THE THESIS BOOKLET

THESIS PROJECT BY MARCUS HOLMGREN

A D V I S O R U L R I K A K A R L S O N A N D J O N A H F R I T Z E L L

IN THE PERFORMATIVE
DESIGN STUDIO AT
KTH ARCHITECURE SCHOOL

Summary *Short facts about the project.*

Site

An introduction to the site in Linköping

Design ConceptThe ideas for the design technique.

Inspirations

References

Summary

2013

Ulrika Karlsson Jonah Fritzell

KTH A
Performative Design Studio
STUDIO

A central station in Linkoping

PROJECT

One semester

Fifth Year

PREP. BOOKLET THESIS

Site

Linköping is a city in southern middle Sweden, with 104,232 inhabitants in 2010. It is the seat of Linköping Municipality and the capital of Östergötland County. Linköping is also the episcopal see of the Diocese of Linköping (Church of Sweden) and is well known for its cathedral. Linköping is the center of an old cultural region and celebrated its 700th anniversary in 1987. Nowadays Linköping is known for its university and its high-technology industry. Dominating the city's skyline from afar is the steeple of the cathedral.

The city is divided into two parts by the river Stångån. The main part of the city is on the west side. The idea is to get the river more centralized in the city and there for build more on the east side.¹





History

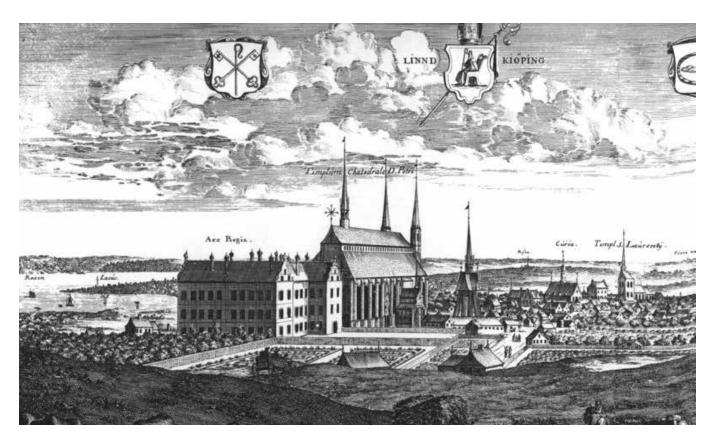
The city is possibly named after the Lionga ting assembly which according to Medieval Scandinavian laws was the most important thing in Östergötland. Exact location of the Lionga ting is not known, but it was along the Eriksgata. Köping means there was a market there.

Historically, Linköping is famed for being an early diocese, second in Sweden (within its pre-1658 boundaries) only to Skara. The diocese is first mentioned in 1104 in the so-called "List of Florence" (Lionga. Kaupinga). The monastery of Vreta Kloster near Roxen north of Linköping was established in 1128, and the oldest parts of the cathedral are also from the 12th century (although it has been changed many times since then, the eye-catching tower with copper roofing being a 19th century product). On several occasions attempts to achieve a separate Swedish archdiocese were based in Linköping, although, when they finally were successful in 1164, Uppsala was chosen instead.

Religious centers tend to become educational centers, and Linköping was no exception. A cathedral school can be traced from 1266. In 1627 the current Linköping cathedral school was established, making it the third oldest gymnasium in Sweden.

Also, Linköping was the site for the final settlement of the dispute between king Sigismund III Vasa and his uncle Duke Charles, the latter prevailing in the battle of Stångebro (today a sports field near central Linköping) on 25 September 1598. This ultimately led to the rise to the throne of Charles (de facto at the Riksdag at Linköping in 1600 and formally four years later) and the end of the short-lived Swedish-Polish personal union, as well as the execution of five of Charles's political opponents on the main square of Linköping on 20 March 1600.

Linköping was a small town until 1937, when the Saab aircraft industry was formed, starting a period of rapid expansion. Linköping University was established in the 1960s. Today the city is a center of high-technology and software industry.¹







Today

The central station in Linköping today will be to small for the communications in the future and the government has recently decided to build a new train track from south to Stockholm in the north. That will not be possible if the station is were it is today. There for will the station be moved to the east side of the river Stångån.

