The SuikerUnie Factory towards a creative future
A gradual and flexible strategy for the site in Groningen
towards a creative based urban development

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Introduction

Colophon
The SuikerUnie Factory towards a creative future
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Guide for the reader

In this report the thesis for a graduation project in Urbanism at the Technical University of Delft is presented. The thesis consists of four frames.
In the first frame of the thesis, frame I: Graduation Field, the report focuses on the introduction of the field of research. We introduce the research questions, methodology and conceptual framework for this thesis.
In the second frame of the thesis plan, frame II: Content of the Research, the report summarizes the content of the research of the graduation project. The theoretical research, and the analysis of the site is presented. It gives an overview on the most important and prominent data used for the further elaboration of the design.
In Frame III: The strategy & design the reader can find the strategy and the design solutions for the site. The strategy and concept are visually presented. Next to that, the design to develop the site is explained.
In Frame IV: The conclusion we look back at the process & products of the thesis. We conclude, reflect, evaluate the research and design. We put the thesis in a larger context. What it the innovative part of this research and can be added to the body of knowledge within the field of Urbanism?
Foreword

The fascination for creative areas

This thesis is the result of my personal fascination for certain areas I had for several years. It all started with my passion for ‘creative factories’, old industrial heritage and the fascinating ‘vibe’ in these areas. In certain areas it seems that there is a certain sense of place (cerutti:2011). When searching for a graduation subject the question arose whether we as urbanists could somehow use these amazing places and initiatives that come along with it, within the field of Urbanism. This contemplation was the starting point of this thesis. Along the way the subject of the thesis was, of course, alternated, redefined and sharpened. The thesis progressed into a design, of which the outcome I could not have conceived in the beginning. But the base of the thesis; the fascination for creative areas in a city, remained throughout the thesis the leitmotiv for everything.

Hannah Cremers
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Industrial heritage, Strategies for redevelopment, Creative Cities, spatial design, urban regeneration, spatial characteristics creative urban development, creative-based development, transformation of brownfields.

**Summary:**

The shift in society from industrial towards a society where innovation, knowledge and creativity are the pillars of the economy has among others led to abandoned industrial sites. Government organisations are searching for ways to attract creative workers to their area. In the mean time conventional financial fundings of big redevelopments are no longer realistic, because of the building crisis. This thesis is aiming to develop a strategy for former industrial areas to redevelop, with the help of local (creative) entrepreneurs with limited big investments. We apply this strategy with a design on a former sugar factory in the city of Groningen. This former sugar factory is a 125-hectare big site, with a hardened factory site and meadows in the periphery of the city. The municipality bought the area in 2010 and is now wondering what to do with this plot of opportunities within their borders. The council itself has no direct building need, or the resources to invest largely in the area; on the other hand it is aiming to become a ‘city of talent’. The research question is: *How to create a spatial strategy for a creative-based urban development, with limited financial resources on a former industrial site, in the case of the sugar factory in the city of Groningen?*

Research shows that creative entrepreneurs can play an important role in transforming former industrial sites into attractive areas. Therefore it is important to know what spatial elements can attract these creative entrepreneurs to a certain area. It is important for them to agglomerate and meet in third places like bars and galleries in a certain area because that way they can a) get in contact with cultural gatekeepers b) derive a form of inspiration out of others, and the area c) use the creative reputation for their own cause. Research shows that creative entrepreneurs are drawn to an area that; a) has a certain *sense of place* b) is mixed in use, functions and style c) is flexible in their use d) provides contrasts of old (industrial) heritage and new attractive real estate e) is well accessible, close to the centre and provides a safe environment. A possible strategy to redevelop a former, not so popular enclosed site with creative entrepreneurs is by *placemaking and building an infrastructural framework*. By allowing creative entrepreneurs to use the space for all sorts of temporary projects the site a) gets known by potential future users B) improves the reputation of the site c) the value of the property increases and development can take place after a while. By providing in a basic infrastructural framework and leaving the infill flexible and changeable through time an area becomes attractive for all sorts of users.
The strategy of the SuikerUnie uses this model of strategy, and applies two new elements. A) The use of the plots remains flexible and adaptable through time. B; the strategy proposes a gradual investment model, where the investments in the public space and network co-evolve along with the development of the inhabitants.

In the case of the SuikerUnie the site is made accessible by adding a new clear basic infrastructural framework and a new station. The site is split up in three parts; a new creative district, an agricultural park, and a rural area. The creative district is located on the hardened area of the site. The former factory is redeveloped in a creative factory; the station is placed next to it and provides a new link to the other side of the train track. It connects to the current infrastructure and to two redeveloped hangars. One hangar is redeveloped into a biological food market the other into an educational institute. The rest of the creative area is coming to life by adding student container within the new infrastructural grid, and providing physical space for temporary projects. When investors (small or big) are interested, the containers can move a block and the temporary projects get a little bit less space. This way the area transforms towards a creative new district in town.

The agricultural park provides a spatial connection between the rural landscape and the city park outside of the area. The park shows in an aesthetic way all sorts of agricultural crops. The products are sold in the biological market and attract potential new inhabitants to the site.

The rural area is transformed from meadows into an area where one can work, recreate and live in a green environment. This is done by making a new infrastructural framework along the existing ditch pattern. The plots within the framework are rented out to allotment owners. They pay the ground price back in yearly small installments. These new users are encouraged to build their own house through time. Along with the amount they built on their plot, the yearly installment increases. The quality of the street-profile gets upgraded alongside with the transformation of the area. The more the new inhabitants invest in their homes, the more the municipality has to invest in the public space. Rules and guidelines for building your house prevents the area from being enclosed and scattered.

The outcome of this strategy is not predictable beforehand. The area becomes a new centre for living, working and recreating. But it is possible that the area remains a low profile green area where there are a lot of allotment gardens, student houses and a biological creative centre. The framework and the financial model is flexible and adaptable enough to capture these outcomes. The innovative part of the strategy is the combination of using all sorts of actors with a spatial need (not only creative entrepreneurs) and allowing the public space and the amount of investments by the owners to upgrade alongside with the development of the inhabitants. The gradual growth of the area, the flexible outcome of the area, in combination with the chance to start today makes this strategy truly creative.
Frame I
Graduation field
Chapter 1:

Introducing the field of research:
A case study for creative-based urban development
This chapter introduces the field of research. We introduce the field of research within the body of knowledge, and the physical area where the research is being applied. The subject of research, the creative industry and the spatial appliance of it, is explained and put into context. By shortly introducing the challenges and the potentialities of the chosen location it becomes clear what the spatial area of the research is. After this the aim, societal and scientific relevance of the research are explained.
1.1 The field of research

The post-industrial society: A shift in society
The decreasing amount of industrial labour in Western society and the rise of new economies in other parts of the world have led to a shift in Western society. The post-industrial Western society is no longer able to produce for low costs. This means other economies in the world are taking over a substantial part of the production of goods. The society is shifting towards a knowledge-based society (figure 1).

How to remain competitive
In order to remain competitive the Western society has to find other ways for economic growth other than producing goods. A way of remaining competitive is by adding value in the economy through knowledge. Innovation and adding value by thinking creative is becoming more important (Romein and Trip, 2010; Landry, 2006; Florida, 2002). Governments have also realised this. They are investing in knowledge and innovation. Governments have made attracting highly educated, creative, people an important topic of policy in the past years. Phrases like ‘creative city concepts’, ‘creative class’ are popular to promote and brand a city. Ever since the book of Florida (2002) was released it seemed that almost all self-respecting policy makers and planners were trying to elaborate the development of the creative city (Trip and Romein, 2010; Saris et al., 2008a).

The building crisis
Besides this shift in society there is an economical and building market crisis in the Netherlands (figure 2). The financial crisis has let to an situation where most of the urban developments have been put on hold. The housing market is ‘locked’, and project developers are waiting for better times. Top down planning developments, where project developers would develop a entire area according to a fixed end goal are no longer realistic (Broekmans, 2011). Big investments by project developers in one single area are not naturally anymore, ,because the guarantee that what is built will be sold in no longer present. What is left are vacant plots of land in the built-up area of the cities.
The starting point of this research

The vacant plots in the built-up areas of cities are not only big developments that are put on hold. It are also industrial sites formerly used for producing goods that are abandoned. These abandoned industrial areas are a part of our history as well. They can be an important element in the need for people to feel attached to their surrounding (Cerutti, 2011). Creative entrepreneurs seem to find old abandoned factories inspirational, and often establish their atelier or office in these factories. These entrepreneurs are seen as ‘agents of neighbourhood revitalization and as enhancing urban competiveness in increasingly knowledge-based urban economies’ (Smit, 2011:22). It are in fact often old industrial sites that are used for creative-based redevelopment (Heebels and van Aalst, 2010: 347;Hutton, 2006). The former brown fields are used as “cultural quarters”, “cultural/creative districts”, “creative hubs” or “innovation hubs” (INTELI, 2011:22).

The starting point or aim of this research is the contemplation whether it would be possible to redevelop a former industrial area, with the help of local (creative) entrepreneurs in such a way that it does not need the financial funding like conventional pre-crisis developments.

Creative entrepreneurs; who are these people?

In this thesis the phrase creative entrepreneur or creative worker is used a lot. But who these creative entrepreneurs are, might not be instantly clear. Lets start by saying there is no uniform definition for this group of people. A lot of researchers define creative entrepreneurs according to the profession they have. They define the
group by using all sorts of classification systems. But several researchers also debate whether it is possible to define one precise group of people as ‘creative’. The risk is that by classifying you exclude certain people who are not necessarily ‘uncreative’. Is a shop owner that custom makes bicycles for example less creative than a graphic designer who sits behind his laptop all day?

In this thesis we use the phrase creative entrepreneurs for people that have an inventive, curious spirit. With creative entrepreneurs we mean people that are willing to think outside the box, and see the world as a learning and testing area. *The common denominator of this group of people is not the professional branch they have in common, but the creative reputation, lifestyle and certain sense of place they appreciate, and value, highly.*

**The SuikerUnie: The choice of location**

In this thesis we will investigate the spatial consequences of this contemplation on a single case. Namely the site of the sugar factory in Groningen. This area is relevant to research for two reasons. The first reason is that this area is a vacant industrial area within the border of the city. The factory has recently become vacant. The municipality has purchased the area and is now wondering what to do with the site. The second reason is that the city also has the ambition to attract knowledge, innovation and creativity. The municipality of Groningen is branding it as a ‘city of talent’. The combination of a vacant site, and an ambitious plan of the municipality makes Groningen a relevant case study for this research. In the next paragraph the site is further introduced.

**1.2 Introducing the site**

Ever since the sugar factory opened her doors in 1913, the inhabitants of the city of Groningen (figure 5) could smell the distinctive scent of beetroot being processed into sugar during the campaign (harvesting season) when the wind came from the West. The factory processed beetroot, which was produced in the surrounding fields of Northern Netherlands. The sugar factory owned a site as big as 133 hectares (figure 4). The site contains among other large flooding fields for water storage (3+4), meadows for ground storage (5) and a large factory terrain (1+2) with some old factory buildings on it (see picture 6).

Like many industrial branches in the Netherlands, and other western countries, the Suiker Unie had to move its production towards emerging economies elsewhere in the world. In January 2008 the Royal Consun - the holding company of the SuikerUnie - decided to close its doors (Hoeve and Overbeek, 2010). By this decision the company acknowledged the wishes of the World Trade Organization and the European Union to reduce the production of beetroot sugar in favour of cane sugar production elsewhere in the world (Gemeente Groningen, 2009b). This shift from production towards other economies places the issues of the sugar factory in a bigger context of the shifting economy in the whole of Western Europe.
4. Overview of Groningen with the site of the SuikerUnie indicated with a white box
source: www.groningen.nl/suikerfabriek
date 16-09-2011
5. The Netherlands with a blue dot the city of Groningen
source: Google maps
6. An aerial picture of the site
source: www.groningen.nl/suikerfabriek
date 16-09-2011
The municipality has purchased the site and has to decide what to do which this location. The huge amount of ground becoming vacant within the borders of the municipality is an opportunity for the municipality. Groningen has an growing population and wants to develop as a compact city (Gemeente Groningen, 2009b). This means that city will have to develop new housing within the border of the municipality. The terrain is located near the ring road, a train track and a canal. Therefor the site is potentially very well accesible for the whole region. The municipality of Groningen is also thinking about its future. The city is a centre for many facilities in the Northern area of the Netherlands. The municipality houses an university, graduate school and hospital. The city has proclaimed that it wants to be ‘a city of talent’(Wallage, 2009). In order to do so, several big institutes like the municipality, university, graduate school and academic hospital, have joint forces in order to grow as a city towards the innovative & knowledge city of Northern Netherlands (see also chapter 7). But how can this branding phrase be spatially translated into a design? Could the site in any way participate in this aim of the municipality?

1.3 The societal and scientific relevance

The societal relevance

First we discuss the societal relevance of this project in three levels (see figure 9) On the lowest micro scale the social relevance can be found in the location of this unique site within the borders if the municipality of Groningen. The city of Groningen and her inhabitants should benefit of this location in the future. Since we know Groningen wants to grow in the future, and is also aiming to develop into a more innovative area. We can ask ourselves how this site could be helpful for the development of the city of Groningen?

When we zoom out to the meso scale of this research we find the societal relevance on the level of the city and her hinterland. The region surrounding Groningen has a decreasing number of inhabitants (de Jong and van Duin, 2011;PBL and CBS, 2009). What can this site mean for the future of the region around Groningen? Could it somehow become a catalyst for further development in the hinterland of the site?

On the largest scale the societal relevance is found in the societal context of this research. The context is for example the question how do we, as the Western society, react on the shift from an industrial economy towards a knowledge-based economy? What is our answer in competing with the rest of the world? Most of the planners and researchers acknowledge the shift towards a knowledge-based economy. But how do you as a city react on that spatially? The building crisis is forcing us to think about other strategies for redeveloping areas. This thesis is searching for an answer and is therefor relevant for the current economical environment.
The scientific relevance

Besides the societal relevance, the project is also scientific relevant because it tries to combine the concept of the creative city with spatial elements in the public space that contribute to the growth of the creative sector in the city. In the Netherlands several institutes are researching creative city concepts. OTB, the research institute of the Technical University in Delft, is researching ‘the application and effect of the creative city thesis in current urban planning’ (OTB Research Institute for Housing Urban and Mobility Studies, 2009: 82). The NICIS, Institute for Urban research and Practice, is in combination with the University of Amsterdam and the Technical University of Delft researching how to combine knowledge from research and design in urban designs for new creative-based developments (Smit, 2009). The scientific relevance of this thesis is that it can contribute to a broader debate about spatial design that benefits creative economy.
Chapter 2:

The research questions:
The theoretical & case specific questions
Problem statement
How to create a spatial strategy for a creative-based urban development, with limited financial resources on a former industrial site, in the case of the sugar factory in the city of Groningen?

After stating the field of research in the first chapter we can now derive the main objective of research in this thesis: The main research question. In order to answer this main research question we need to answer four sub research question. The questions and their relationship with each other and the end result are explained according to the conceptual framework scheme.

After defining what the field of research is, and what the related research questions are, the next step is to define the set up of the research. We explain the set up of thesis and the end results according a conceptual framework.
2.1 The main research question: How to strategically redesign for creative-urban development?

We state the research question of this research as follows: How to create a spatial strategy for a creative-based urban development, with limited financial resources on a former industrial site, in the case of the sugar factory in the city of Groningen?

Objectives of the thesis
In this thesis we address the search for what kind of strategy one could execute in order to attract creative workers to a certain area. After all creative workers are a highly sought after group of people in the policy of cities. The research question also addresses the search for a strategy to redevelop a former industrial site. Many western cities in this post-industrial society are dealing with vacant industrial sites. They are wondering what the best way for redeveloping such a site is. In this search we take into account the knowledge that top down development like mentioned in paragraph 1.1 are not a suitable option for redeveloping a former industrial area in these economic unstable times.

Design task
In this thesis plan we aim to combine the general wishes of government organisations regarding attracting creative entrepreneurs with the general spatial search for new program on abandoned industrial sites within cities. We apply this found knowledge on the case of the SuikerUnie. The design task is therefor show the spatial consequences of the strategy to redevelop the SuikerUnie site into an area where creative entrepreneurs feel at ease and that fits within the current societal conditions.

2.2 The theoretical and the case specific part of research

In order to answer the main research question we need to research two different fields of interest. We need to research case specific elements. And we need to research general theoretical knowledge. Figure 1 starts with showing the main research question. This main research question is divided into a general or theoretical part of research (orange), and a case-specific part of research (blue). The first theoretical questions are broad, general and placed in a bigger context. While the case-specific questions gradually zoom in to respectively; the city, the hinterland and the site itself. When reading figure 1 from left to right, the scale of the question is becoming more detailed when moving to the right. This relates back to the scheme that explains that this thesis is relevant for the society on three different levels (see also page 21, figure 10).
**Problem statement**

How to create a spatial strategy for a creative-based urban development, with limited financial resources on a former industrial site, in the case of the sugar factory in the city of Groningen?

**Evaluation & Recommendations**

Result: A vision & models of development for the area

Evaluation & Recommendations
2.2.1 The theoretical research questions
The general and theoretical part of the research (the orange part in figure 1) needs to investigate two subjects:
(A) What kind of spatial characteristics could attract creative entrepreneurs to a certain area?
This research question deals with the question how, and if, spatial physical elements could attract creative entrepreneurs to a certain spot in town.
(B) What strategy could be used to (re) design a district in the city so that it contributes to the creative urban development?
This research question researches the best way to design a strategy that could attract creative workers to a certain place in town. Also taking into account that there is no room in the current economy to invest large sums of money all in once.

2.2.2 The design related research questions
The case-specific research questions (the blue part in figure 1) deal with the potential of the SuikerUnie site for redeveloping into a milieu for creative entrepreneurs. In order to know whether this is possible we need to research different things about Groningen and the sugar factory itself. Figure 1 shows that the case specific (blue) information can be split up in different questions. On the largest case specific scale we need to research:
(C) What are the potentialities of the city of Groningen for creative city development?
This question deals with the question what the demand and wishes of the current creative industry in Groningen is. Next to that we try to derive what image or intangibles Groningen has in the eye of potential new inhabitants. Could we somehow use this image for the development of the SuikerUnie? (Bell&de-Shalit:2011)
The last sub research question wonders (D) what the potentialities of the site are regarding new development? In order to so we will research the historical, spatial and connective dimension of the site:
(D1) How is the site connected to its surroundings?
(D2) What is the history of the site?
(D3) What is remaining on the site?

2.3 The conceptual framework

The results of the sub research questions
The first theoretical question (A) deals with the spatial characteristics of creative milieus in cities. This results in a theory paper and guidelines how an area could be redesigned (AX). Of this paper the most important elements will be put in the thesis plan (chapter 4). The second theoretical question searches for the best strategy for creative milieus in the city (B). This result in text about what the best possible strategy for developing a creative milieu is (BX). The summery of this text can be found in chapter 5.
The last two sub research questions are the case specific questions. The third sub research question deals with case-specific knowledge about creative city development in Groningen (C). The results are presented in chapter 6. The last sub research question is dealing with the potentials of the site itself. We analyse the connection of the site (D1), the history (D2) and the remains on the site (D3). These results are presented in chapter 7. This results in important guidelines and principles for the strategy and the design.

When we know how to attract creative workers and we have an idea of what strategy to use, we can combine this with the knowledge from the case specific information analysis in a concept for the SuikerUnie Area (E).

In the second stage of the thesis we will elaborate this concept further into a strategy for the area (E1). This strategy will explain how the site can develop in the future. The strategy will be made visible in a design (F) of the terrain. By zooming (Fx) in on a crucial part of the design we can show how the strategy could look like in the future. The zoom in of the project functions as an example of how the strategy could function in the future.

Because the strategy, and therefore the design, is a flexible plan (see chapter 6 and 12) the design will show three different models of development for the area (F1, F2, F3). The three models of development are stages within the transformation process that could possible happen. They show how the area could look like in the future. The second model is a natural runner up for the first model. And the third model is a natural succession on the second model. The second model of development will be explained with more detail. In the end of the thesis we have a strategy and models of development for the SuikerUnie in Groningen (EX). Than we can look back and see how the design and strategy can help other projects in the future.

