City Perception

A modification of the method of mental maps and its application to the centre of the city of Karlskrona

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The fundamental problem is to decide what the form of a human settlement consists of: solely the inert physical things? Or the living organisms too? The actions people engage in? The social structure? The economic system? The ecological system? The control of the space and its meaning? The way it presents itself to the senses? Its daily and seasonal rhythms? Its secular changes? Like any important phenomenon, the city extends out into every other phenomenon, and the choice of where to make the cut is not an easy one”.

(Lynch, The good city form, 1981, p. 48)
Abstract

The city is a complex reality that is composed of a physical environment, social action and political as well as cultural structures. This thesis is based on the assumption that urban space is produced in a continuous process in which all these dimensions mutually interact with each other. I endue, furthermore, that the perception of urban space is to be located at the interface between these aspects. Therefore it is the perception of urban space to which I address this thesis. How do different people perceive the centre of the city of Karlskrona in southern Sweden?

Which method is suited best to capture mental images and individual citizens’ perceptions of urban environments? These are the central questions of my mental maps enquiry. The psychological process of mental mapping on which this method relies and the criticisms that are put forward against it are explicated in the text. From a theoretical point of view, I confront the formalistic approach of Kevin Lynch’s well known survey “The image of a city” with the artistic and critical idea of psycho-geography as it is developed by the French avant-garde movement of the International Situationists.

Inspired by these two approaches I developed a new method and applied this in a field study. Karlskrona, as my field study, currently is a subject of several urban development processes. These processes affect the built city structures and the social realities. This means that Karlskrona was and is still struggling challenges – like the transition from a shrinking population to a stable and eventually growing one – or the transformation from an overage city to a city of new technologies. In this thesis I arrive at the conclusion that surveys on urban perception may indeed serve as a means of orientation for urban development that attempts to deal with more than physical structures.

In exploring the depiction of cognitive images with mental maps, the every-day usage of urban space, the personal relationship to the city centre, the vision of what it might be, I succeed in elaborating places in the city centre that are strongly perceived or not perceived. The mental maps survey draws attention to certain risks and potentials in the urban space of Karlskrona and may thus make a contribution to the evaluation and progress of local urban development.

Keywords: city perception, mental mapping, cognitive maps, social urban planning, sustainable development, civic activism
Acknowledgment

In August 2010 I came to Karlskrona to learn about European Spatial Planning and Regional Development. I had not any lecture about European Planning in my luggage, just my thirst for knowledge and the perception that I would miss a great and intriguing field in sprigtail planning if I did not take the opportunity and study at the BTH Karlskrona. Now one year later, I find myself becoming a spatial planner. All this would not be possible without the help and support of many people that stood by my side in the last month. I would like to take this opportunity to express my gratitude to all of them.

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<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.4</td>
<td>Vision</td>
<td>52</td>
</tr>
<tr>
<td>8.4.1</td>
<td>Inhabitants</td>
<td>52</td>
</tr>
<tr>
<td>8.4.2</td>
<td>Students</td>
<td>53</td>
</tr>
<tr>
<td>8.4.3</td>
<td>Tourists</td>
<td>53</td>
</tr>
<tr>
<td>8.5</td>
<td>Professional planners</td>
<td>54</td>
</tr>
<tr>
<td>8.5.1</td>
<td>Analysis and Conclusion</td>
<td>54</td>
</tr>
<tr>
<td>9</td>
<td>Conclusion</td>
<td>54</td>
</tr>
<tr>
<td>10</td>
<td>Evaluation of the method</td>
<td>58</td>
</tr>
<tr>
<td>11</td>
<td>Graphical Summary</td>
<td>61</td>
</tr>
<tr>
<td>12</td>
<td>Bibliography</td>
<td>64</td>
</tr>
<tr>
<td>13</td>
<td>Table of Figures</td>
<td>67</td>
</tr>
<tr>
<td>14</td>
<td>Appendix</td>
<td>67</td>
</tr>
</tbody>
</table>
1 Border perception of Karlskrona

At the earliest stages of my thesis project, I started to make myself familiar with the physical structure of Karlskrona.

I reviewed the relevant literature (Parker, 2007, S. 123) and analysed various maps. But no matter which material I studied, I always had one problem: To define where the city starts and where the city ends. Satellite images showed to me how the city is embedded into its environment. It appeared to me like a confusing interplay of settlements, forests, meadows and cultivated fields.

The structure of the city is very split up. There is no homogenous townscape.

During the literature review I came across a certain paper (Nuur, 2011, S. 43) alluding to the decentralised nature of Karlskrona and pointing out that the parcelling of the city into different islands can be seen as a problem. But I could not find anything about the borders of the city. This made me wonder and ask myself where the border of Karlskrona actually may be. It was this moment in which I decided to explore the limits of the city.

I would like to know where Karlskrona begins and ends. Until now I have not found any map that shows the definition of the entire urban area. With this background I started to formulate the question: How can you define the space of Karlskrona?

I figured the best to do would be to go to the city centre and start asking passers-by, if they could draw the city border on a map of Blekinge. So, in February 2011 I went out in the streets of Karlskrona and asked 18 passers-by to locate the city border on my map. Subsequently I overlaid the resulting maps. It was really interesting for me to see how different the results were I obtained. Some people told me that the city is defined by the district of Trossö or alternatively that the shoreline of Karlskrona can be regarded as the border.

After my investigation I overlaid the different maps (cf. Fig. 1). Where the map is darkest I encountered the most matches of the perceived city area; the lighter a part the fewer matches. Particularly, it is interesting to see how the size of the city varies from map to map. This approach shows how difficult it is to work with a big area like the city as a whole. This is why I decided to focus more on a smaller part of the city. In my thesis I will try to define the space of the centre of Karlskrona.

Figure 1 Border perception of the people of Karlskrona
2 Introduction
It is very important for spatial planners and urban designers to know the city from different perspectives. During my first semester at university the top priority of my research subjects was always the design quality of the city. But today I realize that physical space is also a social network of relationships and consists of a variety of symbolic, cultural and political significance. This complexity of our environment cannot be fully described from one single point of view. Precisely at this interface, I would like to set my thesis. I would like to deal with the topic of city perception.

An often used method to approach the issue of city perception is the method of mental maps. This method allows capturing the performance aspects of an area in a visual form. On the theoretical level I would like to compare two different methods both of which approach the idea of city perception with mapping. In his study "The image of the city" Kevin Lynch developed a systematic method of mental mapping. He primarily worked with the formal elements of the city. The artistic avant-garde movement of the Situationist International developed the psycho-geographic access to city perception. This method works with atmospheric elements of the city and records how they affect the inhabitants. In my thesis I would like to make use of these methods. Starting at the previously described ideas I would like to develop my own method. The focus of the thesis is to determine the city perception based on the creation of cognitive maps and mental maps. In a final analysis I will show which places are the key spots and which are not.

The area in which I will perform my investigation is the city of Karlskrona in Blekinge in southern Sweden.

2.1 The city of Karlskrona
Karlskrona is one of the most historic places in the province of Blekinge and is located in the south-east of Sweden. The city has about 33000 inhabitants and is located at the Baltic Sea. Karlskrona is spread along the coast as an archipelago.

The history of Karlskrona goes back to the early Middle Ages. In 1680 the Swedish monarch Karl XI built a large naval base in Karlskrona on the island Trossö. The navy base was intended to protect the previously conquered counties of Blekinge and Scania against the Danish. Karlskrona needed only 20 years to become the second largest city in Sweden. The huge economic growth triggered the big expansion. The high technology standard of ship engineering made Karlskrona the trailblazer for many naval bases in Europe (Jönsson & Swahn, 1964, p. 29). In the year 1998 the Naval Base of Karlskrona became a preserved example of a European naval base and since then it has been in the list of World Cultural Heritage Sites (World Heritage Convention, 1998).

In the time of war Karlskrona was financially independent. After the 1930s in the time of peace Karlskrona made an effort to locate civil industry in the city. For this reorganisation Karlskrona received support from the national government. Big companies like Ericsson (telecommunication, 1969), Dynapac (machines, 1960), Uddcom (nuclear components, 1969) and Luma (bulbs and lamps, 19970) moved to Karlskrona (Henning, 1997, p. 34).
But Karlskrona was now a “dying place” (CPC, 2006). The restructuring in the 1970s reduced the employment in the industrial sector. Another problem was that the industrial structure was archaic and there was no new transnational concept to vitalize the city. Even the media contributed to the feeling of a depression by shedding bad light on Karlskrona and Blekinge.

The “Blekinge support package” from the government helped the region. New roads, technology centres and the foundation of a university (opening 1989) helped Blekinge recover. Even the National Board of Housing and Planning (Boverket) moved from Stockholm to Karlskrona and the Coast Guard settled in this town. Towards the end of the 1980s the employment situation became more optimistic. Even the neighbouring cities like Ronneby turned into new hot spots for the IT industry.

After this time the number of working people increased. In the year 1985 the percentage of Karlskrona residents with a post-gymnasia degree was 12.9% and in the year 2004 it increased up to 30.5%. The Swedish national average in the year 2004 was at 13.8% (Statistiska centralbyrån - Statistics Sweden, 2011).

This positive growing effect stimulated all involved actors to build up a connection. In 1993 the municipality, some companies and the university founded the network “TelecomCity”. The city developed a new image and new companies like Telenor (mobile phone provider), EP Data and Ericsson Software Technologies (software engineering) founded new headquarters. This transformation of the city opened a lot of new possibilities like higher buying power and a higher request in the real estate industry (Dolk, 2004, p. 45).

From 1991 to 1994, during the time of Sweden's deep economic crisis, the success of “TelecomCity” obscured the actual problems of Karlskrona and the rest of Sweden. Karlskrona was dealing with two developments in this time. On one hand it was facing economic problems while on the other hand it was hyped as the “TelecomCity”. Another problem was that the inhabitants became afraid of the new identity of the city. In less than hundred years the city transformed from a naval base to an industry sector to the new “TelecomCity”.

2.2 Place of the investigation
In my investigation I would like to focus on Trossö, the city centre of Karlskrona. Especially interesting for me is this centre because it is not really central. The centre is located very peripherally on an island. The only connections to the rest of the city are two bridges. One is the bridge to Galgamarken and the other to Björkholm, another connection is the ferry to Aspö.
The intention of this work is to give an outlook. How relevant is the city perception for urban planning processes? I assume that the urban development processes cannot be limited to physical structures. Instead it has to pay attention to social aspects.

3 Research question:
In the 1960s many different research groups have studied the perception of space. They were mainly interested in investigating the perceptual behaviour of city inhabitants. This research led to the conjecture that there is a relationship between human perception and the nature and quality of architecture. The different research teams based their analyses on empirical studies which tried to assess what kind of mental image people make of their environment. Two of these approaches I will explain in the following chapters.

