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Perception of a City's Extent

-The Case of Malmö

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Abstract

The thesis is about the perceived extent of a city in comparison to the administrative city limits. This thesis primarily based on an opinion poll with 500 respondents that was conducted in the Malmö region in May 2013 and sets out to map the perceived city extent of the city of Malmö. Furthermore, a comparison is made with the findings from an identical opinion poll made in the Stockholm region. The aim is to examine if there is a difference between the administrative city extent and the perceived city extent as well as factors that seem to influence the perception of city. The thesis concludes that there are observable gaps between perceived city extent and administrative city extent and that these gaps consist of both under- and overestimations of the perceived city.

Key words: perception, city extent, social cohesion, urban identity, innovation, urban planning, and opinion poll

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1 Introduction

1.1 Problem formulation

The process of how cities grow has shifted from being a top-down process with boundaries controlled by a town wall to cities that grow like agglomerations around the city core, creating a city region (Hårsman et al. 2009). However, this does not mean that cities are free to grow without any kind of boundaries but the boundaries have shifted from being a town-wall to something else. A city's extent and borders can be defined by a great many things, limitations to road network, public transportation, sprawl, open landscape and agricultural land can be some of the more actual limitations to the cities expansion. The growth of cities today face obstacles that is much less visible than the previous town-wall. One obstacle can be the city municipality border where the jurisdictional city ends. But does that mean that the city, seen through its inhabitant's eyes, likewise ends at the municipality border? Or is there another invisible border, a border more determined by the inhabitant's perception of the cities limits then the administrative municipalities limits. The aim of this thesis is to investigate the extent to which perceptions of city limits correspond to administrative city limits. This is important for many different reasons; the first is the matter of political decisions, which are made by the municipality administration. If the administrative city (municipality) does not correspond to the perceived city limits there is a gap between what is governed and what it is perceived to be the city that should be governed. An example of this could be made with a scenario of an election say for instance that one of the parties election issues concerns a school in an area that is not perceived by the inhabitants to belong to the city, thus it could make them feel that the school is unnecessary and vote for a different party. A second reason for why this study is of importance could be as grounds for municipality mergers. Last but not least, this study is important with respect to the difficult task to combat segregation. If an area is not perceived to belong to the city, most likely it could be segregated from the rest of the city. Thus, this study could be used to measure the level of segregation in the city.

Cities grow like organisms and this fascinates more and more authors both academic and non-academic (Glaeser 2012, Florida 2006). The notion of viewing

the city as an organism could be more in line with how people perceives development of cities today. The process of urbanisation is an ever-growing force in geography; today more than half of the world's population lives in cities (Clover, 2007). Today some of the world's largest cities and city regions are in fact wealthier and more financially prominent than some small countries. Instead of competition among countries, the focus is increasingly turned to a competition between regions and city regions (Dannestam, 2009). The European Union, which is a union of countries, instead of financially supporting countries as a whole, launched and continues to focus some of its financial contributions to weak and strong regions and city regions (Hermant-de-Callataÿ & Svanfeldt, 2011).

There are many different definitions of city. The concept of City could refer to an organizational unit or a specific population density. But city might also refer to perceptions of an urban way of life and certain cultural or social characters, as well as functional space of economic activity (Hermant-de-Callataÿ & Svanfeldt, 2011). Additionally, city can refer to two different truths: the *de jure city* – administrative city – and the *de facto city* – a larger socio-economic agglomeration. The differences between the concepts are that the *de jure city* corresponds in greater extent with the historic city, with clear borders for commerce and defense and distinct city center. Whereas the *de facto city* relates to physical or socio-economic facts, which have been achieved through either morphological or functional definition (Hermant-de-Callataÿ & Svanfeldt, 2011). The discussion about if a city is a *de jure* or *de facto* city is fundamental to this thesis where the aim is to investigate the extent to which perceptions of city limits correspond to administrative city limits.

In achieving this aim, the thesis will focus on the city of Malmö in Scania in Sweden and the results will be compared to the identical study conducted simultaneously in Stockholm. Stockholm is not only a much larger city in terms of number of inhabitants' but also in the share size of the city and therefore an interesting object for comparison. The question of the perceived extent compared to administrative municipality extent will be examined both in Malmö and Stockholm.

The perception is a person's primary form of cognitive contact with the world around them (Ittelson, 1960). The level of interaction with the perceived environment influences the perception, more interaction leads to a larger perceived world (Crompton & Brown, 2006). Furthermore, as Knox and Pinch puts it, a geographical perception and cognition could be a powerful antidote to the impression that cities are populated by land uses rather than by people (Knox & Pinch, 2000). In the book "The Image of the city" (1969) from Lynch, he suggests that we need to consider a city as being perceived by its inhabitants, not only study the city as a thing itself. Further, he states that a clear perceived image

of the city is a necessity for the future, if it could be developed; it will raise the experience of a city (Lynch, 1969). These are just a few examples from the literature that show why a study of the perception of city or city extent could be important. This study will attempt to look at what social factors that seem to influence ones perception of the extent of the city. Does the socioeconomic status or gender of an inhabitant affect the perception?

The perception of the city might be effected by the urban identity. Intuitively, one might think that as a source of social identity, the neighbourhoods are being increasingly eroded with the increase of a more fluid, individualized way of life happening in cities. Forrest and Kearns (2001) claims that social networks are citywide, national, international and increasingly virtual. But as a source of comfort and security, the local social interaction and familiar landmarks of the neighbourhood may be of greater significance nowadays (Forrest & Kearns, 2001). As Castells states, people integrate and socialize with their local environment and it is in the local place that opinion and identity is being produced. Just like the urban identity is supposed to be on the decline, the social cohesion of cities in northern Europe is weakening with increasing spatial inequalities (Hårsman 2006)(Cassiers& Kesteloot, 2012). Social cohesion could be seen as the capacity to recognize the existence of different social and territorial groups presented in the city as well as the capacity for these groups to organise themselves and for the city to create institutions in which these groups can interact with each other (Cassiers& Kesteloot, 2012). The social cohesion is important because the overall socio-spatial structure of cities influence the functioning urban public sphere. A city that forms a socio-spatial continuum linking functionally interdependent areas and creating interaction between different urban zones creates a social cohesion of the entire city (Cassiers& Kesteloot, 2012), as well as an extensive perceived city. The districts of a city could be differently connected to one another or posses a different degree of belonging to the city. Thus creating a cracks in the coherency of the city and/or create socio-economical gaps.

In order to understand the city of the future, Frey (2013) claims that we must first understand the importance of proximity seeing how we live in an increasingly interconnected society and at the same time an increasingly mobile society (Frey, 2013). The definition of proximity is, in this thesis, that it is always constructed and relative. The advantages of proximity are, according to O'Flaherty (2009) that proximity spurs innovation thus making cities hotbeds for innovation. Connected to proximity is the concept of accessibility. A central idea of the accessibility concept, when interpreted as the potential of opportunity for interaction, is that it has a positive impact on economic growth (Reggiani et al., 2011) (Karlsson et al., 2006). A city with proximity and accessibility is thus a city where innovation occur and economic growth.

In the network society of the world today, meetings and especially spontaneous meetings are of relevance to innovation (Nilsson, Svensson-Henning, & Wilkenson, 2002). A city with low barriers to access within the city will be a city where more people meet and exchange ideas and in theory start companies. Innovation requires interaction (Crevoisier, 2004) thus making a coherent perceived city to be of importance for innovation. A large perceived city where all areas are perceived to belong to the city could be a factor for economic growth of a city.

The way in which many cities are viewed and perceived by the inhabitants' is more and more prominent in the urban planning of today and the inhabitants are invited to be a part of the urban planning process (Fainstein, 2000). Thus this investigation could contribute to that collaboration planning process with the perception of the city's extent compared to the administrative city extent.

The thesis is collaboration between the chamber of industry and commerce in the southern Sweden and I. A survey was conducted of 1005 people, 500 in Malmö and surrounding municipalities and 505 in Stockholm and surrounding municipalities, to be able to map out the perceived city of Stockholm and Malmö.

1.2 Aim and Research Question

The aim of this thesis is to investigate the extent to which perceptions of city limits correspond to administrative city limits. In order to investigate this the following research questions will be answered.

- 1) What is the general perception of the extent of the city of Malmö and Stockholm among the inhabitants in and around the cities?
- 2) How well does the perceived city extent correspond to the administrative city extent in Malmö and Stockholm?
- 3) What factors seem to affect the perception of the extent of the city?

And finally it will be discussed what difficulties limits to the perceived extent of the city can have for Malmö.

1.2.1 Limitations

In order to answer the research questions the study has been geographically limited to the city of Malmö and with a comparison of Stockholm. The theoretical framework in chapter 3.0 is the theoretical base on which this thesis rests upon. As all theories and models, they are mere simplifications of the reality. No theory or model represents the society exactly and neither does this framework.

Important limitations for this study are that Malmö is a Swedish city and compared to another Swedish city, Stockholm. This makes this a study of Swedish cities and that is strength in itself. Another reason to why the study is focused on two Swedish cities is that a comparison has fewer errors if the comparison cases shares important features of culture, language, legal system, governance structures etc. In addition, there are differences between Stockholm and Malmö that provides grounds for a comparison of how size of cities and transportation systems affect inhabitants' perception of the extent of the city.

