”En stadskärna för Nacka”
”A city core for Nacka”

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I stated in my thesis booklet (submitted in December, 2012), that I would like to work on the extension of metro line to Nacka and find the options of possible densification that would provide a mix of functions. I found it very challenging to decide to what extent and depth I should go while investigating the processes of infrastructural interventions, as well as combining high density with a limited space of possible development in the area.

By choosing a topic for my thesis project, I expected to learn how to use different methods and principles of urban design, as well as, how to investigate the processes of planning decisions, taken long time ago. By analyzing and researching the Master plan of Nacka 2012, I understood how the politicians and planners imagine the strategies for urban development and whether these proposals could ever be realized. What is really important in urban planning is to understand the historical development of the area. I was analyzing maps and documents in order to get the picture of the development that happened in the municipality of Nacka.

Even though in the first version of thesis booklet I focused more on an extension of metro line and mixed-use development as a building, it was really important to understand the processes and changes that new type of public transportation would bring to the area. It turned out that there might be other issues that really affect those processes, such as topography or infrastructure becoming a boundary for walkability. Other thing that really concerned me was the fact that Nacka does not have a strong identity. What earlier was just a couple of train stations on the way to Södertälje, now is understood as a place for two biggest shopping malls, accessed by cars. I needed to work on a general strategy for the whole area to forecast a possible development for this part of Nacka and find an identity that Nacka lacks, also to propose better options for public transportation and improve walkability. It was a challenge to pick an area as a starting point to test my ideas. Since I was aiming to find a city core in Nacka, initially I looked at Nacka Centrum which is considered to be the municipal centre of the municipality of Nacka, although it does not have a built mass to work as a physical city core for Nacka. When comparing different urban qualities in the area, I decided to work on Sickla Köpknäset.

When I came to the conclusions that Nacka never had or lost its identity, I proposed a strategy how to strengthen the city core of Nacka by adapting the theory of linear city. In that case, Vämdövägen road would be converted into a city venue and link Sickla Köpknäset and Nacka Forum. Together with the conversion, walkability would be improved in the area in order to access public transportation faster. By densifying what is already built, I would stop the urban sprawl towards the nature. I also thought on how a mixed-use development could appear in the area, for this I prepared couple of diagrams showing different actors and who would invest in that type of development. Also I wanted to emphasize that the development in the area would not happen at the same time. I based my strategies on urban theories and urban rules that I found relevant to my project.

In the future, I believe, as an architect or urban designer I will not only have to design the new forms or structures, but work with an existing urban context. I am happy with the research I have done and analyses I prepared in order to understand the background. Since I am not from Stockholm, it was really difficult to get to know the essential key points of the area. Therefore it is very important to know what is already done there, what the historical layers are and how to use the output of the research. It was very interesting to work with the existing municipal planning documents of Stockholm and Nacka and at the same time to forecast the possible options for a future. The process of my Master’s thesis shows that as an architect and urban designer I will have to deal with the consequences of the decisions taken long time ago.
A new metro line would bring major changes to the area of Sicklaön. Some parts will be densified in future in order to accommodate new inhabitants. The Master plan of Nacka Municipality (2012) provided a guidelines for possible densities.

Initial research shows, that development of built areas was very incoherent and currently are isolated from each other where landscape becomes a boundary. Most of the activities that this part of Nacka provides are gathered around Sickla Köpknärter and Nacka Forum which is also considered to be the centre of Nacka. Sickla Köpknärter mainly serves with retail and cultural functions, as well as entertainment and educational functions, meanwhile Nacka has a role of the centre of municipality; most of municipal and service buildings are located there. Worth to mention, that other parts also contribute to the whole picture of functions but functions there are widely dispersed.

Vämdövägen is classified as municipal street which means that it should serve for bigger load of traffic. Although it is historic road, it does not provide an image of a city venue. This means, that classification of the street must be downscaled in order to revive the street life and introduce new functions. Important spots in the area are reached within a walkable distance but some residential areas are still segregated and far away from existing train stations. Steep hills also act as a barrier that prolongs walking distance and duration. There are several pedestrian crossings and bridges located far away from each other.

Conclusion of the research states that Nacka city core cannot be found at one particular spot. A city core for Nacka could work in that sense when different spots are highlighted and working together, providing a mix of functions and variety of densities, as well as, an efficient public transportation and walkability.