In my thesis I would like to catch the mental images that people have of the city centre of Karlskrona.

I would like to find out:

**How do different people perceive the centre of the city of Karlskrona in southern Sweden?**

I would like to figure out how different peer groups perceive Karlskrona in summer 2011. I would like to interview inhabitants, international students and tourists about their perception of the centre of Karlskrona. I chose these three groups because I am very curious to see if perception is dependent on the duration of the stay in Karlskrona. The inhabitant has his constant social surrounding and has his main domicile in Karlskrona. The student lives only a few months in Karlskrona. The tourist stays only for a few days or weeks in town. On top of that, I will add an additional group, the professional planners.
I would like to find out how different groups use the space of the city. What kinds of elements help them to orientate in the city centre? Which places are their favourites and which places do they avoid? Do they have wishes? What should change in the city centre and how would they describe the city centre to a foreigner?

Likewise, I would like to know:

**Which method is suited best to capture mental images and individual citizens’ perceptions of urban environments?**

This sub question should help me to answer the main question. I will confront the formalistic approach of Kevin Lynch’s well known survey “The image of a city” with the artistic and critical idea of psycho-geography as it is developed by the French avant-garde movement of the International Situationists. Inspired by these two approaches I developed a new method and applied this in a field study.

## 4 Perception

### 4.1 Perception research

The results of modern perception research show that every individual perceives the spatial environment subjectively and develops subjective mental images of the environment. This relates to the perception of urban structures and problems. Now, it is important that the space-related behaviours of individuals depend on the existence of basic functions of life or on presented images of the spatial reality. The expression of such a subjective notion of spatial images is not only a function of the information from the perceiver which he gains every day or while he gets into indirect contact with spatial areas. Similarly, this image shows his personal assessment, motivation and needs. These are dependent on age, social status, level of education and on personal experience (Heineberg, 2006, p. 30).

### 4.2 Perceptual space

Perceptual space is the section of the physical environment perceived by an individual. This individual perceives consciously or unconsciously and while doing so it unavoidably evaluates. The evaluated environmental section, which originates from the selective subjective perception of the own environment, is called perceived environment. In order to investigate spatial perception or of a subjective mental image of the environment respectively, several techniques have been developed. The cartographic representations of cognitive and mental images are called cognitive maps and mental maps (Heineberg, 2006, p. 31).

### 4.3 City perception

In this part I will review the understanding of the city. A city is a process and it is reinventing itself again and again. It is a complex interaction between the physical and social environment. The social environment consists of the different actors which interact with each other. (Hengartner, 1999, p. 15) I would like to describe the urban interaction between physical existence and social existence following the approach by Swiss folklorist Thomas Hengartner. He says that the built and designed world (buildings, streets, rows of houses, roofs, landmarks, gardens, green spaces
and arbours) is the localization of human influence in the city (Hengartner, 1999, p. 25).
The physical environment attains its importance only through the social interaction in the space.
Starting at these statements about a city by Thomas Hengartner, it is interesting to transfer his ideas to the concept of city perception. According to Hengartner I assume that the first element of city perception depends on material appearance. The other characteristic element is the utilization. It is expected that these two elements are fundamental to the perception of cities.

German urban studies theorist Michael Müller says that perception and utilization in the city form a very close network. The utilization determines the perception of a place. The perception controls the utilization through the underlying selection processes. The utilization characterizes the local preferences of abidance, passage or rejection. This preference can strongly influence the emotional orientation. In addition to the utilization of space, the cultural and political background is very important (Müller, 2008, p. 4).

Concerning the issue of perception Michael Müller says that perception of urban elements depends in addition on social local images and association. A variety of media factors also give us a framework, how we should position ourselves in our imagination (Müller, 2008, p. 6).

In the context of spatial planning these are the guidelines of a planning project, they show us an imagination of how the city should be like.

Another approach stems from German space sociologist Martina Löw. She turns explicitly against the usual separation into social and physical space; she looks for a room that has different components. Her concept is a theoretical treatment and provides the constitution of space in the foreground in which space is a relational arrangement and regulation of living creatures and social goods at places.

Physical "placing" of social goods and people on the one hand and mental activities on the other hand results in a synthesis of these two different activities. Combining processes of representation and remembrance of goods and people in space we set our perception (Löw, 2001, p. 34).

Talking about city perception I cannot elaborate in much more detail on the external appearance of the city, the usage of urban space and mediated space images.

I would like to give this as a basic framework. In the following chapter I would like to give an introduction about the understanding of city perception.

4.4 Planner and perception
Currently, the fields of urban planning and urban development are facing new challenges. Today the task is not any more to build new cities or new housing areas. Planners are supposed to transform space, according to human needs. It is their task to design the existing environment. Space must be adapted to new circumstances, such as population decline and population growth. Existing planning tools and models that were developed in former
decades are nowadays often regarded as less appropriate or less fitting (Urban-Catalyst, 2007, p. 23).

Spaces with many physical problems are especially prone to social problems. From the point of view of spatial planning the separation between the built and social spaces can no longer be maintained in such cases. One then has to seek well-balanced compromises. The architecture magazine “Archplus” discusses in a lot of its articles how important it is to adopt a new perspective in the field of urban planning (Pablo, 2008, p. 36). Visual quality cannot be equated with planning quality. The magazine calls designers and planners to rethink their archaic planning dogmas. The meaning of space needs to be appreciated. On one hand, the spatial structure should be understood and on the other hand, the designer should reflect his own dominance (Bühn, 2009, p. 98).

The designer needs to identify himself with the inhabitants of the area. It is of particular importance to allow the inhabitants to participate and to design together with them their new living environment. Through the participation of inhabitants the life and identity of space can be designed in a sustainable way.

“People [...] associate the very concept of democracy with the activity of participating in government of decision making. Although many do little more than vote, the term embraces much more“ (Webler, 1995, p. 17).

But which methods do I have at my disposal as a planner to incorporate the inhabitants’ perception and how can I use it as a basis for my planning?

This question can be answered with the method of mental maps. In this work, I introduce this method in detail and apply it to the city centre of Karlskrona.

5 Methods

5.1 Cognitive maps

The method of cognitive maps allows one to visualize the perception of the city. A fundamental step in the application of this method is a psychological process that Downs and Stea have named cognitive mapping. They introduce the notion of cognitive mapping as an abstract term, which includes the cognitive and intellectual abilities that allow us to gather information from the spatial environment. This information helps us to organize, store, retrieve and process the spatial environment. Cognitive mapping subsumes the ways we interact with the world around us and how we understand it (Downs & Stea, 1982, p. 23).

Cognitive mapping describes a process by means of which we record information about places and things and puts them into relationship to each other. This process allows us to orient ourselves in our environment, that is, for example, to estimate distances, to find things and places, to evaluate and to react to this information accordingly. For the daily life it is very important, as it helps us, for example, to find the nearest supermarket, decide on a particular holiday destination and be aware of places that we should avoid in the dark (Downs & Stea, 1982, p. 21).
Cognitive mapping is an interactive, selective and structured process. It is a model rather than a one-to-one reproduction of reality which enables us to act in a complex environment. To interact in this context means to interact with the spatial environment. In a process of learning and action, it will create a reference framework for perception. We begin to compare our impressions and senses and put them in relation to each other. This can change the type of information and the type of the source to which we are sensitive. The situation in which experience is gained also plays an important role.

The pedestrian can determine its own speed and sees the environment differently than, for example, a driver in a vehicle. The selectivity of cognitive mapping is necessary to account for the complexity of the spatial environment. It is impossible not to select. As selection criteria we choose the functional significance and distinctness. We select particular objects because they appear in our everyday life—they are everyday objects that we are familiar with. Distinctness relates to the contrast and spatial arrangement of the environment, such as shape, visibility and utilization. At the same time we try to structure things, to give them a meaning and to comprehend them. The structure we assign to certain things is the result of interplay between the readability of a spatial environment and the accumulation of personal experiences. An environment exhibiting a continuous pattern, with a number of different but still clearly linked parts, is readable to us. This basic structure must be supplemented with personal meaning. The product of this process is called cognitive maps.

A cognitive map is a primarily across-section of the world at a particular moment. It reflects a world as present in the imagination of a person. In fact, it incorporates distortions of reality. This is attributed to our limited possibilities of perception that our senses enables us to. We can only perceive a very small part of our environment. We are moving with respect to the environment in order to increase our cross-section and we can activate other sources (Downs & Stea, 1982, p. 25). These primarily include media sources such as texts and images. Nevertheless our perception is limited. After all, we are unsystematic and prejudiced.

However, these particular distortions of perception gain in significance, as they present themselves in the cognitive maps.

An illustrative example is given by ethnographer Gisela Welz in her research study "Street Life". She reports from the district of Bushwick in New York. In her work, she tells a story about the interaction between systematic presentation and action in space. She says that on one hand action without an overall conception is not possible and that on the other hand spatial action creates conceptions (Welz, 1991, p. 43).

Every form of acting and thinking is an exchange with a materially, socially and culturally occupied environment.

"Street Life" demonstrates that space-based thinking and space-based action are in very close interdependence. Welz’s work can be applied very well to the basic framework from Down and Stea, both are focussed on and describe the strengthening of the perception and the utilization of the city.
5.2 Mental Map

As opposed to the method of cognitive maps the method of mental maps does not work with the psychological understanding of the environment. The cognitive map denotes the psychological process. Mental maps are the methodological tool, which encompasses visual and linguistic representations.

A mental map is a sketch that is drawn by the respondent himself. Another possibility is that mental maps can be constructed by means of space descriptions and space evaluations.

It is important to take into account the following: The storage medium for environmental information need not be a map. A mental map is a complex structure of icons. These icons help to read the environment and consciously engage in it.

What is required is a translation of a mental icon to a visual or verbal form and a compression of information into recognizable signs. Both the oral description and the visual image provided by the respondent have advantages and disadvantages when used as sources for a mental map. They are both highly dependent on the skills, attitudes and habits of the respondent. The chosen medium determines the rendered content. Emotional attachment can be better described linguistically while spatial terms can be better represented in a drawing. There may be even cases in which we make an experience in the form of a verbal communication that we find easier to express in an image. On one hand the verbal language often becomes a routine. However, we have less routine in creating a pictorial representation. On the other hand, there is much more imprecision, because most people are unfamiliar with expressing themselves through images. This distortion is caused by ideals and mediated images.

This raises the question what can be detected with the method of mental maps. Beatrice Ploch says that the strength of the method of mental maps is that subjectively experienced life worlds can be recorded as a whole (Ploch, 1994, p. 57).