A general sample of respondents living in and around each city where surveyed in this study. This provides a broad overview, but it limits the amount of in depth analysis that can be conducted on certain subgroups due to their representation in the general sample. To make sure the sample has equal representation in every possible subgroup of the general sample before the survey is conducted would be to time consuming and this was not prioritized but this affects and limits the analysis based on the results.

2 Background

In this chapter the case study of Malmö is presented with a historical presentation of the development of Malmö as a city from the Hansa city of the 12th century to the Malmö that is present today. It is a brief and a very broad overview of the historical development and the economic development of the city. It starts with some basic facts about Malmö and the comparison case study object of Stockholm and then launches into the economic development of Malmö from Hansa City to Knowledge city.

2.1 Case Study Presentation: Malmö

Malmö is the third largest city in Sweden and located in the area of Öresund in the south of Sweden. Malmö has a population size of 307 600 (Malmö Stad, 2013) and is a growing city with respect to population and the geographical extent of the municipality of Malmö is 156,87 km².

2.1.1 Geographical presentation of Malmö's Districts



Source: City of Malmö website, districts (Malmö Stad, 2013)

Figure 2.1 Malmö's districts

2.1.1 Comparison case Stockholm

Stockholm is the capital of Sweden and is considerably larger both in share size and population size compared to Malmö. The municipality of Stockholm alone has 885 653 inhabitants (Stockholm Stad, 2013) and in the greater urban area of Stockholm (Storstockholm) including the municipality 2 091 000 inhabitants (Boverket, 2012). The geographical size of Stockholm municipality is 214 km² (SCB, 2013).

2.2 Transformation

In this subchapter the main stages of Malmö's development and transformation as a city is brought up and examined. From being a trading city to a production city and last but not least the transformation to a knowledge city present today.

2.2.1 Hansa city

Malmö as a name originates from Malmöghe, a place name that originated in the 1100s. Malmöghe was according to history placed where the park of Pildammsparken is located today. Throughout time the south parts of Malmö developed near Öresund, which became the starting point of growth of the present city. Malmö's extended business relations with the German trade organization, the Hanseatic league, influenced and made a mark on the city's structure and architecture. Malmö and Skåne (Scania) belonged to Denmark and was the second largest city in Denmark until Scania became Swedish in 1658. A process to make Scania Swedish was initiated and the leading positions within the Malmö's city council were taken over by Swedes (Andersson & Olsson, 2009).

During the 1700's Malmö's economic life was dominated by the textile and tobacco industry. At the turn of the century to 1800, the building of the inner harbour in Malmö began. It would have a major impact on the economic development of Malmö (Andersson & Olsson, 2009).

To sum up, Malmö was a commerce city that has been characterized historically by Danish and Swedish culture and international trading/ trade relations.

2.2.2 Industrial city

In the 1800's Malmö experienced a large urbanization process when former agricultural workers migrated from the surrounding areas into the city for jobs in the tobacco, sugar, textile and mechanical industries. Malmö was growing rapidly and experienced a large industrial development. Malmö continued to expand into an industrial city up throughout the 1950's and part of the 60's. But because of the competition from modern textile and ready-made clothing industry from Europe many textile and clothing factories were forced to close and disappeared (Andersson & Olsson, 2009). Shortly after the setback of the textile industry, Kockum's shipyard was impacted by the international competition and was shutdown. This was a major blow to the economy of Malmö (Andersson & Olsson, 2009). Malmö had become an industrialized city without any major industries. During the 1970's, cities all over the world, including Malmö, with industrial production experienced plants closing down or relocating to other parts of the world. About a decade later Malmö was hit by another series of shutdowns. As a consequence of this, there was a sharp rise in unemployment in the city, which in turn spurred migration and social polarization. Unemployment in combination with an increase in the number of refugees from all over the world to Malmö, created a large deficit in the city's budget (Möllerström, 2011). Something had to be done and in 1995 a new vision for the city's future was launched as an initiative from the municipality government in Malmö, Vision 2000. A vision that as the following section shows, dramatically changed Malmö.

2.2.3 Knowledge city

The main form of production in Malmö has changed considerably in the last 20 years. When Kockum was shutdown, the area and to some extent the city redeveloped itself from a city with industrial production to a city that produces knowledge. Major governmental and municipality investments have taken place to redevelop the former shipyard to sustainable housing and to establish a centre for higher education (Möllerström 2011). The transformation from an industrial city to a creative city is reflected in the local industry and occupational structures in Malmö. In 2007, 93870 people in the labour market of Malmö worked in the service sector with services. The same year 50133 people in the same labour market worked with manufacturing or more specifically physical manufacturing (Mellander, 2011).

Malmö's transformation from industrial city into a knowledge city is in line with a new development movement in many major western deindustrialized cities and regions. This transformation is the legacy of deindustrialization and a side effect of the new globalized economy where cities are increasingly trying to

identify their own unique profile to compete with other cities to attract people and businesses. A new image is created in hope of being able to gain competitive advantages on the global arena and attract a new flow of capital to the city (Möllerström, 2011). As seen in the report by the city of Malmö released in 2008 a pattern of a certain kind of language and visions can be seen. The report is a summary of the development work around Malmö to turn it into a knowledge city, phrasing like the rise of the creative class, innovation, cultural planning and knowledge-based development are some of the terms frequently used in the report (Malmö stad , 2008). This is in line with other cities in the west, which has experienced the post- industrialized era, where there is an aspiration of cities to transform to knowledge cities. This might be somewhat an effect of the economies change in character from large-scale industrial production to knowledge intensive services and customized production (Möllerström, 2011).

However, the city of Malmö launched a campaign to try to *wash away* the notion that it was a grey city filled with *dirty* industries. As seen in this quote from the city hall of Malmö:

”Malmö är inte längre den grå arbetarstaden som förlorat sin största arbetsgivare och står handfallen, det trista syskonet till glittrande storstaden Köpenhamn och kloka retsticken Lund. Malmö har gjort en attitydmässig saltomortal, och det har gått fort. Människor vill mer, vågar mer, gör mer”(Det medicinska Malmö. Samverkan. Enkelhet. Närhet, p. 4)

In 1995 the municipality government launched a new vision for Malmö, Vision 2000, and a few years later they established the college of Malmö (1997) followed by the opening of Öresundsbridge (2000) and hosted the living exhibition Bo01 (2001). The living exhibition Bo01 is also the start of a new kind of city planning in Malmö, a planning to make the city more attractive and to turn it into a so called knowledge city (Mukhtar-Landgren, 2005). The Vision 2000 was grand, but much of it has been accomplished and the most important parts of the vision for this study refers to the major infrastructural investments made, the Öresundsbridge and the City tunnel.

In the transformation to a knowledge city, Malmö has, not unlike other cities in the western world, experienced a great number of unintended changes and impacts. In line with the other two larger city regions in Sweden, Malmö's manufacturing industry have slowly shifted and been replaced by a service- and knowledge-based economy (Möllerström, 2011). The economy in Malmö follows the usual trends in western countries when the manufacturing industry is shifted to a service based industry.

3 Theory

In this chapter the theoretical framework on which this thesis analysis lie upon is presented and the definitions of the different concepts used for the analysis is defined and theorised. As all theoretical models, they are a simplification of reality. Therefore, a presentation of this thesis particular framework needs to be explained and defined. The discussion starts with explaining the concept of perception and then moves on to a discussion about cities, cities and innovation, urban identity and social cohesion and proximity and accessibility. All of which are factors that could be significant to the perception as well as might affect the perception of city extent.

3.1 Theoretical Framework

3.1.1 Perception

Seeing as this thesis is based on the inhabitants' perception, there is a need to discuss what perception is and how it is formed and used for science as well as the advantages and disadvantages with using perception in science. Perception is a person's primary form of cognitive contact with the world around them (Ittelson, 1960). Because all conceptual knowledge is based or derived from this primary form of awareness, the study of perception has always had a unique significance for science. However, the exact nature of perception has never been sufficiently defined or theorised. This has the result that those who attempt to study disorders of cognitive function do not know whether a disturbance of cogitation is due to perceptual or conceptual processes (Efron, 1969). With this in mind a geographical perception and cognition has the effect to offer a strong antidote to the impression that cities are populated by land uses and pathologies rather than by people. It is also an enlightening background to the behavioural patterns that contribute significantly to the "objective" geography of the city (Knox & Pinch, 2000). As Lynch puts it "we must consider not just the city as a thing itself, but the city being perceived by its inhabitants" (Lynch, 1969:3).