WHAT NACKA LACKS?
- A city core with the mix of functions
- Efficient public transportation
- Options for densifying what’s already built
STRATEGY:

[1] converting Vämdövägen road into the city venue
[2] forming a city core by linking Sickla Köpkvarter to Nacka forum
[3] densifying what is already built
[4] providing a mix of functions

Since two biggest shopping malls in the area are the asset that attracts flows of people, they should be working together in the future. New development binds them and provides new functions in order to guarantee the flows of people. Vämdövägen is transformed into the city venue and links different spots that act like a city core. Green spaces are activated and provide public functions.
The municipality of Nacka does not have a strong city look-like core because there are no city streets. Main road is designed for intensive flows of cars and together with Saltsjöbana train become a barrier for pedestrians and some species. For this reason, the section where Värmdövägen is converted to a city venue, train tracks are merged with the street at the same level to provide better walkability, reduced speed and less cars. Street should have a distinctive character and provide commercial and recreational activities, as well as efficient public transport and pedestrian facilities, such as escalators and elevators where needed.
Sickla Köpknarter is chosen as a starting point to test the strategy in steps. Development happens in stages, the perimeter of Värdövägen street is being formed, new types of buildings such as Market Hall + Housing or Ski slope are being implemented to make area more diverse. Parking spaces are being kept according to the need. It is expected that cars would not be a necessity in the future. For this reason, parking space is divided into different lots. Every each of them could be given out to different architectural contests that buildings would differ and create a unique character of the area according to spatial and nature qualities.
background
Metro: Kungsträdgården - Nacka

Extending the blue line will provide EFFICIENT PUBLIC TRANSPORT to the FAST-GROWING Nacka - Värmdö sector, taking the pressure off bus traffic at Slussen. New metro stations are planned at Sofia and Henriksdal/Sickla. A section of line with one station at Slussen is included as an option. According to Stockholmsförhandlingen the project is to be completed after 2019.

- THE WALKABLE CITY Stockholm City Plan
  Adopted by Stockholm City Council on 15 March 2010

Nacka, with its more than 90,000 inhabitants of the region populous counties. However, there is NO REAL CORE WITH THE MIX OF FUNCTIONS and the urban life characteristic of a city. The dense city offers solutions to many of the challenges Nacka faces. In the dense city there good conditions for "An efficient and climate-friendly transport", then dense settlements create conditions FOR GOOD PUBLIC TRANSPORT to travel more done on foot or by bicycle. There is also a possibility to create "An attractive and sustainable built environment" with economical construction, and a mixture of functions. By DENSIFYING ALREADY BUILT environment, we can "PROTECT NATURE AND WATER for recreation and biodiversity" despite the increase in population. It requires, however, that small green areas containing natural and recreational values not built away. A densification of Sicklaön true Moreover, consistent with the regional plan's accounting of Western Sicklaön, ie "A regional approach in planning, "even if the comprehensive plan presents a more detailed land use for what RUFS 2010 denotes the central region of the core.

- MASTER PLAN OF NACKA MUNICIPALITY
  Adopted in April 2012
WHAT NACKA LACKS?

[+] A city core with the mix of functions
[+] Efficient public transportation
[+] Options for densifying what’s already built
research
existing situation
The guidelines of densification given by the municipality of Nacka, shows that the development of high density is planned for the western parts of Nacka, especially, areas of West Sicklaön. This part is in proximity to Stockholm city as well as has high proportion of built mass (residential, commercial, industrial, etc.)
The diagram shows that landscape has an influential role when it comes to planning the city. The topography of the municipality of Nacka has huge differences in heights, (shown every 10 m in this diagram). It happened that first development took flat areas and the rest had to deal with building on hills.
Green areas also influence the possible development. In the northern parts of the area, greenery becomes a boundary to what extent urban sprawl could happen. Proposed green links should connect different areas together and bind them in one network of green structure. These green areas should be preserved because they offer a variety of activities.
Green structure is a general term for the green network that is made up of parks, natural areas, green streets, beaches, gardens, cemeteries, plantation areas, traffic green spaces or more generally put - all land within the municipality that is neither built or paved. It is thought that only municipal owned parks and natural areas should be considered as representation of green structure. Nevertheless, every green area, even privately owned, should be included in whole network of green structure. Green structure should form an infrastructure equal to other structures in the city (traffic structure, building structures and so on).
Analysis of historic development shows that Vämdövägen road together with Saltsjöbanan train were one of the first developments that appeared in the area and linked some eastern parts of municipality with Stockholm city. It means that in a way these two have a poetic / romantic meaning to the area.
Even the current situation shows that most of the main municipal functions are allocated along the historic Värmdövägen road which serves as main municipality road. Nevertheless, the surroundings of this road are rich in green areas and water accessibility although the road itself is more like a boundary due to heavy traffic. There are several pedestrian crossings and bridges but located far away from each other. The question is, why it is so difficult to reach one point or another when whole area supposed to be walkable. Do they need different kind of infrastructure? Do they need more pedestrian crossings or bridges?