Kathrin Wildner and Sergio Tamayo point out that the subjectively experienced space is visualized in such a way that the interaction of spatial environment and human behaviour can be analysed. Of central importance in this context is the assumption that the mental space images and the behaviour in space are connected (Wildner & Tamayo, 2004, p. 106).

At this point I would like to refer again to Gisela Welz. In her conclusion she makes explicit the connection between space-oriented thoughts and actions in the juxtaposition of mental maps. Her story describes two 13 years old Puerto Ricans, a boy and a girl; both have drawn their environment. All relevant areas of their everyday life can be found in their drawings. The drawing of the girl is restricted to her school, her house, playgrounds and the place of work of her father.

The drawing of the boy of the area comprises more differences and more details of the common district. The shown places are more or less a testament to the boy’s everyday mobility and indicate an equally wide variety of possibilities of action (Welz, 1991, p. 43).

At this point, another question arises. What are the similarities of mental maps and to what extend are they qualitatively comparable?
According to Beatrice Ploch mental maps are variable in time, individually different; show culturally as well as socially influenced factors and exhibit collective or group-specific similarities. Moreover, the process of cognitive mapping is subject to individual experience and collective activity patterns. (Ploch, 1994, p. 120). Therefore, it is likely that those mental maps turn out to be virtually one and the same object after matching and identifying mutually different elements (Downs & Stea, 1982, p. 101).

The details of the map have to do with the size of the area. When referring to a smaller area the maps are more detailed.

For this reason, the method of mental maps is used in various disciplines. For examples, psychologists explore the creation of mental maps. Social sciences compare the idea of space with the real space as an important indicator.

For cognitive anthropologists mental maps are the key to culture-related perception. More and more planners rely on the method of mental maps. Planners use this tool for the participation of the inhabitants to improve on sustainability. In the following chapters, I would like to deal with two different approaches. First, I would like to respond to Kevin Lynch’s observations about the city. Then I would like to develop an approach to psychographics. The approach to the avant-garde movement of the Situationist International should inspire me to work out my own method.

6 The map in your mind

One of the most popular studies employing the method of mental maps is Kevin Lynch's "Image of a city", in which he analyses the three American cities of Boston, Jersey and Los Angeles. In his approach he combines interviews with professional mapping, putting the main focus on urban structure and the city’s urban design. Kevin Lynch develops a mental map method that is based on five essential elements of the urban landscape:

I. Paths
II. Edges
III. Districts
IV. Nodes
V. Landmarks

In particular, Lynch works out novel principles of urban design, coining, for instance, terms such as "wayfinding" and "imagebility" of the city. In following, I will have a closer look at his method and discuss it critically.

Lynch surveys 15 people in Jersey City and Los Angeles and 30 people in Boston, respectively. He asks for sketches of the city centre and for a description of irregularities, emotions and ways to work. In addition, he reviews the orientation ability of the respondents. In Boston, he conducts in addition a second survey, in which he asks for the recognition of places from pictures. In a
systematic exploration of the city he asks trained observers to create maps influenced by the visual quality aspects of the city.

In the words of Lynch himself: “Environmental images are the result of a two way process between the observer and his environment. The environment suggests distinctions and relations and the observer – with great adaptability and in the light of his own purposes – selects, organizes and endows with meanings what he sees.” (Lynch, The image of a city, 1960, p. 6)

This citation demonstrates that according to Lynch the image of the same environment can result in rather different personal imaginations. The reason for these different imaginations is the diversity among the population of the city (Lynch, The image of a city, 1960, p. 7).

The developed maps and sketches from the respondents represent appropriately simplified and distorted representations of the environment. Lynch describes the degree of compliance between the sketched and the real environment by saying that most plans look like as if they were drawn on an elastic table (Lynch, The image of a city, 1960, p. 98).

Distances, directions and landmarks do not always match; a general continuity of the situation is, however, maintained (Lynch, The image of a city, 1960, p. 98) in most cases.

Furthermore, Kevin Lynch is interested in the details of the creation process of the produced sketches. He finds that the respondents choose different versions of starting points for their sketches, familiar lines of movement and a structure such as a street grid, a group of buildings or familiar places. The presentations vary according to their structural strength. There are detached or loosely connected elements, few fixed points and stare structures.

Lynch’s analysis predominantly deals with the effects of physically perceptible objects. The focus of his work is the shape of the city, while social, cultural and functional meanings are rather neglected.

Kevin Lynch identifies five key elements of the urban landscape. Paths are moving channels that are used habitually or potentially commercially. Edges are insurmountable barriers. Districts are used for the characterization and classification of an area. Nodes are characterized by intensive use and strategic importance. Landmarks are visual reference point that can serve as guides.

At this point I would like to elaborate in more detail on Lynch’s actual method.

In a first step, Lynch overlays all mental maps, which provides him with a basis for his statements about the city. He analyses all mental maps according to his classification scheme consisting of the above mentioned five elements. Additionally, he distinguishes between areas, which are very lively and centrally located and those which are rather lifeless. Moreover, he examines whether the respective areas are well or less well passable (Lynch, The image of a city, 1960, p. 45).
Kevin Lynch complements the illustrations with the oral statements of the observers. In one of his drawings, he highlights the problem areas in Boston (cf. Figure 4).

6.1 Kevin Lynch “Image of a city”

In this drawing he shows interrupted ways, isolated areas, unclear boundaries and crossings as well as characterless areas and ambiguities.

From the formal categories he derives a new maxim, or a new virtual master plan for urban planning. His design guidelines and design criteria are the hierarchy of urban space. In his drawings fixed anchor points, clear and distinctive orientation lines and a concentration of functions are, from the point of view of the readability of the city, of special interest.

Lynch recognizes and singles out important parts of the city and puts them together into a pattern. In this process of ordering the environment, the locations of memories, actions, relationships, communication and activity are simplified. Although Kevin Lynch points out free space for personalising the city, basically everything is already planned and taken care of in his design. He is very influenced by the building and planning traditions of the 50s and 60s, according to which functionality has highest priority. In this context, one question naturally arises: is this form of urban design really understandable?

Lynch argues against the understanding of the functional city. In addition to his own work, he refers to aspects of city perception and the readability of the city for the residents. Such an attitude cannot keep up with modern standards. In retrospective, Lynch is bound to traditional concepts of city planning that set out from the physical environment. The fundamental aspect of his approach is
the optical formation of a city image, which is not as relevant anymore nowadays.

The methodology of the study "Image of a city" has in his time caused a lot of inspiration. In no other study, the method of mental maps was carried out as systematically as in Kevin Lynch’s seminal work. He was the first to describe how he conducted his analysis in such detail. His maps are diverse and show many details. Critical points concern the generalization of empirical observations, the five elements and their transfer to the cities. The deficit of his work is that the analysis of the city is too one-sided. Lynch analyses only the formal elements of the city and pays too little attention to the social construction of places.

6.2 Guy Ernest Debord “la dérive”

The movement of the Situationist International can be regarded as the last avant-garde of the 20\textsuperscript{th} century. In the context of this thesis, I will focus on its urban activism and attitude towards the city rather than its political statements. In particular, I will highlight two especially interesting aspects, the critique of urbanism and the approach to psychographics. Most Situationists’ texts were published in 1950s, so that they refer to the same temporal context as Kevin Lynch’s study "Image of a city". By contrast, the topic of city perception is approached from an entirely different direction by the Situationists.

In the following, I shall present the basic ideas of the Situationist movement. As I will illustrate, they entail new ways of dealing with the city which can serve as a supplement for the mental map method.

Let me start by quoting the French Guy Debord, a member of the Situationists International. He says: "We think that we must change the world [...] but in truth it is us that should change." (Debord, 1955, p.23) This citation reflects his wish for a change of the age, primarily aiming at the perceived discrepancy between the possibilities of political action and the modern production facilities of certain lifestyles.

The Situationists break up the scale between the city and the design and the actual way of life. The central subject of the Parisian Situationists is the alienation of the use and design. An example is Guy Debord’s criticism of the Parisian society (Debord, 1958,p.67). He demands that the French society should not be a passive audience. The society should transform to the bon vivant and remodel the everyday life. Debord requests a new passion. Desires and lifestyles should be emphasised and demonstrated. The present-term life-world must be expanded. This revolution of everyday life then ends in unitary urbanism. The whole application of the artistic and technical resources of the construction should work together to complete a milieu in dynamic relation with behavioural experiments. In this way the integral art, the rising of art in life can be realized.

In the year 1955, after the founding of the Situationist International, Guy Debord writes „The introduction to a critique of urban geography“. In this work Debord develops the idea of psychogeographics. The objective of psychogeographics is to assess and describe the effects and the laws of the age related to a visual surrounding (Debord, 1955, p. 22). Psychogeographics directly captures the emotional perception of the individual, which
perceives the influence of the physical environment on social transformation. In addition Guy Debord develops the "cartography of influences". It provides a classification of the psychographic climate zones in a city. In this sense his method can also be regarded as an intervention.

In this context, Chilean art historian Roberto Ohrt speaks of the geology of movements (Ohrt, 1997, p. 47). This theory reveals any breaks of everyday reality. It can show new alternative modes of action and stimulate changes.

A crucial role in the study of psychographics is played by the so called "dérive" or "drift" method. La (the) dérive is a technique of systematic urban experience that is on purpose different to common modes of conduct and encounter. The method captures the impulse of the physical environment. It helps to explore the manifestations of the city, as well as moods, subjective distances and centres of attraction as well as space borders. (Debord, 1955, p.45)

The dérive follows the interests of a specific implementation of an alternative practice of life in the city. Although it may appear to lack a concrete goal, the dérive is subject to certain rules. Guy Debord has formulated these rules in the “theory of the dérive”. The dérive is an exploration of the ecological and social conditions in a region. It is, for instance, interested in the artistic form of walking and exploring the city, which is reminiscent of surrealistic and dada-like approaches. In addition, Guy Debord develops guidelines for the implementation of the dérive. These take into account also the group, the duration and the area (Debord, 1958,p.76).

Impressions obtained by means of the dérive should be recorded in memory protocols. After a few dérives this protocols should be evaluated, when is then the starting point for the creation and expansion of psychographic maps.

Guy Debord considers his method useful for two reasons. On the one hand it yields an analysis and inventory of urban landscapes. On the other hand it allows one to test the Situationists’ city model. According to Debord, the method of psychogeography bares potentials and needs further development, especially in view of the interplay between static propagation and concrete intervention (Debord, 1958,p.98).