The new track from south of Sweden to the north will be called Ostlänken and are planed to be build 2021

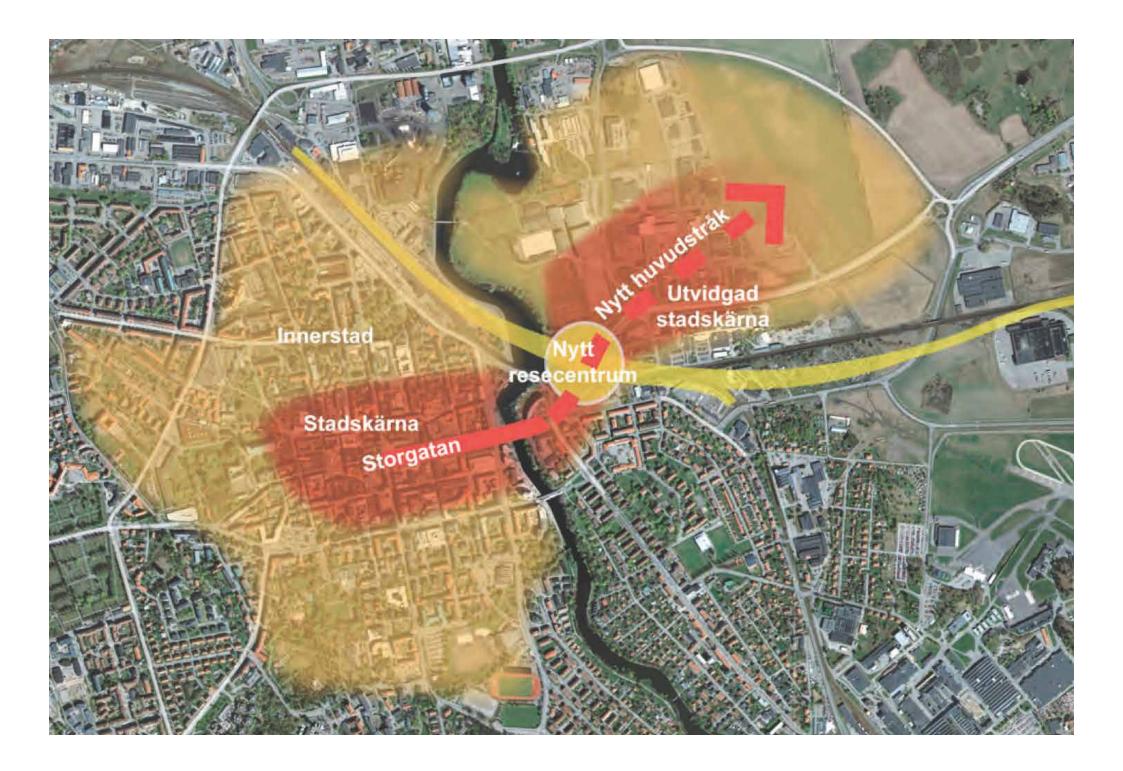
Existing railway from the east (Norrköping - Stockholm) consists of two tracks. New travel center will be built to handle the increased capacity as two additional tracks provide. The new tracks will be built with a geometry of $160~\rm km$ /hour.

The decision to place a new travel center on the east side of Stångån is the result of an extensive process where different options were studied. Current travel center is located on the west side of the river along Järnvägsgatan roughly 600 meters from the new position. choice to locate the new travel center to a new location based partly on the site should be able to take care of significantly increased volumes of rail and other public transport, and that the site has a good and perceptible connection with Linköping current center.



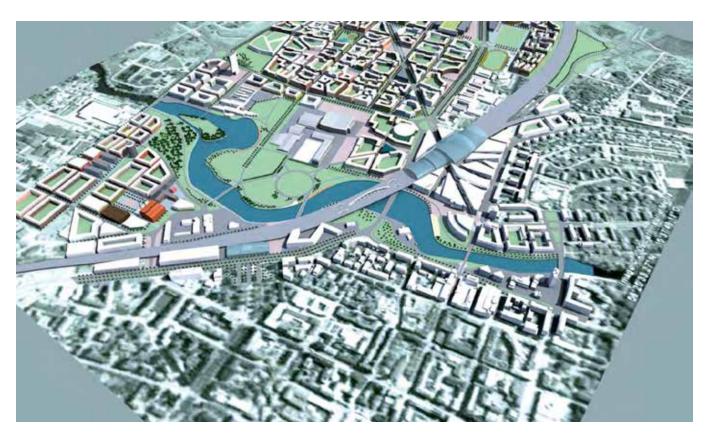






Vision Picture of a future central Linköping where the inner city has grown over the river, where Stångån is part of the city center, where a new railway construction takes place and is designed as a part of the urban area and has significantly less barrier effect than today.

For the exact program for the planned central station in sqm will I follow the city's original plans.







Design concept

I will in my project explore the concept of weak form in the sense that Andrew Zago describes it in his lecture at SCI-Arc 2011

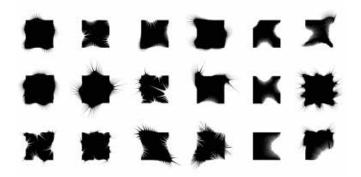
"Discipline relaxation of geometry and what that meant was that it was difficult, simply by that you could arrange the geometry of the surfaces in such a way that it was difficult to get that overall sense of what it was.

