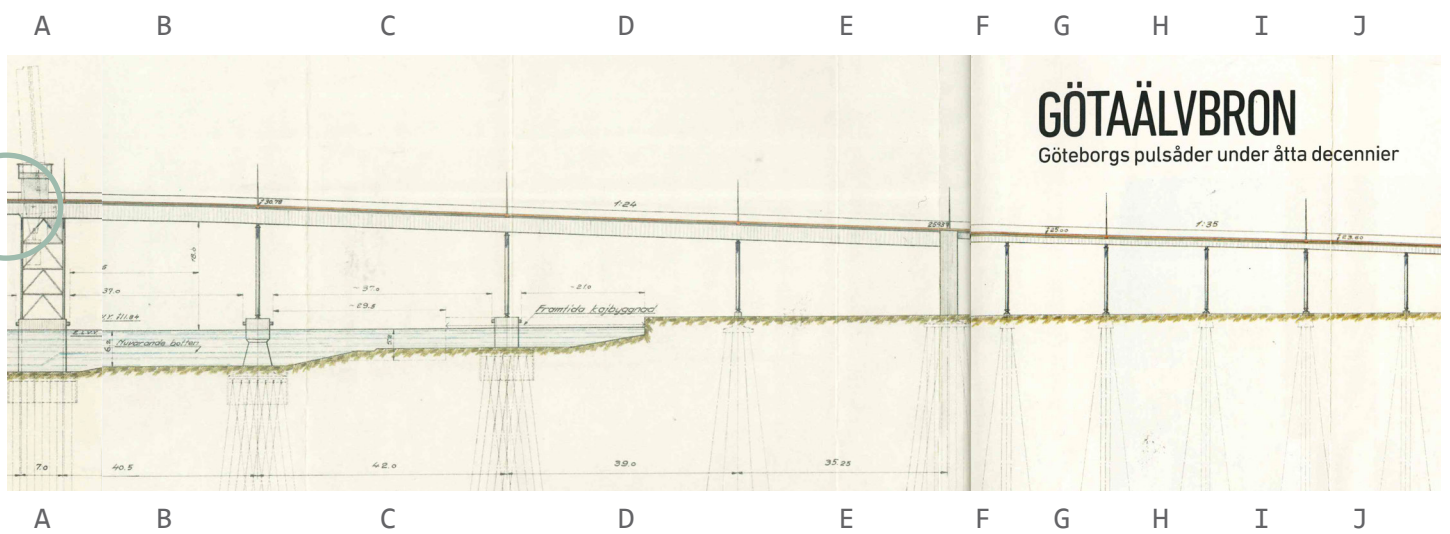
GENERAL SECTION 2



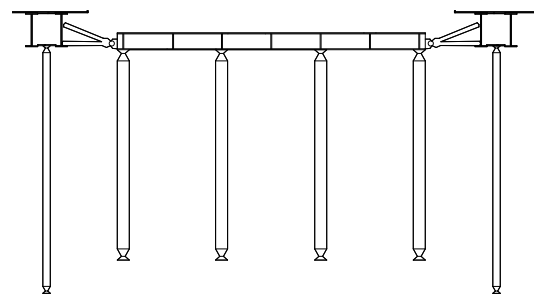
LAB: 6  
THEME: DEMOLITION EDGES

COMMENTARY:

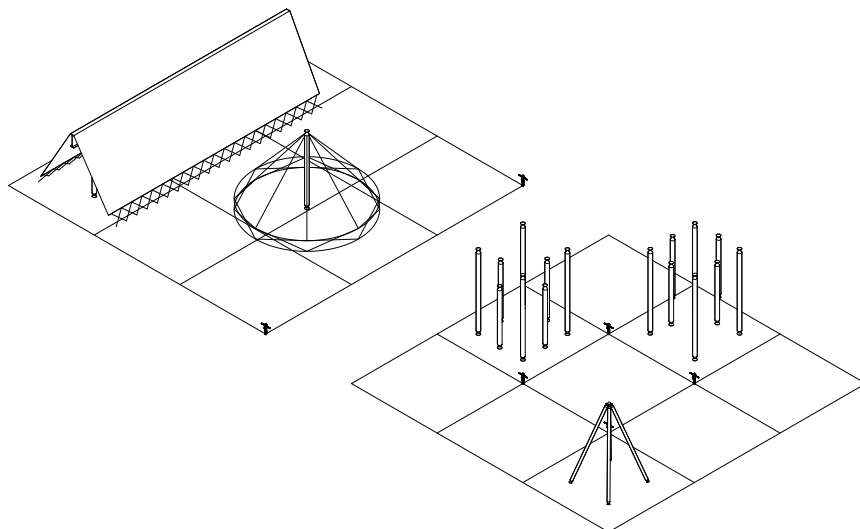
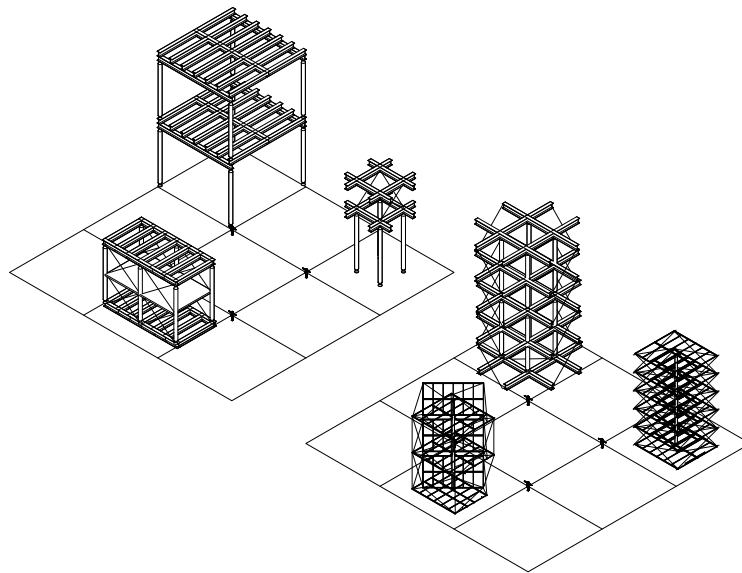
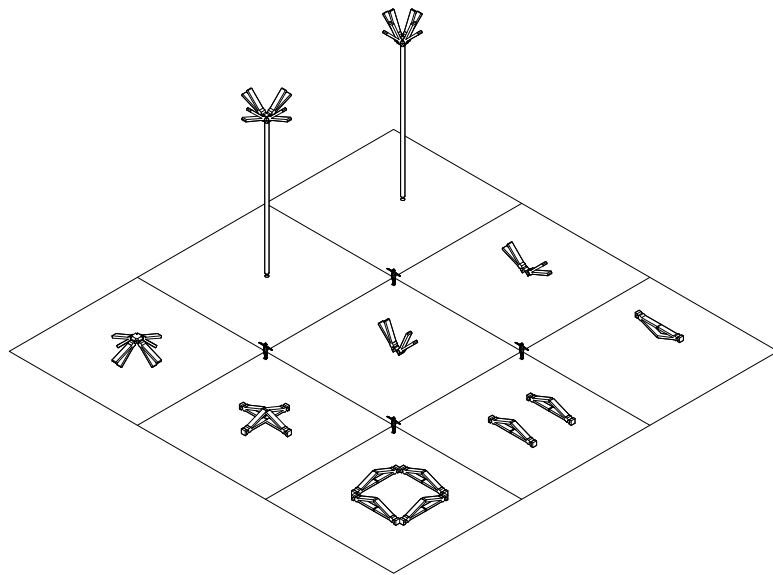
Depending on the angel of the cut, parts can be reassembled in different ways.