Even though Debord's method may not always provide solutions to the problems under study, it represents a powerful tool to identify existing problems. After all, Debord’s method is not always about solving problems. Instead, it is rather able to point the researcher to problems for which he is otherwise blind.

At this point it is in order to discuss a psychographic map by Guy Debord (see Figure 5). The map shows several sections of a Parisian city map which are connected by red arrows.

Each zone on this map is an autonomous part on its own, being isolated like an island in the sea. The empty areas between the islands are disturbing side effects of the spatial continuity. Note that on a map we actually do not expect such a phenomenon. All units are concreted with arrows.
The thicknesses of the arrows are a measure for the degree of alienation, into which the dérive resulted (Debord, 1958,p.106). The space between the respective components of the map is referred to as the fluently empty space of the city, where emptiness stands for the absent allocation of meaning in the city in this context. This space needs a new use concept and a new action. The degree of alienation also points out that proportions have not an objective yardstick. They are subjective impressions. This allows us to reject compressed zones of intensity experience. These are mostly urban axes and nodal points. On a "psychographic map" small alleys or corners can have a more important meaning than for example a main street. The presentation and the handling of psychogeographic maps defy the conventional understanding of city maps. Instead of being an objective representation of an absolute unity of the city these fragmented city maps are based on the perception of the users. The city is in this sense not a given construct, but rather an interpretation and the product of the use of the residents.

Psychogeographics and the dérive method are developed based on certain principles of uniform urbanity. The form of urbanism is linked to behaviours and moods. The design units are defined by building boundaries and by the scale of the situation. Guy Debord describes the urban circumstances as "collective psychogeographic moods, a set of impressions that determines the quality of the moment" (Debord, 1958,p.118).

The construction of situations as short-term living environments is affected by the mutual influence of material conditions, designations and the behaviour of the individual. For Guy Debord architecture is not about designing forms, but rather about constructing emotions in adjusted situations. The understanding of city and urban design reaches beyond the physical level. In the language of the Situationist International, this is known also as the performance of cities. The city and the psychological architecture form the initial spark for the experience of the inhabitants. They should incite the use and appropriation. This creates an "initial architecture" and stimulates and supports the creativity of the residents. (Debord, 1958,p.119)

The approach of the Situationist International varies a lot in comparison with Kevin Lynch. Lynch argues in favour of the development of a formal urban form and demands a strict urban planning practice. The Situationist International assumes that the physical environment is the starting point for action in space. They advocate the creation of an individual life-world. For them it is
important to promote alienation. The Situationist International can benefit from the perspective of Lynch, by focusing on the possibility of social development of the environment, while not being responsive to structural elements. The method of psychogeographic maps of the Situationist International quite differs from Lynch’s maps in terms of the aesthetic background. The maps of the Situationist International are freer. They illustrate the mechanisms of perception, according to the theory of cognitive mapping.

7 Case study Karlskrona

7.1 New method
After I described the methods of mental maps and cognitive maps, criticized their shortcomings and gave two examples, I now would like to present my own method. I explained my background and position in the given context and in this section I would like to share the experience I had with my own method. In the first part of my thesis I worked out the drawbacks of the two presented studies. In particular I elaborated on the criticism these two studies have received because of the distortion of perception that is inherent to them. The experience of other mental maps shows me that it may be advantageous to combine the visual representation in a form of a mental map with an accompanying interview.

I would like to study the perception of the city centre of Karlskrona with the help of mental maps and related interviews in four levels:

I. The visual representation of the perceived physical environment
II. The every-day usage
III. The personal relationship to the space
IV. The city vision

These levels should help me to work out the perception with my own method influenced by Kevin Lynch and Guy Ernest Debord. A particularly important aspect of my research is that my method takes both into account, the visual and the sensed space.

At the first level I want to enquire the real perceived space. The result is a mental map and the representation form is a sketched map and an interview. More specifically, I would like to know the subjectively perceived expansion of the city centre, orientation points and recorded important elements. At the second level I will turn to the presentation of the daily usage of the city. I would like to facilitate this with the help of an interview guideline. Additionally, the enquiry at the third level should help me to catch the feelings in the city centre. Did the person feel comfortable in certain places and are there places that it avoids? What does the person associate with the city centre? In the last part, I want to know what are the wishes, hopes and potential changes in the city. These four steps should help me to answer my research questions.
7.2 Mental map and guided interviews
At the beginning of my investigation I asked every interviewee for a sketch of the centre of Karlskrona. I avoided requesting a “map”. I even did not use the word "map" to allow the respondents to unbiasedly put their thoughts down to paper.

By always literally speaking of the centre of Karlskrona, I can exclude a holistic approach to Karlskrona. However, I never specified where exactly I think the centre of Karlskrona is located. In my opinion it is necessary to make statements at the small-scale level. Beatrice Ploch says that you obtain much more detailed mental maps when you perform your investigation in a smaller area (Ploch, 1994, p. 67).

While they were sketching the centre of Karlskrona I encouraged my respondents to record the conversations with a tape recorder.

I decided to refer to “the centre of Karlskrona” as an abstract term and would not define it geographically. Then I asked for staging points, ways, habits and feelings about certain places and for generally and frequently visited places. Then I asked for activities such as living, working, shopping and recreational activities, if my interviewees had not mentioned these. Moreover, I asked for places where the respondents pass by a lot and for places which they avoid. I also asked for driving directions from one end of town to the other one. With this question I intended to find out about the subjectively perceived extent of the inner city.

Especially, I was interested if the Navy Port located in the south represents a limit for the inner city or not. I also tried to tackle that question without mentioning reference points or familiar landmarks such as churches, museums, the main station etc. In the last part of my interview the respondent was asked to draw wishes and desired changes in the city. For each new question I offered the respondents a new colour for drawing, so I would be able to understand the map later when starting the data acquisition.

7.3 Interview guideline
In the following I present the standardised interview guideline I worked out. I asked these questions all inhabitants and the students. When I did an interview with a tourist I did not ask questions number III and VI because in the sense of these questions tourists have no real habits in the city. They are only temporary guests in Karlskrona.

I. Could you please draw a sketch of the centre of Karlskrona for me?
II. Which elements are necessary and essential in the centre of Karlskrona for you?
III. Where are your staging points and ways? What are your habits?
IV. What are your feelings about certain places and for generally and frequently visited places?
V. Can you tell me about activities you do in the centre of Karlskrona, such as living, working, shopping and recreational activities?

VI. Are there some places in the centre that you like or some places that you avoid?

VII. Can you draw in your sketch a path / direct way from the one end of the centre to the other?

VIII. Can you draw what elements of the centre you encounter when following your path?

IX. Do you have a wish or a vision for the centre? Something you think that has to change!

X. Can you give me one adjective with which you would like to describe the centre of Karlskrona? Can you finish the sentence? Karlskrona is …

7.4 Personal experience

To collect the data for my investigation I decided to go to the main street of Karlskrona, Ronnebygatan. Here I tried to establish contact to the inhabitants of Karlskrona. Getting started with my interviews was rather hard because most people were too busy or even scared that I would save their data and use them for something they do not want. But at least I held some interviews on the main street. The other interviews I held in restaurants or coffee shops.

The second step of my investigation was to collect data from the students from Karlskrona. This was easy in comparison to the inhabitants. I just went to BTH and asked students in their free time if they could draw a mental map for me.

The third part of my investigation, namely the interviews with the tourists, was really difficult. At first I had a problem to find tourists. I went to hostels and hotels in Karlskrona. But the staff would always send me away. They had a problem with my investigation and said to me that I would disturb their guests. So I went instead to the camping ground in Karlskrona Maridal. There I had two interviews. However, now the problem was that one of the two interviewees had arrived only one day, the other only two days before and both had not yet seen the centre when I talked to them. After this setback I decided to go back to the centre again to try once more to contact tourists there. But again it was really difficult because of language disparities and other factors. For example some tourists took out their travel guide and drew a copy for me. After two weeks I decided to reduce the tourist part. I could receive only five instead of ten mental maps from tourists.

During my investigation I made appointments with the planning offices in Karlskrona so that I would also be able to talk to professionals. These efforts allowed me to introduce professionals as an additional category for which I could then collect mental maps as well. From 15 April through 15 June 2011 I held 28 interviews and obtained 28 mental maps.
8 The perception of the centre of Karlskrona

How do different people perceive the centre of Karlskrona? This is the guiding question of my subsequent analysis. In this part of my thesis I would like to present the perceived environment, the everyday usage, the well-being in the city—the personal relationship—and the city vision. These four levels will help me to make a precise evaluation of my interviews and mental maps. Next to the interpretation of the mental maps, I would like to speak about the subjective feelings.

After the data evaluation it will be easy to see which places lack behind in the perception, which are appreciated and which dominate. Then it will be possible to characterise the places and to identify problems and potentials of the city centre.

8.1 The visual representation of the perceived physical environment

Towards the end of my evaluation of all mental maps, it became clear to me that not all elements of the city can be represented by a drawing. Therefore it is interesting to examine which elements are perceived as that important such that the respondents represented them in their personal maps. All these mental maps can be found in the appendix. At first I would like to mention spots of orientation. The most interviewees started with squares, churches, shops and restaurants or streets. A few respondents also drew bigger structures extending into the environment of the centre of Karlskrona.

After I put all mental map together it became very obvious what the most perceived elements are (cf. Figure 10). This part of the analysis should, however, not be a ranking of the perceived elements. It should rather present the preferences of the different peer groups according to my sub question: How do different people perceive the centre of the city of Karlskrona in southern Sweden?
8.1.1 Inhabitants

I questioned ten inhabitants how they perceive the centre of Karlskrona and I received 41 different answers. The interviewees answered with buildings of representation, shops and restaurants, squares and streets and stops of public traffic.

I used these categories to arrange the results. You can find the locations of the mentioned places in the map of this chapter (cf. Figure 6).

This chart indicates the similarities in the perception of the physical elements in the centre of Karlskrona. Six of the ten interviewees named and drew the church Fredrikskykran as an element in the interview. The Fredrikskykran is the most often named element and is located in the centre of Karlskrona on the town square.

In this category subsuming all buildings of representation they named next to the Fredrikskykran, Tefaldighetskyrkan, the Navy Port, the public library Karlskrona Stadsbibliotek and the Blekinge Museum.

The next category contains shops and restaurants, the most named elements of which are the coffee house Waynes Coffee, the pub Nivå, the bookshop Bokia, the pub and nightclub Harrys/Sliver, the apparel store H&M, the mall at Landborgatan, the bank Nordea, the ice cream shop Glassiärens Glassbar, the mall Wachtmeister Galleria, the pub Playbar and the bank Swebank.

In the category of squares and streets they named the street next to the harbour Borgmästarekajen, the street Ronnebygatan, the town square Stortorget and the square Amiralitetsstorget.

