STOCKHOLM URBAN FOOD CENTER
Prinzessinnen Garten, Berlin, Germany
The subject of this thesis has developed from my specific knowledge of the world. I have learned that it is easier to identify a problem and address a vision as you feel a personal connection. I grew up on a farm in the countryside in Sweden. My father is a farmer and one out of the slowly dwindling crowd of producers that today supply the world’s rapidly growing civilization of people. At my parents house on the countryside I have seen my fathers frustration for not getting enough money for the milk he is producing or the wheat he is growing. I have during my childhood seen farmers giving up their professions as a large-scale production has become the only way to earn a profit. I have seen my mothers hesitation towards letting milking-robots taking over her job. In the agricultural-magazines spilling over my parents kitchen-table, you can see ads of farmers sitting in their office watching a computer-screen showing data about the milk just being tapped from a cow by a robot in the cow-stall below. I have heard my father explaining his worries about the farmers in the undeveloped world, not being able to sell their products because of the globalization of the food-distribution which makes their locally produced vegetables more expensive than foreign ones.

I have seen him getting sad as he think there is a link missing between him and the consumers- a link that cost both him and the consumers money.

As a farmer you are well informed about the long processing of food. The long chain of events for the milk going from the milk-lorry to the processing-industry, to the package-industry, to the retailer, to the supermarket and then days and weeks later finally ending up by the consumer. There are plenty of intermediaries but the inscript on the milkbottle still says “From your farmer around the corner”.

The food is something crucial. I always knew that of course. I knew that to stay healthy you have to eat, I knew that to stay alive you have to eat. But I never really made the connection between food and my future profession until writing an essay about Urban farming some years ago. Food production and urban planning have always been somewhat contradictory. The world is becoming one city, but is already one big food market. I believe that food; the production, processing and distribution of food have an important and crucial role to play in our mission for developing a sustainable world.
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We have entered the urban century. For the first time in history more than half of the world’s population live in urban environments. The demographic growth in rural areas is declined, while it in urban areas constantly and rapidly is increasing. In fifty years from now there will be more people living in cities than it is today living people on the entire planet.

Responding to the needs of a rapidly growing urban population have proved to be difficult. Cities today deal with problems on a range of fields concerning hunger and poverty, transports and pollution, big ecological footprints and waste.

Food is the most basic of human needs and as the cities are growing difficulties in bringing food to the people have increased. The food manufacture today is based on largescale agriculture in the countryside, a tortuous processing and long distance transportations. Its a long chain of events with plenty of intermediaries. When the food finally reaches the consumer it is expensive and not even fresh. Poor people can’t afford to eat it, rich people don’t want to eat it.
The urbanized population
Cities require a concentration of food, water, energy and raw materials which nature can’t provide. All the cities in the world are struggling with the difficult task to collect these amounts of raw materials to the city, and handle the circulation of residues, garbage and sewage, back to nature. While urbanization is usually thought of as a demographic or economic phenomenon, it has also major ecological consequences. Together with the flow of food, a corresponding amount of nutrients comes to the cities. But unlike in rural areas, the urban household and market refuse is usually lost, contributes to urban pollution, or is used as landfill. Removing people and livestock far from the land that supports them prevents the economic recycling of phosphorus, nitrogen, other nutrients and organic products back onto farm- and forest lands. What were once local, cyclically integrated ecological production systems, have become global, horizontally disintegrated throughput systems.

GENERAL INTRODUCTION
The lost connection to nature
The one way flow of nutrients to the city
The separation of farming from the city is a new phenomenon in the city’s history. In the past, urban agriculture was the primary method handling urban organic wastes. Since the 20th century the trend has instead been to “clean up” cities by the introduction of modern water treatment system. The waste is removed instead of being incorporated into the existing agricultural systems.