*The build up of the thesis plan*

The conceptual framework is used as a set-up for this thesis plan. The chapters in the frames of the thesis plans are ordered in the same order as the conceptual framework. The coming chapters start out on the big contextual scale, and zoom in onto the preliminary design of the site itself, just as the framework does.
Frame II
CONTENT OF THE RESEARCH
Chapter 3

(Creative) Entrepreneurs: How to attract them?
In this chapter we aim to investigate what kind of spatial characteristics could contribute to the creative city development. We search in literature for spatial characteristics that could attract creative entrepreneurs to a certain area. The elaborated article can be found in appendix A of the thesis. In this chapter, the most important conclusions and recommendation that can be used for a design are mentioned. The research is done within the course of theory of Urbanism, and is executed by the method of a literature review.
3.1 The benefits of agglomerating

First of all it is important to acknowledge that despite the rise of the Internet it is still crucial for creative entrepreneurs to connect and agglomerate. In theory it would be possible to work from any given location in the world, but literature shows that there are still three main reasons for creative entrepreneurs to agglomerate together (Heebels and van Aalst, 2010).

Making contact

The first reason for agglomerating is that the creative entrepreneur is within the proximity of a network and cultural gatekeepers. This way the creative entrepreneur can stay up to date to the latest knowledge, network with like-minded people and obtain new work (Heebels and van Aalst, 2010; Landry, 2008; Hall, 1998; Florida, 2002). Face-to-face contact is crucial for the starting creative entrepreneur.

Places that are not home or work are called third places. Contact between creative entrepreneurs and the cultural gatekeepers are made in these third places. This are places like bars, galleries, restaurants and art fairs.

Providing an identity

Another reason for agglomerating is that the creative entrepreneurs can be inspired by the characteristic and sense of place. This inspirational environment is found in old industrial buildings. These old buildings are often the starting point for more creative entrepreneurs to agglomerate together. Within the area there is a so-called sense of place. Several authors acknowledge this identity and sense of place as important (Florida, 2002; Franke and Verhagen, 2005; Heebels and van Aalst, 2010; Smit, 2011; Rae, 2007; Landry, 2006). The raw and dynamic feel of an old industrial building is inspiring for many creative entrepreneurs. Interviewed creative entrepreneurs describe their crucial reason for locating their business somewhere with words like ‘buzz’, ‘vibe’ and ‘something in the air’.

Building a reputation

Thirdly creative entrepreneurs should agglomerate because that way they can benefit from the creative reputation the district has. (Heebels and van Aalst, 2010; Hutton, 2006; Drake, 2003). Many creative entrepreneurs use the creative district to function like a business card for (future) clients (Saris et al., 2008b).

A more detailed description of reason for creative entrepreneurs to agglomerate can be found in the Appendix of this thesis.

3.2 Spatial attractive elements for creative entrepreneurs found in literature

Now we know that creative entrepreneurs agglomerate, one could wonder what spatial elements in the city could be attractive for a creative entrepreneur. When we know this, these spatial elements could be used in a development in order to make the environment appealing to creative entrepreneurs. Following part sums up several spatial elements that were found to be attractive for creative entrepreneurs. All this information is found through literature research.
Mix in functions and old and new
Creative people work hard; there is a thin line between work, leisure, deadlines and living. Research of Smit (2008) shows that many respondents mention that they would never like to work in a mono-functional industrial site, but also not in a mono-functional residential area. The combination of big houses or the presence of working space near the house is for many respondents a primal reason to establish in a certain area. The mix of new and old building is found to be very appealing.

Flexibility
The use of the space within buildings should be flexible. Creative entrepreneurs sometime need an unconventional size spaces for their products. But they might also – temporary - hire free-lancers. So the space should be flexible in use (Saris, 2008).

Cheap space
Many authors stress the importance of offering cheap space for creative entrepreneurs. They argue that creative entrepreneurs are often starting businesses and therefore have a limited budget. Research of Heebels & van Aalst (2010) shows that the more established creative firms have others wishes and demands for the urban space and architecture than starting firms. The more established firms use the creative atmosphere as their proof of creativity towards the client, but have a higher standard when it comes to their working space. When designing a creative area, besides cheap spaces, there should also be the possibility for more high-end development.

Accessibility
The accessibility of the place is important. According to Smit (2008) the respondent in the research carefully considers a creative place that is also good accessible for themselves (and their clients). The same research shows that accessibility is not as important as the sense of place a certain location has. So creative entrepreneur values the ‘buzz’ in the area more than the accessibility of the area. Cerutti (2011) however adds to this that good accessible public space is crucial for the development of the area. This emphasizes the social cohesion, safety and maintenance of the area. The regeneration of former industrial sites usually opens up a former isolated area in the urban tissue. Therefor implementation of new routes from surrounding area is a crucial process.

Contrasts
Cerutti (2011) in her book has done research to the reason why people are drawn to old industrial sites. She conclude that the appeal of these area is in the combination of contrasting elements. Old and new, green and industrial, open closed, big small and rough and smooth. Smit (2011) also mentions that creative entrepreneurs appreciate contrasting elements.
Spatial characteristics

Literature shows that other spatial characteristics that creative workers appreciate are:

- Third places for meeting and networking
- Historic ‘raw’ buildings
- Distinctive architecture
- Mix of old and new buildings
- Diverse mix in functions
- Tolerant climate
- Flexible environment
- A mix in cheap and more representative office space
- Accessibility
- Easy but limited entrances
- Contrasting elements in the built environment
- Waterfront development

3.3 The life cycle of creative entrepreneurs

It is important to realise there is a certain life cycle for creative entrepreneurs (ETIN:2008, Franke en Verhagen: 2005). It is interesting that the research of Smit and Heebels & van Aalst show that there is a distinction between starting creative workers and the more established firms. Starting businesses need the network, face-to-face contact and access to cultural gatekeepers more than the established firms. Starters highly appreciate and use of the so-called third places for networking. Their resources are limited so, flexible cheap works pace is crucial. Later in the development of the creative firms you see that the assignments are obtained in a bigger network. Third places are now appreciated on a personal level. Other spatial elements like parks, shops, and kindergarten are now more appreciated.

Pioneers

The first type of creative entrepreneur is the starting creative entrepreneur or the autonomous artist. This type creative entrepreneur is often the pioneer. These are the types that willing to develop an old industrial building from scratch. With endless energy and inspiration they transform the area in cultural and creative places. Face-to-face networking, bars and meeting places are crucial for the development of this buzz. This type of creative entrepreneur is not willing to pay high prices for the rent.

Established creative entrepreneurs

The second type of creative entrepreneur are the more established creative workers. They usually have more personal and higher demands on real estate and accessibility, use the creative district for branding their business as being creative and edgy. In reality they demand high quality real estate. They are prepared to pay higher renting prices. Their assignments are obtained through other networks than face-to-face contact. They use the third places for pleasure, and appreciate the proximity of schools and other facilities.
Creative entrepreneurs, the starting and the established ones, both are creative and strive for the same creative sense of place. Throughout their life cycle there remains a thin line between working, pleasure and living. Their wishes and demands are different however. For the first one it is low rents, and huge freedom to do whatever they want. For the established entrepreneurs the area should be more accessible and ‘design’, but they are willing to pay the price. A mix of these types of creative entrepreneurs could be established through time, while the starting creative entrepreneur will play a big part in the starting phase of a project. The more established creative entrepreneur would play a bigger part when the project is more developed.

3.4 Conclusion: Guidelines for the SuikerUnie

It is important for creative entrepreneurs to agglomerate and meet in third places like bars and galleries in a certain area because that way they can a) get in contact with cultural gatekeepers b) derive a form of inspiration out of others and the area c) use the creative reputation for their own cause. Research show that creative entrepreneurs are drawn to an area that; a) has a certain sense of place b) is mixed in use, functions and style c) is flexible in their use d) provides contrasts of old (industrial) heritage and new attractive real estate e) is well accessible, close to the centre and provides a safe environment. These elements are therefore essential too incorporate in the design of the SuikerUnie if the area needs to be attractive for creative entrepreneurs.

One can really show this location off. It isn’t as though you have to hide it. We just say in our brochure: good location, good people. (Heebels and van Aalst, 2010: 359).

Make Meeting places  Offer all functions
Mix old with new  Distinctive architecture
Mix function Cheap space  Create a Buzz
Chapter 4

Strategy for Urban Development: The flexible framework
In this chapter we summarise the research what strategy is often used to (re)design a district in the city so that it contributes to the creative city development. We search for the right strategy to work with local entrepreneurs. And we search for that strategy where one can keep developing despite the building crisis, and the lack of big fundings. We shortly discuss the actors that are present in such a process, and what their future perspectives is. Than we elaborate the background of the flexible framework. We explain which are the three phases within the development of a flexible framework.

By reviewing literature, that describes strategies that are used for to attract creative workers to an urban development, we can find possible strategies for the site. The results that are shown here are obtained by a combination of interviewing experts, attending several workshops and lectures, and doing literature research.
4.1 The contradicting future perspectives of the stakeholders

When an urban area is regenerated there are different actors involved. The most projects where creative city development is taking place consist out of a) the developer b) the municipality c) the local inhabitants d) the creative entrepreneurs e) the housing corporation. All actors have different future perspectives regarding the regeneration. First of all it is important to realise what the different future perspectives of the actors are. Versteijlen et al. (2008) mentions that in many situations the values, and future perspectives of the different actors are contradicting. Their first – exaggerated - future perspective would be (see also figure 1):

The first instinct of the developer is to think that he pays so he would like to decide exactly what is going to be planned

The first reaction of Municipalities is that they realise that they have to take in account the wishes of all the actors, and have often a minimum of finances. They are eager to sell their land for a good price.

Local inhabitants, who live in the surrounding area, often do not want any hassle in their neighbourhood. This is the so-called Not In My BackYard (NIMBY) principal. Where people are often oppressed to any changes in their direct surroundings, while they would like to benefit from the advantages. Besides this, the local inhabitants often still has negative feelings for the former industrial site (Cerutti, 2011)

When creative entrepreneurs are involved in the process, they are sometimes rejecting the way the government and the developer want to plan things. Rules and regulations are now and than seen as contra-productive in the creative regeneration process for creative entrepreneurs.

In many cases a housing corporation is also involved in the redevelopment. The corporation is going to be very sceptical in planning anything in an area where the rental prices are not optimal.
4.2 Seeing the added value; Creating trust & synergy

The first step in making a strategy for a creative-based urban development is to create trust, and make sure there is shared future perspective (see also figure 2). When all the actors involved realise the long term benefits a development, there is trust and synergy between the different stakeholders.

Developer: The developer needs to realise that his added value is in the long term. He buys or develops the building now for a relative small amount of money. And by adding creative entrepreneurs to the site, creating attractive events and so called ‘place making’ the value of the property will raise in the future.

Municipality: Like the developer, the municipality can get profit by place making. Next to this added value in increasing land prices, the use of creative-based urban development can also improve the deprived area. New jobs are created, and the city gets an innovative and creative image.

Local inhabitants: Local inhabitants gain more facilities like shops and schools. The urban space will often be improved. In a lot of cases the public safety will improve. Next to the improvement in their environment, the redeveloping of a former factory can also cause a new sense of pride for the local inhabitants.

Creative entrepreneurs: Creative entrepreneur benefit greatly from agglomerating. They can build their image upon the new factory, it gives them opportunities to network, and the old building might be inspiring for the creative process.

Housing Corporation: Housing corporation are by law obliged to invest in the public space of their property. By investing in a creative-based urban development such as a redevelopment of a factory, they can improve the public space to their surrounding property. In the long run the housing corporation can benefit from the increased rental prices and increase of the value of their property.
4.3 The flexible framework: Introducing a way of developing a creative-based development

The building crisis in the Netherlands has taught us that blue print developments (where the future perspective is planned ahead for 15 to 20 years) is not always the right way for developing an area (Broekmans, 2011; Het Kabelteam, 2010; Urhahn Urban Design, 2010).

A more flexible way of developing has already been applied during the Golden Age in Amsterdam. Around 1662 Stalpaeart made a new extension plan for the city. In his plan he only drew the building outlines (rooilijn) of the parcelling. The municipality was responsible for the infrastructure. Private investors were able to buy parcel per metre along the road. The painting of Berckheyde (1672) de Gouden Bocht in de Herengracht in Amsterdam shows the structure of parcelling. You see that some parcels are not yet bought while other parcels are already in use (Broekmans, 2011).

The principle of this strategy is that the owner of the land presents and makes a fixed infrastructural framework. Within this framework the infill of the plots is flexible, and adjustable through time. A newer element in this strategy is that we are going to use creative entrepreneurs and temporary projects for adding value to the land. This principle we will from now on call the flexible framework. The flexible framework is a process in three major steps. Figure 6 shows the graphical explanation of the different phases of the flexible framework.

Phase 1: The use of temporary projects

In the first phase of the flexible framework the place or site is used for temporary projects. Everybody with an idea can develop his or her – temporary - project on the site. Initiatives can have all sorts of impact. It can be a small initiative like, placing beehives. But is can also be a large festival for a big audience.

First of all it is important to use temporary projects because they are a good tool for place making and creating a buzz (Versteijlen et al., 2008). Secondly it is important because this way potential future users can get aquatint with the possibilities of the area. Temporary project are also important because they can function as a trial and error phase, where one can learn what the ideal routing is and what program works. Furthermore temporary projects are important to (re) build a positive image for a former industrial area (Cerutti, 2011). In order to make the best of the temporary projects the owner of the site and the municipality should have a minimum of rules and regulations and they should keep the prices low. This way all barriers for small initiatives are as low as possible.

Phase 2: Building the rules

In the second phase the project is like a game. The site is the board of the game. The owner of the site should acts like the game master. The (creative) entrepreneurs and other investors are the players. The goal in this phase is to determine the rules of the game, and determine the outlay of the board.

In this phase the infrastructural base of the site could be determined. Like the development of the Amsterdam Canal zone in the 17th century the owner is responsible for the infrastructural base of the site. The owner determines the
Current condition of the Site

Phase 1
Temporary place making
(provided by municipality & owner)

Phase 2
Layer of infrastructure
(provided by municipality)

Phase 2
The parceling with guidelines
(provided by owner)

Phase 2
Individual use of land
(provided by private parties)

Phase 3
Final use of the site
infrastructural grid, which is based on the trial and error phase in the beginning. Within this infrastructural framework the players get the opportunity to buy or rent a parcel. The owner develops certain rules that have to be applied on the parcelling. The stakeholders can develop whatever he or she desires as long as it is within the rules and the framework of the owner.

**Step 3: All grown up, being in line with the market**

This third and last phase in the process of a flexible framework is the adjustment of the prices and rules and regulations for the area. In this phase the prices for renting out property and real estate can be altered to prices that are in line with the market. Special funds, rules and regulations for enhancing (creative) entrepreneurs can be stopped. (Creative) entrepreneurs, also the established group, have found the location as being attractive, and start to benefit from the image of the area. Therefore they should become willing to pay a market conform price. The same goes for developers who on this point decide to invest in the area; these parties should pay prices that are market appropriate. Thanks to the place making and the branding of the (creative) entrepreneurs the added value to the land prices is significant. This is the moment in this long-term development where the first developers and owners profit from investing in the area.

**4.4 Applying the knowledge: make use of the available stakeholders**

*Combining the knowledge*

When we combine the flexible strategy, with the knowledge of the lifecycle of creative entrepreneurs we can use the strategy for a creative urban development. In the first and in the last phase the (creative) entrepreneurs are crucial in the strategy, but for different reasons. In the first phase of the strategy the role of the pioneering entrepreneur is crucial. These stakeholders are responsible for a kick-start of the project. These pioneering entrepreneurs, who are full of ideas and energy, use the site to make temporary projects. These temporary projects generate a certain buzz. In the last phase the established entrepreneurs or stakeholders are crucial. They are the entrepreneurs that want to use the creative and unconventional reputation of the area. They are bringing in the refunds, and professionalise the area. If established entrepreneurs are willing to settle down in this area, the first investors in the area can gain profit from their first investments.

*Using the local available stakeholders*

As mentioned earlier in this master thesis, the common factor of the creative entrepreneurs should be seen as shared lifestyle and passion for a certain sense of place, rather than a professional link. When applying a creative urban strategy as mentioned above, it makes sense to use available enthusiastic stakeholders that can relate to the ethos of creative atmosphere we want to establish in the SuikerUnie Area. Especially in the first phase where temporary projects and place making is taking place; local available stakeholders should be incorporated in the process. This are stakeholders that are in need of housing or a place to execute their profession or lifestyle. These stakeholders should also feel attracted to the reputation of a ‘creative..."
4.5 Conclusion: guidelines for the SuikerUnie

The strategy of making a flexible infrastructural framework with the involvement of pioneering entrepreneurs is something that could be applied on the SuikerUnie site. The area is not yet built-on. So there is room for the development of a new spatial framework. For the infill of these frames the development is depending on local available stakeholders. In the third part of the master thesis we will apply this theoretical strategy on the design of the SuikerUnie and see what adjustments need to be made in order to make it work for this area.
Chapter 5

Analysis of the case study: Site specific research of the SuikerUnie
In this chapter we discuss the current position of the city of Groningen and the creative industry within the city. The results shown here are the result of several researches that have been executed regarding the creative climate or reputation of Groningen. The results of the research combined with some precedents of creative flexible developments within the borders of the city give an overview of the current state of the creative climate of Groningen.

The methods used to obtain these results are data research, interviewing experts and site visits.
5.1 The context: The position of Groningen

The regional position of Groningen
The city of Groningen has a regional function for a lot of facilities. It is the only large city within the Northern Provinces. Therefore the city has got a rather big service area, and attracts a relatively large amount of people (Gemeente Groningen, 2009b; Romein and Trip, 2010). Health care, education and cultural facilities are also depending on the smaller towns surrounding the city. The position of Groningen might be stronger than what might be expected based on the population figures (Romein and Trip, 2010). The Central Bureau of the Statistics (CBS) had predicted a growth for the city of Groningen until 2040 (de Jong and van Duin, 2011).

Education
Groningen itself approximately has 184,213 inhabitants. Almost a quarter of all inhabitants are students. From these students only 2.8 percent is a creative graduate (Romein and Trip, 2010). Three quarters of all creative people in Groningen have had their education in Groningen. This means education is a big attractor for bringing in potential new creative workers. There seems to be a big connection between the entrepreneur and the city (ETIN Adviseurs, 2008).

Jobs
Groningen has approximately 134,207 jobs. That means that there are 728.5 jobs for every 1,000 inhabitants. This figure is higher that the surrounding region. Groningen acts as a regional facility for jobs (Romein and Trip, 2010). According to Romein and Trip one in ten workers are working in the creative industry (9.55 percent see figure 1). That means that they estimated that there are approximately 13,000 jobs within the creative industry. They state that in Groningen there are approximately 2,600 firms in the creative industry, with an average of 4,86 jobs. Research by ETIN (2008), which defines creative workers in another way, is stating that Groningen has approximately 5,548 creative jobs. With this number Groningen takes the seventh position within in the Netherlands.

When compared to other cities in the Netherlands Groningen holds the fifth place for the amount of creative businesses. This position is right behind Eindhoven (ETIN:2008). The added value of the creative industry in 2005 was 234 million euros (ETIN:2008). Since 2003 Groningen has an above average growth of employment within the creative economy, with 16 percent. The average growth in the Netherlands was 8 percent (ETIN:2008).

Specialization
Sources are not agreeing whether there is a specific specialization within the creative industry of Groningen. Romein and Trip (2010) find a low degree of specialization in Groningen (see figure 2). They state that within the creative industry there is no specific specialization found in the sub-sectors. Most employees (35.14 percent) work in the game and software development. Research of ETIN (2008) shows that when compared to other cities in the Netherlands the art sector in Groningen is relatively dominant in Groningen. Together with The Hague, Groningen has the biggest part art related businesses within the creative industry. Next to that Groningen has, after Hilversum, the ‘Media capitole’ of the Netherlands: The largest amount employment within the Media industry. The publishing sector in Groningen is the strongest within the compared cities: 30 percent of all jobs are related to this sector.
5.2 Spatial distribution of the creative industry in Groningen

Is the creative industry concentrated in a certain area?
Research done by Breeman et al. (2008) to the spatial distribution of the creative industry shows that there is not a specific ‘creative’ neighbourhood in Groningen (see also figure 3, 4, 5). ETIN (2008) concludes that the creative industry is mainly located in the inner centre, and the surrounding neighbourhoods. ETIN splits up the data in three categories, the art related sector, the creative business sector and the media and entertainment sector. They argue that mainly the art related sector is located in the centre the most because they benefit the most from exposure. The figures show that although there is a slight concentration of creative industry in the centre of the city, there is no specific concentration of the creative industry.
The Ebbinghequarter in Groningen which profiles itself as being creative (Stichting Creatieve Industrie Groningen, 2011), is statistically not more ‘creative’ than her surrounding neighbourhoods (Breeman et al., 2008: 57).