The inhabitants named the public traffic stops Karlskrona Central Station and the bus station Karlskrona Central. The interviewees named 17 other elements but I do not want to focus on them because they all were only mentioned once.
The visual representation of the perceived physical environment (inhabitants)

- Fredrikskyrkan
- Harbour west (Borgmästarekajen)
- Hoglands Park
- Nivå
- Harrys / Silver
- Stortorget
- Bus Station Karlskrona Central
- Nordea Bank (Ronnebygatan)
- Glassiärens Glassbar (Stortorget)
- Blekinge Museum
- Wachtmeister Galleria
- Swedbank (Borgmästaregatan)
- Museum Kulenovic Collection (Stortorget)
- Willys (Tullgatan)
- Bio (Cinema)
- Bergosa Station
- Apoteket (Landborgatan)
- Marin Museum
- Fish fountain (Kungsplan)
- Saltö
- Bergosa

- Waynes Coffee
- Trefaldigshetskyrkan
- Ronnebygatan
- Bokia
- H&M
- Karlskrona Central Station
- Mall (Landborgatan)
- Navy Port
- Karlskrona Stadsbibliotek
- Amiralitetstorget
- Playbar (Ronnebygatan)
- ICA Supermarket (Arklimästaregatan)
- Mc Donalds
- Konserthuset Karlskrona
- Hemshop (Ronnebygatan)
- BTH
- Apoteket (Borgmästaregatan)
- Drottninggatan
- Pm-pub & Mat (Köpcentrum Kronan)
- Galgmarken

Figure 6 Map: The visual representation of the perceived physical environment (inhabitants)
8.1.2 Students
I asked ten students how they perceive the centre of Karlskrona and I received 43 different answers.

You can find the locations of the answers in the map of this chapter (cf. Figure 7).

In this chart you can see the perceived physical elements in the centre of Karlskrona. Nine of ten interviewees mentioned or drew the Stortorget as an element in the interview. The Stortorget is the element that is perceived the most in the peer student group.

In the category buildings of representation they named the university BTH, Fredrikskykran, the Tefaldighetskyrkan, the Navy Port and the Marin Museum.

The next category is shops and restaurants. The most named element in this category is the ice cream shop Glassjärens Glassbar, the pub and nightclub Harrys/Sliver, the pub Fox and Anchors, the public swimming bath, the apparel store H&M, the bank Nordea, the supermarket ICA, the bank Swebank, the mall Wachtmeister galleria, the mall in the street Landborgatan, the grocery store Lidl in Galgamarken, the book shop Bokia and the coffee house Waynes Coffee.

In the category of squares and streets they named next to the Stortorget the street Ronnebygatan, the Hoglands Park, the Amiralitetsstorget, the street Östra Hamngatan, the street Polhemsgatan and the street Bredgatan.

Like the inhabitants the students named stops of public transportation. They named the Bus Central Station and the ferry spot to Aspö. Even the island Saltö was mentioned. The student interviewees named twelve other elements but I do not want to focus on them because they all were only named once.
The visual representation on the perceived physical environment (students)

Figure 7 Map: The visual representation of the perceived physical environment (students)
8.1.3 Tourists
I asked five tourists how they perceive the centre of Karlskrona and I received 26 different answers to this question.

You can find the locations of the answers in the map of this chapter. (cf. Figure 8)

New to this part is that the tourists did not only focus on the usual elements in comparison with the inhabitants and the students. They mentioned the boats at the harbour; one located the birds on the square, another drew the seagulls in the sky or the fishermen at the harbour. Apparently the tourists copied certain situations they saw in the city to the maps.

For this reason I added situations as a new category in this chapter.

The chart shows the perceived physical element in the centre of Karlskrona in the case of the tourists.

Four of the five interviewees drew the square Stortorget in their mental map. The most perceived element among the tourists was Stortorget. In four mental maps the town square is in the highlight of the drawing.

In the category buildings of representation they named the church Fredrikskykran, the church Tefaldighetskyrkan and the Marin Museum.

The next category is shops and restaurants. The most named element in this category is the ice cream shop Glassiärens Glassbar, the youth hostel in Karlskrona, the camping ground in Saltö, the mall in the street Landsbrogatan and the restaurant McDonalds.

In the category of squares and streets they named next to the Stortorget, the street Ronnebygatan, the harbour west at the street Borgmästarekajen, the street Landsbrogatan, the Hoglands Park, the square Amiralitetstorget, the street Dröttingatan, the street Stenbersrent, the street Parkgatan and the harbour east at the street Östra Hamngatan.

Like the peer groups before the tourists named stops of public traffic. They named the Central Station in Karlskrona and the ferry spot to Aspö.

The category situations contributes the elements of the boats, the birds on the town square, benches at the Stortorget, seagulls in the sky and the fishermen at the harbour.
Figure 8 Map: The visual representation of the perceived physical environment (tourists)
8.1.4 Professional planners
I asked three professional planners how they perceive the centre of Karlskrona and I received 24 answers to my question. You can find the locations of the answers in the map of this chapter. (cf. Figure 9)

This chart shows the perceived physical element in the centre of Karlskrona in the case of the professional planners. All three interviewees drew the square Stortorget, the church Fredrikskykran, the church Tefaldighetskyrkan, the street Ronnebygatan and the square Amiralitetstorget in their mental maps. As for the planners these were the five most perceived elements in the inner city. In the planners’ mental maps these elements were the spotlights of the drawing.

In the category buildings of representation they named next to the above elements the town hall and the Navy Port.

The next category is shops and restaurants. The most named element of this category are the coffee house Waynes Coffee, the mall in the street Landbrogatan, the fast food restaurant MC Donalds, the bank SEB, the grocery store ICA, the ice cream shop Glassiärens Glassbar, the headquarter of Karlskronahem and the apparel store H&M.

In the category of squares and streets they named the street Kungsplan, the Hoglands Park and the street Parkgatan.

Contrary to the other peer groups the planners only named one stop of public traffic. They named the Central Station in Karlskrona.

New in this peer group is that the planners named much more districts and islands than the other groups. They named the islands Dragsö, Längö, Vämö, Hästo and the district Galgamarken.
The visual representation of the perceived physical environment (professional planners)

- Stortorget
- Fredrikskykran (Stortorget)
- Town Hall (Stortorget)
- Waynes Coffee (Borgmästaregatan)
- Mall (Landbrogatan)
- Dragsö
- Vämö
- Hästo
- Mc Donalds
- ICA (Arklimästaregatan)
- Glassiärens Glassbar (Stortorget)
- H&M (Ronnebygatan)
- H&M (Ronnebygatan)
- Navy Port
- Navy Port

Figure 9 Map: The visual representation of the perceived physical environment (professional planners)
8.1.5 Analysis and Conclusion
At the end of this chapter you can find all given answers located on a map to the right scale (cf. Figure 10). The elements that are coloured darker are more perceived by the different peer groups and the lighter ones are only perceived by one peer group.

The most perceived place across all peer groups is the town square Stortorget. The most mentioned place after the Stortorget is the street Ronnebygatan, the ice cream shop Glassiärens Glassbar and the church Fredrikskykran.

The highest concentration of named elements is in the street Ronnebygatan and on the town square. You can see on the map (cf. Figure 10) that it is here where the density of perceived elements is highest.

Comparing all three maps with each other, one can conclude that the students and the tourists perceive in terms of size the largest part of the city centre. They drew the parts in the maps but they are not really detailed. The students located places in their maps of the city centre they know from their daily life. The districts Galgamarken and Kungsmarken became more spotlighted, just as they also mentioned the BTH and the street they live in.

In their maps the tourists were able to demonstrate that they had seen a lot of Karlskrona but they could not give an account of details of the city. They only knew the street that they have to cross on the way to their hostel. This is the group that focused most on the centre and that did not mention so many places around—the reason for this of course being that the tourists were less familiar with Karlskrona and that they rather tended to rely on maps when exploring the town.

The maps of the inhabitants show much more details in comparison to the other maps. During the interviews the respondents started to tell me short stories about the places they drew in their maps. Sometimes they even mentioned things like, for instance, the railroad tracks through the centre which do not exist anymore. But similarly to the students they also mentioned a lot of places which are not located in Trossö.

The maps of the professional planners come with a comparably low density. The main elements were mentioned just as by the other peer groups. However, the planners apparently focussed more on the total area of Karlskrona. They named the most islands around the city centre.

Most mental maps are based on a common ground, that is, most personal mental maps are centred around the Ronnebygatan or the Stortorget which were the starting points of the drawings in most cases. It happened a lot of times that interviewees began their drawings with bigger elements in the middle of the sheet. As they continued the elements they draw became smaller and smaller towards the border of the sheet. The reason obviously was that there was increasingly less place left to still accommodate further elements in the maps.
The differences in the dimension of the perceived centre are also very interesting for the analysis of the city centre. First of all, one can put on record that there is no general scale. In some cases the city centre consists of just few streets or a square and in other cases also the islands around Trossö are attributed to the centre.

After this first assessment of my mental maps I would like to give an outlook and discuss for which purposes the presented data can be used: The elements named in the interviews may, for example, point urban planners to the individual places that are in the focus of the respective peer groups. They indicate which places are easy to remember and which are out of the perception. Likewise, highly as well as less attractive places are singled out.

The first level of my method can help to localize the centres of attraction and to highlight places that have the potential to remain in our memory. Conversely, there must be a reason why it is easier to remember these elements as opposed to the elements that were not mentioned. The particular design of elements with respect to their environment or special usages may contribute to this phenomenon.

Knowing where these spots of high attraction are planners can distribute the needs of a city and are able to identify potentials. These potentials can be developed or places that are out of perception can actively be transformed into new hot spots.

Figure 10 Map: The visual representation of the perceived physical environment (all peer groups)
8.2 The every-day usage

In the following part I would like to present the second level of my mental map study. This part focuses on the every-day usage of the centre of Karlskrona. I will present the daily routine and activities of the people who live in Karlskrona. Special to this part is that it does not include tourists. The reason is that they are just visitors for a short time which is why they do not have any every-day habits in the city. So in this section I will present only three peer groups.

8.2.1 Inhabitants

I will start with the every-day usage of the city centre of the inhabitants. I asked ten inhabitants about their daily activities in the centre of Karlskrona and received nine different answers. In 26% of the answers the respondents said that they use the centre of Karlskrona for the activity of shopping. 23% of the answers were that they use the centre for sightseeing and enjoying and visiting special buildings. 13% of the interviewees' answers were that they like to go to the centre for amusement and entertainment. 10% of the given answers were that the persons use the centre of Karlskrona for going out at night and enjoying the nightlife. 7% of the answers stated that respondents use the centre for socializing and meeting friends. 6% of the received answers expressed that the inhabitants go to the centre for work. Again 6% of the answers were that the citizens of Karlskrona go to the centre to go in for sports. Another 6% of answers declared that the interviewees go to the centre for eating in a restaurant, 3% go running around centre of Karlskrona.
8.2.2 Students
At the same level I asked the students about their activities they like to do in the centre of Karlskrona. I received nine different answers.