As you move around it appear that it has different kind of projections into space and you starting to lose the overall reading of it. The perfect example of it is the F17 stealth fire."

My interests will also focus, investigate and study the architectual effects of blurring and misrepresentation and how to create this. See if it's possible to create this effects and dismantle the distinct entities through complex stacking



The blurring and misrepresantation in the cloud dress by Oscar de la Renta (fall 2012)







Inspiration





Strong inspiration for my porject are Arne Quinze, The Sequence in Brussels Belgium









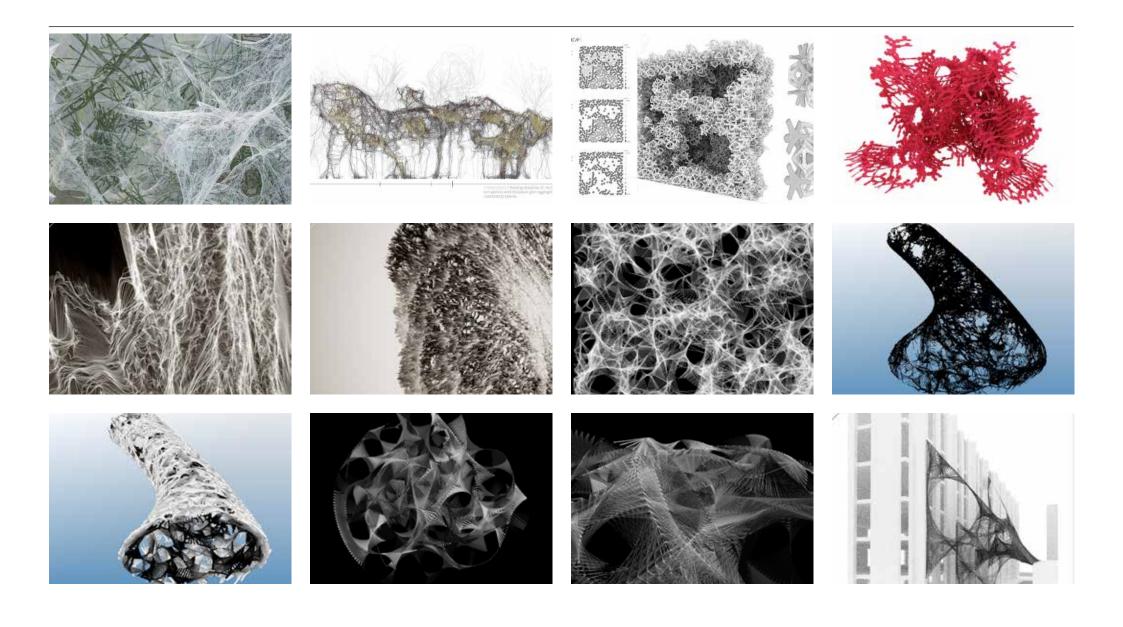
But also Tokujin Yoshioka white installation





and how the installation Anemone by Oyler Wu Collaborative plays with the oscillation between the clear and the blurry

Inspiration for Script and Stacking



Schedule

W2, 7-11 Jan

Site Analys, Site research

W3 14-18 Jan

Site research

Program analys and diagrams

Design technique in form of scripting

W4 21-25 Jan

23/1 Pin-up, Short presentation what the project will look like

W5 28-1 Feb

Massing

Form and function analyses

Stacking techniques in form of scripting

W6 4-8 Feb

Massing

Form and function analyses

Stacking techniques in form of scripting

W7 11-15 Feb

Developing stacking

W8, 18-22 Feb

Drawings Plans and Sections

W9 25-1 Mar

Drawings Plans and Section

W10 4-8 Mar

MIDTERM FINAL

W11 11-15 Mar

Re-doing

W12 18-22 Mar

Digital modelling

W13 25-29 Mar

Digital modelling

W14, 1-5 Apr

Drawings Plans and Sections

W15 8-12 Apr

Drawings Plans and Sections

W16 15-19 Apr

Drawings Plans and Sections

W17 22-26 Apr

Psyical model

CNC, Lasercutting and 3D printing

W18 29-3 May

Psyical model

CNC, Lasercutting and 3D printing

W19 6-10 May

Finish up drawings and models

Start working on the presentation wall

Start printing boards

Start writing presentation text

W20 13-17 May FINAL WEEK

16/5 Will everything hang on the wall

17/5 Presentation

W21 20-24 May EXAM WEEK

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References

1. Wikipedia about Linköping http://en.wikipedia.org/wiki/link%c3%b6Ping

2. Lecture by Andrew Zago at SCI Arc 2011
http://sma.sciarc.edu/subclip/andrew-zago-faculty-talk-clip_4821/

- 3. Stan Allen From Object To Field
- 4. Jeff Kipnis Toward A New Architecture