The location of the SuikerUnie and the Stadspark region
Research by Breeman et al. (2008: 57) shows that the Stadspark area, the area in the South of the project area has already some creative industry. Figure 6, 7 and 8 show the distribution of creative businesses per area according to three different definitions of creative industry. In two of the three figures the Stadspark area is indicated as a relatively creative area. This has to do with some artists that are already located on a former campsite, and publishing businesses located in the area.
5.3 Successful creative factories within the municipality of Groningen

Groningen has got three successful examples of creative factories within the borders of the municipalities. Successful examples of business complex locations are; Bloemsingel 10 (figure 10) also known as the Paleis, the Mediacentrale (figure 11) and the Puddingfabriek (figure 9). All three the examples are bedrijfsverzamelgebouwen (business complexes) containing al sorts of small creative related businesses. The Paleis also offers ateliers for artists. The Mediacentrale is meant for the more established creative worker (see also paragraph 4.3). The Puddingfabriek is for the starting creative worker, offering among others rental desks instead of rooms.
5.4 Wishes and demands from the local creative industry

Accommodation wishes
Research done in Groningen by ETIN (2008) shows that the average business has got 150 m². Creative entrepreneurs wish for 202 m². 53 percent demands a bigger accommodation. 40 percent of the surveyed creative workers have got plans to move.

43 percent of all the creative workers (the starting, semi-established, and established) work at home (see figure 12). The same research concludes that; semi-established creative workers (business between 1 to 5 years) often leave the home and search for a new form of accommodation (see figure 12).

The location choice
Creative businesses are often located in living neighbourhoods in the surrounding of the centre. Creative workers however, wish to be located in the city centre. 75 percent wishes to be located near the city centre, 57 percent wants to combine living and working (see table 13). Only 15 percent is willing to locate them on a mono-functional industrial site.

<table>
<thead>
<tr>
<th>% Respondents that find this element important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Near city centre</td>
</tr>
<tr>
<td>Near shop</td>
</tr>
<tr>
<td>Near cultural facilities</td>
</tr>
<tr>
<td>Near Educational facilities</td>
</tr>
<tr>
<td>Near leisure facilities</td>
</tr>
<tr>
<td>Possibilities to combine work and living</td>
</tr>
<tr>
<td>Diversity in inhabitants</td>
</tr>
<tr>
<td>other</td>
</tr>
</tbody>
</table>

When creative businesses want to move they would rather rent or buy space in an existing building than renting or buying in a new property. 45 percent of the creative workers would like to share facilities like, reception, meeting rooms etc. The top three elements that are relevant in future office space that are mentioned are:

Good balance between the price and the quality
Flexible lay out of the space
Social secure surrounding
(Also see table 14 and 15)
Accessibility by car, and a representative image of the building are also addressed as important element for a future business location.
The neighbourhood should be social secure, well accessible with enough opportunities to park the car. The new accommodation should be in an existing building, with flexible floor space, shared facilities and a good price/quality balance.

### Conclusion: Guiding lines for the SuikerUnie

Above-mentioned facts and figures indicates that if creative workers relocate they would like it to be near the city centre, in a non mono functional neighbourhood where working and living could be combined. The neighbourhood should be social secure, well accessible with enough opportunities to park the car. The new accommodation should be in an existing building, with flexible floor space, shared facilities and a good price/quality balance.
**Ambitions of the municipality**

The municipality of Groningen acknowledges the importance of the creative economy for further growth of the city. The municipality believes that the creative economy could enhance the living and working accommodation climate for both the city as the region. Besides that the creative economy could also act as an important pillar in the economy. It could be a catalyst for innovation processes in different sectors of the economy. The municipality of Groningen has set the ambition to (remain) within the top five of creative cities in the Netherlands (ETIN Adviseurs, 2008). The municipality states that they need to be ‘the place to be’ for creative entrepreneurs, and also need to stay ‘the place to stay’ for these people. A crucial element in attracting people is finding right accommodation for working and living. They want to become a ‘city of talent’ (Wallage, 2009). The coming years they aim to (ETIN Adviseurs, 2008:3);

1. Be within the top five of most creative cities. This creative city has to be executed on all areas; employment, reputation, attractive location climate.
2. Raise the amount of employment within the creative industry
3. Offer physical space for creativity and entrepreneurship. And attract these to Groningen.

**Plans to reach the stated ambition**

In order to reach the ambitions the municipality has set several plans and subsidies have been arranged. The Province of Groningen has, in collaboration with among others the Ministry of Economics, set up a subsidy program. This program aims to strengthen the economy of Groningen (the region), and raise awareness for the region as an innovative and inspiring location for business (de Vries and Schaap, 2010). The program (figure 18) is called the *Innovatief Actieprogramma Groningen* (Innovative Actionprogram). Another project to reach the ambition of the municipality of Groningen is together with other cities and regions within the North Sea Region (NSR). They are setting up a project called the Creative City Challenge (CCC). ‘The project ‘Creative City Challenge’ analyses challenges and barriers confronting the creative sector in the North Sea Region’ (figure 16 and 17). The project aims to develop a strategy that supports the creative industry. The project tries to further establish a innovative and knowledge-based, creative competitive North Sea Region (Creative City Challenge, 2010). A third big project of the municipality of Groningen is the ‘city of talent’ project (figure 19). Together with the university and the hospital they want to further expand the economy of energy, knowledge and health (Wallage, 2009). By working closely together with the Academic Hospital, The University of Groningen and the Hanze Hogeschool new investments in these fields can be done.
A case of temporary use of space: The Ebbingequarter in Groningen

A good example of a creative use of public space is the Ebbingequarter or the CiBoGa terrain in Groningen. In January 2009 the Municipality of Groningen has acknowledged the Ebbingequarter in Groningen as a ‘creative district’. Several (small) parties are collaborating in order to make the Ebbingequarter creative. The Ebbingequarter is an adjacent neighbourhood of the city centre. One big project is the Paleis a creative factory in a former university building. The Open Lab Ebbinge (OLE) is a successful example for redeveloping a building into a creative hot spot.

The strategy of the Open Lab Ebbinge

This projects aims to create a creative city development in the Ebbingequarter. This temporary project places pavilions on the former industrial site (CiBoGa terrain). The site is going to be redeveloped into housing. But because of several reasons, like the building crisis, the site remains empty for at least the coming five years. Now the OLE (Open Lab Ebbinge) is developing it into ‘a temporary village that is located in the new creative quarter in the city centre of Groningen’ (Ondernemersvereniging Ebbinge Kwartier, 2009: 4).

OLE is developing several temporary removable pavilions on a terrain of one hectare (see also picture 22). The soil for developing the pavilions is available for free. The use comes with the condition that the pavilions are easily removable and can be moved after five years. The costs for the built and exploitation are for the user. The owners of the ground are providing the ground for free (for five years). The owners are also already building the public space on the terrain. They are providing the basic infrastructure, lightning and green. This public space is according to the future street pattern for the site. Figure 21 shows the new biking path that going through the site. This biking path is already placed in the future grid of the development. All the future alignments (roolijnen) of the housing are respected by the temporary projects.

OLE held an open subscription for everybody who wanted to develop a temporary pavilion. All the plans were presented, and several projects were further investigated. Currently the first projects are being built. There is going to be a café, an outlet store, student cubicles and a hotel. The rest of the public space is going to be a City Beach, a terrain for events and a playing field (see also picture 22 and 23). The OLE project is a miniature city within the terrain.

Right page:

20. Logo of the Ebbinge Quarter
source: www.ebbinge.nl
21. Still from a video about the development of the Open Lab Ebbing
source: http://www.ebbingeci.nl/documentaires
22. Map of the temporary projects of the Open Lab Ebbinge.

source: http://www.ebbingekwartier.nl/index.php?view=projecten&id=1

23. Examples of pavillons that will be built during the course of time (2012) on the CiBoGa terrain in Groningen.

source: http://www.ebbingekwartier.nl/index.php?view=projecten&id=1
5.5 The search for other local stakeholders that appreciate the creative ethos

In chapter 4.4 we explained that for the strategy we need, besides creative entrepreneurs, other stakeholders that want to participate in the transformation process as well. These stakeholders should a) have a spatial need b) appreciate the *sense of place* that is created on the site. Research showed that a number of stakeholders could be interesting to involve in such a strategy.

*Students*: there is a huge deficit in the amount of rooms for students. These stakeholders are also the group of young and high-educated people that the municipality of Groningen like to attract to their municipality. In an interview with the projectleader of the OpenLabEbbinge it was mentioned that the studentcontainers that were used in that project, were rented out within 24 hours. Since the OpenLabProject has a similar sense of place and is also located in Groningen one could conclude that studentcontainers on the SuikerUnie terrain has huge potential as well.

*Houseboat owners*: For many years there is a huge waiting list for berths for houseboats. Currently the waitinglist to obtain a berth for a houseboats is more than nine years (Woonbotenland, 2012). This means there is a spatial need for these owners. The sight of houseboats is highly appreciated by creative entrepreneurs (van Aalst, 2010). While on the other hand houseboat owners have the reputation for thinking and living outside the box. Therefor they would fit within the *sense of place* of the SuikerUnie terrain.

*Allotment holders*: There is a huge deficit for allotment garden in the city of Groningen. For the allotment garden where one is allowed to built a little shed on site the current waiting list sometimes exceeds 1 year (NMF Groningen, 2011). In the meantime the interest in producing your own food, and using local products is growing in interest (Steel, 2011). The combination of a growing interest and the current waiting list makes that allotment owners are a potential group for intergrating them in the strategy.
Analysis of the case study: Site specific research of the SuikerUnie
After this broader investigation we are going to zoom in onto the site of SuikerUnie itself. In the next paragraph we explain the accessibility of the site. We look at the infrastructure, the water system and the public transport. In the second paragraph we research the remains standing on the site. In the fourth paragraph the history of the site is shortly explained. In the last paragraph we summarise the most important lessons or guidelines we can use in the strategy and design for the SuikerUnie terrain.

We start of with the accessibility of the site on the local scale, city related scale and the regional scal. We research this by:

1-2-3 order method analysis: This method indicates the connectivity of a given point on the site with its surrounding (de Bois and Buurmans, 2007).

Ped-shed/ reach bubble Analysis: With this method we are going to indicate how far one person could come in 10 minutes, by foot, bike, public transport and car from a given point (in this case the SuikerUnie). This shows the potential weaknesses and opportunities for the site regarding the accessibility (Ministry for the Environment, 2006).

The methods used for the history of the site are:

Data research: By researching the archive of Groningen, old pictures and maps of the site are obtained. By analyzing the maps we can define what the symbolic meaning of the site is for the city.

Literatures research: A few articles and books have been written regarding the history of the site. By reading it and summarizing it in this research we have an overview of the history of the site.

For the current state of the site we used the following methods:

We research the current state of the site by mapping: Walk-through analysis: By walking through the site and its surrounding we can determine what design issues are present. A walk-through gives an overview of the design issues, and is often the first stage of a more intensive appraisal that involves both qualitative and quantitative methods. This technique helps establish the extent of the design issues and identifies further work required (Ministry for the Environment, 2006: 39)

Tissue analysis: For this research we will analyse the current tissue of the site, and her surrounding. This will result in a map, which shows the existing tissue, grain and scale of the surrounding urban fabric.
Prologue: the use of the method ‘confrontation matrix’ in this thesis

For the analysis of the site specific research we will use the method of making a confrontation matrix. In this method we search for strengths, weaknesses, opportunities and threats of the site regarding the site and the possibilities for redeveloping the site strategically. The most important conclusions will be combined in a matrix. In this research we aim to elaborate on the three-step-approach described in Creative city policy: bridging the gap with theory (Trip and Romein, 2010). This three-step-approach consists of three steps. The first step is about gathering the right information. In this research we collect the data according to the methods described before. In the second step we make an assessment of strengths, weaknesses, opportunities and threats. The strengths and the weaknesses in the SWOT analysis should come from within the area. While the opportunities and threats come from outside the area (Schijndel, van, 2011). We make a matrix that consists out of four ‘lists’. This is what usually emerges from a SWOT analysis. In the third step the matrix will be transformed into a ‘confrontation matrix’ (Kearns, 1992). With this matrix we go beyond the ‘lists’ of the usual SWOT analysis. In this step the strengths and weaknesses, opportunities and threats that were identified in Step 2 are ranked along the margins of the matrix. By combining the lists we can find promising fields for investment and fields where we there should be damage control.

The four lists of the SWOT analysis are combined according to table on the right page. For example when the primary strengths are combined with the major opportunities you can derive what are promising strengths in which you should invest. This way ‘four types of options can be formulated: 1) invest in promising strengths to exploit comparative advantages; 2) mobilize resources to defend threatened strengths; 3) decide about whether to invest to strengthen promising, but weak areas; 4) control damage by weak and threatened areas by avoiding them and looking for alternatives' (Trip and Romein, 2010:8).
<table>
<thead>
<tr>
<th>Major Opportunities</th>
<th>Major Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Strengths</strong></td>
<td><strong>Defend</strong></td>
</tr>
<tr>
<td>Invest</td>
<td>Areas of threat matched by areas of strength indicate a need to mobilize resources either alone or with others</td>
</tr>
<tr>
<td>Clear matches of strengths and opportunities lead to comparative advantage</td>
<td></td>
</tr>
<tr>
<td><strong>Weaknesses</strong></td>
<td><strong>Damage Control</strong></td>
</tr>
<tr>
<td>Decide</td>
<td>Areas of threat matched by areas of weakness indicate a need for damage control</td>
</tr>
<tr>
<td>Areas of opportunity matched by areas of weakness require a judgment call: invest or divest; collaborate</td>
<td></td>
</tr>
</tbody>
</table>
6.1 The accessibility: The connectivity of the site

6.1.1 The infrastructural accessibility

The regional accessibility

Because the SuikerUnie has got its own exit on the ring road of Groningen, the site is very well connected to the regional infrastructure (see figure 3). Local car traffic can enter the site by taking the ring road, and taking the direct exit for the SuikerUnie. The other option is the ground-based road that is underneath the elevated ring road. Both roads lead to the same roundabout, which is the only entrance to the 133-hectare big site. With just one entrance for the regional and the local car traffic the accessibility of the terrain is very insufficient. Regulations prohibit large gatherings in the area, because there is only one entrance (Wal van der: 2011). If there is going to be any development in the future, the accessibility of the site is crucial and absolutely necessary. Figure 1 shows an aerial view of the only entrance of the site.

The accessibility for pedestrians and bicyclists

Analysis shows that the site is very hard to reach for pedestrians and bicyclists (see also figure 4). The site is only accessible from the Eastside (figure 2) of the terrain. Besides the lack of number of entrances the only access is; hard to find, difficult to reach, and unsafe to use (figure 3). It is crucial in the future to improve this access, not only in numbers but also in safety and accessibility.

Swot analysis

The confrontation matrix is suggesting investing in Park & Ride solutions, because of the regional reach and the potential for developing this on the site. Any plan that invests in optimizing access routes for cars and pedestrians should be defended. There should be decided on whether investment in the local accessibility does not conflict with the regional reach. And damage should be controlled when it becomes clear that accessibility could not be optimized.
Strengths
Very well accessed by cars on the regional level
Own exit from the ring road

Weaknesses
By car not connected to the direct surrounding tissue
By foot and bicycle only connected to surrounding fabric by one entrance
By foot and bicycle the site is insufficient, hard to reach and unclear in its use.

Opportunities
Potential on combining the regional accessibility with local public transport (P&R)
Potential in optimizing the current pedestrian access, also for cars.
A new station could connect the site to the other side of the train track
Potential in optimizing one car entrance also for pedestrians and bicycles

Threats
In order to be a successful new neighbourhood the site should be become well accessible:
The infrastructural knot surrounding the site in the South-East is a severe barrier for local connection
When there is no new station, the site remains isolated
If the current pedestrian is not optimized well the site remains isolated

Confrontation matrix:

Confrontation Matrix on the connection to the surrounding urban fabric

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengths</strong></td>
<td><strong>Invest</strong> in plans that regard Park and Ride solutions</td>
</tr>
<tr>
<td><strong>Weaknesses</strong></td>
<td><strong>Defend</strong> plans that invest in optimizing the access routes for both cars as pedestrians</td>
</tr>
</tbody>
</table>
6.1.2 The waterway system of the site.

The Hoendiep canal
The SuikerUnie terrain is located right next to the Hoendiep canal. This canal is an old canal leading from Leeuwarden to Groningen. The hoendiepcanal is not suitable for sailing boats because of the low bridges leading roads to the centre of Groningen (Hettenhausen, 2011). Table 8 mentions the bridges a boat encounters when heading for the centre from the SuikerUnie site. Figure 6 shows the low bridge of the train track near the SuikerUnie site. Right trough the city of Groningen there is a standing mast route leading from the Waddenzee all the way to Zeeland. This route is not going along the Hoendiepcanal. The municipality of Groningen wants to emphasize water tourism (PvdA et al., 2010). When a connection between the SuikerUnie terrain and the city centre by water is possible, water taxis could bring the Park and Ride people to the city centre (see also the confrontation matrix 6.3).

The waterstructure on the site itself
The site itself exists out of a hardened area, but the larger part of the area are the former flooding fields and meadows in the west of the area. The meadows and flooding fields are very nutrition rich and house many birds.

The potential of a harbour
The Hoendiep canal is already used by houseboats (Gemeente Groningen, 2009a). There is also potential to develop a harbour. Creative workers appreciate water development (Heebels and van Aalst, 2010; Smit, 2011). In fact it seems that everybody in the built environment appreciates water (Urhahn Urban Design, 2010). Therefore developing the waterfront and adding water has got potential. The harbour has also potential because there is a high demand for storage places of houseboats in Groningen (PvdA et al., 2010).
### Strengths

- Nutrician rich water at the floodingfields
- Interesting old *waterloopje* between the main site and the meadows (SES)
- There are already housing boats at the site

### Weaknesses

- The current bridge towards the city is very low
- The Hoendiep is not part of the Standing Mast Route.

### Opportunities

- The site could become a harbour
- In the future there could be more housing boats
- Opening up the water way to the city centre and beyond
- Potential for combining Park and Ride facilities with water taxis
- The flooding meadows could become a lake like structure for birds and recreation

### Threats

- Developing a harbour is only interesting if there are enough ships and possibilities for them to recreate.
- Water taxis are only interesting if they could actually deliver people to the city centre.

### Confrontation Matrix:

<table>
<thead>
<tr>
<th>Confrontation Matrix on enhancing the waterstructure</th>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strenghts</strong></td>
<td><em>Invest</em> in a harbour that among others houses housing boats.</td>
<td><em>Decide</em> if making a lake is interesting enough for water tourism to come to the site</td>
</tr>
<tr>
<td><strong>Weaknesses</strong></td>
<td><em>Defend</em> the Park and Ride plan with water taxis from being impossible because of low bridges</td>
<td><em>Control the damage</em> if the city centre is not accessible and there is no link to the Standing Mast Route</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name bridge</th>
<th>Free height</th>
<th>Width</th>
<th>Open/Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge ring road</td>
<td>-</td>
<td>-</td>
<td>Closed</td>
</tr>
<tr>
<td>Train track bridge</td>
<td>2,10 metres</td>
<td>7,8 metres</td>
<td>Open</td>
</tr>
<tr>
<td>Hoendiep bridge</td>
<td>2,20 metres</td>
<td>6 metres</td>
<td>Closed</td>
</tr>
<tr>
<td>Abel Tasman bridge</td>
<td>1,86 metres</td>
<td>7 metres</td>
<td>Closed</td>
</tr>
<tr>
<td>Eendrachtsbridge</td>
<td>1,25 metres</td>
<td>9,95 metres</td>
<td>Closed</td>
</tr>
<tr>
<td>Sluisbridge</td>
<td>2,10 metres</td>
<td>7 metres</td>
<td>Open</td>
</tr>
</tbody>
</table>
6.1.3 The plans for the public transport

The Southside of the terrain is next to a train track going from Leeuwarden to Groningen. Currently there is no station near the area. But there is huge potential in developing a new station around the SuikerUnie terrain. This is because there is a plan called FrameworkRegionRail (Project RegioTram, 2010 see also figure 11). This plan deals with the ambition of the city of Groningen and Assen to become better accessible in the future. Since the ZuiderZeelijn is not going to take place. The government is offered money for compensating this loss in accessibility to the rest of the Netherlands. There is a sufficient amount of money for making Groningen and her surroundings better connected to the inner city. One of the plans is the make a new tram track leading from Zuidhorn, via the SuikerUnie, to the city centre. This tram track should have a number of stops (figure 9). Another plan is a new train track leading from Groningen, via the SuikerUnie, to Drachten (figure 10). This means that in the future there are going to be three lines coming right through to the SuikerUnie terrain. On the latest maps of the plans of the FrameworkRegionRail a new stop at the SuikerUnie is already drawn. The development of a station has got great potential. The combination of the Park and Ride and the water taxis makes the new station even more potential.