In the case of 20% of their answers the students told me that they use the centre of Karlskrona for shopping. 17% of the students’ answers were that they go to the centre to have a meal in restaurants or a coffee in a café. 12% of the answers of the interviewees were that they go to the centre for sightseeing. 12% pass by the centre while riding their bike or use the centre for cycling around. According to another 12% of the answers the students go the centre to enjoy the nightlife. 9% of the students’ answers express that they go to the centre for entertainment, that is, for going to the theatre or the cinema. In 9% of their answers the students stated that they go to the centre to meet friends. Another answer, representing 9% of all answers, was swimming or going to church.
8.2.3 Professional planners

The last peer group at this analysis level dealing with the every-day usage is the group of professional planners. I asked the planners if they could tell me how they use the centre of the city on a daily basis and I received five different answers.

The most frequent answer was the activity shopping with 30%. After shopping the interviewees told me that they use the city centre for sightseeing, as a location for meeting friends or relatives and enjoying a meal in a restaurant. Each of these answers occurred with a frequency of 20%. The last answer was the activity entertainment, in a cinema or in a museum. These answers were each given at a rate of 20%.

In the case of the professional planners I received much less answers which may partly be attributed to the fact that here the group of interviewees was much smaller. The number of interview partners in the other groups (inhabitants and students) was much larger automatically entailing a higher possibility to receive more answers.
8.2.4 Analysis and Conclusion

As I will demonstrate the data that I collected allows a precise reconstruction of the usage of the centre of Karlskrona.

All three peer groups consonantly told me that they primarily use the centre of Karlskrona for shopping. In all groups this was the activity that was mentioned most often.

The peer groups of the inhabitants and the professional planners told me that they go to the centre for sightseeing. For both of these groups this answer was the second most often one. In the peer group of the professional planners I obtained the answer meeting friends and relatives just as frequently.

The answer that ranked second among the students is very close to shopping, their most preferred activity: They told me that they use the centre to consume food.

The peer groups of the inhabitants and the professional planners also agree on their third most preferred activity: Both groups go to the centre for entertainment. The third largest amount of answers among the students referred to activities such as cycling, sightseeing or going out at night (nightlife).

After this small comparison it is obvious that the centre of Karlskrona is first and foremost a place for consumption. Most people go there for shopping. This level of my analysis shows that there are no big differences between the individual peer groups.

Finally, I would like to report a remarkable answer that I received from one of the students. During the interview she said: “I only go to the city centre for shopping, dressing my hair or eating pizza. What else can you do here in Karlskrona? The centre is dead, but at least you can get a nice hair dress. How often did you see people sitting in a park or people in the side roads?” She sounded to me as if she was thinking that the range of possible activities in the centre is too restricted and rather one-sided. At this stage of my research, as the student was not the only interviewee that had a grumbling tone in her voice, I began to wonder whether people felt uncomfortable in Karlskrona. But this is an issue that I would like to postpone to the next chapter.

The second level of my analysis identifies the reasons why people go to the centre of Karlskrona—it explains what people consider relevant enough such that they visit certain places in the centre of Karlskrona. It also answers the question what the locational attraction of the city is. Knowing what activities people would like to pursue in the city, enables urban planners to anticipate the requests of their projects' prospective users. Or put differently: When you determine the currents needs of the inhabitants and the changes in their demands, you can stimulate further evolution of the city. The city depends on the usage of its inhabitants!
8.3 The personal relationship to the space

In this part I will turn to the well-being of the interviewees in the centre. I will list the places that the people like and those where they feel uncomfortable. As I would like to point out the feelings and the interpretation of the city centre in this chapter, it will rather be a presentation of the sensed and hence invisible elements of the city.

8.3.1 Inhabitants

Places with a positive connotation

I asked the inhabitants if they have favourite places in the city centre of Karlskrona or places that they especially like and I obtained 12 different answers.

The place with the most positive connotation is the Hoglands Park which was named first in the case of 19% of the given answers. The second rank is shared by the town square Stortorget and the ice cream shop Glassiärens Glassbar with 13% each. Other places the interviewees mentioned were the pub Nivå with 7%, the square Amiralitetstorget with 6% and the pub “Harrys/Sliver” with 6%, the Fredrikskyrkan with 6%, the Blekinge museum with 6%, the street Borgmästarekajen at the harbour with 6%, the cinema “Bio” with 6%, the pub “Pm-pub & Mat” with 6% and the pub Playbar with 6%.
**Places with a negative connotation**

In the next step of my interview I wanted to figure out places with a negative connotation. So I asked my ten interviewees which places they do not like or avoid. I received six different answers. 28% of the answers were the Navy Port, followed by the pub Nivå. 27% of the asked inhabitants do not like it. 18% said that they do not like the mall in the street Landborgatan and 9% said that they do not like the store Åhlens, the street Ronnebygatan and the pub Playbar.
Karlskrona in one word

One of the central goals of my study is to catch the feelings towards the places of Karlskrona. Accordingly, I asked my interview partners about a verbal description of the centre of Karlskrona, that is, if they could describe the centre of Karlskrona in one word to me. I handed all the inhabitants the same sentence fragment and asked if they could complete it for me. I received ten answers. The centre of Karlskrona is…

Cosy (positive)  Boring (negative)
Small (neutral)  Wannabe (negative)
Blue (positive)  Melancholy (negative)
Beautiful (positive)  Empty (negative)
Alive (positive)  Family-friendly (positive)

All these ten answers have to be understood as personal umbrella terms. To get a better handle on these words I put them into categories. There are on one hand words with a positive connotation like cosy, blue, beautiful, alive, and family-friendly. On the other hand there are negative connoted words like boring, wannabe, melancholy and empty. The word small can be understood either way and should thus be classified as neutral.
8.3.2 Students

Places with a positive connotation

I also asked the students about places they like. The students responded to this question with in total 17 different elements. The most positively perceived place in the centre of Karlskrona in this peer group is the ice cream shop Glassiärens Glassbar at the big town square which was named in 14% of the students’ answers. On the second place are the town square Stortorget itself and the stop of the Aspö Ferry with 11% each. The third most popular rated places with 7% are the public swimming pool, the island Saltö, the harbour west at the street Borgmästarekajen, the fish fountain at the Kungsplan and the coffee house Waynes Coffee. The fourth place with 4% is shared by the cinema, the street Ronnebygatan, the harbour east at the street Östra Hamngatan, the Central Station, the BTH university, the statue at the Stortorget, the mall at Landborgatan and the church Fredrikskyrkan.
**Places with a negative connotation**

Asking the students for places that they negatively connote, I received eight different answers. Three of the interrogated students could not come up with an answer to this question.

The place with the most negative connotation is the Navy Port in the centre of Karlskrona which was mentioned in 25% of the given answers. It is followed by the bar Nivå and the Karlskrona Central Station with 17% each. The third place is the pub and nightclub “Harrys/Sliver” with 9%. The remaining answers are the street Ronnebygatan, the Norra Smedjegatan, the Piraten night club and the Aspö ferry stop with 8%.

![Diagram showing the percentage of negative connotations for each location.](image-url)
I asked the students to give me a description of the centre of Karlskrona with one word. I received the following ten answers. The centre of Karlskrona is...

- Small (neutral)
- Home (positive)
- Windy (negative)
- Dead (negative)
- Unfriendly (negative)
- Cold (negative)
- Dead (negative)
- Small (neutral)
- Racist (negative)
- Quiet (neutral)

The answers dead and small were both given twice. Again all ten answers have to be understood as personal umbrella terms that can be categorised as either negative, neutral or positive descriptions. The only answer I received that can be regarded as positive is that the centre of Karlskrona represents home. The negative connoted words are windy, unfriendly, dead, racist and cold. The words small and quiet are rather neutral.
8.3.3 Tourists

Places with a positive connotation

I asked the tourists if they could tell me the places in the centre of Karlskrona that they like most and I received in total 9 different answers. The most liked place among the tourists is the Stortorget with 22%. The second most liked places are the street Ronnebygatan and the harbour at the street Borgmästarekajen which are both rated with 17%. Next come the ice cream shop Glassiärens Glassbar at the Stortorget and the square Amiralitetstorget with 11% each. They are followed by the Aspö Ferry and the Marin museum with 6%. The Hoglands Park and the harbour at the street Östra Hamngatan were mentioned in 5% of all answers.
Places with a negative connotation

I also asked the tourists about places that they do not like and I received seven different answers. The tourists named the Wachtmeiser Galleria, the western part of Trossö, the Navy Port the south of Björkholm and the street Sternbergsgränd, the Karlskrona Central Station and the mall at the street Landbrogatan.
Karlskrona in one word
I asked the tourists for a description of the centre of Karlskrona in one word and I obtained five answers.

The centre of Karlskrona is…

無寛 (“silent”)  “Schön”(beautiful)
“Sauber”(clean)  “trevligt” (nice)
“Erholsam”(relaxing)

All answers that the tourists gave me represent positively connoted words.

Figure 13 Map of positive and negative connotated places (tourists)


8.3.4 Professional planners
Places with a positive connotation
I asked the planners if they could draw and tell me about the places they like at most in Karlskrona and I received five different answers. All three planners mentioned the Hoglands Park and the Stortorget. Two of the planners mentioned in addition the street Ronnebygatan. Other elements that were named are the coast of Karlskrona and the Amiralitetstorget.

Places with a positive connotation (professional planners)

- Hoglands Park: 30%
- Stortorget: 10%
- Ronnebygatan: 30%
- Coast: 20%
- Amiralitetstorget: 10%
Places with a negative connotation
I also asked all planners if they could tell me which places they do not like or if there is any place that they avoid. I obtained from each planner one and the same answer: the Navy Port.
Karlskrona in one word
I asked the planners for a description of the centre of Karlskrona in one word and I obtained three answers.

The centre of Karlskrona is...

Regenerative (positive)

Speechless (negative)

Green (positive)
8.3.5 Analysis and Conclusion

The mapping of the well-being presents places where the interviewees feel good or places that they avoid. The map in Figure 15 gives an overview of all elements that have been named. Some nominations overlap. In this case the respective elements are highlighted in two different colours. Well-defined are the places Hoglands Park and Stortorget. These objects are among the most liked places in all peer groups. The most negative connoted mentioned by all peer groups is the Navy Port.