The perception of the city could be of interest because cognitive distance perception, or knowing how far apart places are, is one of the ways we navigate, comprehend and understand urban space. Thus, the perceptions influence how we move in the city. In a study of cognitive distance perception participants estimated a walk in a picturesque village to be, on average, twice as long as an equal-length journey in a city. One must keep in mind that our distance perception is adapted to a natural world that is fractal. The size of that world depends on the scale at which we interact with it (Crompton & Brown, 2006). More interaction with the environment leads to a perception of a larger scale. Conscious perception of space may be influenced by one's interaction of that space (Creem-Regehr et al. 2004). Further research shows that associations involving urban residential variables and measures of perceptions are illegitimate by-products of compositional factors such as social class, ethnicity and stage in life cycle (Sacco, 1985). As affirmed previously, there is a need for the understanding of the correspondence between perceived and objectively in assessed environments that has not yet been fully comprehended. There are pros and cons to using perception in research to characterize environments, if these perceptions is inaccurate, important associations might be overlooked and others may be mistakenly identified. To sum up there may be systematic biases of the environmental perceptions (Ball et al. 2008). However as Lynch puts it, the moving elements in a city (people) are as important as the stationary physical parts. People are not simply observers of the spectacle that is a city and every citizen has had long associations with some part of that citizen's city and his image is soaked in memories. Further, a clear perceived image of the city is a requirement for the future, if it can be developed; it will raise the experience of a city to a new level (Lynch, 1969). That's one example of why a study of the perception of the extent of the city is important.

It is central to recognize both the pros and cons to the study of perception as well as the factors that affect the perception. As found in the study of "Mismatch between perceived and objective measures of physical activity environments" the misperception of the environment could be linked to certain socio-economical factors. Less educated groups were more likely to misperceive their physical environment. For example, women in highest income households were least likely, and those in low-income houses most likely, to show mismatched perceived environments. In the study, educational level and neighbourhood socioeconomic status showed the same trends (Ball et al. 2008). This seems to indicate that the perception is influenced by different social factors. This will be further examined in this thesis with respect to the research question concerning what factor that seem to affect the perception of the city extent.

3.1.2 City

In order to answer the research questions and achieving the aim of this thesis that concerns the perception of extent of cities there is a need to discuss definitions of a city. There are many different definitions of a city. These are only a few and chosen with regards to this discussion concerning the extent of the city. The concept City can refer to an organizational unit or a specific population density. The density varies from country to country and thus a city in one country could be a village in another country and so on. This makes comparisons of cities between nations difficult. Further, city might also refer more generally to perceptions of an urban way of life and certain cultural or social characters, as well as functional space of economic activity (Hermant-de-Callataÿ & Svanfeldt, 2011). City may also refer to two different truths: the *de jure city* – administrative city – and *de facto city* – the larger socio-economic agglomeration. To explain the difference, *de jure city* corresponds in greater extent to the historic city with its clear borders for commerce and defense and distinct city center. Whereas the *de facto city* relates to physical or socio-economic facts, which have been achieved through either morphological or functional definition (Hermant-de-Callataÿ & Svanfeldt, 2011). Some say that following the expansion of the *de facto city* comes a delimitation of urban and rural and the boundary become less clear or even lost its sense. Or as stated by Allingham and Raahauge (2008):

“The boundary between the city and countryside is disappearing while the rural and urban have melted into a new *rurban* condition” (Allingham & Raahauge, 2008:99).

This theoretical framework concerning if a city is a *de jure* or *de facto* city is of interest to this thesis and the discussion about perception of city extent and how it corresponds to the administrative city limits and could thus be used to answer the first two research questions.

3.1.3 Cities and innovation

In order to discuss what difficulties there may be if the perception of city extent does not correspond to the administrative city there is a need to look at the current economic structure of cities. In this thesis a special interest is placed on how innovation occur and how that might be affected by the perception of city extent. Seeing how cities are becoming increasingly service oriented economy where ideas and meetings (and later on innovation) are just as important as a for instance a shipbuilding industry was to an industry-oriented economy.

The change of cities with regards for the economic structure in cities is also of interest to the policymaking and expansion of cities today. Cities have

transformed from geographical locations for industrial production, governed by the nation states (Smith, 2005), to places of entrepreneurship and economic growth (Harvey, 1989). This is not to say that the cities are disconnected from the national territory. However, the global competition between cities and regions is increasingly rivalling that of nations (Dannestam, 2009). The transition from physical production to knowledge production is also connected to a transition from the city as a provider of social-welfare to a supporter of economic growth (Harvey, 1989). Cities are becoming increasingly important in innovation research. This is followed by expectations of regional innovation, knowledge-based economy and the financial growth. The interaction between people has been presented as a part of the reason for innovation (Nilsson, Svensson-Henning, & Wilkenson, 2002). Interaction is vital to the innovation and in extent also vital for the financial growth in the creative economy (Florida, 2006). Cities could drive innovation but that would also depend on the cities unique features and the cohesion of the entire city. If the city is compound with connections not only between companies, but a cluster of connections between inhabitants, it is more likely that interaction will occur and as the theory expresses, so will innovation.

The approach of innovative milieu described by Crevoisier (2004) as innovative milieu is understood as the place in which an organized network exists that links companies, institutions and local populations within a process of economic development. The approach brings up that there are different kinds of barriers to innovation regarding proximity and distance (Crevoisier 2004). In addition Nilson, Svensson-Henning and Wilkenson bring up the interaction, links, relationships and connections between different actors in cities and city region's between companies. This is seen and considered as essential for the innovative processes in the discussion focused around innovative milieu (Nilsson, Svensson-Henning, & Wilkenson, 2002). The districts of a city could be different connected to one another or posses a different degree of belonging to the city. Thus creating a cracks in the coherency of the city or create socio-economical gaps. From a planning perspective it is a question of belonging and socio identity, a concept that is further developed later on.

Furthermore, Crevoisier makes the claim that innovation cannot be condensed to the financing of research and to developing and registering patents. Innovations can originate from so much more and here are proximity and low barriers for contact is essential (Crevoisier 2004). Innovation requires interaction, thus making a coherent perceived city to be of important for innovation. A large perceived city where all areas are perceived to belong to the city could thus be a factor for economic growth of a city.

3.1.4 Urban Identity and Social Cohesion

In the search to find what factors that seem to affect the perception of a cities extent as well as why there might be a difference between the administrative city and perceived city, the concepts of urban identity and social cohesion.

One of the oldest debates within urban sociology is in regards to the loss of a sense of community due to first urbanization and then suburbanization. Identity is defined, according to Castells, as the process where opinion forms on the basis of a cultural attribute or related sets of cultural attribute that gain priority over other sources of opinion. There could be many different identities for an individual or a collective actor (Castells, 1998). One of the types of identities is the territorial identity of the local community. Intuitively, one might think that as a source of social identity, the neighbourhood is being progressively eroded with the emergence of a more fluid, individualized way of life (Forrest & Kearns, 2001). However, Forrest and Kearns (2001) claims that social networks are citywide, national, international and increasingly virtual. However, they also conclude that local social interaction and familiar landmarks of the neighbourhood may be of greater significance as sources of comfort and security (Forrest & Kearns, 2001).

Castells support this notion and takes it to the next level when he claims that people integrate and socialize with their local environment, regardless if that might be a village, a city or a suburb, and people build social networks with their neighbours. Furthermore, Castells states that it's in the local place that opinion and identity is being produced: my community, my neighbourhood, my city, my school, my tree and so on. In other words, the local neighbourhood remains significant as a source of social identity (Forrest & Kearns, 2001). But this urban and social identity is a defensive identity, an identity with the known entrenchment to possess a fear of the unknown (Castells, 1998).

In a study of the cognitive map over a city centre, Stoiculescu (2012) came to the conclusion that the city centre could be better managed to support the residents' identity. Making the city center become a space of social concentration, which translates the collective process of identity modeling. Furthermore, Stoiculescu concluded that any major change in the city centre has consequences to the perception of the spatial outline (Stoiculescu, 2012). Thus the urban identity is important to take into consideration with regards to the perception of the extent of the city.

The second factor that might influence the perception of a cities extent is the social cohesion present in the city. Social cohesion can be seen as the capacity to recognize the existence of different social and territorial groups presented in the city and the capacity for these groups to organise themselves and for the city to create institutions in which these groups can interact with each other (Cassiers&

Kesteloot, 2012). Social cohesion is important for the perceived cohesion of the entire city. The overall socio-spatial structure of cities has a major impact on the functioning urban public sphere (Cassiers& Kesteloot, 2012). A city that forms a socio-spatial continuum linking functionally interdependent areas and creating interaction between different urban zones creates a social cohesion of the entire city, as well as an extensive perceived city. With the current urban climate, the socio-spatial inequalities seem to be on the rise in urban Europe, demonstrated for instance in Stockholm (Hårsman, 2006), northern European cities have rich centers and poorer peripheries (Cassiers& Kesteloot, 2012). In society at large, these increasing inequalities are brought about by intensified processes of economic globalisation, capital and labour flexibility (Defillipps, 2004).

Thus a social cohesive city need to build on the normative notion that was once at the core of the European city concept- i.e., the notion that civil society rests on a form of urban planning that is at the service of urban society as a whole, aspiring to build a socially just city. The planning that exist today consist of a market based attraction of investment and a geographical competition between cities thus creating a planning that serves the market instead of coming up with socially innovative strategies to mobilise both the external and internal resources of the city. There is a need to constitute new institutions through which the future of the city can be negotiated to make sure that both the internal and external resources are taken advantage of (Cassiers& Kesteloot, 2012). A first step towards that could be to make sure that the city is perceived to be of the same extent as the administrative city or find out what factors that affects the perception and work with them to create a socially cohesive city.