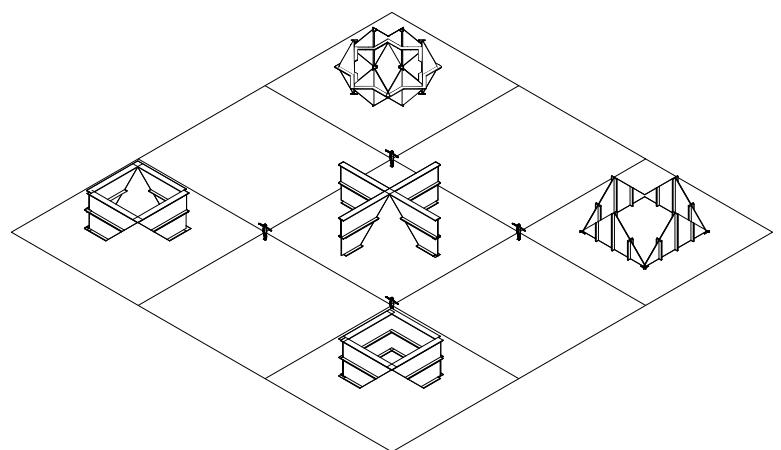
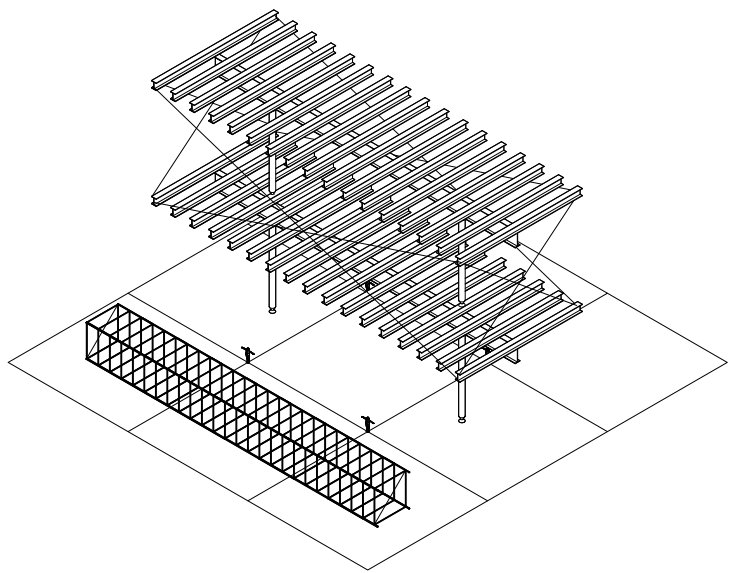
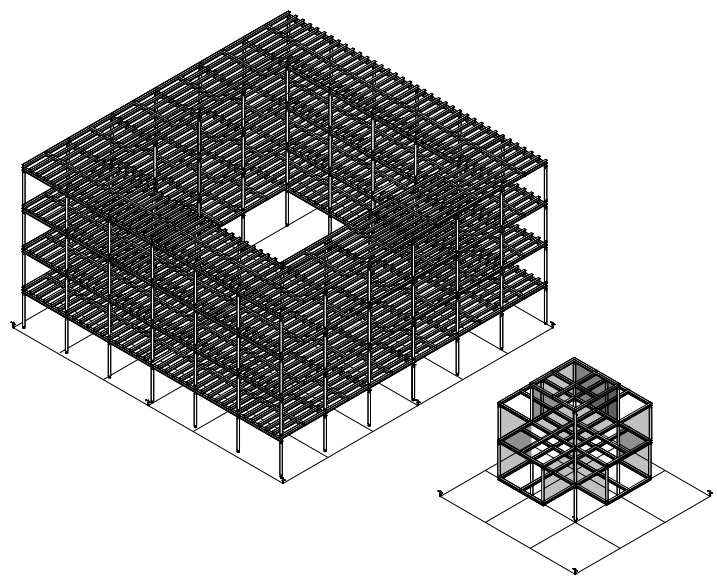