Analysis of walkability shows that different important spots in the area are reached within a walkable distance but some residential areas are still segregated and far away from existing train stations. Steep hills also act as a barrier or boundary that also prolongs walking distance and duration.
The analysis of functions shows that most of the activities that this part of Nacka provides, are gathered around Sickla Shopping district and Nacka Forum which is also considered to be the central part of Nacka. Sickla shopping district mainly serves with retail and cultural functions, as well as entertainment and educational, meanwhile Nacka has a role of the centre of municipality, that’s why most of municipal buildings are located there. Worth to mention, that other parts also contribute to the whole picture of functions but they are widely dispersed. In conclusion, it seems that some areas need to be strengthened in term of mixture of functions and be related to Sickla Shopping district and Nacka centrum.
looking for a city core
Nacka today is recognized as a home of the two, probably biggest shopping malls in Stockholm. Each of them offers a wide range of shops and services although at the same time, a shopping mall becomes an enclave that supports only its premises and surroundings. Nacka did not have a plan, zoning map shows that most of the areas are monofunctional and segregated from each other. That means longer travel distance to markets or other activities.

Commercial activities have always been attracting flows of people and cars. This is the force that keeps the area alive. Green areas should be protected and preserved as much as possible. For this reason the development should be focused along the Värmdövägen road which should serve as a street venue. Towards the street, buildings should stand directly on the edges of their parcels. This would endow the street with a continued streetscape. Ground-floor zones should work as retail and commercial in order to enrich the street life.

What if its liveliness could be extended towards each other to create a lively boulevard instead of Värmdövägen road? People living in Nacka should be encouraged to stop using cars, nature and water should become an activated public space that provides a mix of activities. By densifying and developing land that are left undeveloped in this part of municipality, this part of Nacka could accommodate approximately 13817 people (average number of storeys - 5). Of course some of the areas could be denser, some should remain low in order to preserve nature and view corridors.
a vision

Vämdövägen is classified as municipal street which means that it should serve for bigger load of traffic. Although it is historic road, it does not provide an image of a city venue. This means, that classification of the street must be downscaled in order to revive the street life and introduce new functions.

The municipality of Nacka does not have a strong city look-like core because there are no city streets. Main road is designed for intensive flows of cars and together with Saltsjöbanan train become a barrier for pedestrians and some species.

For this reason, the section where Vämdövägen is converted into a city venue, train tracks are merged with the street at the same level to provide better walkability, reduced speed and less cars.

Street should have a distinctive character and provide commercial and recreational activities, as well as efficient public transportation and pedestrian facilities, such as escalators and elevators where needed.
a visionary image of Värmdövägen street
The identity of Nacka is understood as “islands” developed in between the infrastructure and nature. Since this part of municipality of Nacka did not have a plan, it is obvious that what happened or appeared in Nacka as built mass is the result of infrastructure decisions taken long time ago. For this reason, Nacka does not have a strong city look-like centre or so to say - a city core. To conclude, Nacka core is not located at one particular spot, the core of Nacka is several spots highlighted and working together. Those spots are related with good infrastructure, public transportation and green links. In that case people would like to stay in the area because they can find all the functions and activities they might need.