3.1.5 Proximity and Accessibility

The perception of a city extent could be boiled down to what kind of accessibility the respondent has as well as the proximity that the city offers. In order to answer the research questions concerning both, what difficulties there may be if the perception of city extent does not correspond to the administrative city as well as to why that might be the case, there is a need to look at the concept of accessibility and proximity.

In order to understand the city of the future, Frey claims that we must first understand the importance of proximity since we live in an increasingly interconnected society and at the same time an increasingly mobile society (Frey, 2013). The definition of the concept of proximity is that it is always constructed and relative. Most human activity on this planet is concentrated on a very small amount of land, cities. The first step towards understanding cities then is

examining why activity is concentrated in a few places (O’Flaherty, 2009). What are the advantages of proximity? According to O’Flaherty, proximity spurs innovations, thus cities are hotbeds for innovation. Proximity can also be positive for knowledge transfer or as O’Flaherty (2009) puts it, new knowledge is hard to communicate over long distances. Fresh, strange and not-yet-fully-developed ideas seem to travel a lot better though face to face discussions, where the feedback is immediate than telephone, email or publication (O’Flaherty 2009). The proximity that cities provide can support the transmission of knowledge.

Closely related to proximity is the concept of accessibility. Accessibility can be defined as the potential to reach locations where facilities, such as education, employment, service and social activities, are available (Haugen, 2012). Accessibility is largely dependent on the built environment. The built environment creates accessibility and barriers, proximity and distance. It facilitates some activities at the expense of others. Accessibility and distance (or lack of proximity) both demonstrate the role of friction of distance in human affairs. Distance is both a barrier to and a defence from social interaction (Knox and Pinch, 2000). Distance “is simply a measure of the degree to which the friction of space has been overcome to accommodate social interaction” (Harvey, 1989,p.222).

A central idea of the accessibility model, when interpreted as the potential of opportunity for interaction, is that it has a positive impact on economic growth (Reggiani et al., 2011) (Karlsson et al.,2006). Thus, a city with proximity and accessibility is a city where economic growth and innovation occur. The proximity and accessibility are both dependent on the city extent and could affect the perception of the city extent and thus important for this thesis.

4 Method

The aim of this thesis is to investigate the extent to which perceptions of city limits correspond to administrative city limits. With the research questions as a starting point a choice have been made to conduct the study using the method of case study and a web based survey. In this chapter of the thesis the method will be problematized and discussed. Additionally will its methodology be explained and defended.

4.1 Case study

To answer the research questions a choice has been made to use a case study. In a case study focus is placed on just one survey unit in order to study that case in depth. The rationality behind the concentration of the effort into one single case is that it can provide insight in the consequences that would not have been thought of in a larger research strategy with a number of cases. The aim is to highlight the overall, by examining the specific (Denscombe 2009). The case study is appropriate to use when you want to be able to explain how the processes and relationships relate to each other, something that had been difficult with a more superficial approach. One of the advantages in the use of case study as a research method is that it allows the researcher to use a multitude of sources and a several types of data as well as several research methods in the investigation (Denscombe 2009). In this thesis the survey unit is, as previously mentioned, the municipality of Malmö and the comparison case of Stockholm. The focus of this thesis is to investigate in what extent the perceived city corresponds with the administrative city. Seeing how the two cities are different in size and structure but both have an administrative city (municipality of Malmö and Stockholm) the choices seem to be appropriate for the thesis purpose.

4.2 Methodology

The thesis has its base in a quantitative method. Method is a collective term for the approaches applied to conduct social science research. The quantitative method is a well-established method in virtually all social science knowledge areas. Often an approach which combines' both a qualitative and a quantitative approach to reach a broad and reliable result (Descombe, 2009). The difference between the quantitative and qualitative research refers primary the various approaches used to analyse. Qualitative research is primary based on transforming information into data of written format. Quantitative research, however, tends to use figures and is often based on a measurement of some phenomena (Descombe, 2009). Certain types of research questions lend themselves better to quantitative approaches, descriptive questions that seek to answer how much, how often or seek to identify the degree of relationship that exist between two or more variables (South Alabama Education, nd). An example of that could be a research question like this: What is the relationship between (factor 1) and (factor 2) for (respondents)? 'What' questions that seek to detect a pattern, or measure the scale of a phenomenon, often lend themselves to quantitative approaches. Looking at this thesis research questions, three of four questions are 'what' questions and the 'how' question is still a descriptive question seeking to answer how much. Therefore the choice of methodological approach being a quantitative method link to the research questions.

In this study the data is collected using a web-based survey sent out to 500 inhabitants in Malmö and surrounding municipalities. This is to consider being a quantitative data.

4.3 Web-based survey

In order to establish the difference between the administrative city extent and perceived city extent and answer the research questions a survey was conducted. The survey was a web-based survey sent out to the sample selection of inhabitants in Malmö and surrounding municipalities and Stockholm and surrounding municipalities. Web-based surveys as a method is a very cost efficient way to conduct the collection of data, mainly because the cost of distribution is low and all the responses do not have to be registered separately (Troost 2012). Using the Internet to conduct survey research is a cheaper and quicker way to conduct research compared to postal surveys and personal interviews. The questionnaire can be sent as an attachment in an email and surveys as an attachment in an email gives greater room for design. They are also relatively easy to produce and that

makes them quite attractive. Another benefit with web-based surveys is that it is possible to create interactive surveys, where the answer of the question determines what follow-up questions are asked (Troost, 2012). This web-based survey was conducted as an interactive survey and as a webpage where a link to a website was sent out in an email. After opening the link, the respondent gets to choose the answers on a scale and with a simple click the answer is recorded in a database, which has the advantages of being quick and accurate. If for some reason the survey is not completed the answers automatically gets erased from the database as the survey was incomplete. The downside of this approach is that it requires more technical expertise and technical components than other kinds of surveys (Denscombe 2009).

The question of the selection of population needs to be particularly thorough for practical reasons when using web-based surveys. It requires a selection amongst people with a computer or tablet or phone with a good Internet connection. The access of Internet and the simplicity of using it come with its own set of problems. It might be easy to get a lot of respondents but the selection of participants is most often deficient ad-hoc-selections because there is no good directory. Furthermore, emails and the character of websites make it harder to steer the research towards the respondents that fit the specific categories as the research requires. The best thing is if there is present email already or a list of respondents that fits the criteria's of the survey research (Denscombe 2009).

But if the research, just like this one, instead is conducted based on a recruited web-panel that required a telephone contact with the selected participants from a randomized directory of phone numbers. An email is then sent to the people that gave their permission in the phone recruitment. The email is then sent out with a link to the survey with a unique identifier, which hinders one participant to answer the survey multiple times. The identifier also works to see who has answered and who to send a reminder to answer the survey (Troost 2012).

The answering frequency is, just like other forms of survey research, affected by the visual appearance and how easy the questions are to answer. However, the questions need to have much discriminatory power and still remain comprehensible for the vast majority, if not all, the sample. However, the answering frequency can be stimulated into becoming a bit higher if the respondents are contacted in advance (Denscombe 2009) as was the case for this survey. Still, the answering frequency is often lower with the use of web-based surveys compared to postal surveys in spite the low costs of sending out reminders (Troost 2012). One reason might be that it is easier to forget something in a virtual mailbox than a real one. Reminders might also be seen as nagging when they come in the email than by regular post. Last but not least, there is the

computer error loss of respondents when the email never arrives to the receiver (Trost 2012).

4.3.1 Questions in the Questionnaire

To write the questions for the web based survey questionnaire was the most difficult part of the research. The questions in the questionnaire need to secure that the intent of the question comes across clearly and at the same time secure that the questions remain comprehensible and informal. This was a search for the precise question to ensure reliability in the answers that come out for the questionnaire. The main question in the questionnaire that is formulated as such, to what extent do you feel that the following areas are a part of Malmö, and is connected to the first research question that is what is the general perception of the extent of the city of Malmö among the inhabitants in and around the city. Thus creating a link between what is set out to investigate and what is actually investigated in the empirical research.

A fundamental key in the construction of questionnaires is to make it comprehensible understandable and quick for the respondent to answer, in order to make sure of this the questionnaire needs to be tested for time and to remove difficult formulations (Denscombe 2009). It's very important to consider the question's style and meaning from more perspectives than one's own (Trochim, 2006), here it was useful to conduct a pilot test and ask people what they thought of the questions and to make sure that there is no anchoring of a certain notion. For this thesis, several different questionnaires was constructed and tested upon colleagues, friends and family. Sometimes it was best to ask someone completely separated from the research such as distant family members for the best formulation of a question. To formulate and identify the key question is the most important and therefore the most difficult questions to phrase. In the key question there is no room for vagueness or lack of precision and thus it consumed most of the time. For this research in particular the use of maps for the questions of what parts belonged to the city, was an anchoring technique and that method would most likely end up in not representative conclusions. To ask someone to just simply draw a circle on a map could mean that the circle might not involve the perceived circle that exists in the cognitive minds of the respondent but just the easiest possible circle.