Conclusion: Guidelines for the SuikerUnie

The confrontation matrix is suggesting investing in plans that regard combining new infrastructures with the new station. The design should defend the new station form stagnating because plans do not take place. We should decide whether a Park and Ride is still relevant if there is no new station. And we should control the damage if the development of the SuikerUnie site itself is not going to take place.
9. New tramline connection leading from Zuidhorn to the city centre, with an indicated stop at the SuikerUnie
source: (Project RegioTram, 2010)

10. New train connection going from Drachten to Groningen, with an indicated stop at the SuikerUnie
source: (Project RegioTram, 2010)

11. Overview of the plan made by the project RegioTram. The aim of the project is to better connect the surrounding towns with the centre of Groningen. Therefore several new lines of public transport will be planned.
source: (Project RegioTram, 2010)

12. SWOT & confrontation matrix about the potentials of a new station at the SuikerUnie site. More detailed information is found in appendix D1
source: Author

Confrontation matrix (Kearns, 1992):

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invest in plans that regard combining infrastructures and the station.</td>
<td>Decide if the potential Park and Ride solution is still relevant if no new development is taking place</td>
</tr>
</tbody>
</table>

Strengths
- Enhances the possibilities for new development
- Relatively easy applied, because of existing train track
- The plan fits in the plans of the government

Weaknesses
- The station is only relevant if new development is taking place

Opportunities
- Huge potential in combining the road infrastructure with the station in for example a park & ride zone.
- Huge potential in combining the water infrastructure with the station in for example a water taxi system.

Threats
- The success of the station depends on other factors, like new development.

Defend the new station from stagnating because plans don not take place
Control the damage when the development of the SuikerUnie site itself is not going to take place

Invest

Decide
Connectivity

1. Start ground based road towards entrance site by local car use
2. The only difficult, hard to find and unsafe entrance for pedestrians and bikers.
3. Own exit from ring road leading directly to the site.
4. Possible spot for future station in the Framework RegionTram plan
5. The Hoendiepcanal is not accessible by boat because of low bridges
6. Potential site for P & R facilities because proximity to ring road.
7. Old waterway
8. Living boats
9. Living boats
1. Start ground based road towards entrance site by local car use
2. The only difficult, hard to find and unsafe entrance for pedestrians and bikers.
3. Own exit from ring road leading directly to the site.
4. Possible spot for future station in the Framework Region Tram plan
5. The Hoendiepcanal is not accessible by boat because of low bridges
6. Potential site for P & R facilities because proximity to ring road.
7. Old waterway
8. Living boats
9. Living boats
6.2 The ecological value of the site

The flooding-fields *(vloevelden)* in the NorthWest of the area represent a unique ecological value (figure 1). The fields are a nutrition-rich, dynamical and tranquil water system. A rich bird population houses here (Burgemeester en Wethouder Groningen, 2011). This is because of the production process of making sugar. For years the remains of the beetroot have been placed on these flooding-fields. The combination of quiet fields with a constant development of new nutrition-rich soil made it is so attractive. In the Urban Ecological Structure *(Stedelijke Ecologische Structuur, SES)* of the municipality it is visible that the flooding fields are on a strategic position between the national ecological structure (in orange dotted) and the ecological important area of the Stadspark (figure 2). The flooding fields itself are indicated as ‘ecological important water’. The old waterway leading from the Stadspark towards the Hoendiep is indicated as an important water connection. But in two places is it indicated that there is an obstruction. In a future development these obstructions should be eliminated.

**The soil of the site**

According to the municipality the ’former terrain of the fabric is almost entirely hardened with asphalt and small rocks (puin). The soil underneath this, as well as the groundwater is slightly polluted. The zoning plan of the site indicated that the terrain is designated and appropriate for the function “industry”. When the area transforms into another function, it is possible that additional (cleaning) measurements are required. The former flooding fields and storage fields are not polluted. They are suitable for the function “living”.’ (Gemeente Groningen, 2011b translated by author).

**The surrounding recreational routes**

There are several recreational (bicycle) route in the surrounding of the SuikerUnie (see figure 4). Because the terrain is not accessible for outsiders, the terrain is a barrier for the continuity of several routes. Opening up the terrain and adding recreational routes will solve this.

**The surrounding green structures**

The SuikerUnie terrain is laying within a string of several parks and greens structures. See also figure 5 and the Urban Ecological Structure. The ecological recreational value of the surrounding green structures are important for the city of Groningen. The SuikerUnie itself is linking connecting to several of these areas. In the future the ecological and recreational role of the SuikerUnie terrain should be carefully considered. Ideally the site would connect different green structures and recreational facilities to each other.

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Right page:
2. Urban Ecological Structure *(Stedelijke Ecologische Structuur)*
   source: http://gemeente.groningen.nl/natuur/sessals-fysieke-ruimtelijke-structuur/ (27-12-2011)
3. SWOT analysis on the ecological value of the site
   source: Author
4. Recreational routes in the surrounding of the area
   source: Karres & Brands 2009
5. Greenstructure of the surrounding area
   source: Karres & Brands 2009
6. A picture of the floodings fields in the west of the area
   source: Author
### Strengths
Huge amount of nutrition-rich flooding fields where there are already many birds. The site is the last ‘wedge’ of green entering the city. The site is in between the Stadspark and the national ecological zone.

### Weaknesses
The old waterway is leading to the Stadspark/Piccardhofplas/Hoornsemeer, but has got some bottlenecks: The water is not yet connected to the Hoendiep. The connection between ditches is sometimes disconnected.

### Opportunities
There are opportunities to enhance the connection of the old waterway from Hoendiep to the Stadspark and all the way to the Hoornsemeer. The green structure of the flooding fields could become the ecological connection between the Stadspark and the ecological national zone.

### Threats
If in the future the site is going to be developed, a choice between nature or development should be made.
6.3 The historical remains on the SuikerUnie site

The sugar factory has been a well-known part of the life in the city of Groningen and her surroundings. Many people have vivid memories of the distinctive sweet mellow smell of the boiling of the beetroots (Burgemeester en Wethouder Groningen, 2011). Every fall, during the harvesting season better known as the ‘campagne’, the smoke and steam was seen and smelled everywhere in the city.

In the 19th century the Northern provinces in the Netherlands started to produce beetroots for sugar. On the 16th of May 1913 J.J.Doormaal became the first director of the Vereeniging Friesch-Groningsche Cooperitieve Beertwortelsuikerafval. A simple but architectural high quality building was placed on a strategic location. The site is next to the water and close to the city of Groningen. During the next decades the factory grew and extended several times. In January 2008, almost one hundred year after the start of sugar factory Royal Consun, the company of the Sugar factory decided to close down the factory. By this decision the wishes of the World Trade Organisation and the European Union was acknowledged. The organisations wished to cut down on the production in Western Europe in favor of the production of sugarcane production elsewhere in the world (Hoeve and Overbeek, 2010). By court order it was decided that the terrain should never again be used for producing sugar. Every building or machine that was solely for producing sugar had to be removed (Gemeente Groningen, 2011b). Only this way the subsidy for closing down the factory could be acknowledged. Now only a few buildings are left (Gemeente Groningen, 2010). Picture 2 shows the site before the demolition in 2010. Picture 3 shows the same site only after the demolition of the buildings. The property of the Sugar Factory expands all the way to the next village called Hoogkerk. In between large plots of flooding fields are found. These fields were used in the process of sugar making. The pulp remaining from the beetroot after the process of sugar making was washed and spread out on the flooding fields. This process has been repeated for years and years, making the flooding fields a very nutrition rich environment for birds and other small animals. In the middle of the flooding fields a couple of bunkers dating back from the Second World War (Gemeente Groningen, 2011a).
The first maps of Groningen show the fortified centre of the town. In 1577 the canal towards Leeuwarden the Hoendiep is already present. The canal Hoendiep is an old stream leading from the old portal called the Aa-port and a small village de Poffert. During the course of time the canal was extended so it led all the way to Leeuwarden. Alongside this canal small farmhouses were built.
The first more detailed plan of the site. The fine grains of the meadow are shown. There are no buildings on the site. The map shows building near the site at the canal.

The first drawing of the sugar factory site. The main structure of ditches is visible. A large black indicates a building near the site.

The maps show that in the surrounding area there was a wood-sawing mill, an oil mill (olieslagermolen). In the 1850's plans were made to make a train track from Groningen to Leeuwarden. The East-West orientation of the train track cuts straight through the Northeast orientation of the meadows.
Along the Drentse Laan, now called the Peizerweg, a steam-tram is developed until 1985. This tram went back and forth between Groningen and Drachten. The train went straight through built-up area and later on was only used for transporting cargo.

In the map the name Donghorn is mentioned. This was originally called the Dodingehorn which in former days meant Death. Horn meant corner (hoek) so the place was named after the dead corner in the bend of the river. Nowadays the name is not known or used anymore.

The map further shows the arrival of the train track. One track leading the way to Leeuwarden in the West. The other train track is going to Delfzijl in the North. Furthermore, the first expansions of the city are drawn in the map. The Drentse Laan is cut through by the train track.

The map of 1885 shows the important infrastructure before the train track was placed. The important infrastructure at the time was; The Hoendiep canal going to the West with alongside of it the road to Leeuwarden. The Drenthse Laan leading to villages in the South West of Groningen. The Hoornse Diep, with the road alongside of it leading to the South (Assen). To the North the Reitdiep Canal with the Friesestraatweg is leading to the most Northern part of the Netherlands.
The city is further expanding. Near the Peizerweg a courtyard (buitenplaats) Rozenburg is on the map. Nowadays no signs of a formal garden are visible. A ancient road leading from here to the North is cut through by the train track but is apparently still in use. The sign Tol indicates that the place is in use by passengers to cross over. In the map of 1888 it is mentioned that there is a voetveer or pedestrian pass over the water.

The Peizerweg leading to Peize is mapped like a formal allee with green on the sides.

In the south of the map the development of the city parc (Stadspark) is visible. A large ice skating park, horse race track and waterstreams are designed in a romantic English style by Springer in 1913. The city is now expanding rapidly, for the first time the factory is drawn in the map. The connecting neighbourhood, the Zeeheldenbuurt is developing. The main axes to the city centre is not easy, because the lack of bridges connecting to the other side of the Hoendiep.
1962

On the Northside of the sugar factory the industry has been developed. On the Southside the Peizerweg is fully industrialized. The tram going to Drachten has been closed down. The ring road alongside the train track is working. In order to make a connection from the highway to the ring road the big road is dividing the city park in two. The circle like road structure in the South West of the map is Gypsy camp for Roma’s.

1982

In the North a big outlay of the city called Vinkhuizen is developed. The industry in the North is also developing. The road next to the Hoendiep is even further smoothened in the Westside near Hoogkerk. The city park is further extended. Rozenburg is still slightly visible in the landscape by green ring surrounding the former garden. A highway going to Leeuwarden is placed at the Southside of the park.

1990

The road leading from the Peizerweg to the pedestrian ferry is closed off. The road alongside of the Hoendiep canal is being smoothened so that the difficult corner is not there anymore. Industry starts to be developed alongside of the Peizerweg. Informal campingplaces are present on the Westside of the park. Informal roads leading to old farms are still visible on the map.
The citypark is now enclosed by built up area. New houses and offices are built along the highway. The camping is even enlarged further. A new road on the Westside of the big terrain is connecting Vinkhuizen in the North with new extensions and vice versa.
The value of the real estate

The figure on the right page shows the remaining built elements on and near the site. Among others there is a small guard house near the entrance, an old distinctive chimney. As mentioned before there are two bunker from the Second World War still present in the floodingfields. Absolute highlight on the terrain is the remaining SuikerUnie factory that is built in 1914. This building is a symbol for the rich history regarding the beetroot and sugar production in Groningen. (Hoeve and Overbeek, 2010). The remaining building is the former cubes-building (*klontjesgebouw*) here the stock of sugar cubes was stored. It was the first building on site. The oldest chimney is also saved from demolition. Originally it was 100 metres high. Currently the chimney is approximately 50 metres high. During the liberation in the Second World War the south side of the remaining building was heavily shot at (Gemeente Groningen, 2011a). The historical value of this building is significant. This is because it is the last remaining building from a century of sugar making on this site.

Historic elements

1. Bunker from the Second World War
2. Old Toll Road
3. Old Shed
4. The Sugar Cubes Factory (1914)
5. Peizerweg; Old road leading to surrounding villages
6. Old houses near the Peizerweg
7. Camping belonging to the Stadspark
8. Stadspark
9. Old waterway
1. Bunker from the Second World War
2. Old Toll Road
3. Old Shed
4. The Sugar Cubes Factory (1914)
5. Peizerweg; Old road leading to surrounding villages
6. Old houses near the Peizerweg
7. Camping belonging to the Stadspark
8. Stadspark
9. Old waterway
6.4 Conclusion: finding some design principles

From the analysis and research done in chapter 4, 5 and 6 we can derive important design principles or guidelines that need to be implemented in the design of the SuikerUnie site. We will summarise the most important conclusions in this paragraph.

**Improve accessibility**
Currently there is only one entrance for the whole terrain. Therefore the accessibility of the site is the first major improvement, based on the analysis of the accessibility of the area, which should be executed. By adding infrastructure, and opening up the site physically, this will enhance the opportunity for future actors to visit the temporary projects on the site. With relatively limited recourses the site could be opened up to the public.

**Connect to the surrounding**
Research by Cerutti (2011) indicates that it is important to open up former industrial terrains literal and figurally speaking to the public. This is, among other reasons, because industrial sites often have a negative, secluded reputation with the local inhabitants. Making the terrain transparent and known for the local inhabitants is the first step in redeveloping the area. The SuikerUnie site is also an enclosed area. By connecting and reacting to the surrounding environment, the area becomes a part of the ‘DNA’ of the inhabitants. Therefore the area should be transformed in an area where there is a natural and cohesive transition to the surrounding area.

**Make use of the potential of the new station**
The potential of the new station is huge. It could open up the area, attract new residents and businesses and kick start the developments taking place in this area.

**Use of the local active actors**
Part of the strategy as presented in chapter 5, is to make use of (local) actors that can help to ‘kick-start’ the place making of an area. Research shows that there is no immediate need for housing in the city of Groningen. Therefore another strategy for kick starting this development is necessary. By involving actors in the process that have a need of space, the area gets instant relevance for a group of people. As suggested in paragraph 5.4 interesting actors for the SuikerUnie are: Students, Houseboat owners, Creative Entrepreneurs and Allotment owners. Part of this strategy is also to enhance pioneering activities and private initiatives in the first phase of the redevelopment. The reputation of the area should become open, innovative and creative. If people have a good initiative or idea, the SuikerUnie offers the infrastructural grid to execute this.

The SuikerUnie factory has a hardened surface with a large factory on it. This could form the centre for any new initiatives. The meadows and flooding fields are not ready for use yet, they need to be transformed in order to be used for future users.
Building for the creative entrepreneur
Research shows that the creative entrepreneur want to be near the city centre, in a non mono functional neighbourhood where working and living could be combined. The neighbourhood should be social secure, well accessible with enough opportunities to park the car. The new accommodation should be in an existing building, with flexible floor space, shared facilities and a good price/quality balance.

The ecological value of the site
The nutrition rich environment of the flooding fields and meadows in the west of the area are precious goods. The future development of the site, should somehow make a statement about how to respond to the ecological value of this land. It is inevitable that the area will change in the future, but how it is changed is crucial.

Waterfront development
Research shows that water and waterfront are highly appreciated by all users within an area. The waterfront the site has along Hoendiep should be developed optimally.

Use the real estate that is left
The huge demolition that took place on the site caused the site to be almost empty. The little real estate that is still available, should be nurtured and used for the most in the strategy.
Frame III
Strategy & Design
Design principles: The concept of the design
The analysis of the site and her surrounding gave us some design principles to work with. The strategy of the future development and the design should incorporate some of these design principles.

In this chapter the basic concept or idea for the design on meso scale is explained. We start with explaining the concept on the largest scale. What relation should the design have with her surroundings? The concept reveals that there are three different areas, with each her own identity and concept. Two backbones connect and attract people to the area. Then we explain the concept of the different areas within the SuikerUnie, the micro scale. Each idea or concept behind these three area is explained, as well as the backbones that guide the infra through the area.
7.1. The concept on the meso scale: connecting to the surrounding

*On the edge of changing worlds*

The guidelines for the design give the design of the site a certain approach (see chapter 6.5). This results in a concept for the future of the area. Figure 3 conceptually shows the current condition for the site and her surroundings. The picture on the right page show the different habitats that surround the area. The site of the SuikerUnie is on the edge of different environments. On the north side of the site it is enclosed by the countryside. Here the agricultural landscape starts. On the eastside of the site the site is enclosed by and urban neighbourhood. From here it is only one kilometre to the city centre of Groningen. The south side is defined by the big industrial buildings. But also the city park that starts here. This park dates back from 1910, and is carefully designed as an English Landscape park (Gemeente Groningen, 2009). On the west side of the edges the rural village Hoogkerk, and several extensions of the city Groningen are present.

On the first glimpse it seems rather impossible to make a design or strategy that fits the needs of all these different habitats. But the concept of the design is that the future area makes a transition from Urban tot Rural, in the east – west direction. In the north – south direction the area makes a transition from Landscape towards a Park (figure 1). By connecting to the surrounding conditions the design adapts and reacts to the surrounding area. It forms a natural and logical continuation of the present surrounding conditions.

*Three districts*

When you make a transition from urban to rural and from landscape to park you will have different areas or spheres in the new SuikerUnie area. It results in three different areas. The area in the east of the site has a more Urban condition. It reacts on the urban tissue and industrial site surrounding it. We from now on call this area the *Creative Area* (indicated as red in figure 2). The area in the South will have more Rural conditions. This is because it is surrounded by rural living conditions. This part is called the *Rural Area*. and is indicated in pink in figure 2. The part of the site in the north forms the transition between the countryside and the park. This site will be referred to as the *Agricultural Park*, and is indicated green in figure 2.

*The two lines*

The concept also has two conceptual lines in order to guide the three districts from urban to rural in one direction, and from landscape to park in the other direction. Figure 2 shows these two lines. The conceptual lines are also physically in the design. 

*The green line*

The green line, as shown in figure two, connects the landscape in the north, via the agricultural park, with the English style city park in the south. It is the green backbone of the area. It causes a transition between two types of landscapes. This transition is also made by a new physical connection in the shape of a new lane on an existing road structure.

*The red line*

The ‘red line’ makes the transition from Urban to Rural. It also connects the new districts with each other and with the surrounding urban fabric. The new backbone consists out of new infrastructure. And it follows the existing Peizerweg, which goes through the area.
7.2 Concept on the district or micro scale: Providing identity

**The agricultural park**
The agricultural park forms, as mentioned before, the transition between the agricultural landscape on the north side, and the park in the south. The area itself is creating a grid of long stretching plots with different sizes (figure 4). On these plots all sorts of agricultural use are executed to make this transition. The green backbone is right alongside this new park, and takes the recreational route from the park to the landscape by a new bridge.
The different sorts of agricultural use are placed in a rhythm that starts frequent and becomes wider and longer when you cross the park (see concept drawing). On the existing dike structure of the current flooding fields a system of pathways is created. The walking paths are in the opposite direction than the agricultural plots. This way you have an optimal experience all the different agricultural use. From the elevated level of the dikes the different sorts of agricultural use are very visible.

**The Rural Area**
The Rural is going to transform from an area filled with meadows towards an area where there is a mix of functions like living, working and recreating. This transformation is going to take place by a strategy that starts out with a basic infrastructural grid alongside the current ditches of the meadows. Plots of land will be rented out to allotment owners, or other users who need land. The idea is that during the course of time, the renters of the plots get the opportunity to buy their piece of land and built their own home or business on it. By making it relatively easy and low profile to start renting a plot, a different category of people is attracted. It encourages the pioneering spirit. This concept is welcoming everybody to come and start to make this place there home. The strategy is further elaborated in the next chapter.

**The creative district**
In the rural district the allotment renter act as the kick-start actors who start the transformation. In the creative district several other actors give the area a kick-start. As the design principles indicated, students, house boats owners and creative entrepreneurs are potential group that can be integrated in the development of the area. This district is the future the centre of this area. The goal is to make this area a urban district where there is a very lively mix of entertainment, art, culture, living, working and leisure (figure 5). The concept of the strategy is to start this transformation with the old SuikerUnie fabric and two former hangars on the other site of the train track. These properties are going to be transformed into a creative factory. Alongside this there are going to be placed containers for student housing. There is going to be a harbour for houseboats as well. These first actors alongside with temporary place making projects by creative entreprenuers will make the area a vivid place to be. A new grid of infrastructure will make room for new development. A comprehensive description of the strategy can be found in the next chapter.
The connecting backbones
The connecting backbones of the area are developed in a contradicting but recognisable way. By choosing three main material components (figure 7) the base of both the elements are equal. Figure 6a and 6b show the principal of the two connectors.