As a result we have growing volumes of waste that have to be moved from the city and that put increased demands on functioning infrastructures for sanitation. Slowly but surely the cycle have become a one-way street on which the food for the cities is imported and the waste is being exported. In developing countries where most of the future urbanization will take place, the western model of city sanitation is applied because it is believed to be the urban way of living. It becomes a symbol and a showpiece of modernity, which is an official attitude and behavior that has to change.
City waste
A major socio-cultural consequence of urbanization is that people are first spatially and then psychologically distanced from the land that supports them. For many urban dwellers, even food, that most vital of basic needs, is increasingly dissociated from its origins in the sun and soil. Food at the farmgate today is only raw material for an elaborate processing industry. Most wealth generated by the food sector in the North is in value-added processing, packaging, transportation, and retailing, effectively trivializing farming per se as economic activity and way of life. There is no wonder that food and farming occupies a diminished place in the consciousness of city folk everywhere in the “developed” world.

The Australian professor Julian Cribb, author of "The Coming Famine" and specialist on agriculture and environmental issues, believe this disconnection has to be fixed. “If we don’t, by 2050 we will have more than three-quarters of the human population – almost 8 billion people – living in places where they are totally without the means or the knowledge of how to feed themselves. Our giant cities will be gigantic death traps, at the mercy of even quite minor glitches in regional or global food supplies.”
The long chain of events and the distanced relation between producer and consumer
As consumers in industrialized countries we are used to be able to choose from all sort of global food in our local supermarket. We buy apples from New Zealand, green beans from Brasil and bottled water from Canada. We have the sushi-restaurant around the corner and we use all kinds of exotic fruits in our desserts. We have become used to having everything exactly where we stand.

But the price we pay for all this is high. Not just in swedish krones but also in the form of a declined environment. In the United Kingdom, as an example, around 3 out of 10 transports are food related. Since 1978, the annual amount of food moved by HGVs (Heavy Goods Vehicles) has increased by 23 percent, with the average distance for each trip also up by 50 percent. Air freight of fresh food has doubled in the past twenty years and it is a trend set to continue. The total distance in miles the food item is transported from field to plate, also called food miles, has increased extremely as the global trade in agricultural products have been expanding and as centralized distribution systems of large retailers and food manufactures have developed within national boarders. Food must travel through a complex network in order to supply cities.
Foodmiles
GENERAL INTRODUCTION

Urban vs Rural

The resultant mass movement of people from farms and rural villages everywhere constitutes the greatest human migration in history. Why do people leave rural life for urban life? Programming and designing the city requires good knowledge about what people are looking for. We need to ask ourselves; what is this urban living all about?

The differences between urban and rural, town and country are not straightforward and the definition of urban change over time and space. Issues related to food system are today regarded as a strange in the bar for planning. Although the designer’s basic aim is to improve quality of life among humans in the city and to get the city to better respond to human needs, matters to do with food are seldom discussed as a part of urban planning strategies. In the book, ‘More Urban, Less Poor’ urban is defined as “a city or other residence where a majority of the population have their income in activities linked to urban economy, which means activities not concerning agriculture, forestry, hunting and fishing. By definition, the city often stands in sharp contrast to agriculture. The fact that we percept rural and urban as two divorced activities is problematic as it becomes a limiting factor in planning contexts.
GENERAL INTRODUCTION

Urban agriculture

Urban Agriculture as a term is relatively new, as well as the recognition of Urban agriculture as a form of sustainable food production. The most widely used definition of urban agriculture are from Luc Mougeot, one of the world’s foremost experts on the subject.

“Urban Agriculture is an industry located within, or on the fringe of a town, a city or a metropolis, which grows and raises, processes and distributes a diversity of food and non-food products, (re)using largely human and material resources, products and services found in and around that urban area, and in turn supplying human and materials resources, products and services largely to that urban area.”
Urban farming being practiced in Havanna, Cuba. Cuba is regarded as the most sustainable country in the world when it comes to food production.
Stockholm region is growing quickly. The number of inhabitants in Stockholm City has during the last years increased by 10,000 persons each year and expect to exceed 1 million by 2030.