GENERAL SECTION 1



GENERAL SECTION 2

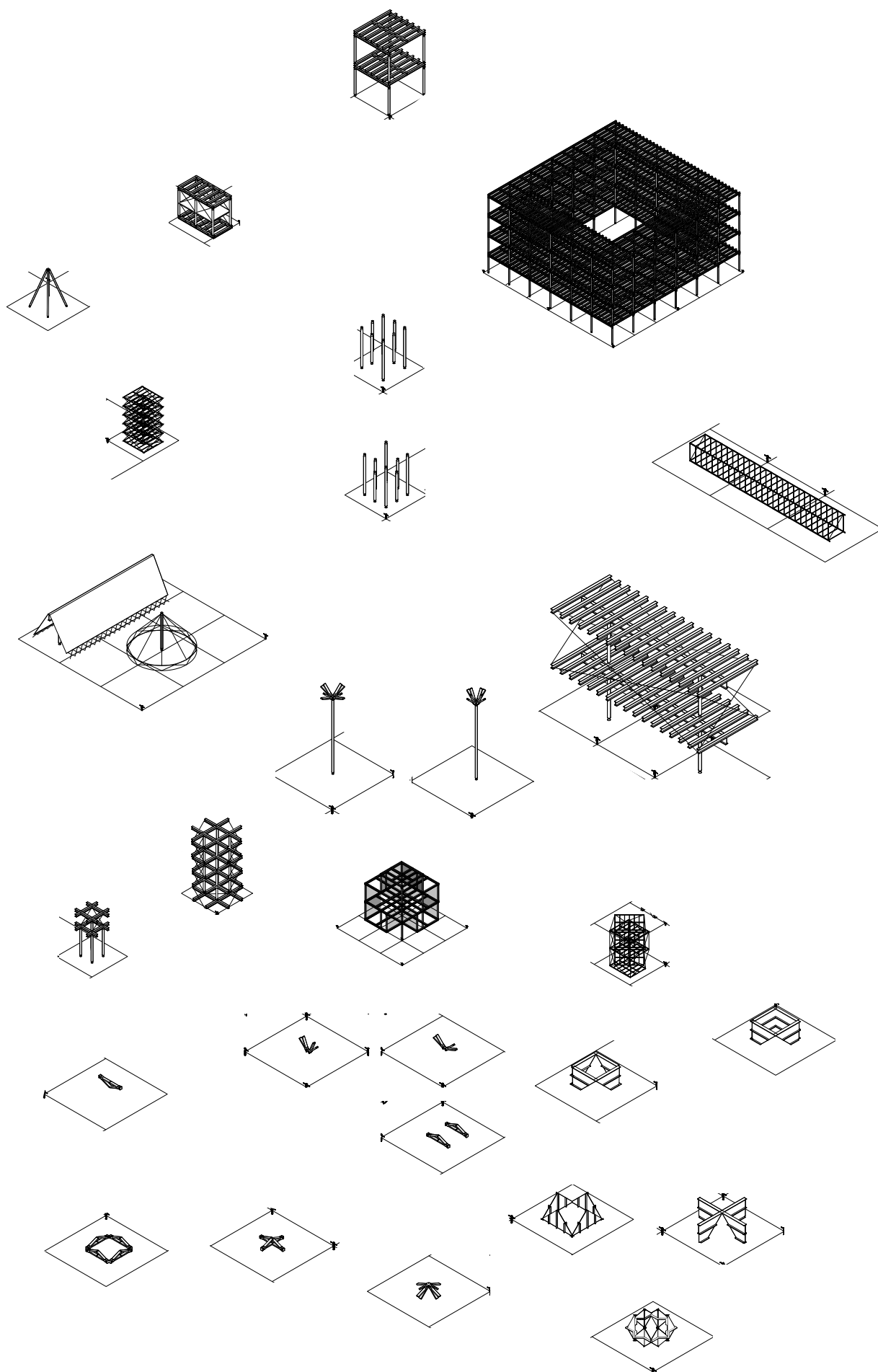




GENERAL



SPECIFIC

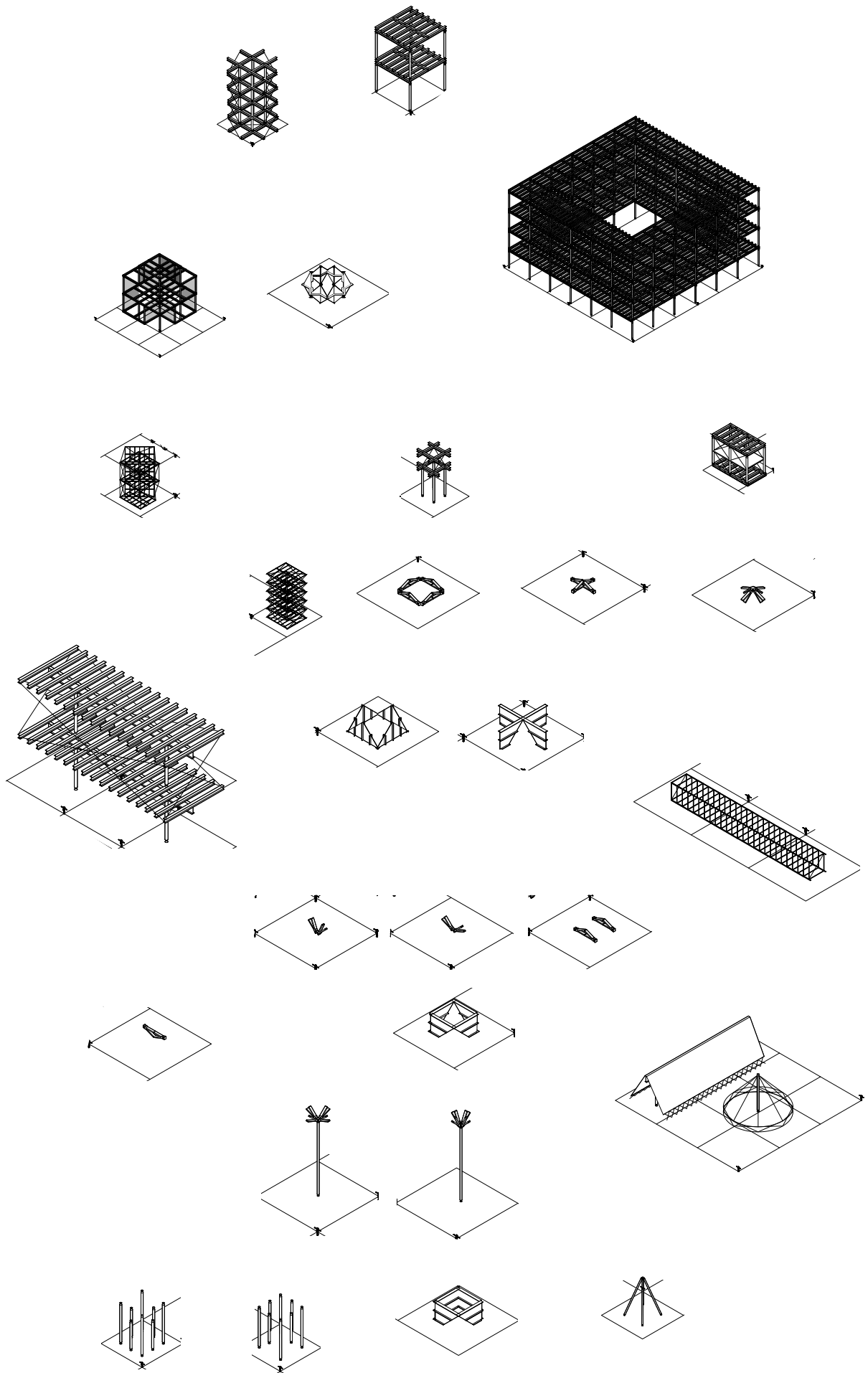


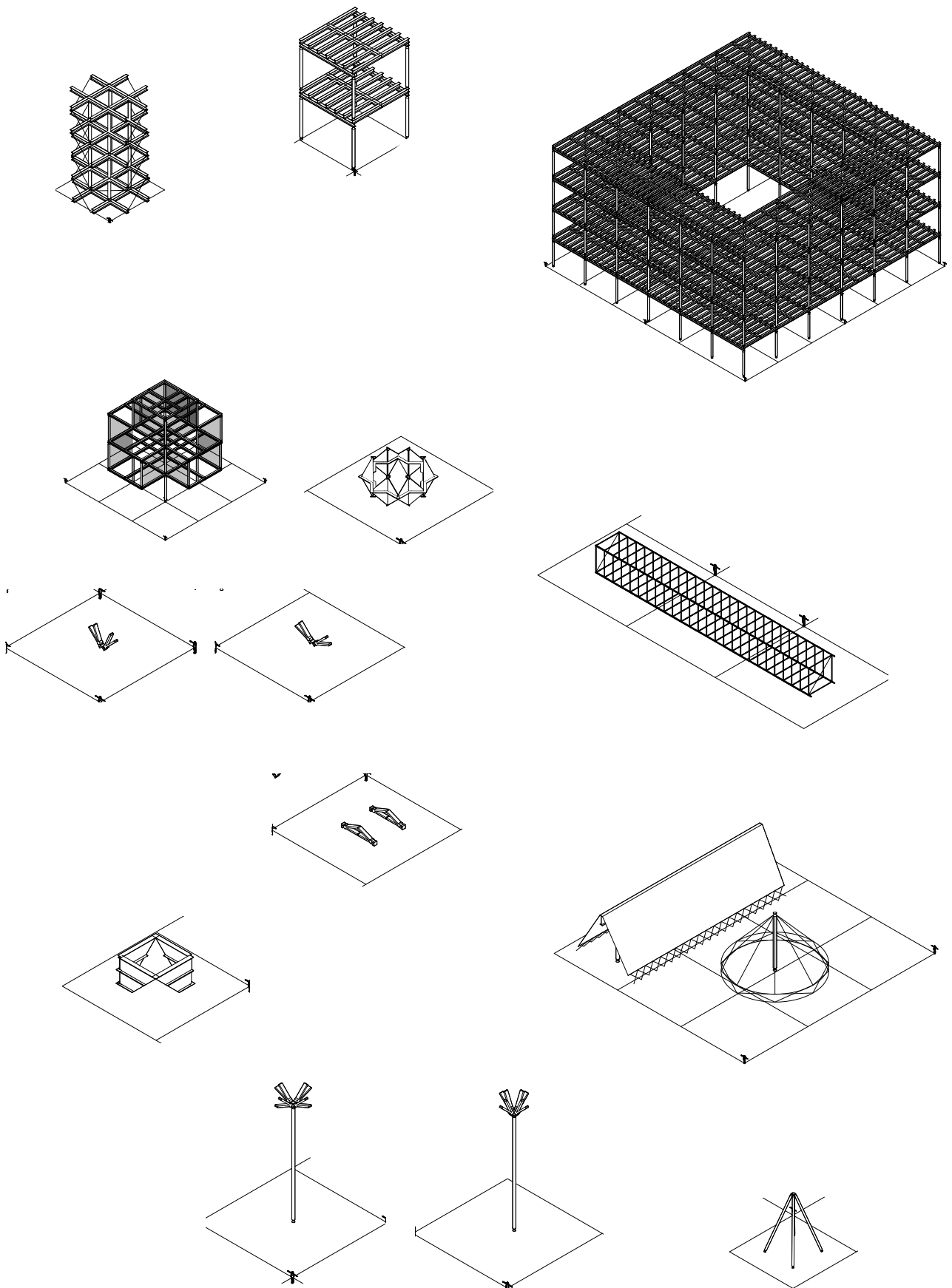
SYSTEM

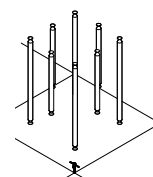
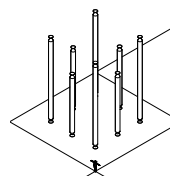
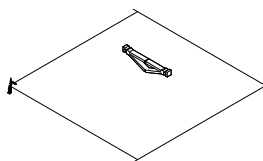
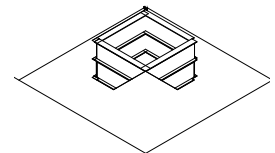
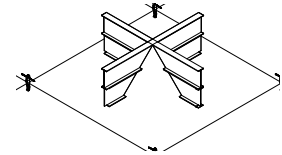
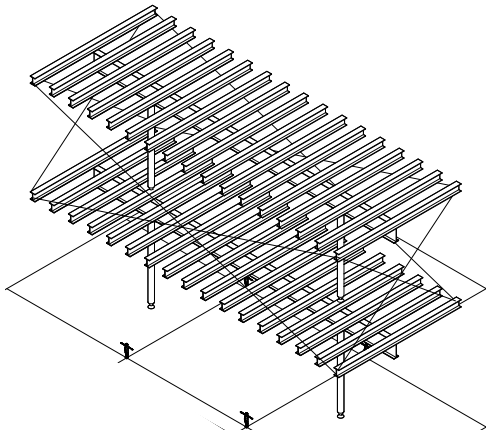
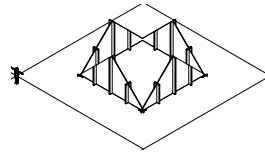
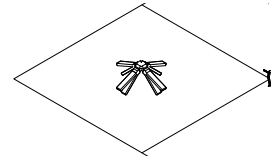
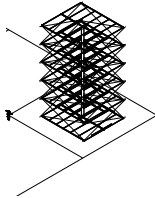
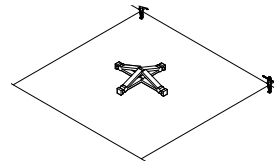
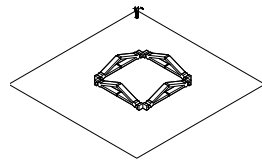
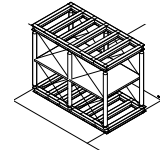
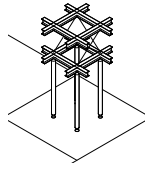
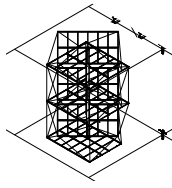


PRINCIPLE





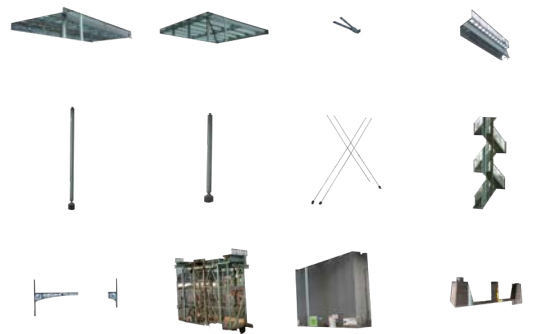






## ARCHIVE IMAGES

## DEMOLITION



## BRIDGES AND TIME METHOD

## INVENTORY

*"... discourses in and around an upcycled artefact make it possible for it to move between cultural and geographical spaces, whilst both maintaining and transforming the meaning potential of the artefact"*