Turning to the evaluation of the acquired data one first obvious observation is that most positive descriptions came from the peer group of the tourists. Rather than mentioning anything negative all of them said something positive about the centre of Karlskrona. Also the group of the planners gave positive statements about the city centre. In the case of the inhabitants only three made negative statements and in the group of the planners only one said something negative about the inner city.

Unexpected were the statements from the peer group of the students. Six of the answers about Karlskrona were negative and just one was positively connoted.

During this part of the investigation I received much more statements about the city centre, some of which I wish to repeat here. I think it is of crucial importance to present these statements because only if they are taken into account as well one can arrive at a complete and comprehensive understanding of how people perceive the city centre of Karlskrona.

“Places I do like in the centre of Karlskrona: I know almost every place in Karlskrona. I live here for over 40 years. I am Karlskrona. The citizens of Karlskrona are the identity of the whole town. The history transformed Karlskrona. When I walk around the city centre I remember places, places I really liked, years ago and now they are decayed. But every year I find a new treasure and make this to my favourite place.” (Inhabitant of Karlskrona)

“Here in the centre of Karlskrona there is not so much to do. There are not so many places where I like to be. I just go to the centre to run errands.” (Student of Karlskrona)

“I really like it to go to the centre of Karlskrona. My favourite place is the Hoglands Park. When I am going home to my parents’ place there is so much nature and the park is the greenest spot in the centre and it reminds me of my hometown.” (Student of Karlskrona)

“Karlskrona—I was never in a city that was so quiet. I can sit the whole day on a bench at the Stortorget and feed the birds. I enjoy it to be here.” (Tourist from China)

All these statements indicate that the centre and the mentioned favoured and disfavoured places play a very important and emotional role for the people who live in or visit Karlskrona.
8.4 Vision
At the last level of my research method I would like to capture the wishes and the vision of the people for Karlskrona. I would like to give an account of the possibilities and the hopes that people associate with the centre of Karlskrona.

8.4.1 Inhabitants
In this part of my study I asked the inhabitants about wishes or visions for the centre of Karlskrona and I received seven answers. Three inhabitants were not able to give me an answer.

1. I would like to change the amount of shops in the centre of Karlskrona. We have too little shops.

2. I would like to change the car situation in the centre of Karlskrona. The centre should be car free.

3. I would like to change the weather. The centre of Karlskrona is always too windy.

4. I would like to change the empty streets. The centre of Karlskrona should be more alive in the week.

5. I would like to change some restaurants in the city centre. They do not serve good food.

6. I would like to change the size of the city centre. It should be bigger.
7. I would like to change the town square. There should be more public attractions.

8.4.2 Students
I also asked the students about wishes or visions for the centre of Karlskrona and I received nine answers to my question. One student could not tell me what she would like to change.

1. I would like to change the traffic in the centre of Karlskrona. There is too much traffic.

2. I would like to change the big town square in the centre of Karlskrona. The square should be for the people, not for the cars.

3. I would like to change the temperature. The centre of Karlskrona is always too cold.

4. I would like to change the people in the centre of Karlskrona. They should be more open for foreigners.

5. I would like to change the green spots in the centre of Karlskrona. There are too little parks.

6. I would like to change the nightlife in Karlskrona. There should be more nightclubs.

7. I would like to change the border between the BTH and the centre. That all should become one.

8. I would like to change the big square in Karlskrona. They should redesign the square.

9. I would like to change the sidewalks for bikes. Most of them in the centre are really bad.

8.4.3 Tourists
Three of the five tourists told me a personal wish for the centre of Karlskrona.

1. I would like to change the big square in the centre of Karlskrona. This place is so empty and I fell so lost on it. Where are all the people?

2. I would like to change a lot in the city. But I am too busy to mention everything.

3. I would like to change the amount of public parks. Why are there only two green places in the centre?
8.5 Professional planners

Eventually the last peer group, the professional planners, told me about their wishes and visions for the city centre.

1. I would like to change the density in the city centre. A lot of young people would like to move to the centre, but there are no apartments for these people.

2. I would like to change the image of Karlskrona. We need a creative group in Karlskrona such that life will return to the centre.

3. I would like to change the ways at the coast. Some of them are not usable.

8.5.1 Analysis and Conclusion

Most interviewees had the wish that Karlskrona should become more diverse, lively and creative. “Life is not all beer and skittles. Karlskrona is a life with no beer and no skittles.” This is how my first interview partner got to the heart of how a lot of people think about the centre of Karlskrona. Most people mentioned during the interview that the city centre is always empty and that there are too few people. They mentioned that they are missing people in the streets, festivals and creativity. Some of my interview partners also mentioned the traffic or the parking situation or the unused space on the town square Stortorget. I was really impressed that I obtained so many different answers showing that the people of Karlskrona indeed know about the deficits in the centre. But more than that: They even told me how they think the situation in the city centre can be improved. In conclusion one can say, the people of Karlskrona perceive nuisances and they are open to fix them up. In general, the people are not afraid of changes but are rather ready for them. Only a few respondents were unable to cope with my question. This can either mean that they had not thought about this issue such that they could not come up with an answer quickly or that they had already given up thinking about life could be improved in Karlskrona.

Finally, I would like to cite one of the city planners that I interviewed who expressed himself about the interplay between the perception of a city, its history and the changes that take place in it. He hit the nail on the head by saying: “Changes keep the city awake and make people speak about what happens in Karlskrona. [...] Changes are the reason why things are how they are and all is based in history.”

9 Conclusion

In this last, concluding section of my thesis I would like to give a final summary of how my empirical study that I conducted in the centre of Karlskrona enabled me to answer my initially posed research questions. How do the people of Karlskrona perceive the centre of the city? And: Which method has the best potential to capture their perception? These were the guiding questions that inspired me to carry out this thesis project.
After I had made myself familiar with the methods existing in the literature, I developed an own method and applied it in a case study that was targeted on the centre of Karlskrona. Thereby I acquired a wealth of data that allowed me to derive qualitative and quantitative statements about Karlskrona. My enquiry method operates at four levels—qualitative statements could be extracted from the first, second and partly from the third level. The map shown in figure 16 presents all perceptions of the city centre that I was able to record in the summer of 2011. As it subsumes all of the visual elements that were mentioned by my interview partners in a compact form, it may be regarded as the concise answer to my research question.

Illustrating city perceptions with mental maps, however, also comes with certain limitations. It is, for instance, not clear a priori how to define the scope of the maps. At the beginning of my investigation I realised that I would not be able to include all of the answers in the maps, but that it would, of course, be impossible to record each and every feeling or impression articulated by the interviewees. Previously, I had noticed similar restrictions in the work by Kevin Lynch. But now I understand why he focuses only on the formal and visual perception of the city.

On the other hand, the evident need to incorporate the city perception of the citizens into a planning project demonstrates that spatial planning is way more than simply a technical job. Spatial planning rather requires a balanced combination of social and technical approaches. This is important to arrive at good and sustainable planning solutions that conform with the ideas and demands of the people.

My investigation clearly shows that the most perceived visual objects in the centre of Karlskrona are the town square Stortorget and the street Ronnebygatan. Other buildings and shops in the vicinity of these elements also enjoy a special perception. There is no doubt that the Stortorget and the street Ronnebygatan represent the two key spots of the city centre. At this point I would like to come back once more to Beatrice Ploch who says that it is easier to make qualitative statements when referring to small scales. As an essential result of my thesis I can note that my study confirms this claim (Ploch, 1994, p. 67) The Stortorget and Ronnebygatan were the areas in the centre of Karlskrona that were described by my interview partners with the most details and that contributed with the largest number of urban elements to the mental maps: Most interviewees began their map with drawing a contour of either of the two elements and continued by adding more and more elements as they came to their minds. At the first level of my research I thus conclude that the visual perception of the city centre of Karlskrona is dominated by the Stortorget and Ronnebygatan. But it is also important to take into account the mentioned elements that are not in the centre such as the adjacent islands or BTH University. The references to these elements clearly imply that the perception of the city centre is not limited to a waterfront or district borders.
A future application of this thesis could consist of extending my study into various directions. For instance, it would be really interesting to see how the perception of the city centre changes in time. So repeatedly conducting interviews in certain time steps would allow one to document the change in perception as the centre grows or shrinks or as new sub centres emerge. My method therefore represents an indicator for factors that lead to changes in the city. It hence helps planners to faster react to problems and to better use potentials.

In the next step of my analysis I turned to the use of the city centre. At this level it became very evident that the use and the visual perception of the centre go hand in hand. As expected, frequently visited places also played a prominent role in the city perception of the people of Karlskrona. When asked for their activities in the centre the respondents often told me about what they are usually doing when they are at the places that they had mentioned before. The elements of the city centre that were referred to most often during the interviews were shops and restaurants. Correspondingly, at the second level of my research the interviewees primarily told me that they go to the city centre for shopping and dining, or taken together for consumption. This suggests that the people tend to like the visual from of the centre because it is designated to underline its character as a shopping district. A smaller fraction of my interview partners mentioned that the city centre is a place for sightseeing or recreation. Rather unexpectedly, only a few inhabitants told me that they go to the inner city to work.

The third level of my mental maps survey focused on the personal relationship to the city centre. The map in figure 16 summarizes which places in the centre of Karlskrona are rather met with approval and which places are generally met with refusal. Clearly, the most positively connotated places are the Hoglands Park and the Stortorget. The Navy Port represents the most visible and extended border in the inner city and most people mentioned that they do not like it. In many cases they complained that this place is very big, occupying almost half the area of Trossö. Another apparent problem is the large contrast between the navy base and the nearby main street with its shops and the town square. As I have demonstrated these two areas are the two hotspots of the city and only a couple of hundred meters away the Navy Port begins, a place to which most people have no access. In this sense, indeed, two different worlds clash at the border between the military and the civil districts.

At the last level of my study I asked for visions and hopes for the city centre, thereby giving my interview partners the chance to contemplate about what changes they would like to see happen in Karlskrona. The bottom line of most responses was that the city should become more diverse, lively and creative. Pleasantly and perhaps also surprisingly, most interviewees were open-minded about changes in the city. Rather than complaining about certain problems in Karlskrona, they began thinking about possible ways how to solve those problems.
It is out of the question that my thesis project only provides a glimpse of how the method of mental maps can help explore the field of city perception. The time that I had at my disposal was limited and it is important to stress that my results represent only a snapshot reflecting the situation in Karlskrona in the period from March to June 2011. To obtain a more detailed image of the city perception one would have to invest more time.