In June 2007 Stockholm City council adopted “Vision 2030- Ett Stockholm i världsklass” a document presenting the guidelines and the long-term future scenario for Stockholm. Guidelines explaining how to support the continued growth and analyses about how the needs of a rapidly increasing population can be met. In the document a few development areas are specifically being pointed out. One of them is “Söderstaden” an area located directly south of Stockholm inner city. “Söderstaden”, today a diverse environment, is going to be transformed into a denser more functional urban environment and being integrated in its surrounding neighborhoods. The development plans for Söderstaden is divided into 4 investigation areas. "Globenområdet", "Slakhusområdet", "Södra Skanstull" and "Gullmarsplan och Nynäsvägen"
The 4 different investigation areas in the development plan for “Söderstaden”
SPECIFIC INTRODUCTION

Slakthusområdet

The investigation area Slakthusområdet (The Slaughterhouse area) is northern Europe’s largest wholesale trading of meat, pork, and processed meat. The site established in 1912 has an impressing 100 year old experience and tradition of food handling. Today there are 257 businesses in the area, whereof one third belongs to the food industry.

As a part of the vision for “Söderstaden 2030” this is going to change.

The vision about ”Matstaden” (the Food town) that was decided upon in 2008 was in 2010 revised. The plans from 2008 visioning a more accessible food enterprise center has been slaughtered on behalf of an area with a focus on housing, entertainment and events.

Slakthusområdet is going to be developed into a classic dense inner city neighborhood with spaces for business, shops, restaurants and housing for approximately 2500-3000 people. The industries are going to be removed.

Today’s cluster of food companies are going to be relocated on a new site outside the city in Larsboda, Farsta.

Investigations and propasals are as we speak being done and developed and at the end of 2013 a program proposal for the new “urban” Slakthusområdet expects to be completed and ready to be evaluated by the public.
The building development at Slakthusområdet
ABSTRACT

Research questions

The development in Slakthusområdet actualize and raises questions. What role does food play in our society today, in the urban context and in the minds of the citizens?

Our tv-schedules are brimming with programmes about food. In the supermarkets “hundreds” of labels are giving us information about “organic”, “locally produced” and “all naturals”. As consumers of food we want to be informed about the food we are eating, but the long chain of events between food being produced and consumed, makes it all difficult.

Like mentioned in the very beginning, I believe that food; the production, processing and distribution of food are important designing factors for the future cities.

This thesis will not be about creating a selfsupporting city or totally rearranging the plan of our city. It will be about how to inform and create awareness in Stockholm 2030.

It will give an example of how Slakthusområdet and its tradition and heritage of food can be contain and modernized.

It's about trying to answear how foodproduction can become a part of the urban discussion, about how foodproduction and urbanity can live closer together. It's about informing and highlighting how our norms and values can get in harmony with the ecosystem.
Difficult decision makings in the grocery shop
SITE
The history of Slakthusområdet

During the years of 1906 til 1912 Enskede Slaughterhouse or Slakthusområdet was built, after architect Gustav Wickmans drawings. The area was established in order to overcome the lack of hygienic conditions at the private slaughterhouses.

At the end of the 18th century the so-called “slaughter compulsion” was introduced, which meant a monopoly on slaughtering for the public slaughterhouses.

The slaughterhouse was set up as an examplary facility. Contemporary technology was embraced -spaces for husbandry, slaughter process and technical installations were all designed for the new modernity. Every function with its own individually structure and expression.

The complex was given a strong geometric design with a simplified Art Nouveau articulation and facades were made of sand-lime bricks.
Situationsplan 1912. Ur Stockholms stads slaktthus

Slaktthusområdet, Stockholm - Kulturhistorisk inventering och analys


Original plan and program functions
Magnus Isæus kontor där han i Stockholm medverkade.

Wickman började sin karriär som medarbetare på så behövdes. Gustaf Wickman däremot hade kontor i ovanliga. Ofta arbetade arkitekten ensam i anslutning till sin bostad, med tillfällig hjälp av assistenter när vananliga. Vid sekelskiftet 1900 var regelrätta arkitektkontor anläggningar och innebar en komplex samordning av överlagrade skikt.