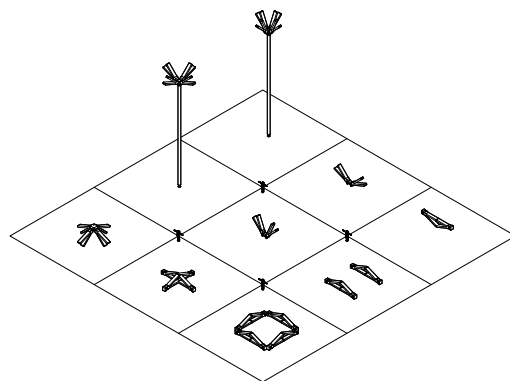


## ANNECDOTES REFERENCES

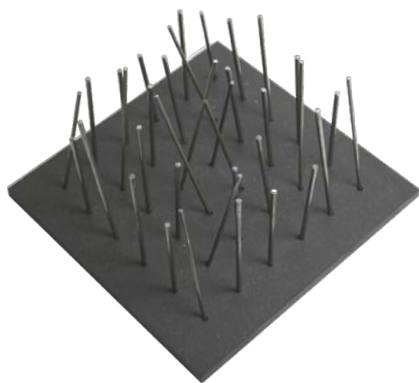
## ASSOCIATION INVENTORY



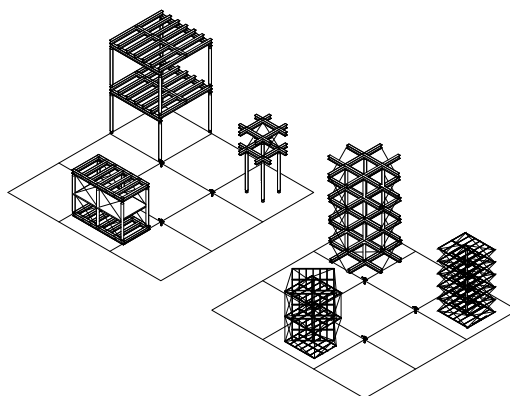
MATERIALIZED INVENTORY



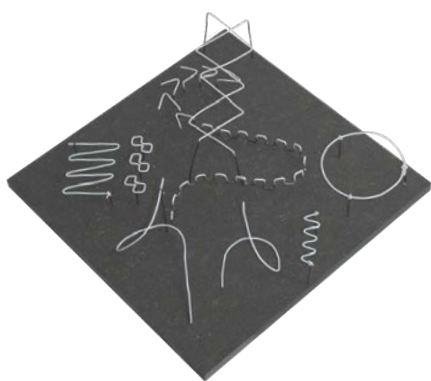
LAB 1-2



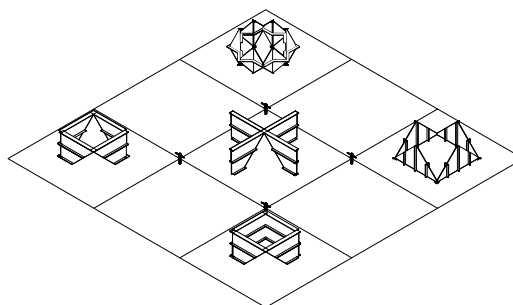
VARIATION AND AMOUNT



LAB 3-4



TRAFIC AESTHETICS



LAB 5-6

## REFLECTION

During the archive phase I have learned Rhino, used photography (which I usually don't), made models in metal to get close to the material and tried 3D-printing.

It is an interesting method to collect a broad perspective of a chosen situation, something I will bring with me in the future. Though I wish I would have created more freely without thinking of how or what the result could be used for in the future.

It is a challenge to have time to iterate more than one time. I will try to get better at planning for that.

This course aims to develop the personal methods of the student, I have a hard time expressing my specific method and will continue reflect on my preferences continuously. In the next module I will pick the aspects from the archive that I find most fun and interesting and work with, and develop them.

## ARCHITECTURAL OBJECTS

## NOSTALGIA

Nostalgia was coined as a medical condition seen in mercenaries away from home by a swiss doctor during the 17th century. It's meaning changed with the romanticism and during the modern era.

Today, nostalgia can be perceived as a positive and important psychological experience with various functions. For example an ability to bolster existential meaning.

Nostalgia can be triggered through various medias, for example impressions through the senses.

The demolition of the Götaälvbridge can be seen as the 'distance away from home' in nostalgia or the transition out of context. This work will investigate how nostalgic experiences of a public memory and everyday object can be translated into architecture.

Routledge, C., Arndt, J., Wildschut, T., Sedikides, C., Hart, C. M., Juhl, J., Vingerhoets, A. J. J. M., & Schlotz, W. (2011). The past makes the present meaningful: Nostalgia as an existential resource. *Journal of Personality and Social Psychology*, 101(3), 638-652. <https://doi.org/10.1037/a0024292>



*Nostos* 'Homecoming'  
*Algos* 'pain'

NOSTALGIA-MATERIAL/PLACE



DECAY

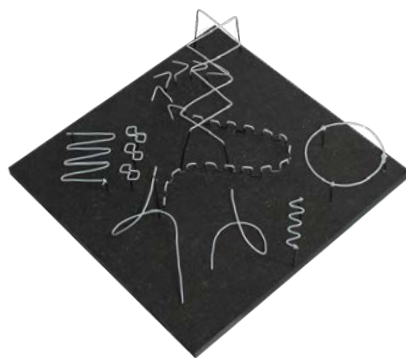


RECOGNITION/ VISIBILITY

NOSTALGIA-EXPERIENCE



HORIZON-VIEW-WEATHER



MOVEMENT

DEMOLITION OF BRIDGE —————> NOSTALGIA 'DISTANCE FROM HOME'

INVENTORY —————> PHOTOGRAPHIC MATERIAL

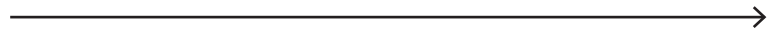


MATERIALIZED INVENTORY

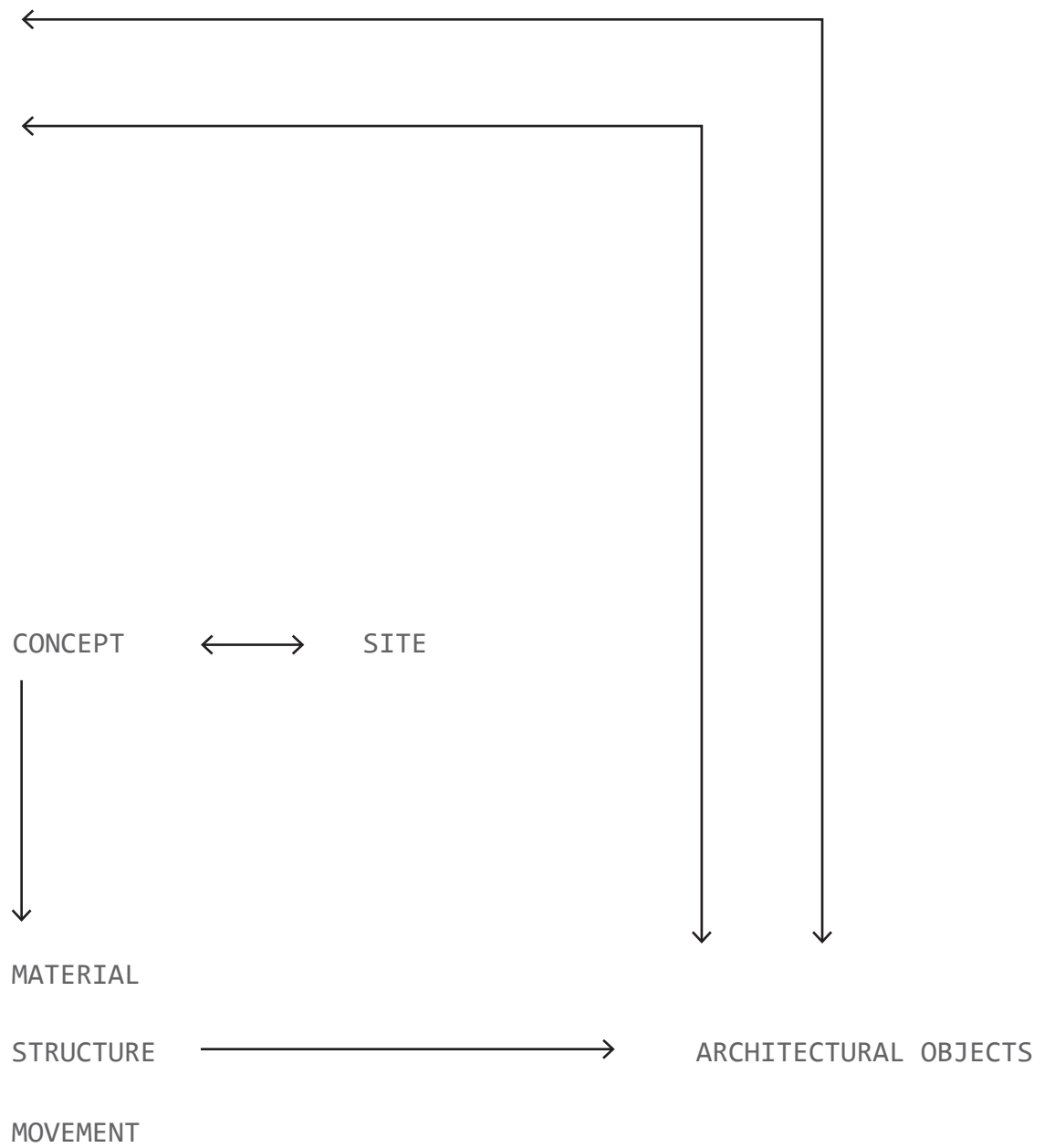


LAB FORMFINDING

LAB PHYSICAL  
TRANSLATIONS



LAB NOSTALGIA





MAP





## ARCHITECTURAL OBJECTS

An architectural object is not primarily its function or its relation to a site, it is a sculpture mediating between the ingredients above through the material and the impressions of the spectator. The objects emphasise the context of the site from a distance and a function, in this case experiences of material, structure and movement when the observer becomes a user.