The development should be achieved in couple of stages:

[01] conversion of Värmdövägen road to city venue
[02] speed of car traffic limited
[03] Saltsjöbanan train tracks merged with street
[04] development should appear close to Värmdövägen in order to strengthen the character of the street.
[05] some of the parking lots should be developed
[06] development of flat shopping mall roofs
Section of the existing situation shows that sometimes the surroundings of the road is forgotten in those generic guidelines provided by municipality. This diagram shows that sometimes the elements of landscape or other infrastructure like train tracks are not included and has an influential role in possible development.
By merging street with the train tracks, converted into the city tram, a new land for possible development is provided on the edge of the street. The ground floors of the new buildings should provide commercial / public functions in order to revive the street life.
And maybe in the future, when there is no such a big need for cars, the street could be pedestrianized for more social and commercial activities.
SICKLA SHOPPING DISTRICT is chosen as a starting point for testing the strategies of densification because:

[01] area of Sickla has a high proportion of built mass
[02] the area has the qualities of city-look-like, suburbs and nature
[03] some developments are already planned to happen
[04] the area would provide the intersection of 3 public transportation options
[05] the area is in proximity to Stockholm
[06] the area provides different typologies, densities, uses and types of nature.
Municipality of Nacka could invest in mixed-use development if developers contribute to the community with a public space or facility, e.g. playground, square, daycare, laundry, etc.

If development is planned on the rooftop, the owner of the building could invest in development or rent it out to other developers. The owner of the building could get a profit from letting out some of the premises or rooftops.

Group of people could be interested in renting out a lot or a rooftop for cooperative housing. They could get a loan from a bank. Another scenario - owner of the building invests in construction and provides some public shared spaces that could be profitable.

The variety of uses allows people to live, work, play and shop in one place, which then becomes a destination for people from other neighborhoods.
Mostly all of the area of Sickla Köpkvarter is being owned by one large property company Atrium Ljundberg AB. This company manages different spaces of retail and offices, rents it out to other smaller developers and companies.

Together with municipality, biggest property owners could prepare a zoning plan which would allow to divide huge parking lots to new properties that could be possible to rent or even sell to smaller companies.

The aim of the zoning plan should state that clearly, that each new building or development should contribute to the area with mixed-use functions. New developers should be aware by the guidelines that each lot should provide green public space, accessible 24/7 and some other functions that could be accessible most of the time. Some spaces of the existing shopping malls could also be listed as a public space, that could be rented out or managed by municipality, in order to make shopping mall more open and urbanized.

The municipality of Nacka could be responsible for converting Vämdövägen into the city venue, SL should take care of conversion of Sältsjöbanan train at this segment of the area.

Green link ties different green spaces together. Green link is a place where people can observe seasonal changes, hear bird songs, ride a bike or simply walk. Traffic should be limited. A narrow street with a housing close by could also serve as a green link. In case of Sickla Köpkvarter, green link stretches through the area and provides the walkability. Green link is understood as a public green spaces that includes sustainable walkability and transportation options such as public transport, bike paths, greenery. Also, it continues to connect other green spaces that are near by.
Different developers would bring diversity and mix of functions in the area. New lots should be given out to different architectural competitions and different architects in order to achieve diversity and unique character of the area that could be an example of densifying what is already built.
GUIDELINE #01

SLOPING SITE: buildings should follow the slope of the site in their volumetry and roof termini. By designing the buildings that follow the topography, the views towards the water and green spaces are preserved.

GUIDELINE #02

The maximum PERMISSIBLE BUILDING HEIGHT is reduced progressively as the street edge is approached.
GUIDELINE #03

It is said that maximum allowable heights of buildings must be lowered in proportion to preserve the line of topography. On the other hand, it is important to determine visually the height bulk relation. Sometimes what is allowed to build horizontally, blocks the view. In this case it is more efficient to design higher buildings and built vertically.

GUIDELINE #04

In the area, where differences in heights of topography become more like a barrier, it is convenient to plan vertical connections such as ramps and escalators in order to reach street level faster.
GUIDELINE #05

OVERLAY ZONES: In a mixed-use development, residential use shall always be positioned above commercial zone. Nevertheless, those zones could mix and be placed together even on the different levels. If building provides public space for everyone, it should be accessible and free to use.

GUIDELINE #06

URBANIZING THE SHOPPING MALL: After the development takes places, some of the shopping malls should be urbanized strategically. For example, some of the commercial functions shall be transferred to new buildings in order to revive the area somewhere else. Space of shopping malls could accommodate new functions such as daycare, hostel, public space, etc.