Slakthusets bebyggelsehistoria

1  Slakthusområdet strax efter färdigställandet, flygbild. Källa: SSA
3 Bergviks sulfitfabrik.

Bebyggelseutvecklingen, förbättrar, erforderlig för att Wickman blev välbeställd. Han ordnade bankprojekten. Wickman står bakom Skånes enskilda asleri och dynghus (8). Källa: SSA

Klassificerat område

Ur Den rationella fabriken

Av arkitekten Sigge Cronstedt.

Fönster, en stiliserad form eller en mönstermurning. Arkitekturen en förenklad jugendartikulering anpassad till det enkelt sakliga fasadmaterialet kalksandtegel. Byggnaderna har inte egentliga monumentala och moderna Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna har byggts av arkitekten Peter Behrens turbinhall för AEG Werkbundutställningen i Köln 1914.) Byggnaderna...
Stockholm Urban food center will become a hub for food. A place where production, processing, distribution and consumption of food can be made, an exemplary facility where we can be educated and informed. A place that makes us as citizens react and think about the concept of locally produced, food production and food security. A place where special competences can gather and discussions can be held. The Urban Food Center will become a hub from which knowledge can be retrieved and applied around the city.
Program

Preliminary wide program to be investigated and condensed:

**Production:**
- Urban Gardens
- Urban gardens in greenhouse
- Vertical Garden
- Indoor Hydroponic farms
- Roof top Garden

**Processing:**
- Restuarant kitchen
- Rooms for cooking classes

**Distribution:**
- Urban food shop
- Farmers market

**Consumption:**
- Restaurant/Cafe

**Information/Education:**
- Exhibition area
- Conference Rooms
- Nutrition Labs
- Growing school
- Plant growing shop
- Composting system
STRATEGY
Reconstructing and reprogramming

According to Stockholm City’s building classification the physical environment at Slakthusområdet is of special interest for cultural heritage conservation. Plenty of buildings on site are classified as cultural property.

It is therefore with great respect for the original structures I like to develop the plans for the Urban Food Center. The old brickbuildings will be reconstructed for different program activities and both new and original greenspaces will be created and transformed into urban gardens.

The urban gardens will play an important educational role at the center. They will not only learn the citizens of Stockholm about growing, about the services of a natural ecosystem, about how food production can be done in the city. They will at the same time be reprogramming urbanity, attitudes and behaviour. By giving citizen tools to change and become engaged about their food and environment, discussions can be raised and political strategies for making Stockholm a sustainable city can be formed.
Slakthusområdet, Stockholm - Kulturhistorisk inventering och analys

Stockholm stads klassificering

Fastighet med bebyggelse som är särskilt värdefull från historisk, kulturhistorisk, miljömässig eller konstnärlig synpunkt.

Fastigheter med bebyggelse vars kulturhistoriska värde motsvarar fodringarna för byggnadsminne i kulturminneslagen.

Byggnadsminnen samt kyrkobyggnader skyddade enligt 4 kap i kulturminneslagen.

Fastighet med bebyggelse av positiv betydelse för stadsbilden och/eller av visst kulturhistoriskt värde.

Fastighet med bebyggelse som inte går att hänföra till övriga klassificeringskategorier.

Fastighet med bebyggelse som ännu ej klassificerats eller obebyggd fastighet.

Kulturhistoriskt särskilt värdefulla områden redovisade i Stockholms översiktsplan.

Cultural property

The eleven cultural properties on the site
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BIBLIOGRAPHY

"Stadsbyggnadsstrategi Söderstaden"
*Sammanfattande dokument från Stockholm Stad*

Utvecklingen av norra Slakthusområdet - Matstaden.
*Inriktningsbeslut. Fastighetskontoret.*

Slakthusområdet i Stockholm
Kulturhistorisk inventering och analys
*Utredningsmaterial Stockholm stad 2011-07-07*

Continuous Productive Urban Landscapes,
*Andre Viljoen 2008*

Odla staden,
*Maria Höök, Kandidatuppsats Alnarp*

Omwägningens tid,
*Björn Forsberg*

I framtiden måste vi odla i staden
*Artikelserie i DN, 2012-06-28*