Reference to the right: Layered I  
(2021) By Bram Vanderbeke  
<https://bramvanderbeke.com/>



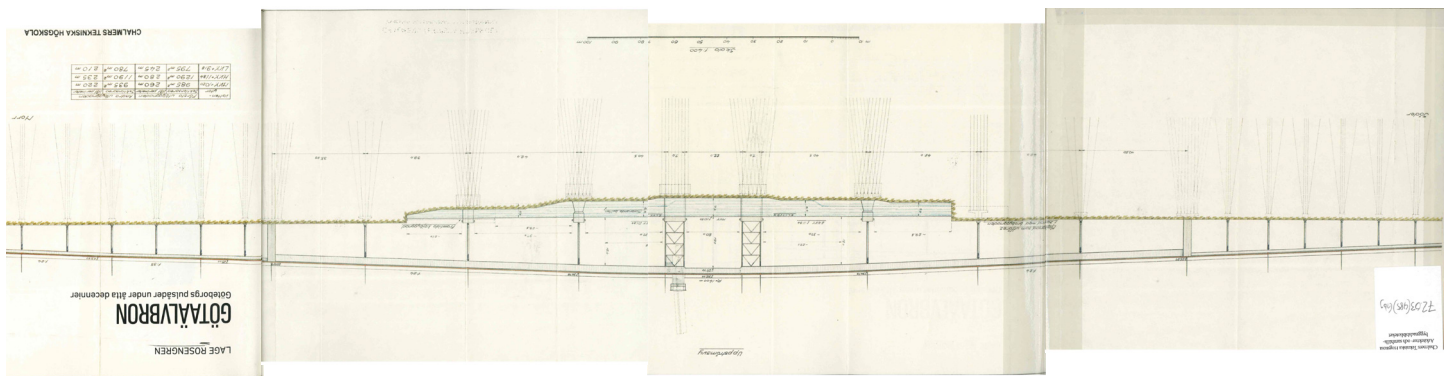


## SITES

The objects are placed on three sites with a view over the position of the bridge. A characteristic typology in Gothenburg are steep, rocky, hillsides. These have potentials for giving and being viewpoints, a theme occurring in all the objects.

The variation and amounts of invented pillars gave possibilities of placing objects in varying terrain.

Three sites constitute three new contexts affecting the reading and implementation of the objects. The material object is placed on the original position of the bridge but on other altitude while the structural object is placed in relation to surrounding buildings. The movement object is placed in a setting of nature and trees contrasting the industrial material.



Scanned drawing: Götaälvbron  
 [1936] H. Törnros,  
 G. Westberg, Göteborg stad  
 trafikkontoret. Publicerad  
 i Götaälvbron, Göteborgs  
 pulsåder under åtta decennier  
 av Lage Rosengren

MATERIAL  
STRUCTURE  
MOVEMENT

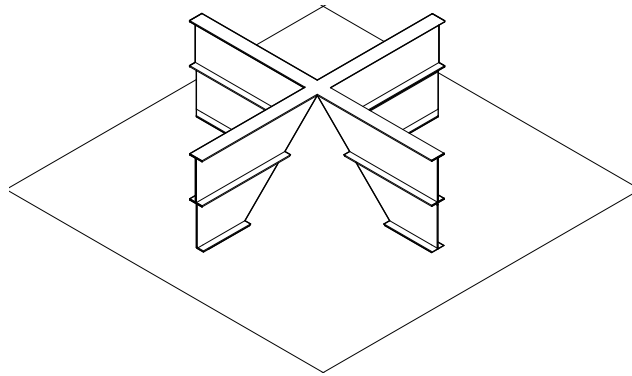


## MATERIAL

This object investigates how to manifest and experience the nostalgia of decay. The demolition edges of the thick sheet metal becomes a design feature aswell as the infrastructural scale as it is lowered to the ground underneath the original site of the bridge. The cuts create a structure of spaces between passage and vault. The triangular shapes define the structure and directs the view towards the sky and remains of the bridge on site. The fundament marking the use of thick beams in the bridge is translated into an entrance of the object. The escape staircase remains but is depraved of its function, now a decaying object of beauty and a satirway to an old view.