In the second part of my thesis I discussed the received answers to my interview questions in great detail. I mainly did this to give an example of how the data acquired in a mental maps study could look like and to illustrate what kind of conclusions could be derived from it. The essence of my thesis, however, is not this data, but the method behind it. It is the method which decides how successfully one is able to access the perception of a city as well as the thoughts of the people who live in it. And that is of crucial importance: The first priority of every spatial planner should be to plan according to human needs. The more one knows about these needs in a certain environment, the better one can directly react to problems and the better one can use hidden potentials in this environment. In every planning process, independent of size, it is always important to first get an overview of the total area and then to successively scale down to the respective levels at which people are involved. Participation in planning processes always entails a high degree of sustainability. When people get involved in planning processes, they feel heard with their concerns allowing them to identify with the planning concept more easily. Civic activism is one of the key ideas of democracy and democracy can only be alive if as many citizens as possible are willing to get involved and take the responsibility for what happens with the space they live in.
10 Evaluation of the method

My method was based on the interplay between maps, mental maps and accompanying interviews. One of its virtues was that it allowed me to contextualise the results of my interviews rather than to simply collect isolated subjective opinions. For instance, I was able to arrive at qualitative statements which I consider especially necessary in the investigation of city perception. Also, it was important for me to show the individual representation of the environment. Otherwise one would risk overlooking certain aspects as it may be the case with other methods such as the one by Kevin Lynch.

I combined the maps drawn by my interview partners with their verbal statements which have proven very valuable for my work: The visual worlds of the mental maps have turned out to be an excellent gateway to the subjectively experienced life-worlds of the respondents. By contrast, I believe that it is almost impossible for an interviewee to represent his mood and city perception graphically in a cognitive map according to the ideas of the Situationists’ International. But also in my approach some aspects such as the personal feelings about the city could only be transmitted verbally. Likewise, the individual strategies for the orientation in the city centre could not be captured by the method of mental maps. As I laid out, Kevin Lynch follows a different route. His analyses entirely rely on formal forms. By developing my own method I tried to depart from this idea. In conclusion, I can say that I, albeit not completely but to some extent, succeeded in doing so.
In my study I could demonstrate that the visual perception of the city and the everyday use are interrelated. Apparently, most people could better recall their recent activities in the city centre than their recent visual impressions. Because of that the places that they could describe best were those that they had recently visited for some reason.

Finally, mapping the well-being of the people of Karlskrona represented a certainly not exhaustive or comprehensive attempt to find out about their emotions and mental state. Important aspects that I left out and that could be part of a closer examination are the historical development of the city of Karlskrona as well as personal memories. Extending my method into these directions would provide access to totally different layers of city perception. Unfortunately, the comprehension of historical data or personal memories was beyond the scope of my study. However, I think it could be very interesting and relevant to examine how the perception of individual elements changes in the course of time and how urban transformation processes over time are reflected in the perception of the citizens. The question how the inhabitants perceive urban developments definitely deserves further investigation. With regard to this issue I would only like to mention in passing that it happened in some of my interviews that the respondents told me about elements in the city that no longer exist or that they used names for city elements which are out of date.

A further limitation of my work is the age of the respondents. A large fraction of my interview partners was between twenty and thirty years old. It would therefore be nice to include a larger number of younger and older people to obtain a more representative section through society. This would also allow to reconstruct personal preferences in dependence of age. Moreover, the number of people that I questioned and the time during which I conducted my interviews were quite limited. To be able to statistically confirm certain features in the data with a high significance, one would have to hold hundreds of interviews. And instead of examining the city perception only for a few months one should better do a long-term research. For example, during my investigation a lot of people mentioned the ice cream shop in Karlskrona. But this shop is only open in summer. It is almost certain that it will be out of the perception during the winter time.

In summary, I demonstrated with my method how to gather complex data on the preferences of the residents of the city of Karlskrona. I showed which elements of the inner city are perceived by different peer groups, which functional and emotional importance they possess and whether they are either positively or negatively connotated. This data paves the way for further studies. With its help habitats in the city centre can be located and characterized. It can serve spatial planners as a guide for a successful and sustainable development of the city and point them to potentials and difficulties that are foreshadowed nowhere else than in the perception of the residents. My method can thus supplement existing measures and principles of urban planning.
can call them into question, confirm, correct or expand them. The
determination of the perception with mental maps can provide a
relevant contribution to urban development.
11 Graphical summary
The visual perception of the centre of Karlskrona

The usage of the centre of Karlskrona

- Shopping
- Meeting friends or relatives
- Eating and Drinking
- Going out (nightlife)
- Going to church
- Jogging
- Sightseeing
- Entertainment
- Cycling
- Swimming
- Working

Figure 17 The visual perception of the centre of Karlskrona
The personal relationship to the space

Interpretation of relationship to the centre of Karlskrona

The centre of Karlskrona is…

- blue
- empty
- dead
- green

Figure 18 The personal relationship to the space
I would like to change the amount of shops in the centre of Karlskrona. We have too little shops. I would like to change the car situation in the centre of Karlskrona. The centre should be car free. I would like to change the weather. The centre of Karlskrona is always too windy. I would like to change the empty streets. The centre of Karlskrona should be more alive in the week. I would like to change some restaurants in the city centre. They do not serve good food. I would like to change the size of the city centre. It should be bigger. I would like to change the town square. There should be more public attractions. I would like to change the traffic in the centre of Karlskrona. There is too much traffic. I would like to change the big town square in the centre of Karlskrona. The square should be for the people, not for the cars. I would like to change the temperature in the centre of Karlskrona. It is always too cold. I would like to change the people in the centre of Karlskrona. They should be more open for foreigners. I would like to change the green spots in the centre of Karlskrona. There are too little parks. I would like to change the nightlife in Karlskrona. There should be more nightclubs. I would like to change the big square in Karlskrona. They should redesign the square. I would like to change the border between the RTU and the centre. That area should become one. I would like to change the sidewalks for bikes. Most of them in the centre are really bad. I would like to change the big square in the centre of Karlskrona. This place is empty and I feel so lost on it. Where are all the people? I would like to change the image of the city. But I am too busy to mention everything. I would like to change the amount of public parks. Why are there only two green places in the city? I would like to change the density in the city centre. A lot of young people would like to move to the centre, but there are no apartments for these people. I would like to change the image of Karlskrona. We need a creative group in Karlskrona such that life will return to the centre. I would like to change the ways at the coast. Some of them are not usable.
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13 Table of Figures

Figure 1 Border perception of the people of Karlskrona .................6
Figure 2 Conditions of Trossö .........................................................9
Figure 3 Map of Boston by Kevin Lynch derived from interview with Bostonians .................................................................17
Figure 4 Problem of the Boston image by Kevin Lynch .................17
Figure 5 Guide Psychogeographique de Paris by Guy Ernest Debord ....20
Figure 6 Map: The visual representation of the perceived physical environment (inhabitants) .......................................................26
Figure 7 Map: The visual representation of the perceived physical environment (students) ..........................................................28
Figure 8 Map: The visual representation of the perceived physical environment (tourists) ........................................................30
Figure 9 Map: The visual representation of the perceived physical environment (professional planners) ........................................32
Figure 10 Map: The visual representation of the perceived physical environment (all peer groups) ..................................................34
Figure 11 Map of positive and negative connoted places (inhabitants) .......................................................................................41
Figure 12 Map of positive and negative connoted places (students) ....44
Figure 13 Map of positive and negative connoted places (tourists) ....47
Figure 14 Map of positive and negative connoted places (professional planner) ........................................................................50

Figure 15 Map of positive and negative connoted places (all peer groups) ......................................................................................52
Figure 16 Visual perception of the centre of Karlskrona ..................58
Figure 17 The visual perception of the centre of Karlskrona .............61
Figure 18 The personal relationship to the space .........................62
Figure 19 Interpretation of relationship ........................................63
Figure 20 Vision .............................................................................63

14 Appendix

Inhabitants
Name: Burcu
Sex: male
Age: 29
Homeland: Iran
Time of stay: 5 years

Name: Frida
Sex: female
Age: 18
Homeland: Sweden
Time of stay: 18 years
Name: Anne
Sex: female
Age: 12
Homeland: Sweden
Time of stay: 12 years

Name: Åke
Sex: male
Age: 19
Homeland: Sweden
Time of stay: 19 years
Name: Simon
Sex: male
Age: 34
Homeland: Iraq
Time of stay: 1 year

Name: Jan
Sex: male
Age: 41
Homeland: Sweden
Time of stay: 34 years
Name: Jasper
Sex: male
Age: 16
Homeland: Germany
Time of stay: 2 years

Name: Lars
Sex: male
Age: 37
Homeland: Sweden
Time of stay: 16 years
Name: Sam
Sex: male
Age: 27
Homeland: Sweden
Time of stay: 7 years

Name: Lisa
Sex: female
Age: 21
Homeland: Sweden
Time of stay: 2 years
Students
Name: Mohammed
Sex: male
Age: 21
Homeland: Iran
Time of stay: 3 month

Name: Sandra
Sex: female
Age: 22
Homeland: China
Time of stay: 9 month
Name: Lena  
Sex: female  
Age: 24  
Homeland: Sweden  
Time of stay: 8 month

Name: Sophia  
Sex: female  
Age: 26  
Homeland: Nigeria  
Time of stay: 11 month
Name: Markus
Sex: male
Age: 22
Homeland: Germany
Time of stay: 8 month

Name: Fatih
Sex: male
Age: 26
Homeland: Turkey
Time of stay: 1 year
Name: Nicklas
Sex: male
Age: 21
Homeland: Sweden
Time of stay: 2, 5 years

Name: Emma
Sex: female
Age: 23
Homeland: Sweden
Time of stay: 1, 5 years
Name: Eva
Sex: female
Age: 25
Homeland: Poland
Time of stay: 10 month

Name: Rico
Sex: male
Age: 23
Homeland: Germany
Time of stay: 9 month
Name: Nicole
Sex: female
Age: 20
Homeland: Germany
Time of stay: 3 days

Name: Thomas
Sex: male
Age: 13
Homeland: Sweden
Time of stay: 5 days
Name: Hushi
Sex: male
Age: 47
Homeland: China
Time of stay: 8 days

Name: Alexander
Sex: male
Age: 20
Homeland: Germany
Time of stay: 4 days
Name: Daniel
Sex: male
Age: 17
Homeland: Germany
Time of stay: 2 days
Professional planners
Name: Katinka
Sex: female
Age: 39
Homeland: Sweden
Time of stay: 12 years

Name: Ulrika
Sex: female
Age: 36
Homeland: Sweden
Time of stay: 7 years
Name: Marin
Sex: male
Age: 27
Homeland: Sweden
Time of stay: 2 years