The green line
The green backbone (figure 6a) is developed as a green lane with a wide green structure in between the lanes. The street furniture like kiosks, benches, play facilities are made of corten steel and wood. The pavement is of the same brick as the red backbone.

The red line
The red backbone (figure 6b) is paved in brick. In the pavement there are elements of green captured in corten steel and wood. The street furniture is made out of corten steel and wood. Height differences have walls of rusted damwandprofielen.

The spread on the next page shows the SuikerUnie Area within the context of the surrounding. The three areas with each their own sphere and the connecting lines are visible.

Left page:
4. The concept of the agricultural park
source: Own work
5. The main concept of the creative center
source: own work

Right page:
6a. The concept of the green access
6b. The concept of the red access
source: Own work
.7 The main materials of the backbones:
7a. Brick for the pavement
Source: textures.com
7b. Rusted cortensteel
Source: textures.com
7c. Greenstructure
Source: textures.com
Part III

WORKING ENVIRONMENT

INDUSTRIAL ENVIRONMENT

CREATIVE CENTRE

STUDENT METRO EVENT

CITY LIFE
Chapter 8

The strategy: How can we start today?
The flexible approach
Because of the size of the area, the different areas and different goals we want to reach, different strategies are applied. In the coming paragraphs the main strategy to reach the end vision is explained.

We start by explaining the concept of the strategy. We explain how the strategy relates to the theory of the flexible approach as described in chapter 4. Than we will elaborate the specific strategy to transform two areas within the area. First the strategy for the Rural area is explained. How can we transform these meadows into an area where people can live? We shortly explain the strategy and the rules and regulations that will control the growth.

Than the strategy to redevelop the Creative Centre is elaborated. Again we will shortly explain the most important tools to redevelop the area.

The agricultural Park will be developed as an regular park, with a special infill. The strategy to develop this park will be not further elaborated. This thesis focusses on the elaboration of the Rural and the Creative District.
8.1 The general concept of the strategy for the SuikerUnie

The theoretical model: three phases
The model described in chapter 4 proposes three phases, a; placemaking by pioneering creative spirits, b; introducing a solid infrastructural framework with a flexible infill of the plots, c; the further transformation of the area into a regular neigbourhood (see also figure 1 on the left page).

The modification of the model: introducing more flexibility
Figure 2 shows the concept of the strategy for the SuikerUnie area. The strategy proposes a new infrastructural framework throughout the SuikerUnie area. Within this framework the infill of the plots are flexible and adaptable through time. The nature of the infill of the plot differs within the three different areas (the rural and the creative district).

We adapt the model as described in chapter 4 but we propose two new elements in order to make the strategy more gradual and flexible. We propose a; a gradual investment and revenue strategy and b; a gradual and flexible way of using the plots.

Flexible infill of the plots, in use and owner
The use and occupation of the plots are flexible. This enhances the possibility for the owners of the plot to adapt their plot to the life cycle changes of the entrepreneur. Most of the initial plots will be rented out to pioneering creative entrepreneurs. Through the course of time they will develop into established entrepreneurs. The plot they rent is flexible in the use of the space so it is capable to adapt to these changes. Therefor the area can co-evolve along with the life cycle of the creative entrepreneur. This flexible infill for both the rural as the creative area is explained in paragraph 8.2 and 8.3

A flexible and gradual investment and revenue model
The second addition made to the model is the financial part of the strategy. The strategy for the SuikerUnie imposes a gradual investment model which synchronises with the revenues the rent of the area brings in. The infrastructural framework and the public space will improve from simple to a high quality public space along with the investments new inhabitants make.

The plots are rented out to the new inhabitants. The revenue of renting out these plots will directly be invested back in the public space of the SuikerUnie area. When people start to built on their plots, the revenues will increases and therefor the investments in the public space will increase as well. The principle of this upward spiral is explained in paragraph 10.2
8.2 The flexible strategy for the rural area: The rules and regulations

The current condition (figure 2)
The current use of the rural area of the site is agricultural. The rural area consists out of meadows surrounded by ditches. In order to transform these meadows into an area where there is room for work, living and leisure, a strategy has to be developed. The rural area is going to develop according to a basic infrastructural grid. The infill of the plots on this grid remains flexible.

Improve accessibility (figure 3).
In the first step of the strategy is that the meadows are made accessible by a low-key road structure. These roads form the bases of the flexible framework. The new roads are alongside the current ditches. Alongside these roads trees are planted. Large meadows are cut in two, so the plots in between the roads always have a front road and a back road.

Divide in rental plots (figure 4)
The plots in between framework are rented out to everybody who wants to build a building. The rural area becomes a mixed-use area. So it is possible to build a school, bike shop, or your own house there. Because of the current building market the site will probably not be filled completely with actors who are willing to build something on this site. But that is not a problem at all. All the plots that are not rented out to regular users inmediately are rented out to allotment garden keepers. This step in the strategy is familiar to the first phase of temporary use as mentioned in chapter 4. Research shows that there is a high demand of allotments gardens in the city of Groningen (Nature en Milieu federatie Groningen, 2012)
I want to rent a plot at this site:
That is possible if you meet the following requirements:

Does your function meet the legal safety regulations?
- No: You can only hire a plot when you meet the legal safety regulations

Yes:
Are there any complaint over your proposed function (within the reach of X metre?)
- Yes: You can only hire a plot when there is no complaint about your plot & function

No:
Is the plot you want to rent at least 4 metres wide (at the main street side?)
- Yes: You can only hire a plot when the plot is at least 4 metres wide

No:
Is the surface of the plot at least 200 m²?
- Yes: The plot has to be at least 200 m². You could try finding participants to rent a plot

Yes:
Congratulations! You are able to rent a plot for 10 years!
Do you wish to built something on your plot directly?

Yes:
You are allowed to built something on your plot (if you meet the requirements as mentioned in the building rules).
For every percentage of built surface you will have to pay a the same percentage above the yearly rent of 3 euro/m².
The municipality is obliged to service in water, gas and electricity.
In the case the built surface of the block is exceeding 20 %
When 30% of your plot is built you will get the opportunity to buy your plot. The price will be 300 euro/m² minus the payed of installments.

Not for now, maybe later:
You are allowed to built something on your plot (if you meet the requirements as mentioned in the building rules).
For every percentage of built surface you will have to pay a the same percentage above the yearly rent of 3 euro/m².
The municipality is obliged to service in water, gas and electricity.
In the case the built surface of the block is exceeding 20 %
When 30% of your plot is built you will get the opportunity to buy your plot. The price will be 300 euro/m² minus the payed of installments.

No:
You are allowed to rent the site.
You will re-pay the groundprice of 300 euro/m² in yearly amounts of 3 euro/m².

Left page:
1. A graphical overview of the rules and regulations in the Rural Area
   source: own work
2. Conceptual view of the first phase in the rural area: Improve accessibility
3. Conceptual view of the second phase in the rural area: Plants the trees
4. Conceptual view of the third phase in the Rural area: Deviation of the plots

Right page:
5. An overview of the rules and regulations when you want to rent a plot in the rural area
When a user first rents a plot in the rural area, they have to meet certain conditions. See also the matrix of figure 5. The plot needs to have a certain volume (200m²) and size (minimum of 4 metres wide). Furthermore the use on the plot should not conflict with the surrounding plots. The zoning plan for the area is mixed use. The plots are regulated after what they call in Berlin Germany *Mischgebiete* (Schaar van der, 2012). On these sites everything is possible as long as it does not conflict with the surrounding inhabitants. The owner (the municipality) has to act as an referee, and provide rules and conditions on which the new inhabitants can flourish. When you meet the conditions of the SuikerUnie site you can rent a plot for. You will pay off the total ground price in small amounts every year.

*Enhance regulated buildings (figure 6)*

When a user has rented an allotment garden or plot and decides to build on his site he has to meet some rules and conditions as mentioned in the matrix of figure 9. The goal of these rules and regulations is to make the area united, and create a monogeneses end vision. A new building for example, has to be placed on the *rooilijn*. Another rule is that you first have to build the whole width of your plot before you can start to expend to the back. Figure 1 shows the different rules that apply in the area graphically. This way in the end, all buildings are placed in one line, and form a continuous road. If you want to build higher or have more parking spaces than prescribed you have to invest in the public space by paying the owner of the land. This step in the strategy is working towards the third phase *the final use of the site* as mentioned in the research for flexible planning in chapter 4.

*Sell the plots (figure 7)*

A user pays, as mentioned before, installments of 3 euro per m² per year. This way the total groundprice of 300 euro per m² is slowly paid off. The renter has an option to buy out his plot instantly when he has built 30% of the surface. As long as he does not reach this percentage he can continue to rent the site. This construction is developed, so it is relatively easy to start to rent a plot on site and keep an allotment garden. The reasoning behind this that it is relatively cheap and low profile to obtain a plot on this area. When the renter becomes attached to the area he might want to build a cabin for his tools in the garden. The cabin becomes a little home, the little home becomes a summer holiday house, the holiday house gets a guest room etc. In the end the plot is used for living. This way of developing a site, gives an opportunity for people with a lower income to still realise an own built house. It attracts a different crowd of people, and dares different users to built their own home.

*A flexible outcome (figure 8)*

In the end the streets of the area have buildings along one *rooilijn*, and are built directly next to each other, thanks to the rules and regulations for building on your plot. The infill of these plots is not predictable beforehand. This is also not necessary; the basic infrastructural grid is designed this way. If the area remains an allotment garden district, the rental incomes are sufficient to maintain the area. If the plots get sold, and a lot m³ are built, the profit is for the municipality.
I rented a plot, I want to built something
That is possible if you meet the following requirements:

Does the front of your building stand within 0.5 metres from the front street side?

No: Place your main building within 0.5 metres of the front street side

Yes:

Is your building designed as a closed front?

No; it is not closed:

You are only allowed to extend the building further to the back than three metres if you have already used the whole width of the plot.

Yes:

Does your main building have at least one pitched roof?

No:

At least one roof part of the main building should contain a pitched roof

Yes:

Do regulations prescribe more than one parking lot?

No:

Parking of one car is arranged at street level, per 4 m1 rented street side plot

Yes, I need up to 5 parking lots:

Up to 5 parking lots can be placed at the back side of the main building

Yes, I need more than 5 parking lots:

More than five parking lots should be placed out of sight. Per extra car facility a amount of X euro needs to be invested in public facilities

Is your building 10 metres or lower than surface level

No, it is higher:

When main building is higher that 10 metres you invest X euro per extra metre in public space (compensation for loss of sunlight).

Yes:

Does the building capacity exceed the 300m3?

No, it is smaller:

When your building meets the building regulations you are allowed to built your own building here!

Yes:

You have to invest X euro per m3 above 300m3 in public space.

Left page:
6. Conceptual view of the forth phase in the rural area: first buildings on site
7. Conceptual view of the fifth phase in the rural area: Extension of the buildings
8. Conceptual view of the last phase in the Rural area

Right page:
9. An overview of the rules and regulations when you want to built on the plot within the rural area
8.3 The strategy for the creative area

The strategy to redevelop the creative area is different than the rural area. The old SuikerUnie factory, together with the two former hangars, forms the base for the new centre. The Rural Area is using allotment keepers as the kick start actors. While in this area other actors like creative entrepreneurs, students and houseboats owners, make the area instantly vivid and lively. They prepare the site for the flexible framework where the plots are sold to developers and individual buyers. The starting point of this strategy is the SuikerUnie factory as a new centre. Development will start from here, and will gradually spread out over the rest of the area during the course of time.

Improve accessibility

The first step in redeveloping this site is improving the accessibility. This is done by the development of a new station for the region-network. And by the physical connection of the SuikerUnie factory and the two hangars on the other side of the train track by a underpass. The careful design of the slope connects the two sides of the train tracks together. The slope literally connects the different real estate together, and opens the site up.

Making a flexible vivid place.

Attracting life (phase two of the theory)

Next to the accessibility, the site should become vivid and known to a big audience. We do this by the organisation of the creative industry in the existing real estate. By setting up a ‘creative factory’, where small entrepreneurs can start their business in, the area gets a creative vibe and reputation. The SuikerUnie factory becomes the new heart of the area. Students who will house in flexible container units will make the area vivid, and make the area a 24 – 7 economy. In the new harbour and along the canal of the Hoendiep it becomes possible to berth houseboats. The houseboats owners will also bring life to the site.

Place making

The rest of the terrain can be used for temporary projects and festivals. All sorts of initiatives for local and regional events can take place on the site. Art students can build projects on the site. Theatre groups can preform in open air. Events like Drive in movie theatres; weddings and festivals should make the terrain and her possibilities known for a big audience. This audience is a potential future inhabitant of the area.
**A spatial framework**

A physical grid of infrastructure is placed on the terrain. The container units of the students are placed within the grid of this framework. From here on the outcome of the development of the area is flexible. Depending on the economical development within the building market, the demand for houses, workingplaces and retail facilities the area will increase or decrease.

Once there is a demand from developers or private initiatives to built on the site the student containers are moved to the next block within the grid. This way developers (individuals or project) can buy a plot within the framework. This will slowly transform the area from a terrain with temporary projects and forms of living to a neighbourhood where living, working and leisure can be combined. The amount of space for temporary projects will gradually become smaller, because block by block the site will be filled with new inhabitants and entrepreneurs. The temporary projects are no longer needed to make the place known in a larger area. People have found the place and are willing to build a building on the site.

**A flexible outcome**

Just as the Rural area the outcome of this flexible strategy is not predictable beforehand. But again this does not matter. If nobody is interested to buy a plot within the framework, the students and the creative factory form a vivid small core around the station. The amount of container units can be expanded. And the festival terrain is making the site a regional hot spot for the city.
Chapter 9

Justification of the design
In the next chapter we are going to show and explain a possible outcome of the strategy as described in chapter 8. Because the strategy does not dictate a fixed outcome one could derives several models of development. We elaborate a model of development that shows us an average growth for the area. For this model of development we explain what the implication is for this design. First of all we explain the improvements of accessibility the design indicates. We discuss and show the new infrastructure within the area. Next we show the programmatic input in the design. What functions are planned where, and how do they physically relate to each other.

In the third paragraph we show the new green structure in the area. We show the design by renders of the area and give a view of how the area could potentially look like in the future.

In the fourth paragraph we zoom in onto the heart of the creative centre and show a detail of the design in the surrounding of the new Suiker Unie station.

In the last paragraph we show the spatial consequences when another growth model of development takes place. We show a model of development that implies limited growth, and we show a model of development which shows extensive growth.
9.1 The accessibility

The design principles indicated that the one of the main improvements of the area should be that the accessibility is improved. Therefore the design suggests a number of improvements.

*Improve accessibility*

The accessibility of the area is improved by several new entrances. For the pedestrians, bicyclists, and the car there is going to be one new bridge (1). This bridge leads from the creative district to the other side of the Hoendiep. There is directly linked to the street Hoendiep. This is a regional road going directly, without any stops or corners, to the city centre. The other way around the road is leading you, without any curves or corners to Leeuwarden. Pedestrians and bicyclists get another bridge (2). This bridge directly links the green backbone to a recreational route into the typical landscape of Groningen. It becomes possible to bicycle from this landscape, through the agricultural park, and than via the green backbone straight to the city park. The entrance for the city park and the green backbone is designed so that they are interpreted to each other (3).

The city park is connected to the creative area by a new connection leading from the SuikerUnie station directly to the park (4). Beside this new connection the design indicates three new entrances that connect to the surrounding infrastructure (5). This way it becomes easier to reach the area. By making these new entrances it also becomes possible to use the area as a passing through route from Hoogkerk to the city centre (and vice versa). The municipality did already plan these entrances. In the road structure the start of these roads are already visible. (figure 1)

The only entry that currently exists gets improved (6). The roundabout currently has four exits. One of these exits is only accessible for pedestrians and bicyclist. By improving this exit, it becomes relatively easy to reach the area from the city centre.

*Public transport*

The public transport is improved by adding a new station (7) right next to the Creative Factory. This new stop connects the site directly to three train tracks: Leeuwarden – Groningen (intercity), Groningen – Drachten (commuter train) and Groningen - Zuidhorn (commuter train). The new station has an integrated design of a sloping underpass, and forms the new centre of the area. It is literally making the connection between the Creative Factory and the hangars on the other side. Paragraph 9.5 further elaborates on the design of this area. In the map a potential second stop in the SuikerUnie is indicated (8). This stop services the Rural Area and the Agricultural Park. If the development in the Rural Area becomes a success it is relatively easy to make a low-key stop for the commuter train from Groningen to Zuidhorn.
9.2 Programmatic input

The bare minimum
Although the infill of the plots is flexible there are a few catalysts that are necessary in order to make the strategy work. This paragraph explains the crucial program that needs to be realised in the area.

Creative Factory
Paragraph 8.2 already explained that the strategy to develop the creative area is by starting from the SuikerUnie factory and the two hangars. The SuikerUnie factory is going to be a creative factory (3) for entrepreneurs. In this creative factory businesses can start their projects. There will also a bar, restaurant and gallery in this building.

Biological market
The hangar is going to be transformed into a biological market (1). Products from the Agricultural Park are sold here. It is also possible for the allotment renters to sell their produced goods here. The produced goods are used in the meeting or third places that creative entrepreneurs value so highly (Heebels and van Aalst, 2010). Trainees of local practice schools can work in the biological market and the restaurants and cafes.

Practice school
The second hangar is going to be transformed in a school for practical education (2). Institutes like the Agricultural school; Retail education; Graphic design and service industry education can offer their program in the hangar. The students can have internships in the surrounding area.

Student containers
The area provides room for approximately 800 container units for students at one time (4). These units will be moved throughout the area. The containers will start in the centre, and will end at the edge of the area. Because of the amount of student that is living in this area, it becomes instantly profitable for small retail to start a business there. Creative entrepreneurs appreciate small retail in the area. So these three actors benefit from each other.

Harbour
The new harbour(5) provides berth places for houseboats. The harbour also provides a quay alongside a public square with the old chimney as a central piece. The student containers are placed on the edge of the harbour. So from the very first start of the transformation the harbour is the central spot in the area.

Steering the program in the Rural Area
As explained in the strategy for the Rural Area (paragraph 8.1) is the programmatic infill of the rural area flexible. If a group of people decides to start, for example a Boy Scouts Association, they are more than welcome to rent, and eventually buy a plot in the area. By designing the infrastructure carefully some places become more attractive for commercial renters than others. The infra structural grid provides good accessibility (front and back) to each plot. On strategic places, space is designed as a square or public space (6). This makes the surrounding commercially more attractive. A potential second stop for the train near one of the biggest public space implies that this spot is attractive for commercial renters to start their business on that spot (7).
Streetprofiles
By introducing two different street profiles, a wide ‘commercial’ profile, and a greener more rural profile you will probably attract different users to different area.

The commercial profile
The main axes that connects Hoogkerk with the Creative Area and the city centre, is designed with a wide and public street profile. Along these axes you are allowed to build higher. This road will potentially also attract more traffic. Therefore this road will attract more commercial renters. Inspirational reference for the street profile is the Jan Pieter Heijstraat in the West of Amsterdam. The design uses the same broadness, solution for park, separation of the traffic flows and building heights.
The rural profile

The informal secondary streets along the ditches are more rural and green. Reference for this street is the Galamagracht in IJlst. The profile uses the existing pattern of ditches in the area. On both sides of the ditch there is a stroke of public green. On both sides are one-way roads with a narrow profile. This will discourage motorised traffic from taking this road. This profile will enhance pedestrians and bicyclist to take this road. The profile will attract allotment renters and more private initiatives.
9.3 Green structure

The agricultural park

The agricultural park has very limited program. The purpose of the Agricultural Park is to show the possibilities of agricultural land. On the plots all kind of species and innovative forms of agricultural use are presented. A new farm with visitor centre and education facility is built (1). This forms the main attraction to the park and is placed along the recreational route of the green backbone. From here the park can be explored. The products that are produced are sold in the biological market (2).

A reference project in Duisberg Germany (figure 4,5,6) shows the possibilities of producing several forms agricultural use along side each other. The aesthetical value of experiencing the agricultural land increases by placing them in a rhythm. The area had a park-like feel, while it remains productive. So the Agricultural park is combination between the agricultural landscape in the north and the Park like landscape in the south.

The green line (3)
The green backbone is leading the recreational route from the agricultural landscape to the city park. The road is placed on an existing former toll road. Alongside this road there are several old farms. The new road is widened with a 20 metre wide green structure. Within this green structure corten steel objects like, kiosks, street furniture and playing objects are placed. New buildings along this road are placed with a set back, so the green front yard emphasizes the green structure of this road.