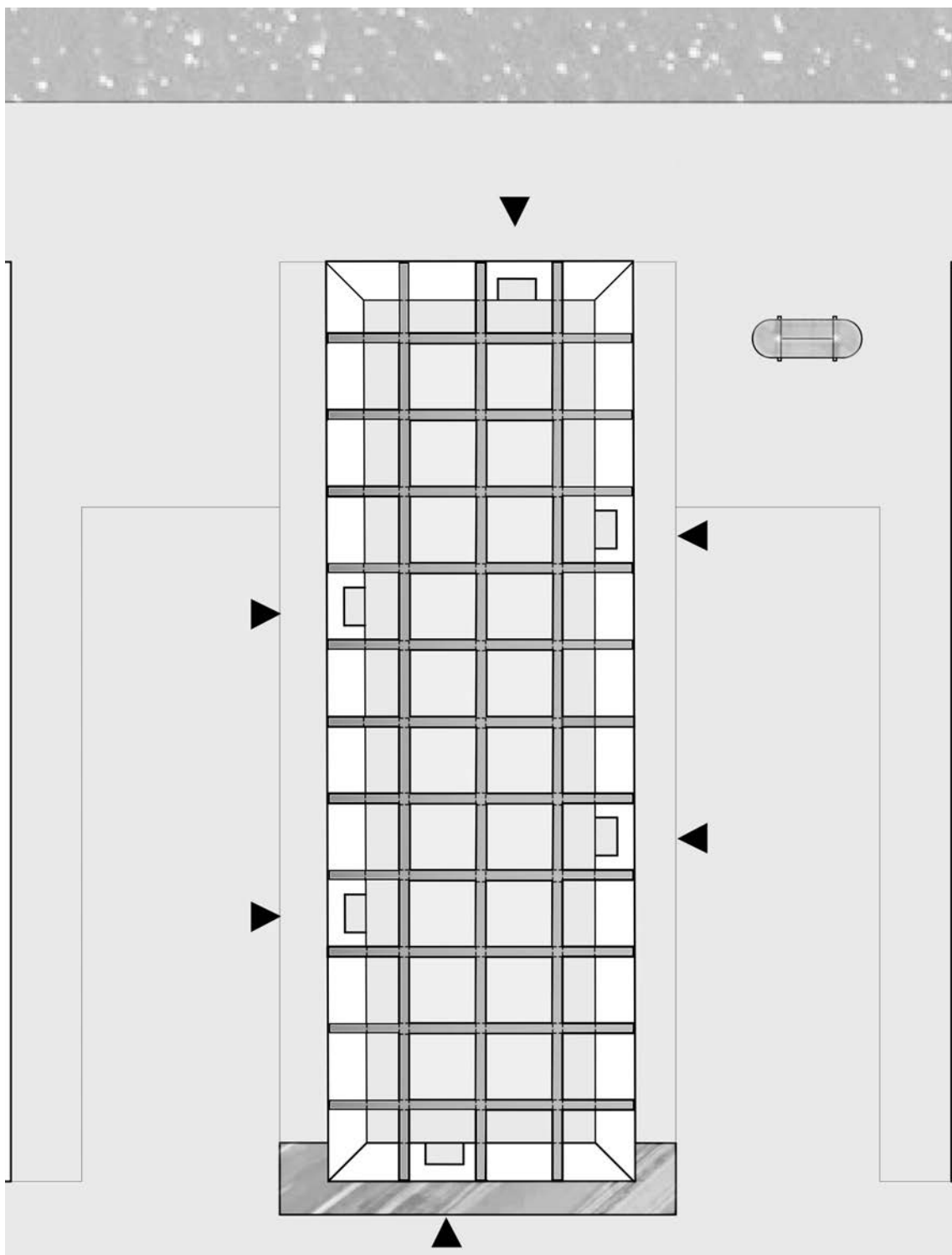
LAB NOSTALGIA: DECAY



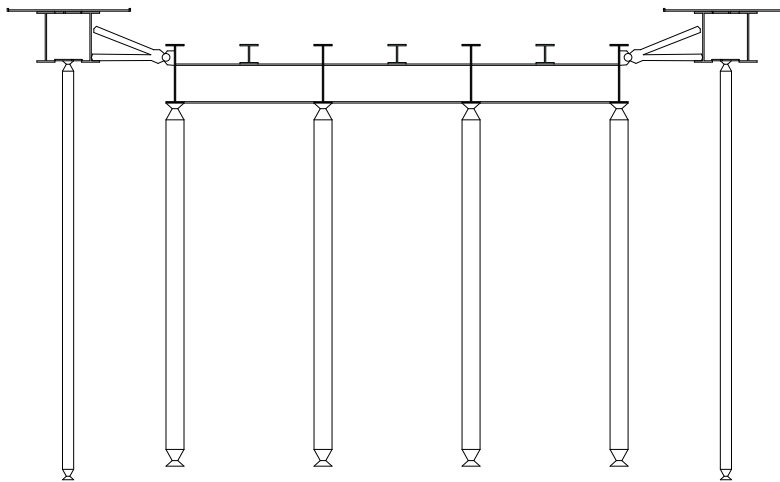
LAB FORMFINDING: DEMOLITION EDGES



REFERENCE: TWELVE ROOM PAVILION BY  
FÖRSTBERG LING

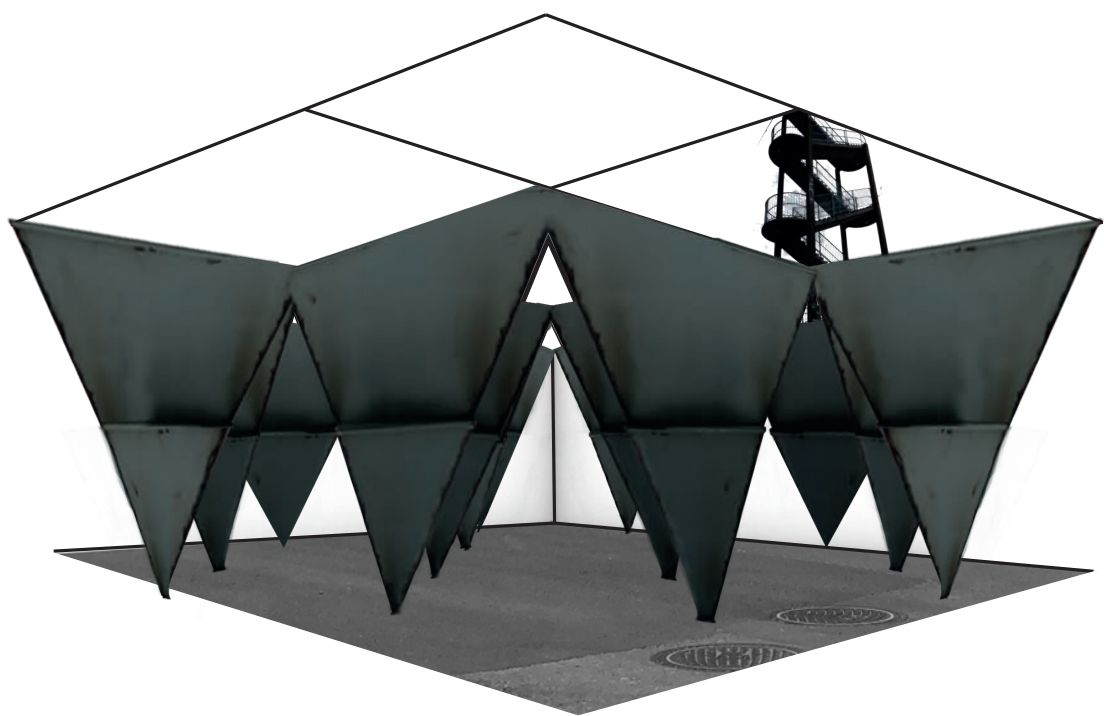




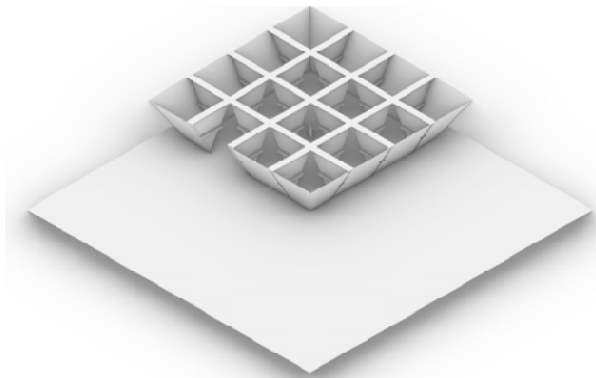


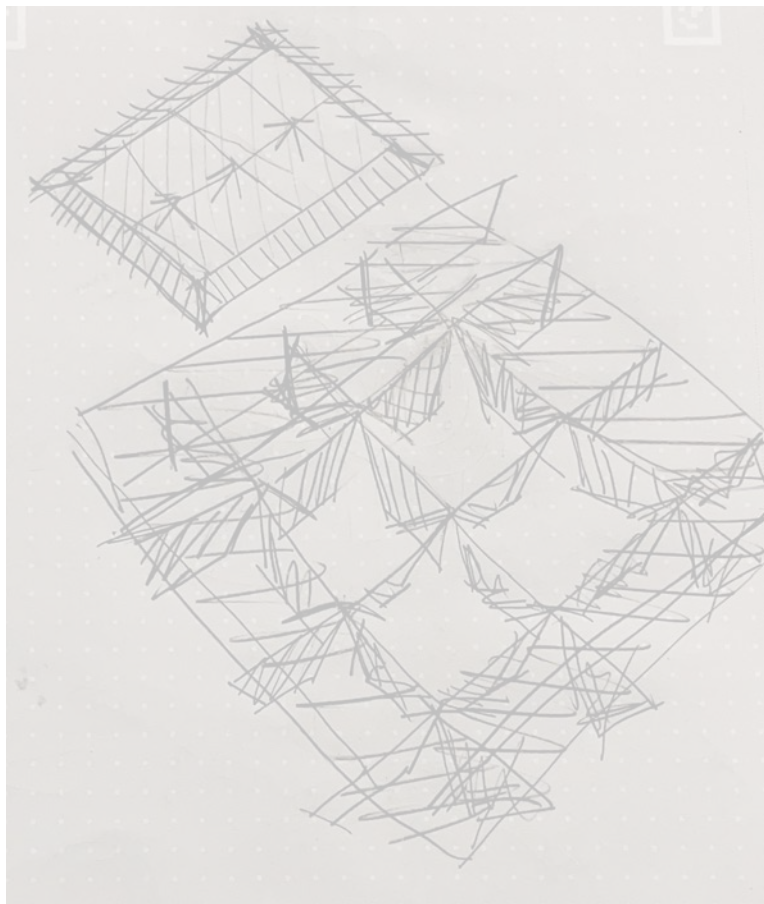


EXTERIOR PERSPECTIVE



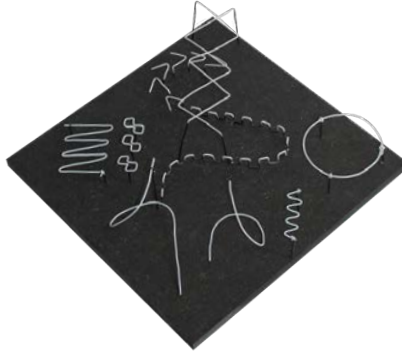
INTERIOR PERSPECTIVE



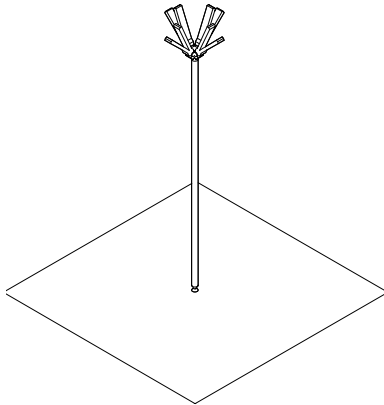


## MOVEMENT

The movements of the Götaälvbridge is part of a public everyday memory. This choreography was recreated on a hillside in central Gothenburg. The movement of the bridge is transformed to fit the experience of moving up and around tree crowns by a steep cliff towards a view. The variation of the pillars allows the structure to be placed in the terrain. The rods of the bridge are used in excess to hold the walkway mounted on the pillars and walls of the cliff.