The sequence of the questions asked is also important to consider, for instance in this questionnaire a choice was made to place the background questions at the end to ensure that all the most important questions got answered first. Furthermore to make sure that there is no anchoring of a certain notion, a

randomization of the questions was used except for background information that were always last to make sure that the respondent get to answer the interesting questions first.

To make sure that the questions are informal and quick to answer, most of the questions in the questionnaire were scaled questions. This is also in line with using the benefits from using a web-based survey where the use of the functions such as the easiness of using the mouse to click the right answers are used to full advantage (Trochim, 2006). In the questionnaire, a few control questions and options to scaled questions were added to make sure that the respondent made an active choice to for instance exclude neighbourhoods that technically are not a part of Malmö in the question of what areas belong to Malmö. With advice from Demoskop scales on questions were added and the main research question was limited to only asking about 10 districts in Malmö to make sure that all the respondent answered on all districts. This was done to ensure the most possible reliability and validity in the conclusions that might be drawn from the answers.

4.3.1 Field diary

In the course of the construction of the questionnaire a field diary was kept. The diary was kept to have a record of the thoughts and to force oneself to be reflective on the choices that were made and why those particular decisions were made and to keep a track of how the ideas were changed over time. The diary was updated almost every other day or when new decisions were made or more information about the survey was presented. The length of the posts varied from two pages down to just a couple of lines. An example of what the field diary contained is this part where reflections were made about the scaled versus open question in the questionnaire:

”It’s a bit bias to do this question as scaled, and it could be better to have it as an open question. When I talked to Demoskop, they said that around 60% of the participants answer on their phone or tablet, which means that they are unwilling to write an answer on an open question and a scaled one is more likely to get more answers and more correct answers. I do take this into consideration and think about the fact that these questions and the scales and answers were thought up by me with the objective to “falsify” the municipality border as the border of the city. (Field diary kept by Ulfgrén 1/5-2013, p.10)

The challenges with this are that a field diary takes extensive amount of time to write. In more qualitative methods field diaries are more extensively used to make sure that the observer is keeping a record of the observations (Denscombe 2009). The benefits from the field diary was that the research reflexivity is recorded and

questions of why the questionnaire is designed in the way it is and the decisions that lead to that design in particular and no other designs or other kind of questions are all kept record of. The diary was kept is because it is important for a researcher to remember what line of thinking lead to the decisions that were made and it is much easier defending the decisions if there is a record of why the decisions were made (Denscombe 2009).

4.3.2 Sample Selection

The sample selection was conducted with a few criteria. As this is a case study of the city of Malmö, sample was selected from inhabitants living in Malmö or surrounding municipalities. The selection was made after what was previously (before 2005) called Stormalmö which includes the municipalities of Malmö, Vellinge, Trelleborg, Svedala, Lund, Burlöv, Lomma, Staffanstorp och Kävlinge, see map in the appendix. Demoskop did this selection because it could not be statistically verified with just the use of respondents that lived within the city of Malmö. However, in the survey there is a question that asks if the respondent lives in Malmö, which could be used to identify the subset of the sample of only people living in Malmö. In addition, the respondents are asked for their postal number in the background information, which can be used for the same purpose.

The selection is limited to respondents over 18 years old. This is because it is illegal in Sweden to ask a minor (>18) to answer a survey without the parent's permission. The survey does not have any top age limit but the background questions allows selections from the respondents to be made afterwards to, for example, only look at the responses from respondents that are amongst the labour force.

As the survey is a web-based survey, there will be a loss of all inhabitants of Malmö that do not have access to an email account, computer and telephone. The population ends up being adults (<18) that have access to a computer and Internet and live in Malmö or surrounding municipalities. The respondents are contacted by the subcontractor of Demoskop that has the base of telephone numbers and telephone switchboard with the manpower to conduct the phone calls quickly and efficiently. The subcontractor's workers receive randomized numbers in the StorMalmö and call them to ask if they would like to participate in a web-based survey. If the respondent agrees, the next question will be what the respondent's email is. Then an email with a link to the survey is sent out and once the respondent has answered this considered to be one respondent. The response rate is thought by Demoskop to be somewhere around 25-40%. The subcontractor

continues contacting potential respondents until there are 500 respondents in Malmö and surrounding municipalities.

4.3.3 Methods for gathering participants

The sample for this particular research was gathered with the method, previously mentioned, of a telephone recruiting of respondents. A telephone survey is conducted through a randomized selection of phone and mobile phone numbers according to the methods that is present for the nationally representative selection. According to the information received after the survey from Demoskop, about 50 % of the people contacted for the telephone survey wanted to participate. The response rate for the telephone survey is thus 50%. In the end of that survey the respondent receives an option of participating in the web- based panel. Around 10% of all that gets the question of participating in the panel answers that they want to participate. This is how the company, Demoskop, slowly builds up their so-called randomly recruited Internet panel. To be able to use panel at least 10.000 respondents need to be active in the panel. The panel that was used for this particular survey has 103 000 possible respondents.

For this survey, some of the emails bounced, some that receive the survey did not belong to the sample selection and got screened out, for instance if they do not live in Malmö or surrounding municipalities. Or if someone begins the survey but does not complete the survey those responses get screened out. The participating frequency is the number of the people that gets the survey minus the emails that bounce. The participating frequency for this survey is presented in table 4.1.

Table 4.1 Participating frequency

Total invited	1750
Bounced	27
Delivered	1723

Completes	501
Screen out	49
Incomplete	69

The participating frequency for this survey thus becomes about 30%. However, the answering frequency is lower. One might assert that this sample is not great enough to draw conclusions from the answers but a participating frequency of 30% and about 500 respondents is still a good enough number to draw some

conclusions from. However, this participating frequency is still considered quite good according to methodological textbooks (Denscombe 2009).

4.3.4 Respondents according to municipality

To show where the main proportion of the respondents live, a table of the respondents that participated in the survey according to municipality is presented in table 4.2.

Table 4.2 Percentage of participants in survey according to municipality

Kävlinge	5%
Lomma	6%
Staffanstorp	5%
Burlöv	3%
Malmö	37% (187 ppl)
Lund	25% (121 ppl)
Vellinge	7%
Trelleborg	6%
Svedala	4%

Something that might have contributed to strengthen of the research would have been if a breakdown had been made on where the respondents from Malmö lived within the city according to postal codes. As it is now, we do not know how the respondents were distributed over Malmö. This would affect the reliability of the research.

4.3.5 Generalizability and Validity

With the methodology being a quantitative research method with the use of a web-based survey a discussion about the generalizability and validity is necessary. First off, the generalizability from case studies has some specific questions that need to be taken into consideration when deciding whether or not the findings from the case study are generalizable (Denscombe, 2009).

1. To what extent is the case study representative?
2. Is not the result, although they might be interesting, unique for this case study in particular?
3. How can one generalize from the foundation in a survey of just one case?

This case study is representative, as brought up in the part of limitations, for the structure of cities similar to the one examined. Every case study is unique and this case study, seeing how it is set in a Swedish city, might only be generalizable to other Swedish cities. The possibility for generalizability in the findings of the case study to other examples in the same category depends on to what extent the case studies are similar in kind (Denscombe, 2009). This particular case study is a case of a larger city in an interactive environment that is the Öresund region. Scania is one of the three most populated areas in Sweden. With this in mind, the findings of this case study could be generalized to other larger cities in Sweden in a populated area. However, seeing how this particular case study has a comparison case of the same survey results from another much larger city of Stockholm makes it possible generalize matching findings from both cities. However, when it comes to how transferable the conclusions might be, one needs to consider that it is two Swedish cities that are the case studies and the results might not be transferable to cities in other countries. Every case study is unique and the results might not be transferable to other Swedish cities even.

Secondly, the validity of the results depends on how the data is gathered. When dividing the results into subgroups, as done in the results, the subgroups become considerably smaller than the 500 respondents. If any subgroups become too small, fewer than 30 respondents, no conclusions were drawn upon the results. To the farthest extent, the subgroups should be similar in size to insure validity in the results (Trochim, 2006). Furthermore, as stated in 4.3.4, no breakdown of where inside the city of Malmö the respondents lived and this could affect the validity of the research.

4.4 Method discussion

Some of the disadvantages with the case study method are whether or not the findings from this particular case study can be extended to explain the same phenomenon in other locations. The generalizability of case study research can be limited (Denscombe 2009). Furthermore, the method used in this research is that of a secondary source and that requires reflection of the use of this method. The method belongs to Demoskop and that means that the access to full process is limited. The collection of data is primary data but a third party is used to collect the primary data. Even though I created the questionnaire, it was with advice from Demoskop that the fully ready questionnaire was created. However, in this research, I had the final saying on all the questions and had full control over what

the final questionnaire looked like. It wasn't until I gave the overall okay, that the process of sending out the questionnaire began.

There are limitations to this method that needs to be recognized but limitations will exist in any kind of research. Demoskop was an advisory party and working with them was a learning experience. To be able to order the survey, formulate, test and ensure validity in the research are still questions that need to be addressed by the researcher and not the subcontractor. Furthermore in contrast to what data, given the timeframe, a single researcher standing on the street with a questionnaire could have collected, this method allowed me to collect data from 500 respondents in the greater Malmö area. This has been great opportunity to learn how research and public opinion is collected outside of the university as well as a process of learning how to create a questionnaire and select the sample.