GUIDELINE #07

TRANSPORT: When a new metro station appears and uses the part of the existing building as an entrance/exit, building shall be higher and provide high density and new functions; building shall be accessible 24/7.
diagram of existing functions. Commercial dominates in the area, meanwhile residential uses are segregated by intensive roads. Currently area is mono-use.
[01] stage

devolution starts along the Värmdövägen street, the perimeter of other streets are being formed by new buildings; sport facilities are introduced to contribute to educational uses.
A new metro station appears in the area. New buildings are developed in order to provide new functions. Development along the Värmdövägen continues. Parking lots start to be used for new construction, although parking is being provided at the ground floor of the building.
[03] stage

parking lots continue being built up, new functions appear in the area as well while forming the perimeter of the streets; development continues to strengthen the Värmdövägen street. Green space becomes public space and provides activities. Parking lot serves as event place.
development continues according to the needs

[04] stage
development continues on the rooftops of the buildings, providing new functions and activities, new typologies of buildings are introduced.

if there is no need of high density in the future, some of the rooftops could be used for urban farming or community functions

building that provides people with sport facilities and flexible spaces for living that could be adjusted according to their needs

if there is no need for cars, parking building could be converted and provide a new mixture of functions

walkability facility
Taking over the parking lot

Existing situation - parking lots are full of cars, buildings do not provide a distinct character of the area, most of the facades are similar and there is only one entrance to the shopping mall.

Imagined view of street leading to metro station. Street is full of people, facades are open to pedestrians, buildings provide mixture of functions that could be available 24/7.
RIGHT:
Existing situation - Simbagatan street at Sickla Shopping district. Street is formed, proportions were kept but facades are dull and uninviting. The street does not provide any pedestrian function and leads to nowhere.

ABOVE:
Imagined view of Simbagatan street. Street is full of people, facades are being opened to pedestrians, car traffic is limited on certain days, street becomes social and leads to a market.
The first diagram shows the principle of one of the most crucial axioms of modernist urbanism, the figure-ground antagonism of building and urban space. In Le Corbusier’s urbanist ideology, the building is a singular object that is placed on a flat ground. There is no overlap between the two. Nowadays this perception is changing according to the values and living standards. Also, it is very important to understand the topographical character of the area and to adapt different strategies. Urbanism is no longer flat - never was. That is why Sickla should be divided into layers, overlapping with each other and eliminating boundaries between each other.
Example of how a parking building could be converted into a mixed-use building that could provide new functions. At first stage, some of the spaces could be rented out to different developers who would bring variety of functions. In a long-term, most spaces of the parking building could be converted into office, retail, other commercial spaces, also, adapted to student or social housing, hostel, rental, educational spaces, public green spaces, etc.

The diagram explains, that principle “everyone’s space - our space - my space” does not necessarily must be layered horizontally or vertically in a row. Sometimes those layers mix with each other.
presentation sheets
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FUNCTIONS

CLASSIFICATION OF STREETS

IMPORTANCE OF VARMOYAGEN

TYPLOGIES

INDUSTRIAL DEVELOPMENT

GREEN STRUCTURE

PRESERVATION OF GREEN STRUCTURE

WALKABILITY WITH EXISTING TRAIN AND PROPOSED METRO STATIONS

LOOKING FOR A CITY CORE
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GENERAL STRATEGY: densification
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VÄRMDÖVÅGEN CONVERTED INTO A CITY VENUE

THE VISION

Connecting hills with the street

Integrating building into the topography

Guideline #01

Guideline #02

Guideline #03

Guideline #04

Guideline #05

Guideline #06

Guideline #07

General strategy: densification
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DESERVATION - WHO WOULD BUILD?

WELCOME TO DIVERSITY

STAGES OF DEVELOPMENT

[01] stage

[02] stage

[03] stage

[04] stage

ACCESSIBILITY

ZOOM-IN: SICKLA
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MIXED-USE LONG-TERM STRATEGY

EXISTING TYPES OF GENERAL MIXED-USE

PRIVATE-PUBLIC LAYERS

EXAMPLE

FEASIBLE MIXED-USE

ALTERNATIVE MIXED-USE

SUGGESTED MIXED-USE PROGRAM FOR A METRO BUILDING
pictures of the process diary
pictures of the models