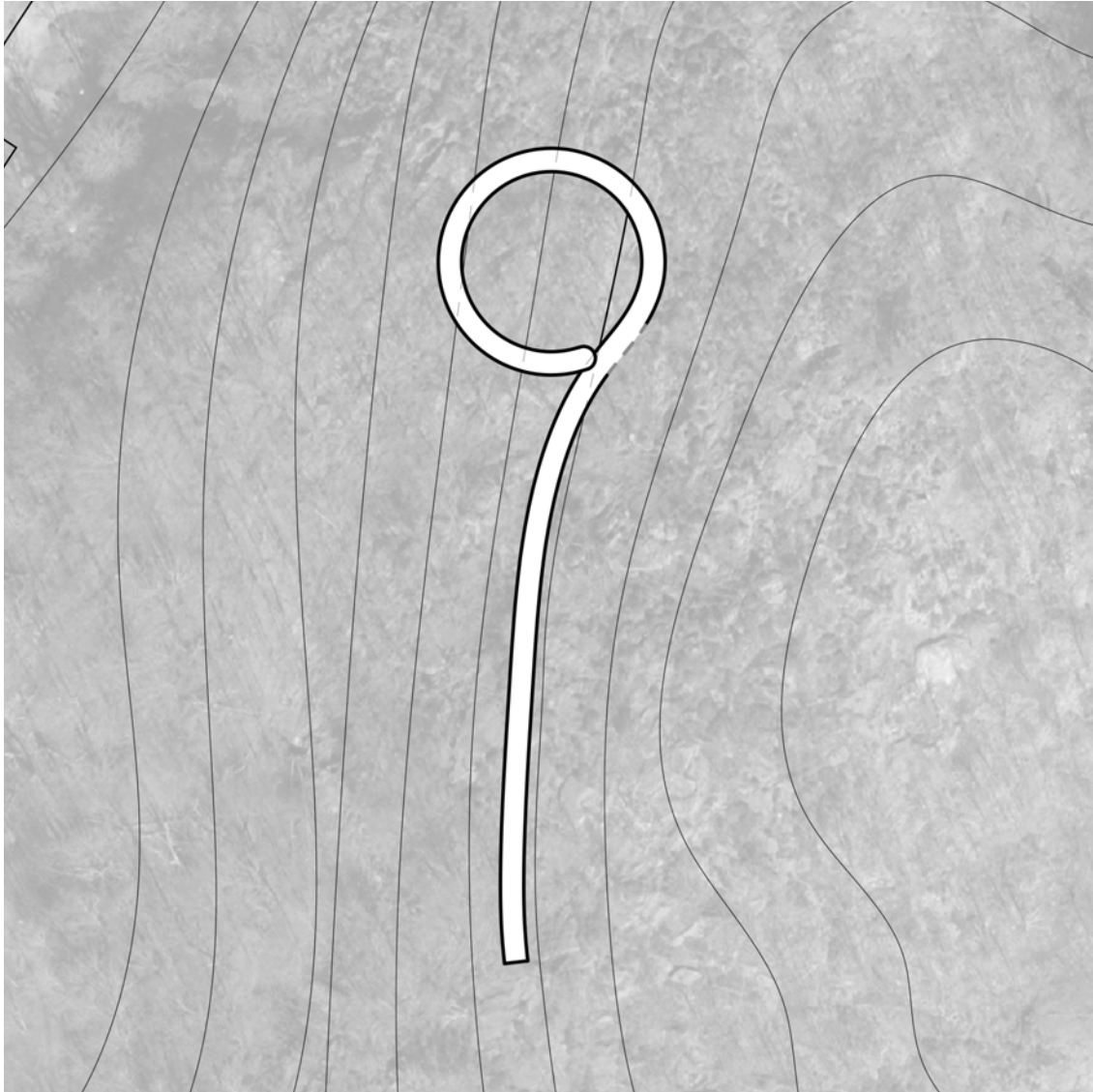
LAB NOSTALGIA: MOVEMENT



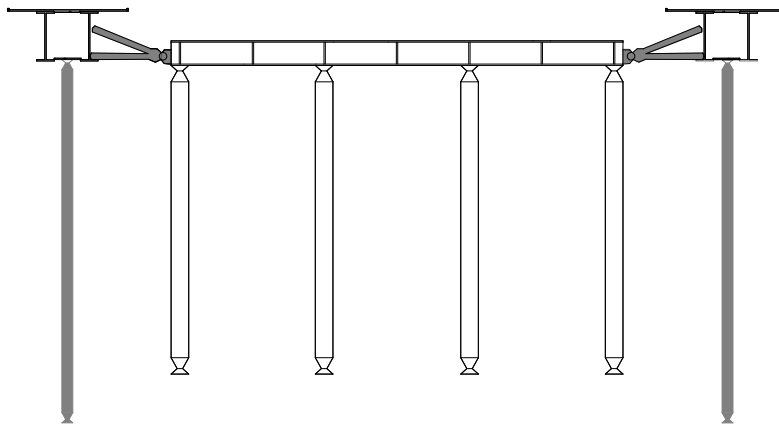
LAB FORMFINDING  
VARIATION IN HEIGHTS + COLUMN



REFERENCE: SOLANGE KNOWLES AT GUGGENHEIM



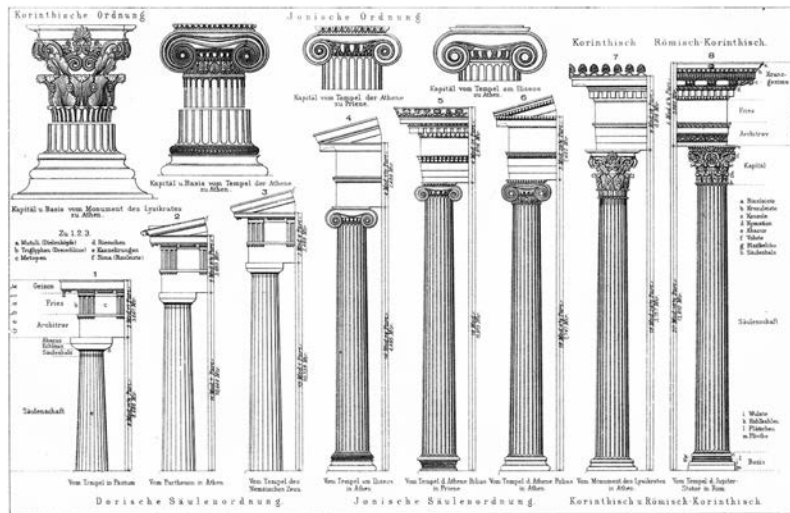


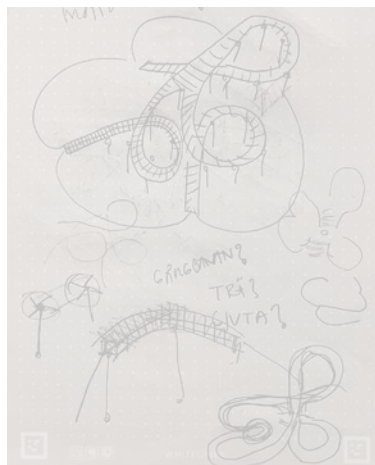
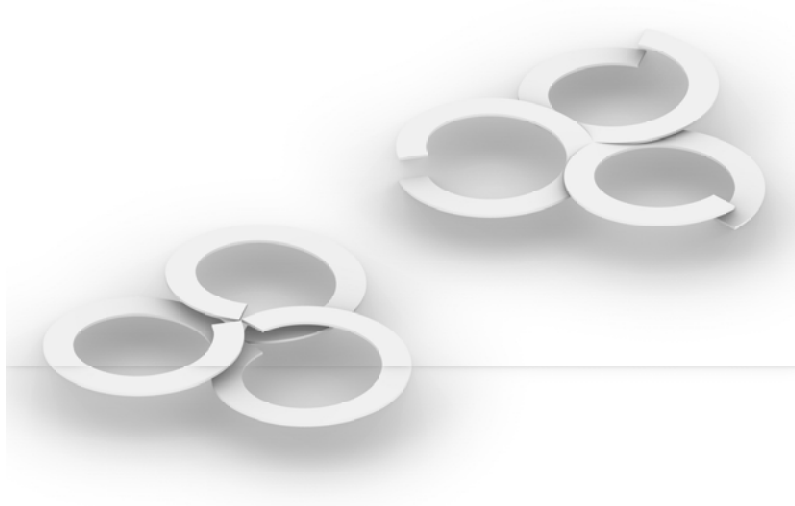






EXTERIOR PERSPECTIVE



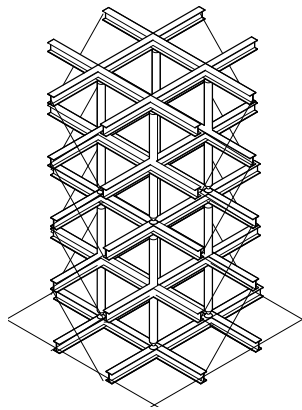


## STRUCTURE

This object is a parasite on the hillside overlooking the river and original site of the bridge. It aims to recall the beauty of the modernistic bridge structure built during the era of the stockholm exhibition 1930. The towering and cantilevering structure plays with features of the the surrounding buildings and gives access to views in two axes and a private rooftop terrace.