5 Results

In this chapter the results from the web-based survey are presented with graphs and text. The findings are for the most part presented as spider graphs of the percentage of opinion. These spider graphs are not a geographical representations but a surface of opinion. The results are based on the key question in the questionnaire: To what extent do you feel that the following districts are a part of Malmö? Thus, these findings are a representation of the perceived extent of the city of Malmö according to the respondents and then compared to the administrative city. This is connected to the first and second research question that are as follows: What is the general perception of the extent of the city of Malmö and Stockholm among the inhabitants in and around the city and how well does the perceived city extent correspond to the administrative city extent in Malmö and Stockholm. It should be noted that the administrative city includes more districts than presented in these findings, for further discussion see 4.3.1.

The chapter begins with the main findings from Malmö and then moves on to a comparison from the main findings from Stockholm. In the section 5.2 the results of the key question are divided up according to some background variables of the respondents such as age and level of education. Section 5.2 present results that are supposed to answer the third research question that are as follows: What factors seem to affect the perception of the extent of the city?

5.1 Main Finding

The findings represent the perception and opinion of the extent of the city of the respondents. The first spider graph is a representation of the administrative city compared with the perceived extent of the city. It is important to remember that this is not a geographical representation but a surface of opinion presented in percentage of respondents that answered that the districts are in very/fairly extensively a part of Malmö.

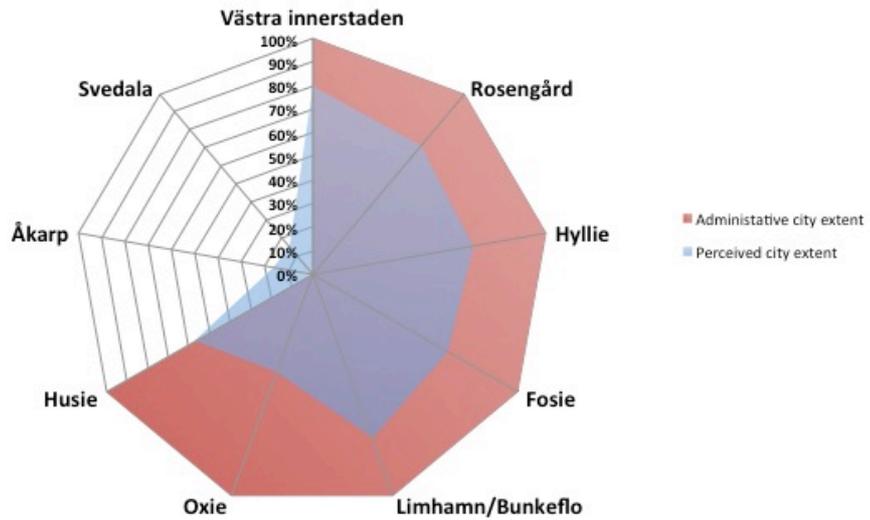


Figure 5.1 Administrative city extent and perceived city extent

Figure 5.1 presents the main finding of the perceived extent of the city compared to the administrative city extent. The two districts, Åkarp and Svedala was added to the list of districts in the questionnaire, even though they are not a part of the administrative city of Malmö, as a test of the respondents knowledge about the extent of the city. As the findings show the two districts showed low perceived belonging to the extent of the city of Malmö.

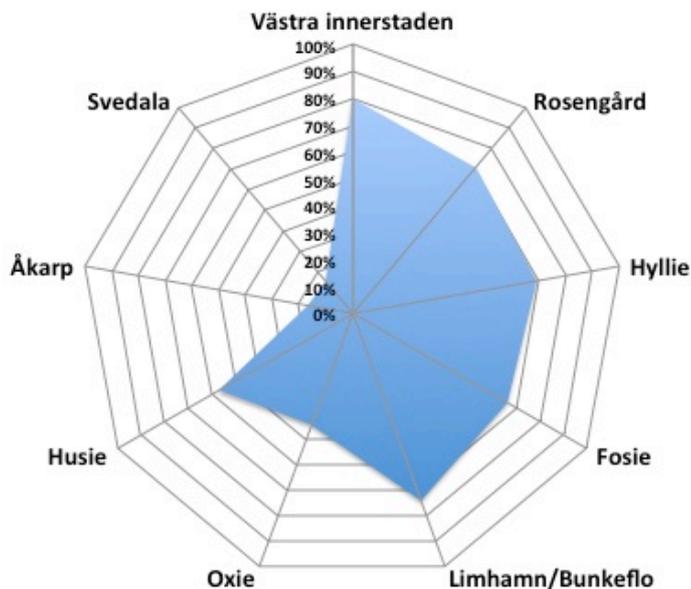


Figure 5.2 Main findings

In figure 5.2 the blue area represents the percentage of the 500 respondents that feel that the districts are in very/fairly extensively a part of Malmö. Åkarp and Svedala showed a finding that would lead to the conclusion that the districts not a

part of what is perceived as Malmö and was therefore excluded from the following spider graphs.

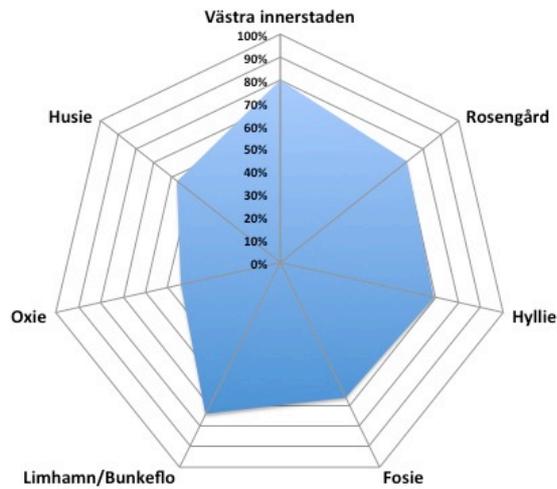


Figure 5.3 Main findings of survey without test districts

In figure 5.3 the main finding of the survey is presented without the test districts Svedala and Åkarp. The figure represents the percentage of the 500 respondents that felt that the districts were in very/fairly extensively a part of Malmö. All the districts in this graph is a part of administrative city of Malmö but as the figure shows, according to the respondents, there are differences in how much a part of the city the districts are perceived to be. The spider graph clearly shows a difference between perceived extent of city and the administrative city.

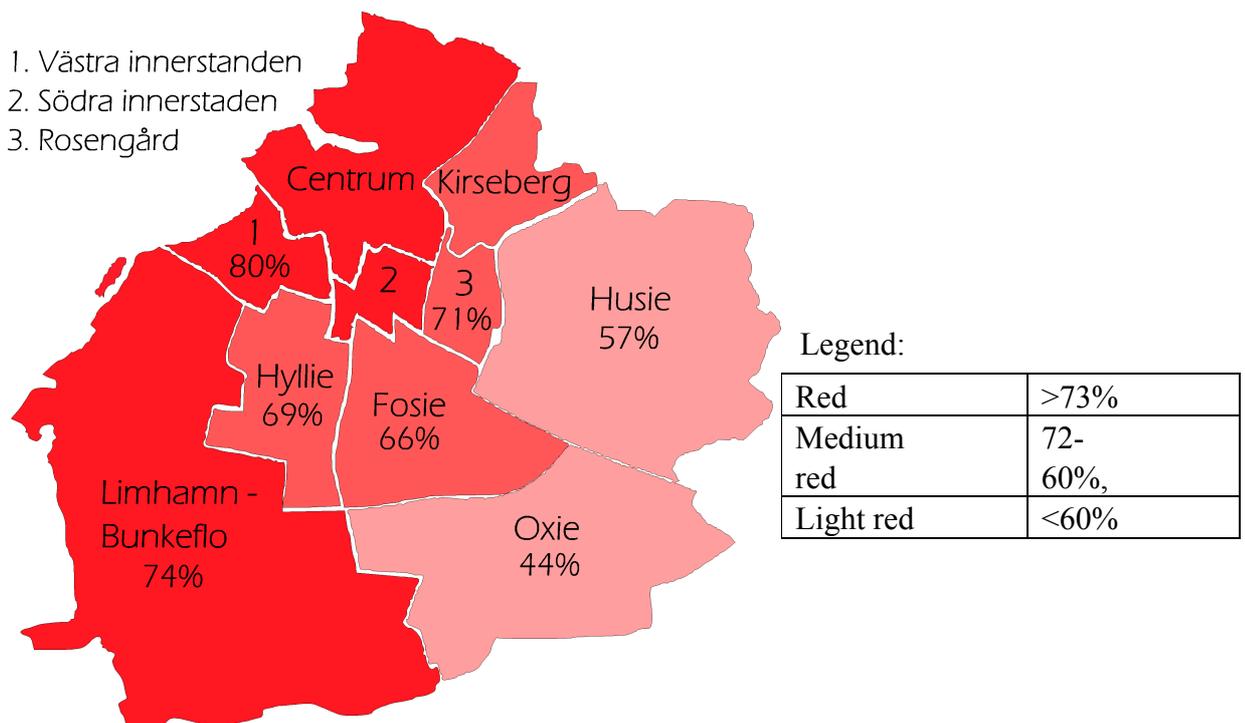


Figure 5.4 Heat map of main findings

In figure 5.4, a map of the same findings as in figure 5.2 is presented with the use of a map of all the district administration areas in Malmö. Not all of the districts were asked about and the areas without a percentage number are estimations and are not supported by the information from the survey. As stated in 4.3.1 some districts of Malmö were not asked about in the survey to make the questionnaire as correct as possible. For further discussion see 4.3.1.