The event terrain turns into a park (4)
The temporary terrain for events turns gradually in a park along the train track.

Left page:

4. Reference project. The Park in Duisberg by Feldstudien
source: www.feldstudien.de
5. Reference project. The Park in Duisberg by Feldstudien
source: www.feldstudien.de
6. Reference project. The Park in Duisberg by Feldstudien
source: www.feldstudien.de

Right page:

7. The highlights of the map show the two axes through the area
source: own work
8. Visualisation of the Agricultural Park
The pathways are placed on the former dike structure of the flooding fields. These dikes cut straight through the different agricultural plots.
9.4 The Zoom in: The Station Area

Connecting the two sides
The station area is a crucial new element in the design and strategy for the whole area. Here a new connection between the creative factory with the square on one side, and the bio-market and the school on the other side is made. By the physical connection of a underpass and the uniform materialization of the area, the station area becomes one place.
When you are at the retail square near the harbour you can already see the special lining and forms of the new underpass attracting people to discover what is on the other side of the train track.

The area is made up out of an uniform pavement for pedestrians and cars. The pavement slowly descent in the underpass. The walk towards the underpass is enlightened by several cortensteel pavilions. These pavilions are flexible in use, and can move throughout the area. In these pavilion temporary projects can take place. An artist can show his latest work, a florist can sell his flowers or a musician can preform his music in it. Within the underpass there is enough space for the entrance of the new station. There is about 1,000 m2 for bike stalling and a kiss and ride stroke for dropping people off at the station.

Materialization
The whole area uses four main materials namely; brick for the pavings, cortensteel for the walls, furniture and elements, and greenery within these elements.
Left page:
12. Visualisation of the new harbour. In the background the new underpass towards the other side of the train track is visible.
13. Visualisation of the underpass seen from the side of the bio-market. On the left side the car track is visible. In the middle is the underpass for pedestrians. On the right you see the entrance for the station.

Right page:
14. Visualisation of the creative factory in the creative area.
Left page:

14a. Section of the new underpass going underneath the station, connecting the Creative District with the Peizerweg

14b. Section of the Green Axes. Making it possible to bike or walk in a tranquil green environment from the City Park, via the Agricultural Park into the open landscape.
9.5 Different model of developments for the strategy

9.5.1 Model of development 1: Little growth

If the building market in the future will remain cautious, it will effect the infill of the plots in the area. The demand for houses will not be very high. Therefore the infill of the plots will be adapted to that. The plots within the rural area will be rented out to allotment keepers. They will slowly start to build little cabanas and weekend houses on their property (4). The area will remain very green and rural. An example of allotments where people slowly have built their own house is found in Toronto at the Algonquin Islands (figure 15).

In the creative area the plots will be rented out to students for container units (figure 14). This area will than exists out of approximately 2000 containers units for students or young urban professionals (1).

Other basic program

No matter what the infill of the plots is going to be there is going to be a basic programmatic input within the area that helps the area come to life. The basic improvements of the accessibility have to be executed anyway if any activity on the site is going to take place. In the worst case model of development this means that a new bridge for pedestrians and bicyclists will connect recreational routes with each other (9). The new station at the SuikerUnie site will be developed. (7) With this new station a new underpass, that connects the two sides with each other, is developed as well. This is realistic because the municipality is already planning to add new train tracks and new stations along this route. The basic infrastructure will be placed on the Rural area, as well as a bridge near the station (8). The new harbour (10) will provide in the needed water management capacity. And the harbour will also attract houseboats and other inhabitants.

The creative factories will be also elaborated on the site (2) no matter what. The creative factory contains approximately 9,000 m² for businesses. Beside office space it will contain a bar and restaurant which uses local products from the agricultural park (3) and the allotment keepers (4), as well. A bio-market which also sells these products, and other local produced products will attract people from the whole region (5). The agricultural park will also be executed. This way local food can be produced, and inhabitants of Groningen can get inspired to implement a healthy and more local orientated food life style in their daily routine. A dependance of the local middle school (6) will be placed in a former shed next to the station. Here students can learn how to work in several branches within the economy. The new found knowledge they can apply as interns in the several programmatic functions the area contains.
9.5.2 Model of development 2: Extensive growth

Another model of development is if the strategy starts to work, and there is economic growth. People and companies are willing to invest in real estate. The same basic programmatic input as described in the last paragraph will also be there in this model of development. But besides these basic improvements there is room for more developments in, for example, the infrastructure of the site. It becomes possible to realise an extra bridge so the agricultural and rural get better connected (1). This bridge connects directly to an important regional road, and connects with the surrounding post war area in the North.

A second stop for the new regional tram can be realised next to the biggest public space of the rural area (3). This square becomes attractive for businesses to start their business here.

When there is extensive interest for developing in this area the infill of the plots will be totally different. In the rural area the plots will not be solely used for allotments anymore. The plots are bought by numerous (private) developers who want to built there own house of apartment block, or business. It is off course also possible for the first renter to buy their own plot and built their own house on it (4). This way a vivid and mixed use is established in the area.

In the creative centre the student containers are replaced by (private) developers who want to built a more urban and dense building (4). Because it is closer to the city centre and next to the creative centre, it becomes attractive for retail and other businesses to locate on or near the square (5) next to the harbour. The courtyards of the student containers in the first model of development were public space. In this model of development the courtyards are sold to investors, and there for the land within the courtyards are for the new owner.

The next spread shows a graphic representation of the possible infill of the plots surrounding the harbour of the Creative Centre, and a street in the Rural Area. The pictures show the area in the three model of developments as mentioned before. The upper picture shows the model of development when there limited to no growth. The middle picture shows a infill of the plots when there is a average growth. The last pictures shows the two locations when there is extensive growth in the area.

Right page:
18. A vision of the area when there is extensive growth in the area.
19. The current condition of the Creative district
20. The first development on the site: The development of the harbour, opening up the area by adding a new underpass and a station
21. The green structure is placed. The building plots are already defined. Within these building plots temporary place making projects can take place.

Right page:

22. The harbour and the creative factory when there is almost no growth. The plots are filled with container for students and young urban professionals.
23. The harbour when there is mediocre growth, the container units are replaced by smaller buildings. The land is bought by private investors.
24. The harbour when there is extensive growth. When the demand is high, the municipality can sell the plots for more money. This will make the area attractive for bigger developments and a denser infill of the plots.
Left page:

25. The current condition of the site in the Rural Area.
26. The first development: A framework of trails is placed along the current ditch pattern. A green structure placed alongside of it.
27. The plots within the building block are rented out to new inhabitants.

Right page:

A visualisation of the Rural Area when there is little to no demand. In this model of development the area will remain an area with allotment garden. In the visualisation you see the sheds and weekend houses along the new infrastructure
23. A visualisation of the Rural area when there is an average growth. The sheds in the area are now replaced by modest buildings. All buildings are according to the regulations as mentioned in this thesis
24. A visualisation of the Rural Area when there is extensive growth. Because the ground is becoming precious, the owners of the land will be persuaded to extend their property. Some of these building exceed the maximum building height. This means they are obliged to invest a certain amount of money in the public space of the area. This way the prosperity of the area will effect the quality of the public space in the area positively.
Chapter 10

The conclusion: The consequences of the strategy & design
Now we know what strategy and design we will use to regenerate the SuikerUnie, we can predict the effects and consequences it will have. We take this opportunity too look back and see what the consequences are of this strategy. We start off with showing the capacity the area has with this design and strategy. We explain the different densities that can occur during the development of the area. Than we show which stakeholders will contribute within this strategy. We graphically show the partnerships they will make, and what consequences these will have. Than we will elaborate the financial consequences this design and strategy has. At last we will discuss the spatial effects of the design on the area has on the surrounding area.
10.1 The capacity of the plan

The capacity of the plan changes according to the developments, and the investments the owner and the new inhabitants put in the area. In this paragraph we indicate the possible densities or capacity one area could achieve in the coming decades. The method used for showing the density or capacity of the space, is done according to the method used the Spacemate (2010). This method shows the correlation between the FSI (Floor Space index), GSI (Ground Space Index) and the OSR (Open Space Ratio).

The capacity of the rural area

The rural area is 55 hectares big. Of this total surface 40 hectares is for renting out to new inhabitants. 15 hectares is reserved for public space and infrastructure. The maximum built surface of the plots is set on 40 percent. That means that the total footprint of the area is 16 hectare. The minimum plot size is 200m². That indicates that there is a maximum of 2,000 plots to be rented out. If these 2,000 plots are kept as allotments, the area will remain low profile and green.

If all these plots are built upon in a modest way (the development of an average growth as explained in chapter 9) there will be 1250 buildings. One can compare this density with Betondorp in Amsterdam (figure 1).

When the area is developing extensively the area will contain 2,000 houses. The density will than be somewhere between 50-60 building per hectares. This is comparable with the new extension area Ypenburg in the area of The Hague (figure2).
**5,600 m² Biological Market**

**38 hectare of Agricultural Park**

**40 hectare of Allotment gardens**

**maximum of 2,000 plots**

1,5 million per year

159 million revenue

**53 hectare of land to be sold**

<table>
<thead>
<tr>
<th>Total area:</th>
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<tbody>
<tr>
<td>Total rented out:</td>
<td>40 hectare</td>
</tr>
<tr>
<td>Public space:</td>
<td>15 hectare</td>
</tr>
<tr>
<td>Footprint:</td>
<td>16 hectare *</td>
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<td>(*= maximum building percentage is 40%)</td>
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<table>
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<tr>
<th>Model of development little growth:</th>
<th>max. 2000 plots for allotments *</th>
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<tbody>
<tr>
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<td>GSI: 0,29</td>
</tr>
<tr>
<td></td>
<td>FSI: 0,58</td>
</tr>
<tr>
<td></td>
<td>OSR: 1,19</td>
</tr>
<tr>
<td></td>
<td>20-30 building per hectare</td>
</tr>
<tr>
<td></td>
<td>1250 buildlings</td>
</tr>
<tr>
<td></td>
<td>Example project: Betondorp, Amsterdam</td>
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<table>
<thead>
<tr>
<th>Model of development extensive growth:</th>
<th>GSI: 0,29</th>
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<tr>
<td></td>
<td>FSI: 0,88</td>
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<td>OSR: 0,79</td>
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<td>50-60 building per hectare</td>
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<td></td>
<td>2000 buildlings</td>
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<tr>
<td></td>
<td>Example project: Ypenburg, Den Haag</td>
</tr>
</tbody>
</table>
The capacity of the creative district

The creative district facilitates the program of the creative factory, the educational institute and the biological local food market in old existing real estate. These old industrial buildings contain:

Creative factory in the old SuikerUnie factory: 9,000 m2
Educational Institute in the old hangar #1: 10,000 m2
Biological local food market in old hangar #2: 5,600 m2

The creative factory can house approximately 60 new firms. The new harbour that is 5,200 m2 big, along with the quay of the Hoendiep can house 40 house boats. The rest of the creative district is approximately 14 hectares big. 4 hectares is reserved for the park, station square and infrastructure. Of this area 10 hectares is for building purposes. We calculated that approximately 60 percent of the plots is used for building.

In the beginning the 14 hectares can be used for temporary projects. Later on, the building plots are filled with student containers. If the containers are stacked with four layers there is room for approximately 6,000 student containers.

If the area develops further and the area will be turned into an average urban area (between 50-60 buildings per hectare), the area will contain approximately 450 buildings (figure 3). When this development occurs the density of the area will be comparable to an centre of the small Dutch village.

When the area is fully developing and the area becomes dense and highly urbanised the area will contain approximately 700 buildings (figure 4). A reference project of this density is the Pijp area in Amsterdam.

Left page:
Figure 3: The density of the Creative area when there is an average growth.
source: http://www.permeta.nl/spacemate/index2.html
Figure 4: The density of the Creative area when there is an extensive growth.
source: http://www.permeta.nl/spacemate/index2.html
5,200 m² new harbour
about 40 new house boats
9,000 m² Creative Factory
about 60 new firms
10,000 m² Education
6,000 container units

6 new entrances
1 new station
2 new bridges
3 new squares
2 new parks

| Total area: | 14 hectare |
| Total rented out: | 10 hectare |
| Public space: | 6 hectare |
| Footprint: | 8,5 hectare * |
| (*= maximum building percentage is set on 60%) |

| Model of development little growth: | max. 6000 containers for students * |
| Model of development average growth: | GSI: 0,60 |
| | FSI: 1,27 |
| | OSR: 0,30 |
| | 50-60 building per hectare |
| | 450 buildings |
| | Example project: Centre of a village |

| Model of development extensive growth: | GSI: 0,60 |
| | FSI: 2,33 |
| | OSR: 0,18 |
| | 70-90 building per hectare |
| | 700 buildings |
| | Example project: De Pijp, Amsterdam |
10.2 Consequences for the stakeholders

Use of the local active actors
As mentioned in the guidelines of the design (paragraph 6.4) it would be best to use the strengths of groups who are willing to participate in the regeneration of the area. Enhancing local initiatives, and allowing a free infill of the plots will trigger this. There are some crucial stakeholders and partnerships in order to make the strategy and the design a successful regeneration process.

The pioneering people
The first research showed that there were some stakeholders within the city of Groningen that have a spatial or physical need for space. This in combination with the likings of the creative reputation of the SuikerUnie area, we derived four groups of potential stakeholders. These are the creative entrepreneurs, students, houseboat owners and allotment keepers. These pioneering stakeholders play and important role in the final design of the regeneration process:

- The creative entrepreneurs or pioneers. They will organise festivals, temporary projects and the creative factory. They get a buzz going, and create a vibe
- The students that house in the first container units. They make the area vivid, and commercially interesting
- The houseboat owners. They bring life and activity along the Hoendiep canal and the new harbour
- The allotment keeper. They are crucial for the development of the Rural Area. They make the area alive and green. These stakeholders are also potential future builders in the Rural Area

Other stakeholders & partnerships
Besides these stakeholders, we also used other stakeholders in the strategy and the design of the area. Other stakeholders of importance for the development are; ProRail, Province of Groningen, and some Educational institutes. Possible important partnership between these stakeholders are described in the coming paragraph.

Partnerships in the cycle of food
The biological market will sell the products that are being produced in the Agricultural Park as well as the products people want to sell from their allotment garden. Local produced food and products will attracts inhabitants from the whole region to this market. By coming to this market the buyers will also get introduced to other festivities within the area. The food is also used for the local bars and restaurants. Interns from the local middle school can do most of the work within the Biological market, Agricultural Park and the bars and restaurants.

Educational partnerships
Besides the internships at the biological market, Agricultural Park and the bars, it should also become possible for students to educate themselves in more creative educations like, event management, graphic design and game design. Partnerships between the creative factory and the local middle school can be established. They can learn from each other, and help each other grow stronger.
Coorperation scheme:
Involved actors & stakeholders

Individual Stakeholders
- Students
- Harbor
- Allotment renters
- (future) inhabitants
- All Users
- Creatives

Commercial exploitants
- Creative factory
- Farmer
- Horeca
- Events
- Retail
- Supermarket

Education/Innovation
- HBO
- University
- MBO
- LTO
**Infrastructural partnerships**
An important big financial investment in the area is the accessibility and the public space. ProRail and the local public transport company could co-fund the new station. The Province of Groningen and the municipality have a subsidy of 577 million euro for improving the accessibility of the Groningen. A part of this subsidy could be invested in the SuikerUnie Station. Since the traintrack is already going to be upgraded, the investment in a new station will be relatively easy.

**Consequences for the partnerships**
Because this strategy is not an fixed end vision, the use of stakeholders and active partnerships is crucial. The actors mentioned above are elementary in making the site a success. Research during this thesis showed that there is a spatial need for all of these groups within the municipality of Groningen. This makes the likability of these actors working together more realistic. As mentioned by Saris (2008) it is first of all crucial for all the stakeholders to see the added value in working together as a team. Only than it is possible to have a successful regeneration of this area. The owner of the area, the municipality will have to play an important facilitating, and directing role in this process. Networking, bringing people together is crucial in this strategy.

**Social consequences**
The strategy will create possibilities for groups that have needs in Groningen, as mentioned in the last paragraph. The program of the new area will also attract and attach high-educated creative pioneering people to the city of Groningen. An aim the municipality of Groningen has been working on for years. Students and creative pioneers will be attracted to the area to live and work relatively cheap. The numerous festivities can also attract high-educated professionals. All of these activities draw potential new inhabitants and users to the area.

The effects of the strategy are also socially interesting because the Rural Area gives everybody a chance to built their own home. Because you can relatively cheaply rent a plot in the area. The barrier to start renting a piece of land is not too high. Once attached to the area, people will be triggered to built their own shed, house, business, or holiday unit. Point is, that the area does not have to be finished within a certain time frame. Inhabitants get the space to grow, adjust and built their own home.
10.3 The financial concept of the strategy

The strategy indicates a non-conventional profit model for this area. The conventional way of developing is to work with limited big project investors on one development. They will invest a large sum of money, and will expect relatively quick profit in return. Profit is gained in selling or renting out real estate to individuals. In the current building market these types of development are a lot harder to establish. This is because there is almost no movement in housing market. This makes the profit for the project developer uncertain. Therefor project and real estate investors are hesitative to invest large sums of money.

The strategy for the SuikerUnie terrain is working with another model. It proposes a new form of investment. This is done in the first place by place-making. The strategy aims to add value in the price of the land by making the area hip and happening. By attracting future users to the site, people get enthusiastic about it, and are willing to pay a higher price for their land. Secondly people are invited to slowly pay off their rented plot. Every year they pay a part of the asking price. With every percentage of built surface the price of the land increases. If they have built enough on their plot they get the opportunity to buy the land. This way it is relatively easy and cheap to rent a piece of land in this area. Within the area relatively much is possible. This triggers people to come to this area and slowly built their own house or business. Thirdly the investments of the owner of the area (the municipality) increase when the revenues of renting out the plots increase. The investments in the public space are linear to the ground revenues. The municipality is responsible for a certain quality of public space within the area, but this will be developed through time.

The price of the land

The land of the SuikerUnie has been purchased by the municipality in 2010 for 35,2 million euro (SuikerUnie, 2009). This sum is for approximately 124 hectares. That means the municipality paid 28 euro per m2. The cheapest agricultural land sold in the province of Groningen was in 2010, for example, 4 euro per m2 (Kadaster, 2010). While plots for building purposes in a new neighbourhood in Groningen in 2010 were sold for 250 - 265 euro per m2 (Gemeente Groningen, 2010). Prices for buying land for other functions than living were set anywhere between 115 and 400 euro per m2 (Gemeente Groningen, 2010). Research shows that an m2 allotment garden in Groningen costs a minimum of 2 euro per year (Bond van Volkstuinders, 2012). If 3 euro per m2 would be charged for renting a plot at the Rural Area, more than 1,5 million euros could be gained in the area on a yearly bases. The Agricultural Park in the North is approximately 38 hectare. This area will remain owned and rented out by the municipality. The food and goods produced in this park should cover the expenses and costs of this area. The 35 hectares of public space mentioned in figure 4 also includes the infrastructure of the agricultural. The 38 hectares of land is the usable area of the Agricultural Park for food producing use. The new area has an estimated 40 hectares of land to rent out in the Rural Area. 12 hectare can be sold in the creative district. This indicates that about 52 hectares of the area should provide enough profit to pay for the costs and interest of the purchase of the land. These revenues should also pay for the approximately 35 hectare of public space in the area.
**Costs:** $ 35.2 million

Amount that Groningen paid for the site (www.suikerunie.nl/Nieuws/Nieuwsarchief)

that is 28 euro/m² for the total area

**Total surface:**

Surface to sell:

1. Rural Area:
2. Agricultural Area:
3. Creative district:
4. Public space:

**Max. build surface:**

- 125 hectare
- 52 hectare

40 hectares
- 38 hectare
- 12 hectare
- 35 hectare
- 20,8 hectare

**Revenues:**

**Potential revenues:**

52 hectare building ground (300 euro/m²):

$ 159 million

Minimal rent revenue per year (3 euro x 52 hectare):

1.59 million per year
The model of gradual investment & revenues
The next page shows the relationship between the investments and the revenues within the SuikerUnie Area seen from the perspective of the owner of the SuikerUnie, the municipality. First we explain the revenues for the municipality (on the right side of the model). These revenues can be invested in the area, so the area develops positively. Than we explain in what steps the municipality can do the investments in the area.