LAB NOSTALGIA: MOVEMENT



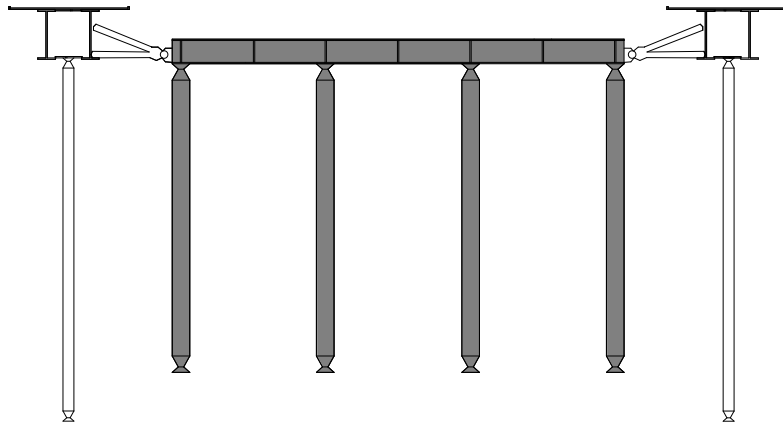
LAB 3: VERTICAL



REFERENCE: GRETA GROSSMAN

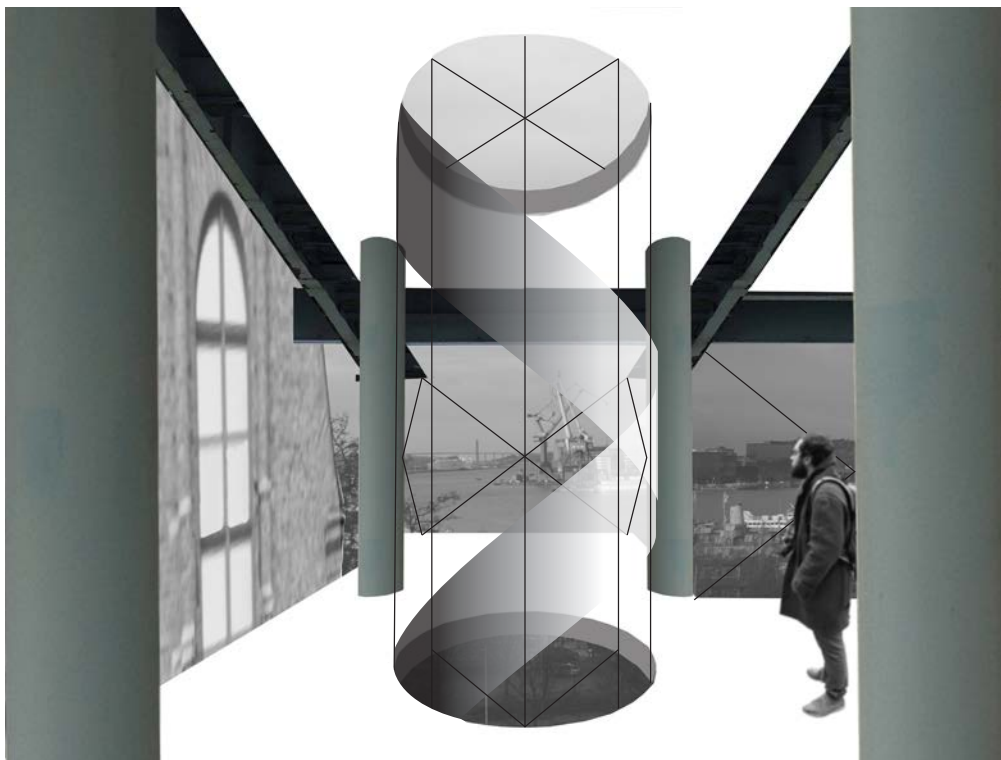


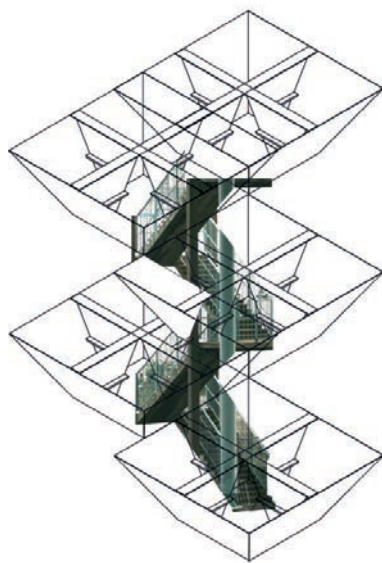


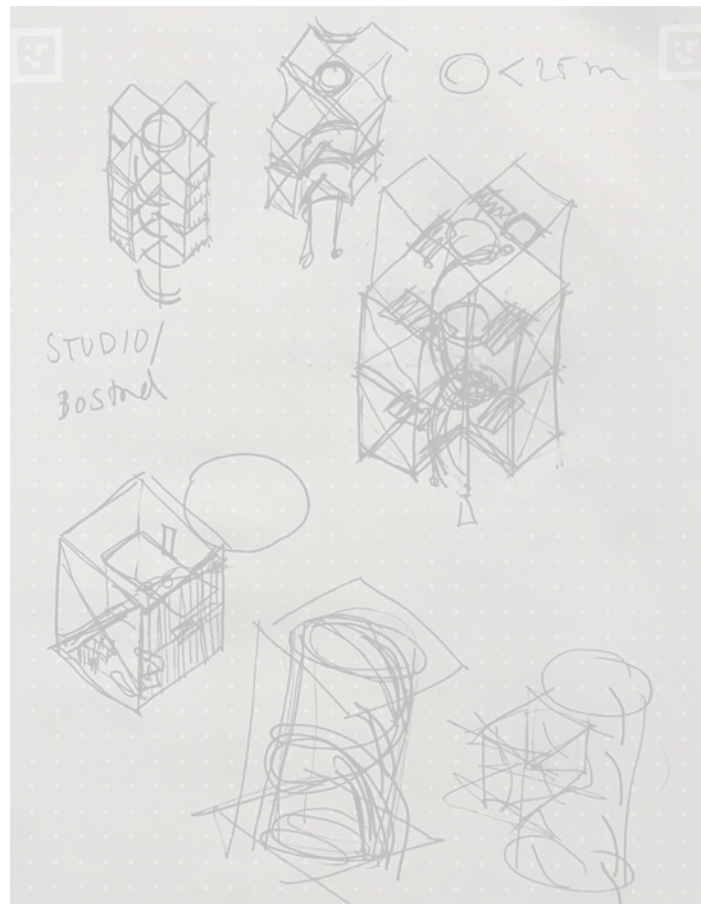




EXTERIOR PERSPECTIVE







## REFLECTION

The amounts of anecdotes surrounding the Götaälvbridge suggest a monument of everyday life. A movement pattern, a colour, a viewpoint.

But can you be nostalgic about an object as dry and functional as a bridge? What happens with it when it can no longer bear its entire load? Is the decaying material a source of existential experiences or irrational anxiety of separation?

Nostalgia has something unpleasant and sentimental about it, clouding our judgment and manipulating our emotions.

Can nostalgia make us keep old, stinky, values, trap us in digital algorithms, consume things? -Probably.

Yet it makes us feel connected to the physical world, time and our peers.

How much does nostalgia change the way we perceive the value of the material of the bridge?

Do we need nostalgia in order to see values that are not strictly measurable and rational like beauty, awareness of time and experiences of movement?

It has been interesting to create in order to tell a story rather than building something. This restricted way of representing with photographic material and with surfaces blending with the surrounding paper/frame was a good exercise.

I will continue to think about parts of the representations as ingredients and effective tools.

On the other hand I do not think my process needs more rules, rather exercising in freeing my mind and then simplify in iterations. I also think that this restriction has made me realise what methods I was longing for doing-like building conceptual models physically.

The booklet is a great format also, allowing the process to be visual and making reflection easier.

## MODULE 1

### Mapping:

Bridge

Water

### Inventory:

Parts of bridge

Demolition

Drawings

### Theoretical studies:

The architecture of the city by Aldo Rossi

Götaälvbron under åtta decennier by Lage Rosengren

Completions: Reuse and Object representation by Daniel Norell, Martin Rodhe, Karin Hedlund

Slutrapport: Sammarbete för ett cirkulärt Göteborg by Göteborgs stad

## MODULE 2

### Materialize inventory:

Digital parts of bridge

### Lab:

Identity

Demolition edges

Combining parts

### Theoretical studies:

#### Material

Urban mining  
Upcycling  
Reuse

### References:

Serpentine pavillion by Counterspace

Umarelli intervju/  
Anecdotes

Stockholmsutställningen

Filip Dujardin

Upcycle studios

Superuse studios

Bernard Tschumi -  
Parc Villette

Twelve room pavilion by  
Förstberg Ling

Case study movement

Vejle viewpoints

Sou Fujimoto

David Chipperfield

Solange Knowles

Greta Grossman



## MODULE 3

### Assumption:

The material have the capacity  
for a medium sized building

### Site:

viewpoints in relation to the shadow place.  
Gothenburg hillsides

### Chosen laboration results

Movement

Material

Structure

### Iterations on site

Combine labs

Additions

### Pillar grid model

wire

Topography

### Representation

Photographic material- reuse

Linedrawing-additions

Site- vague

### References

Carl-Viggo Hölmenbakk  
Sohlbergplassen Viewpoint  
<https://www.holmebakk.no/project/sohlbergplassen>

Peter Zumthor  
Ryfylke zinc mine  
<https://www.dezeen.com/2016/06/10/peter-zumthor-architecture-wooden-buildings-on-stilts-tourist-trail-norway-al-lamannajuvet-mine/>

Bram Vanderbeke  
<https://bramvanderbeke.com/>

## MODULE 4

### Portfolio

### Booklet

### Digital exhibition

### Portfolio

### Articulating plans

### Reflection