The important thing to discern from this map is that there is a pattern to what districts are to more extent a part of the city and what districts are to less extent a part of the perceived city. What does this say about the connectedness and social cohesion of the city? Secondly one could discern that the perceived city, according to the respondents is located near the coastline. One could see a pattern of rings of perception were the further away from the coastline city districts, presented with darker colour here, the less a part of the perceived city the districts become.

5.1.1 Comparison with main findings in Stockholm

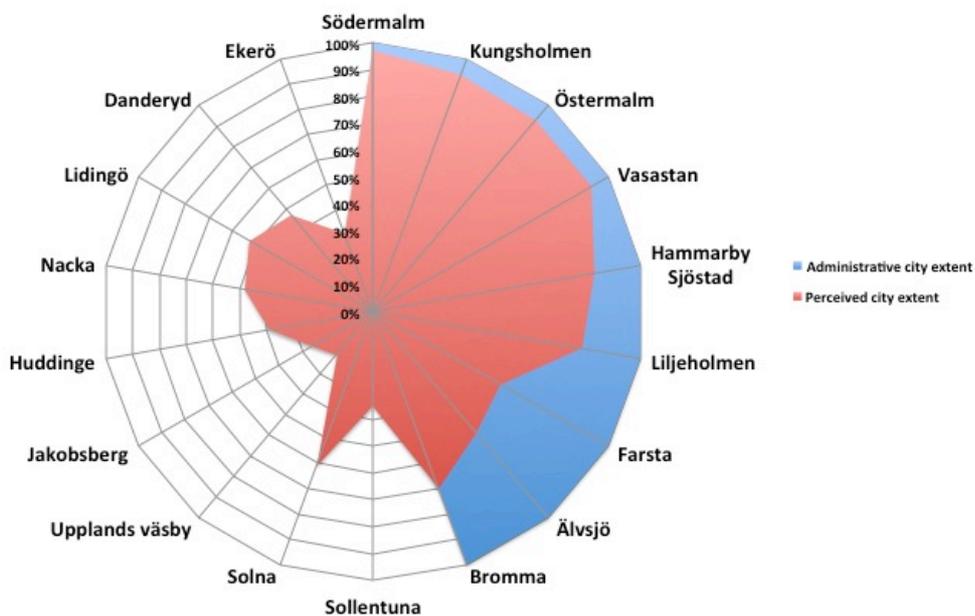


Figure 5.5 Main findings from the survey of Stockholm

In figure 5.5 the main findings of all the 505 respondents in Stockholm are presented. The red area represents the percentage of respondents that perceived that the districts are in very/fairly extensively a part of Stockholm. The blue area

represents, the administrative area of the municipality of Stockholm. In the case of Stockholm, more districts that are not a part of the municipality Stockholm were incorporated to the perceived city extent. This spider graph compared to figure 5.1 of Malmö shows a much more diffuse picture of what districts belong to the city. In Malmö, Svedala and Åkarp were clearly not a part of the city but in Stockholm there was a much higher response frequency in districts that technically don't belong to Stockholm. The perception of the city extent is more diffuse and an observation of for example Solna, clearly shows that around 60% of the 505 respondents still thought it to be a part of Stockholm in very/fairly extensively. Compared to Malmö the boundary of the city extent is more diffuse in Stockholm. Reasons for this will be further examined in the analysis but the districts in Stockholm that don't belong to the municipality have some characteristics that might explain a higher perceived belonging to the city such as a subway station.

5.2 Pieces of perception

In this section the findings from the survey is further investigated and a break down is made according to some of the background information that the respondents gave at the end of the questionnaire. This section is connected to the third research question about what factors that seem to affect the perception of the extent of the city. The results from the key question, of what districts is a part of Malmö, are broken down according to background factors such as income, gender and level of education. The section starts with one of the background questions where the respondent got to answer the question do you live in Malmö. The questions from the questionnaire that were used for this thesis are presented in the appendix.

5.2.1 Perceived belonging to the city

One of the background questions in the questionnaire asked for the respondent postal number and another question in the questionnaire asked if the respondents thought that they lived in the city of Malmö.

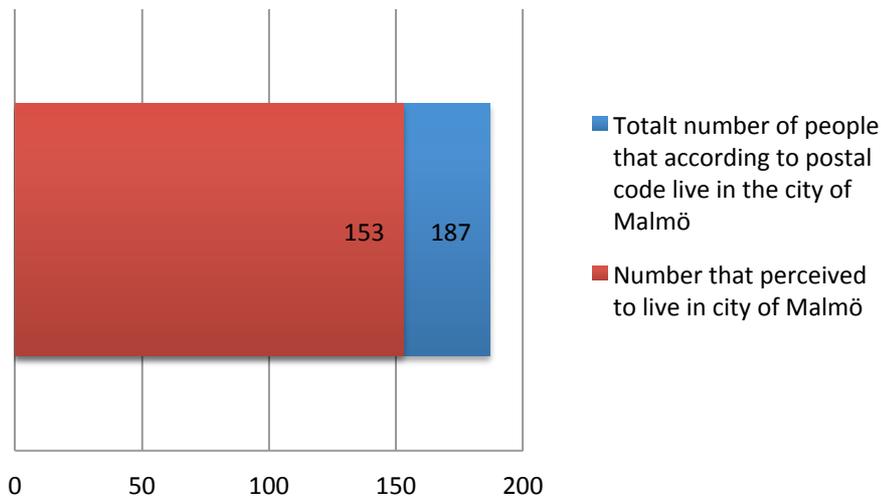


Figure 5.6 Perceived belonging to Malmö

In figure 5.6 the difference between how many thought/perceived that they lived in the city of Malmö is compared to the number of respondents that put down a postal number that places them in the administrative city of Malmö. This is an indication of that there is a difference between the perceived extent of the city and the administrative city. 187 respondents actually lived in Malmö, according to their postal codes, but only 153 respondents answered that they lived in Malmö.

5.2.2 Income

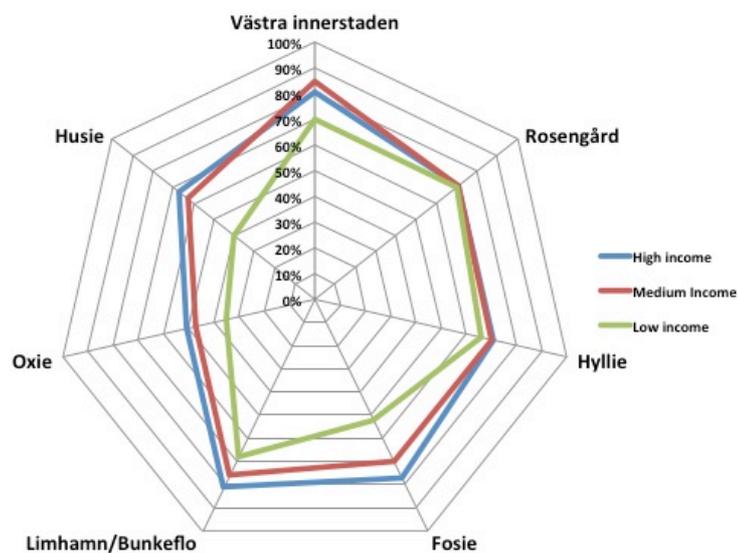


Figure 5.7 Income difference reflect perception of city

One of the background questions concerned the respondents' income. To prevent anchoring of what is perceived as a high/medium or low income with an amount, the respondent simply got to choose whether or not he/she has a high/medium or low income. This is important to keep in mind when looking at figure 5.7 that presents the difference in the perception of belongingness of districts with respect of whether or not the respondent thought to have a high or low income.

The results presented in figure 5.7 with a spider graph presents the difference of the in very/fairly extensively a part of Malmö divided into the high, medium and low earners responses. As shown in the graph there is a disproportion between the levels of incomes. There is a clear difference between the high and low income but the medium income does not follow the pattern. At least as a hypothesis the medium income level should have the middle level of perceived extent of the city. However that does not seem to be the case. This suggests that income is a factor that shapes a person's perception of the extent of the city.