The revenues
We propose that the price in the new area will be 300 euro/m². Renters of a plot pay off this price by 3 euro/m² per year. 40 percent of the surface can be built upon. For every percentage of built surfaces the renting prices increases. So if a renter places a building on their plot that contains 10 percent of the built surface, the price increases from 3 euro/m²/py towards 3,30 euro/m²/py. When 30% of the surface is built, the renter of the plot is able to pay off the remaining price for the land instantly. But the renter does not have to do this. He can also continue to pay off the price in installments. This way the renter owns the land after approximately 100 years.

The investments
The first revenues of renting out plots (1,5 million on a yearly bases) on the SuikerUnie Area are invested in opening up the area a basic trail and pontoon bridges. When one third of the area is rented out a system that integrally takes care of the piping in the area is placed. This is a basic big tube is placed throughout the framework; an integral piping system. Inhabitants need to connect to their piping to the system their selves (see also the section on page 113). The municipality places the electricity. If two third of the area is rented out, the municipality can invest in the public space by planting trees. When every plot is rented out the sewage and the water piping is placed within the integral piping system. When the time has come that approximately 15 % of the surface is built, the trail are paved with stones. In 20% of the area is built the pontoon bridges are replaced with permanent bridges. The last investment is to add street furniture within the public space, this will take place is 25% of the area is built. This model ensures, that is possible for people with limited resources to build their own house in a gradual way. It also insures the municipality of certain basic revenue on a yearly base. If the area becomes popular, and people are willing to build buildings on the site, the revenue out of the rent increases as well. This allows the municipality to invest more in the public space. The improved public space causes more investments in building. So it has the potential to trigger an upward spiral of revenues in the area.
Investments by owner

- Investing in street furniture
- Making permanent bridges
- Paving the streets
- Applying water & sewage system
- Investment in trees & providing street lamps
- Inserting central piping providing electricity
- Investing in a trail & pontoon bridges

Revenues for owner

- A ‘common’ neighbourhood
- 25% of build surface
- 20% of build surface
- 15% of build surface
- 100% rented out & First builders
- 66% rented out to renter
- First 33% of pioneering renters
10.4 **The spatial consequences: the design put in context**

*Making a physical (recreational) routing*

The SuikerUnie terrain is connecting to the surrounding by physical connections made by the new infrastructure. The new infrastructure is connecting Hoogkerk and the surrounding extensions with the city centre. The new green axes connects several recreational routes going through the city park with several routes going through the landscape of Groningen. By creating a new station, and a possible second new stop within the area, this means the area is becoming a new point of interest within the border of the city of Groningen.

*City of Talent*

As said in the introduction of the thesis, Groningen is aiming to attract and keep high educated people to the region of Groningen. The design of the creative district is keeping in mind the spatial elements that attracts creative entrepreneurs. The desired mix of functions, presence of third places and possibilities to combine work and living, and most of all the distinctive mix between old and new and the sense of place, is brought together in the design for the creative district. This way the design for the area is contributing to the desire of the municipality to enhance their wish to be a city of talent.

*Enhance the area*

The SuikerUnie Terrain is forming the last piece in the puzzle in the westside of the city of Groningen. It is the last big piece of no-mans-land. By opening up the area, and adjusting the spatial conditions within the terrain to the outside of the area the area interacts with the surrounding. Practically the design means that a former industrial area is transformed into a public neighbourhood everybody can enjoy. This also means that the open landscape of meadows within the terrain will not be maintained. It will be transformed into a green park with agricultural use, and it will be transformed in an area where Rural living and working can take place. If the city of Groningen wants to keep growing and expending it is not realistic to not redevelop these meadows into an area that is useful for the growth of the city. Because of the careful design, and the green character of the strategy the area will remain recreational attractive.
Green axes connects to the open landscape

The surrounding villages are integrated with Groningen

The new station links with the existing plans

Creative factory & educational institute links with City of Talent

Green axes makes connection to the city park
Frame IV
Reflections
Reflection:
On the process & the products
In this chapter we will reflect several elements of this thesis. We will first reflect on the results of the research, strategy and the design of the area. We will look back and see if the approach taken in this thesis worked for the area. We compare both the final design & the final research results with the goals we stated in the first frame of the thesis. We evaluate whether the method we choose was appropriate for the given situation. We will also discuss the relationship between the studio Urban Regeneration and the subject of this thesis.
11.1. Reflection on the methodology of the process of the thesis

The theory of research by design

When looking back at the research we see that beforehand you cannot know what the exact outcome of the (design) research will be. Dorst and Cross (2001) mention that a precise problem statement of the design tasks cannot be defined completely beforehand. They argue that defining the field of research and finding the solution are a simultaneous process, they co-evolve. ‘It seems that creative design is not a matter of first fixing the problem and then searching for a satisfactory solution concept.’ (2001: 434).

The research part and the design part of this thesis were also not a linear process but they were executed simultaneously. The two parts represent a cyclic process where research and design alternate each other. Figure 1 shows this principle graphically. The process of a project is shown as a box. In the beginning of the project the main component process is researching, and adding knowledge into the project. In the mean time gradually a first idea regarding a design is maturing. These first ideas are tested to the found knowledge. New questions arise. While finding knowledge, new inspiration for the design evolves. This cycle will be repeated numerous times. During the course of time spend on the research part of the thesis will become smaller, while the time spend on the design part of the thesis will become bigger. While the research is adding to the body of knowledge of the project, the design is using the body of knowledge, this way they benefit from each other.

This process indicates that both the research and the design part can provide new insights. This enhances the quality of both the research and the design. By discussing and reflecting on the products that are being produced, and applying it on the design or research, the project evolves into a end-product. This methodology is called Research by design (van Dorst in Rocco, 2011; Stolk, 2011).
11.2 Reflection on the relationship between research and design

Applying the knowledge: creative entrepreneurship is broader than creative workers only

This thesis started out with the aim to apply theoretical knowledge about how to attract creative entrepreneurs to the site of the SuikerUnie in Groningen. The starting point was a fascination with creative areas and factories in city throughout the world. The contemplation was that it would be wonderful if the former SuikerUnie site in Groningen could be transformed into a creative area.

During the search for a good strategy it became clear that the site has more future residents than creative entrepreneurs only. The site cannot solely be used for creative entrepreneurship. More people should feel welcome to start living and working in this area. This caused an alternation in the process. The focus of the research part should also contain other stakeholders.

During the process of the thesis we found out what creative entrepreneurs attracts to a certain area. But the question what to do with the rest of the site remained. A crucial moment in the process was the realisation that creative entrepreneurs are so much more than the strict category some researchers in their research describe. Because of the literature research the focus of the research was too much categorising people and groups. The area was not meant for one group only. When you perceive creative entrepreneurs as a broader category, the knowledge found in the research can still be applied. This means for example that a young bicyclist mechanic, of a beginning urban farmer, is also considered as a young beginning creative entrepreneur (the pioneer one, as mentioned in paragraph 4.3). More established entrepreneurs, like a big advertisement firm or an established floral shop, are considered as established like mentioned in paragraph 4.3. So instead of limiting the future residents to a single group, like creative entrepreneurs, the group becomes larger. The common denominator of the future residents is not the professional branch they have in common, but the reputation, lifestyle and certain sense of place they appreciate and value highly.
By not limiting the new residents to strict creative workers only, a more realistic strategy could be developed. However, the research on how to attract creative entrepreneurs showed opportunities for a development strategy for a site. This strategy uses the strengths of the entrepreneurs no matter where they are in their career. The strategy uses the energy and power of the starting (creative) entrepreneurs for revitalising the physique and the reputation of the area. And the strategy uses the refunds of the more established entrepreneurs that want to live off the reputation of the young pioneering entrepreneurs. This strategy could not have been developed without the research done for creative entrepreneurs.

11.3 Reflection on the products: is the research applied on the strategy & design?

In the first chapter of the thesis the design task of this research to find a spatial strategy to redevelop the SuikerUnie site into an area where creative entrepreneurs feel at ease and that fits within the current societal conditions. The end result of the thesis is a strategy that takes into account the wishes of the creative entrepreneurs. The literature research showed that there where several elements that are appreciated and valued highly by creative entrepreneurs. We will evaluate whether all these characteristics are visible in the end result of the vision. The next spread shows an overview of the design principles derived from the research. These design principles are mentioned in paragraph 6.5. The next spread reflects whether these goals are realised. If the goals are not reached the spread shows some recommendations for further research.

11.4 Reflection on the proposed strategy: what is so innovative about it?

As mentioned in the beginning quite a few cities nationwide are working on becoming a ‘creative city’. One could wonder how many creative cities a country or region could have. Next to that, the strategy of using creative entrepreneurs for place making has been executed before. It turns out that is a possible way to redevelop a deprived area. The other element of the strategy, the use of a fixed grid and a flexible infill is an ancient and well-approved method of building a city. It is however a method the Netherlands has stopped doing for some decades. So all in all one could wonder what the innovative part of the proposed strategy is? The strategy is innovative, and can add to the body of knowledge within Urbanism because first of all it proposes a slow and gradual process, instead of working with a fixed end vision. Because the end vision is not determined the inhabitants get the chance to develop their own house or building. In stead of buying a house from the developer, you truly get the chance to develop it for yourself. The second innovative element is the financial strategy. The investments in the public space and infrastructural framework expand alongside with the investments of the new inhabitants. This way it becomes possible to make gradual investments instead of one big investment. The third and last innovative part of the strategy is the stakeholders that are involved in the process. The strategy is not focussing on one specific target group but is allowing everybody with a spatial need and a fascination with the sense of place to come and start developing. By attracting allotment keepers a persuading them to gradually develop their own house, you allow the area to redevelop with an unusual
group of stakeholders. One often sees complete houses on allotment garden parks, while policy forbids the owners to officially live in these houses. This strategy is using the determination of the allotment keepers to build their own place to transform the SuikerUnie area. These three elements make the strategy innovative.

### 11.5 Reflection on the thesis within the studio of Urban Regeneration

The guidance of this graduation project is by the graduation studio *Urban Regeneration in the European Context, New approaches for modernization of urbanized areas* of the Technical University of Delft. The aim of this studio is to make strategic spatial interventions that can regenerate an urban area. The studio is opposed to fragmented solutions. ‘It aims at the creation of lasting spatial solutions which connects design issues to their social, economic and cultural contexts. Moreover, it takes account of the ever-changing requirements of users and dynamics of population characteristics’ (Technical University of Delft, 2011). The studio searches for how urban regeneration projects are designed and elaborated. Furthermore they look for what strategies, design elements and planning tools are used for this regeneration.

The strategy of this thesis is to make a fixed strong infrastructural framework where the infill of the plots remains adaptable, and changeable through time. This way the enclosed and deprived area of the SuikerUnie is integrated in the urban fabric of the city of Groningen. By making it possible to slowly built, create and adapt your own house or building, you allow groups of people who are normally not interested in building their own home, to realise their own place. This creates a social constructive solution for redeveloping alocation. By making the strategy a social and adaptable one, the strategy is in line with the approach of the studio Urban Regeneration. The approach of the Urban Regeneration studio is to search for a sustainable and long-lasting approach to reintegrate a deprived area in a bigger urban context. That is exactly what the strategy of this thesis aims for as well.

### 11.6 Personal reflection: Looking back on the graduation year

Looking back and knowing what I know now, I would have done little things differently. I started the thesis with a fascination I had for creative districts in cities. I started researching them, thinking I could apply this directly on the SuikerUnie site. Research on the site showed that the dimensions of the site were immense. Next to that there was very little real estate. This caused that applying the usual method of transforming an industrial site into a creative area would not have worked. This forced me to search for unconventional solutions. The end result, where there is gradual, slow transformation with unusual stakeholders and a smart financial model is a rich and innovative strategy that has potential to be used. Therefore I am content that the conditions of the site forced me to look further and think harder, it was a truly creative process. On the next spread some recommendations regarding the design principles are given.
Principal: **Accessibility**

Goal: Opening up the site by adding new infrastructure

Results in strategy & design: The result is a solid grid of infrastructure that opens up the area. Six new entrances, with two bridges are realised. The roads make a shortcut for the people of Hoogkerk to the centre of Groningen.

Recommendations: The second bridge for cars that will only be executed in the positive scenario might be more important than indicated. Further research could be done.

Principal: **Connecting**

Goal: Connect to surrounding physically and by referring to surrounding in the program

Results in strategy & design: The three different areas make sure that there is a subtle transition between the existing surrounding and the new area. The new infrastructure connect several recreational routes to each other. The red and green backbone provide hierarchy.

Recommendations: The green backbone is now beginning in the Agricultural park and ending in the City park. The road system in the city park is slightly altered. More research to whether more drastic improvements in the road structure of the city park is necessary.

Principal: **Public transport**

Goal: Exploit the potential of a new station on the SuikerUnie

Results in strategy & design: The new station is part of the new heart of the area: the creative centre. The station with the special underpass makes the creative factory, school and biological market one area.

Recommendations: In the future there could be done research in the potential of the second stop that is now indicated in the scenario for extensive growth. The plans of the RegionNetwork are currently developing. When these plans are more definite it would be wise to compare them with the plan made in this strategy.

Principal: **Involve local Actors**

Goal: Incorporate local actors that have a spatial need in the strategy of the area.

Results in strategy & design: The strategy involves students, living boats owners, allotment keepers and creative entrepreneurs. All these group have a spatial need in Groningen.

Recommendations: More research for groups with spatial needs can be done. This will indicate whether there are more potential stakeholders who can play a role in the temporary place making in the beginning. And the filling of the plots later in the process.
**Principal:**

**Involve creative people**

**Goal:**
Incorporate creative pioneering people that are willing to invest time in the area

**Results in strategy & design:**
The creatives are crucial in the first phase of the place making of the area. They make the area known to a big audience. In return they will receive a location for their business.

**Recommendations:**
In further research for this strategy the actual amount of workings pace they receive in the SuikerUnie could be researched. One could research how many creative entrepreneurs are needed for the first kick start

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**Principal:**

**Value the ecosystem**

**Goal:**
Be aware of the precious ecological green system in the area

**Results in strategy & design:**
The agricultural park and the rural area definitively change the ecological system in the area. The area will remain green, and nature-rich. But will be more cultivated and more extensively used.

**Recommendations:**
In the transformation process of the area one could research whether is would be possible to somehow respect the current natural richness more. Maybe a watersystem? Rules for maintaining your garden? etc

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**Principal:**

**Make use of the water**

**Goal:**
Incorporate the water (Hoendiep) in the new design

**Results in strategy & design:**
The new harbour, with the places for living boats and quay along the Hoendiep in the heart of the area make sure the water is appreciated. In the rural area the old ditch pattern is turned into the centre of the new street profile.

**Recommendations:**
The old ditch leading from the Hoendiep to the city park is not yet incorporated to the fullest in the design. Further research could maybe enhance the position of this old ditch.

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**Principal:**

**Make use of the real estate**

**Goal:**
Incorporate the real estate that is still present in the strategy and design

**Results in strategy & design:**
All the remaining real estate is optimal used in the transformation process. They provide an authentic feeling to the area, and provide a cheap and easy starting point for the transformation.

**Recommendations:**
The Bunkers in the Agricultural Park, who date back from the WWII are the only two real estates that do not have a new program yet. This could be elaborated further.
Chapter 12

A broader view
Reflection on creative city development
This last chapter is reflecting on the thesis subject in a broader view. What is the broader debate that is taking place within the field of Urbanism regarding creative economy? What can we say about the ethical implications of the approach of the creative city, and how does this thesis subject relate to the studio Urban Regeneration?
12.1 The debate within Urbanism

When we talk about creative city concepts and creative districts in urban areas, we talk about recent developments in the history of Urbanism. Jacobs her book *The life and death of great American cities* (1961) was for many people the starting point of thinking about cities in a different way. In this book she pleads for a ‘compact city’, with mixed functions. Diversity and interaction are the main components for an economically and livable city the author argues. In the book *The economy of cities* Jacobs (1972) compares the city with an ecosystem. Cities are the engines of the economy and are more important than countries as a whole. The creative city concept was not yet mentioned here. Most academics agree that Florida was the first to connect and acknowledge the economic development in the United States and Western Europe with the cultural climate (Franke and Verhagen, 2005). Florida (2002) published his book *the rise of the creative class* in which he elaborates the idea of dealing with the shift in economy by emphasizing the creative class. His book was, and is, popular among a lot of planners and policy makers in the Western society. Florida argued that creativity was important for the development of cities. Cities that have the three T’s; Talent, Technology and Tolerance, would benefit of the creative city concept. But within the field of Urbanism and planning there is also scepticism on the story Florida is promoting. This is because many planners who were looking for a solution for their post-industrialist city very enthusiastically adapted the theory of Florida, but not completely. Some cities have a good university and technologic sources, the T of technology in the story of Florida. The same cities may have a lack of the T tolerance and talent. By applying the theory of Florida only half there is the threat that the creative city concept becomes a hollow marketing phrase (Kloosterman, 2005). Some Dutch cities have the simplified the message towards a city-marketing strategy to promote their city as a cultural hotspot. (Saris et al., 2008a). Trip and Romein recognize a gap between ‘academic literature that discuss the development of the creative city or creative economy on a conceptual level, and actual policy development in individual cities’ (Trip and Romein, 2010:7). They argue that policy makers base their policy on a limited number of sources, and tend to imitate – copy and paste – well-known creative city successes like Barcelona. The term creative city is used as an label to ‘renew and popularize existing policies’ (Chatterton, 2010 in Trip and Romein, 2010:2).

Left page:
1. Richard Florida speeching about his bestselling book *the rise of the creative class*. A highly appreciated but also debated book
source: http://www.creativeclass.com/richard_florida date: 12-11-2011
12.2 Ethical thoughts on creative city development

To illustrate the subject of the debate that is taking place within the field of Urbanism we take as example the case of Berlin, where a big community of artists and creative entrepreneurs are based. For years the city is attracting artists because it had great possibilities, cheap rents and a certain sense of place (see also Saris et al., 2008b; Heebels and van Aalst, 2010). Politician now start to pick up on this movement and organized a 1,4 million euros costing exhibition called Based in Berlin. The first policy to support creative industry is still in its infancy (Heebels and van Aalst, 2010). The paradox is nowhere in Europe more art is being produced nor is the amount of small artists ateliers so high. Meanwhile the discussion remains whether the city is a ‘real’ art-metro pole. The art-fair Artforum has, for example, stopped. The long anticipated art-hall is not going to be developed and for good exhibitions Frankfurt is still the place to be (Schoonenboom, 2011). Furthermore Schoonenboom is very sceptical about the role of the government in the article Promise Berlin. The author argues that nowadays the municipality is using the image of the arts in developing Berlin but is not willing to pay the price. Hackert is, in the same article, debating that you should not call out for subsidies because ‘Berlin is not artificial. Freedom comes with a degree of living without compromises’ (Hackert in Schoonenboom, 2011). The paradox between the lively artists-scene who have started up the ‘creative city’, and the government now trying to benefit from this image, is a relevant ethical debate in this thesis.

One can ask his self whether it is ethical to use the artists as a tool for gentrification of deprived areas. Nowadays artists are often encouraged to establish themselves in a deprived area. For low rent prices they are offered a working place within a deprived area. This way municipalities, and real estate developers, hope that the prices of the area will rise, and the image of the area will turn into a positive place to be. The risk is that once the area is developed in a successful creative area, the former users and the beginning artists can no longer afford the prices of the real estate. Increasing property prices, and rents, cause the move of starting artists and original inhabitants to elsewhere (Olma, 2011a). Ethically this is very questionable: you use creative entrepreneurs to upgrade an area; after that firms who can afford the premium prices use the area. A movie called Creativity and the Capitalist City is also discussing this same ethical question (Buchholz, 2011).

Besides that is ethically very doubtful we must also not forget that both the original inhabitants as the artists are ‘a part of the new image the area has developed. When gentrification appears, the site looses its sense of place’ (Cerutti, 2011:150). Olma is adding that this gentrification process is also a ‘waste of creative potential, particularly for cities and economies that label themselves ‘creative’ (2011b). He states that small towns like Groningen that are not within the boundaries of a big metropolis do not have the time to find new locations for the creative entrepreneurs. This way they will loose the entrepreneurs, which is a dangerous situation.
Related to the strategy for the SuikerUnie

The question is how we perceive the strategy of the SuikerUnie. I personally strongly believe in the innovational and creative skills of creative entrepreneur and artists. I believe once these deprived area have become ‘booming’ artists move on. True pioneering artists like their location of choice to be obscure, unknown and radically different. They will always find other ways and places to come together and make beautiful things. I do not think it is morally wrong to use artists to upgrade a neighbourhood. Not only do they have the opportunity to rent enormous spaces at good prices, they also have the opportunity to make or break an area and find inspiration in the contrasts. Once the sharp edges are of the area, I believe true autonomous artists feel the need to wander on and explore other areas; where they will be challenged to think outside the box again.

To say that the gentrification process for using artists to empower an area is a dangerous thing, I think, is a patronizing way of looking at the ability and flexibility of artists and creative entrepreneurs. Next to that I believe that within a city of Groningen, although it is not within the border of a bigger metropolis, will always contain areas where rules are dodgy, artists can roam, and creativity can flourish to great highs. A city is never finished, so it will always contain the right area for the right people.

Therefor I think the design and strategy for the SuikerUnie is a good example on how one can transform a former industrial area into a new lively neighbourhood, together with local stakeholder, and with a minimum of expenses for the municipality. It appeals the creative nature in every new inhabitant; from allotment owner to the visitors at the cafe. This makes the SuikerUnie an excellent show case to see how one could deal with the creative city concept in a new way. The strategy of the SuikerUnie is setting an example for redeveloping creatively, and is providing an innovative future for the whole city of Groningen.
13. Bibliography


CERUTTI, V. 2011 *Creatieve fabrieken. Waardecreatie met herbestemming van industrieel erfgoed*, Utrecht, C2Publishing


DRAKE, G. 2003. ‘This place gives me space’: place and creativity in the creative industries. *Geoforum*, 34, 511-524.


FLORIDA, R. 2002 *The rise of the creative class ... and how it’s transforming work, leisure, community and everyday life*, New York, Basic Books.

FRANKE, S. & VERHAGEN, E. 2005 *Creativiteit en de stad hoe de creatieve economie de stad verandert*, Rotterdam, NAi Uitgevers.


H. IBELINGS & V. VAN ROSSEM 2009 De nieuwe traditie, continuïteit en vernieuwing in de Nederlandse architectuur, Amsterdam, SUN.

HALL, P. 1998 Cities in civilization culture, innovation, and urban order, London, Phoenix.


LANDRY, C. 2008 *The creative city: a toolkit for urban innovators*, New Stroud, UK; London; Sterling, VA, Comedia; Earthscan.


ROMEIN, A. & TRIP, J. J. 2010. The creative economy in CCC cities and regions. SWOT Analysis Report 6.2. written within the framework of the NSR INTERREG IVB project
Creative City Challenge. Delft: OTB Research Institute for the Built Environment, Delft University of Technology.


SCHAAAR VAN DER, M. 2012. RE: Flexibele bestemmingsplannen.

SCHIJNDEL VAN, B. 2011 Basisboek Ruimtelijke Ordening en Planologie, Groningen, Noordhoff Uitgevers.


URHAHN URBAN DESIGN 2010 De Spontane Stad, Amsterdam, BIS Publishers.


Source of photo’s at chapters introduction:

All source of Author expect for;

page 8-9:   www.groningerbeeldbank.nl (Accessed 06-01-2011)
page 34-35: www.groningerbeeldbank.nl (Accessed 06-01-2011)
page 42:   www.rijksmuseum.nl (accessed 28-12-2011)
page 50:   www.groningen.nl/suikerfabriek (Accessed 16-09-2011)
page 72:   www.newpower.nl (04-11-2011)
14. Appendix:
The literature review
Creating a Creative Urban Environment
An investigation on the spatial characteristics

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Abstract — The decreasing amount of industrial labour in the western society and the rise of new economies in the rest of the world has led to a shift in the western economy. The post-industrial Western society is no longer able to produce for low costs anymore (Cerutti, 2011). Innovation and adding value by thinking creative is becoming more important to remain competitive (Romein and Trip, 2010). Creative workers are seen as ‘agents of neighbourhood revitalization and as enhancing urban competitiveness in increasingly knowledge-based urban economies’ (Smit, 2011:22). Ever since the book of Florida (2004) was released it seemed that almost all self-respecting policy makers and planners were trying to elaborate the concept of the creative city (Trip and Romein, 2010; Saris et al., 2008a). The spatial development of this creative city concept remains vague in a lot of research.

In this research we aim to investigate according to what spatial characteristics a district in a western city could be (re-) designed so that it attracts creative urban development. Literature shows that there are three main reasons for creative workers to agglomerate together. This is because a) he or she than is within the proximity of a network and cultural gatekeepers b) he or she than can be inspired by the characteristic and sense of place c) he or she can benefit from the creative reputation the district has. (Heebels and van Aalst, 2010). In the paper we further elaborate these three perspectives. Next to that we search in literature for spatial characteristics. For example; the spatial characteristics like historic ‘raw’ buildings, flexible space and the use of third places seem to be stressed by many authors as important attractors for creative workers. Research of Smit (2011) and Heebels & van Aalst (2010) show that the spatial conditions that are appreciated by creative workers shift during the course of their career.

By finding spatial characteristics for creative urban development it becomes possible to apply these characteristics in designing a new creative urban development. This could be helpful for designers and policy makers dealing with urban regeneration.

Key words — Creative City, urban regeneration, city development, design tools, Creative Urban Development, Creative Worker, entrepreneurship,

1 Introducing the search to spatial characteristics by literature review

The decreasing amount of industrial labour in the western society and the rise of new economies in the rest of the world have led to a shift in the western economy. The post-industrial Western society is no longer able to produce for low costs anymore. Economical growth is to be found in other ways than producing goods (Cerutti, 2011). Innovation and adding value by thinking creative is becoming more important to remain competitive (Romein and Trip, 2010). Florida (2004) argues that the shift in society is not only towards a knowledge-based economy but also into a society where the creative ethos is becoming dominant. Ever since the book of Florida was released it seemed that almost all self-respecting policy makers and planners were trying to elaborate the development of the creative city (Trip and Romein, 2010; Saris et al., 2008a).

Creative workers and the revitalisation of former industrial area are seen as a booster for spatial and social transformation (Cerutti, 2011). This creative city development also needs to be applied in a spatial manner (Smit, 2011; Heebels and van Aalst, 2010). What spatially attracts creative workers to a certain area?

In this literature review we aim to investigate according to what spatial characteristics a district in a western city could be (re-) designed so that it attracts creative urban development. This paper will first investigate what we define under creative urban development. After forming the definition the paper will search in literature how, and if, creative workers benefit from agglomeration in a district. Next we search for spatial characteristics that could attract creative workers. In the conclusion an overview of the found characteristics is given.
By finding spatial characteristics for creative urban development it becomes possible to better understand what the creative worker wants. This knowledge could be applied when designing a new creative urban development. Next to that it is helpful for designers and planners who are dealing with attracting and keeping creative workers.

2 Defining creative urban development
In this literature paper we search for spatial characteristics that could attract creative workers to a certain urban development. Therefor we need to define the creative urban development. We define creative urban development by the **people** who will be using it, namely the creative workers.

There is a distinction between creative **people** and creative **industry**. Although the two definitions are not the same, they also overlap (Trip and Romein, 2010). What, for example, is attractive for **people** might not be attractive for the creative **industry**. In this literature review we will consider the creative **people** as the main perspective. We define creative worker as people who are ‘creating or identifying an opportunity to provide a cultural product, service or experience and bringing together the recourses to exploit this.’ (Rae, 2007: 55).

When we mention a creative urban environment in this theory paper we define this as an area within the border of a city that focuses on creative workers and industries as mentioned by Rea and Scott.

3 Why creative workers agglomerate
Most studies on creative industries depart from the notion that there are advantages for creative firms for clustering in a district (Heebels and van Aalst, 2010). Many authors stress the importance of place for creative workers despite globalisation processes (Heebels and van Aalst, 2010; Landry, 2008; Hall, 1998). Marshall (1920) explains why economies are spatially clustered. He states that there are three main reasons why similar companies are clustered in the same region. First of all it is to make the most of the information and ideas that are present in an area. Secondly this way companies can tap into, and add, to the presence of non-traded input: This way companies can reduce transportation and transaction costs. Thirdly companies can benefit of the availability of specialized labour (Heebels and van Aalst, 2010). This last reason is according to Scott a reason for creative workers to locate themselves in clusters (Scott, 2004). Creative clusters can provide for a ‘flexible workforce possessing expertise and creativity, low labour costs, and high productivity’ (Heebels and van Aalst, 2010: 349). Heebels and van Aalst explain that other researchers like Crewe and Beaverstock, Gordon and Mc Cann, Pratt and Banks et al. argue that creative clusters can provide a ‘contexts of trust, socialization, knowledge exchange, innovation, and inspiration for creative firms and it can act as safe havens in an uncertain and competitive business climate’ (Heebels and van Aalst, 2010: 349). Overviewing the literature Heebels and van Aalst (2010) conclude that are three main reasons, or perspectives, for creative workers for agglomerating. First of all it establishes **contacts** with cultural gatekeepers. Second it is because being in a creative cluster shapes the **identity** as a worker. And as third it builds a **reputation** within the community. In the next three chapters we will further elaborate these main perspectives, and give them a spatial meaning.

4 Perspective One; Contacts, the importance of third places
The first perspective on clustering deals with the added value face-to-face contact. Florida (2002) was one of the first to argue that social meeting places are crucial for the development of the creative worker. In cafes, bars and galleries new cooperation’s are started. Assignments are not obtained through conservative channels. They are obtained through networking in the so-called **third places**. Being within a creative community is crucial according to Currid (2007) because of the high level of insecurity in job searching. Meeting in third places are therefore crucial for creative workers to obtain assignments and network.

Research done by Smit & Schutjens (2011) and Heebels & van Aalst (2010) both nuance that the face-to-face is crucial for creative workers. The addition they make as a result of their research is that these third places are of different importance for different phases in the career of the creative worker. The research of and Heebels & van Aalst (2010) shows that already established contacts was of more importance than the opportunity to network for the location choice of creative entrepreneurs. But once established, the starting creative workers needs the third places for meeting sparring partners, getting feed back, and obtain new assignments.

‘In my early years I shared a studio with three other illustrators. We worked together on a number of comic books. These were inspiring and educational years and reflection was paramount.’
(Heebels and Van Aalst, 2010: 357).

The more established creative workers the face-to-face contact and public opportunities are less relevant. They still benefit from the reputation of the area, but their assignments and network are obtained on a bigger scale. The creative cluster is a valuable asset to their business but their personal needs like parks, playgrounds and grocery shops are becoming more important.

‘Nowadays, I would rather work alone or I choose who I co-operate with. When I see
people’s work in magazines, in the Internet or at exhibitions and I would like to co-operate with them, I phone them’ (Heebels and van Aalst, 2010: 357).

For the local face-to-face network it is crucial to design meeting places in the public space where there is space for social gatherings; cafes, bars, restaurants, galleries, museum and art fairs. Clients are entertained in the area; creative workers feel a certain pride in showing the inspiring neighbourhood.

‘I enjoy it when clients visit us and see the Ocean Liners. I like it when they see that we are located in an industrial area with a creative vibe. I like it when clients arrive, or leave inspired… It is nice when a client from Hoorn or Oss visits us, and leaves with a little bit of allure.’(Smit, 2008: 28)

5 Perspective two: Identity, or the crucial sense of place

Next to above-mentioned perspective that clustering is important for creative development because of the opportunity to meet; there is also another perspective. The first perspective emphasizes that clustering in a creative district is beneficial because of proximity to facilities and people. The other perspective emphasizes the experience and the symbolic value of the built environment that is beneficial for the creative worker. The look and feel of places are crucial for the location choice of creative workers (Helbrecht, 1998). Somehow it seems that creative workers are drawn to area where there is a certain sense of place(Florida, 2002; Franke and Verhagen, 2005; Heebels and van Aalst, 2010; Smit, 2011: Rae, 2007; Landry, 2006). It seems that a ‘buzz’, ‘vibe’ or ‘something in the air’ is the reason for locating in a certain area. Studies show that many creative workers value the built environment as crucial in their location choice. Cerutti (2011) stresses that successful transformations of industrial sites into creative factories are the ones that are embedded in the local DNA or genius loci of the site.

Historic ‘raw’ buildings

Creative workers value old industrial buildings, and feel connected to the look and feel of the physical environment. They appreciate the rawness of the area and the historical presence of the industrial heritage. The symbolic values of the local look and feel of the area. A combination of the presence of history, monumental buildings, special constructions, the authenticity and incomplete roughness of the built environment is often mentioned as inspiring and crucial for the sense of placer(Smit, 2011; Heebels and van Aalst, 2010; Hutton, 2006; Saris et al., 2008b; Cerutti, 2011).

‘The history, which is still visible in the buildings, inspires me. Many things are still open, not finished yet, anything could happen and I can contribute to his. There are still so many unspoilt corners; you can live here just as you want’ (Heebels and van Aalst, 2010: 358).

Distinctive new architecture

Besides rough unfinished buildings, buildings with distinctive architecture are also highly appreciated. The modern architecture is appreciated by creative workers when it is ‘distinguishing’ architecture, diverse and original in size, style, and use of materials. Such architectural elements gave a sense of uniqueness to the overall district appearance.’ (Smit, 2011: 176). The contrasts and styles of old and new buildings end up in an inspiring décor that is symbolic for the development of the site (Cerutti, 2011). Terms used by respondents in the research of Smit (2008) for good urban space are “creative appearance” or “progressive, dynamic, authentic, edgy, indeterminate, and rugged”. Bad urban space is defined as “over completed, boring, or can be anywhere”.

‘I often make appointments for work in the Music Hall. Then I feel a certain pride… I find the Music Hall very attractive. It is huge, it fits in this setting: In this way it does justice to the grandness, the roughness and the sturdiness of the surrounding district…. The magnificence of the building. The enormous overhang of the roof… It is in balance, it matches, it is a coherent whole with its surroundings.’ (Smit, 2011: 177)

6 Perspective three: Image, or the reputation of being creative

The last perspective on agglomeration deals with the influence of the reputation of the area on creative industry. In a creative cluster, the presence of other creative workers is essential for the majority of the creative workers (Hutton, 2006). By being in a creative cluster they are provided with a certain image or creative reputation (Drake, 2003). The ‘place becomes a marketing device. Presence here not only amounts to an opportunity to establish local contacts and to access localized resources, it takes on the qualities of a strategic tool that enables the worker to reach out beyond the neighbourhood’ (Heebels and van Aalst, 2010: 357). This was according to the research of Smit (2011) also a reason for creative workers to locate them at a
specific place. The mix of old and new architecture functions as inspiration and a business card. It provides inspiration for both the creative workers as for the clients (Saris et al., 2008b). The distinctive architecture functions as a showcase for the company. Creative workers use their environment to strengthen and reproduce their creative reputation (Heebels and van Aalst, 2010; Hutton, 2006).

‘One can really show this location off. It isn’t as though you have to hide it. We just say in our brochure: good location, good people.’ (Heebels and van Aalst, 2010: 359).

Cerutti (2011) mentions in her book that this sense of pride also works for the local inhabitants. When festivals of renowned firms house themselves in the area, the local inhabitants, who often felt ashamed of the industrial heritage of the area, feel a new sense of pride for the area. Besides this the old industrial site becomes a symbol for a new image for a whole area, and that way contributes to the cultural and economical development of an area.

7 Other characteristics to attract creative industries
Now we know what spatially is important from the three perspectives of advantages in agglomerating as a creative worker. Besides these characteristics there are some other important characteristics that are important for creative workers. We will discuss some of them in the following paragraphs.

7.1 Following Jacobs: Tolerance and diversity
Florida (2002) explains that the creative class benefits from an environment in the city that has the three T’s; Talent, Technology and Tolerance. Creative workers feel inspired, and are drawn to tolerant urban environments with a diversity of people. Jacobs (1961) already pleads for a ‘compact city’, with mixed functions, diversity in population, building and facilities. According to her diversity and interaction are the main components for an economically and liveable city. Both Florida and Jacobs emphasize the presence of tolerance in (amongst others) the diversity in population. It is interesting to find in the research of Heebels and van Aalst that tolerance for the respondents’ means that they are located in an environment where they are tolerated themselves. The tolerance and diversification in population as mentioned by Florida and Jacobs is not as important (Hutton, 2006; Smit, 2011).

‘The freedom van be found in the tolerance. You could wear green shoes here and nobody would look twice at you.’ (Heebels and van Aalst, 2010: 359).

Creative people work hard; there is a thin line between work, leisure, deadlines and living. Research of Smit (2008) mentions that respondents in her research mention that they would never like to work in a mono-functional industrial site, but also not in a mono-functional residential area. This is because often starting creative workers work at home most of the times. The combination of big houses or the presence of working space near the house is for many respondents a primal reason to establish in a certain area. The mix of new and old building is found to be very appealing.

‘It’s nice to see boats here, the atmosphere of the old harbour; you do see where the tracks were. That really appeals to me. That part of history here [...] Because if everything is new, it is not attractive.’ (Smit, 2011: 178)

7.2 Design a flexible environment
Flexibility is a word mentioned often in the research of Smit and Heebels & van Aalst. Saris mentions that you should design the area so the space can grow and adept to changes in the working environment (2008b). He argues that creative businesses grow fast, but are also flexible in hiring free lancers. The space they use should be able to adjust to their demand with relatively little means. Next to that the flexibility in the architecture is symbolic for the dynamic image of creative people (Saris, 2008). The temporality in urban structure and architecture stimulate the creativity people can make their own mark on their space.

7.3 Keeping it cheap?
Many authors stress the importance of offering cheap space for creative workers. They argue that creative workers are often starting businesses and therefor have a limited budget. Research of Heebels & van Aalst (2010) show that the more established creative firms have others wishes and demands for the urban space and architecture than starting firms. The more established firms use the creative atmosphere as their proof of creativity towards the client, but have a higher standard when it comes to their working space.

7.4 Accessibility is important
The accessibility of the place is important. According to Smit (2008) the respondent in the research carefully consider a creative place that is also good reachable for themselves and their clients. But the accessibility is not as important as the sense of place. Cerutti (2011) adds to this that good accessible public space is crucial for the development of the area. The area should be public, but with a limited amount of entrances. This way the
enclosed character of the meeting function is enhanced. This emphasizes the social cohesion, safety and maintenance of the area. The regeneration of former industrial sites usually opens up former isolated area in the urban tissue. Implementation of new routes from surrounding area is a crucial process.

7.5 Designing in contrasts
Cerutti (2011) in her book has done research to the reason why people are drawn to old industrial sites. She thinks the reason is in the combination of contrasting elements. Old and new, green and industrial, open closed, big small and rough and smooth. Smit (2011) also mentions that creative workers appreciate contrasting elements. In the regeneration of an old industrial site these contrasts could be further emphasized.

8 Conclusion
In this literature review we aimed to find what spatial characteristics could attract creative workers. Literature first of all indicates the importance for creative workers to agglomerate. This is helpful for the creative worker because a) he can get in contact with a creative network and cultural gatekeepers b) he than can be inspired by the characteristic sense of place c) he can benefit from the creative reputation and image the district has. Spatial characteristics creative workers appreciate are:

- Third places for meeting and networking
- Historic ‘raw’ buildings
- Distinctive architecture
- Mix of old and new buildings
- Diverse mix in functions
- Tolerant climate
- Flexible environment
- A mix in cheap and more representative office space
- Accessibility
- Easy but limited entrances
- Contrasting elements in the built environment
- Waterfront development

Interesting to see is that the research of Smit and Heebels & van Aalst show that there is a distinction between starting creative workers and the more established firms. Starting businesses need the network, face-to-face contact and access to cultural gatekeepers more than the established firms. Starters highly appreciate and use of the so-called third places for networking. Their resources are limited so, flexible cheap workspace is crucial. Later in the development of the creative firms you see that the assignments are obtained in a bigger network. Third places are now appreciated on a personal level. Other spatial elements like parks, shops, and kindergarten are now more appreciated. The office space should be more representative. Accessibility is more appreciated as well. The established creative firm use the creative vibe or climate from the district for their own reputation. The district functions like a business card. This evolution in wishes and demands might be an interesting research for further research. For now the results of the literature review could be helpful for designers and planners dealing with regenerating urban areas.

Bibliography

CERUTTI, V. 2011 Creatieve fabrieken. Waardecreatie met herbestemming van industrieel erfgoed, Utrecht, C2Publishing
DRAKE, G. 2003 'This place gives me space': place and creativity in the creative industries. Geoforum, 34, 511-524.
FLORIDA, R. 2002 The rise of the creative class ... and how it's transforming work, leisure, community and everyday life, New York, Basic Books.
FRANKE, S. & VERHAGEN, E. 2005 Creativiteit en de stad hoe de creatieve economie de stad verandert, Rotterdam, NAI Uitgevers.
HALL, P. 1998 Cities in civilization culture, innovation, and urban order, London, Phoenix.
LANDRY, C. 2008 The creative city: a toolkit for urban innovators, New Stroud, UK; London ; Sterling, VA, Comedia; Earthscan.
SMIT, A. J. 2008. NICIS onderzoek 2008: Creatieve werkmilieus in Amsterdam, Rotterdam, Groningen. NICIS.