5.2.3 Level of Education

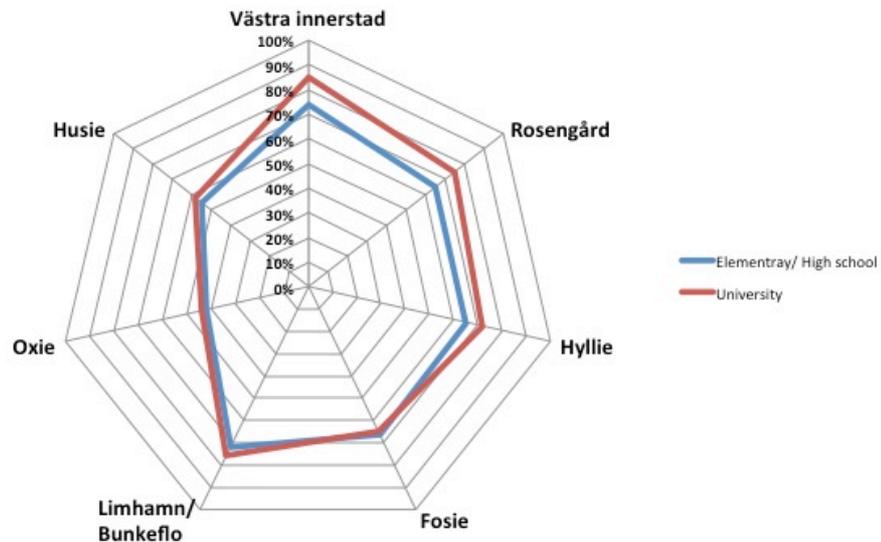


Figure 5.8 Level of education with regards to the perception of the city

Figure 5.8 presents the perception of the extent of the city with regard to the level of education possessed by the respondents. It shows that, to some extent, higher education leads to a larger perception of the city. Compared to the differences presented in figure 5.8, figure 5.9 presents a smaller difference in perception according to level of education. However, the graph demonstrates clearly that the

respondent's level of education provides a distinction when it comes to the extent of the city. The respondent with a lower level of education perceive the city to be of less extent than the respondent with a higher level of education. The findings suggest that the level of education is a factor for a person's perception of the extent of the city.

5.2.4 Gender and perception

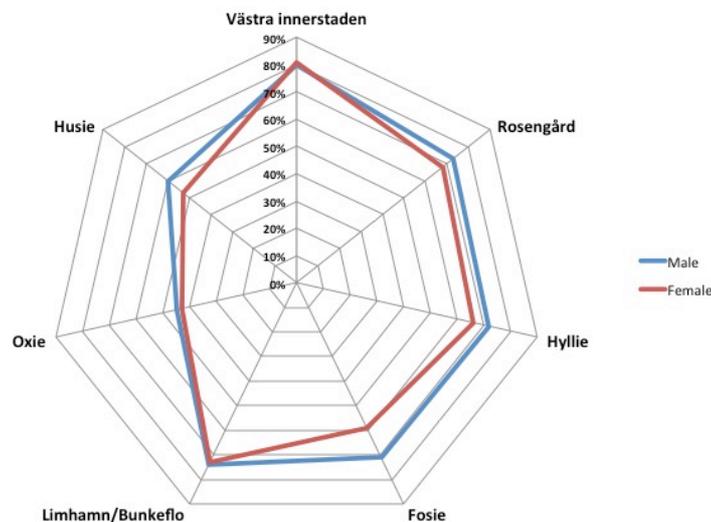


Figure 5.9 Gender differences to the perception of city

In figure 5.9, the question of the extent of the city is plotted against the background question of gender. The result provides us with a picture showing that gender has some impact on the perceived city. The female respondents perceive the city to be of less extent compared to the male respondents. Some literature on cognitive mapping (Antes, McBride and Collins, 1998) suggests that women have a less developed cognitive map of a city than a man. The results from this survey present a similar picture of that a women's perception of the city is somewhat less extensive than a man's.

However, as the authors of a paper on cognitive maps of the residents concluded, this is not a cohesive picture. Factors shaping the cognitive map such as habits of travel are not taken into consideration (Antes, McBride and Collins, 1998). Further research could investigate the difference in perception of environment with respect to gender.

5.2.5 Perceived city: perception of city plotted on residents versus non-residents of Malmö

In this section the graph present findings from the survey decomposed into whether or not the respondents felt that they lived in the city of Malmö.

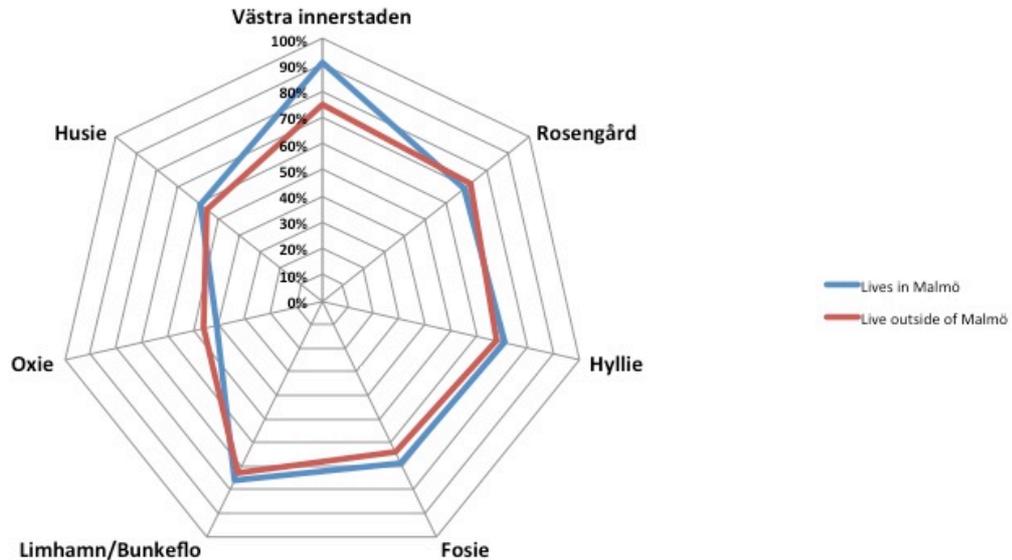


Figure 5.10 Plotted perception of city against whether or not the respondent perceived to live in Malmö or not

In figure 5.10, when plotting the perceived extent of the city with respect to where the respondent lived, in or outside of Malmö, a different outcome was presented compared to the other graphs. Compared to the other factors, the results were not as clear and the picture of the perceived city is a more diffuse. No clear distinction was presented with respect to that one group perceived the city to be larger than the other group. Instead the findings showed a different picture, where in some district the respondents from Malmö perceived the city to be of greater extent. For instance the case of Västra Innerstaden, that respondents' from Malmö perceived to be over 90% very/fairly extensively a part of Malmö. The same number for the respondents not living in Malmö was around 75%. However, in some districts it was the opposite picture presented where the respondents not living in Malmö perceived for example Oxie to be 50% very/fairly extensively. The same number for the respondents living in Malmö was only around 40%.

5.2.6 Frequency of travel outside of city boundaries

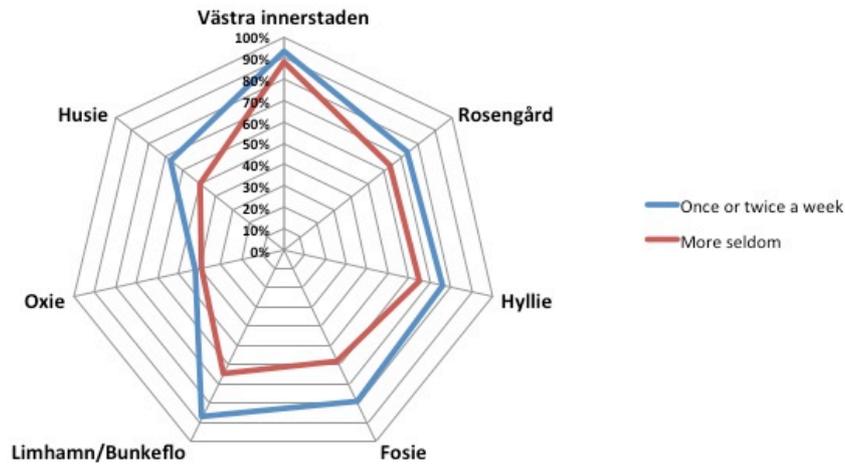


Figure 5.11 Frequency of traveling outside city boundaries

In figure 5.12, where the frequency of travel factor was put against the respondents' perceived extent of the city a strikingly clear picture is presented of the extent of the city according to the travel habits. The respondents that more frequently traveled in and out of the city presented a picture of a perceived city that was of greater extent than the respondents' that traveled over the city boundary more seldom. Thus, one could say that more frequent travel leads to a perception of a much larger city. This suggests that the habits of travel could be a factor shaping a person's perception of the city extent. .

6 Analysis and Discussion

In this section the analysis of the results will be presented along with a discussion of the conclusions from the results. Furthermore, the research questions presented in 1.2 will be answered and discussed.

6.1 Analysis and discussion of results

6.1.1 General perception of extent of Malmö

Research question 1: What is the general perception of the extent of the city of Malmö and Stockholm among the inhabitants in and around the city?

The first research question concerned the general perception of the extent of Malmö and Stockholm among the inhabitants living in respectively cities and in surrounding municipalities. For the simplicity each city is dealt with separately starting with Malmö. From the result of the survey it is evident that there is a difference between the perceived extent of Malmö and the administrative city. In figures 5.2 and 5.3 the main findings are presented and the graphs presents a clear picture of what the 500 respondents perceived to be the city of Malmö's extent. For example, the district of Oxie was only perceived to be a part of Malmö at 40% whereas Västra Innerstaden scored 80%. These findings are the perception of the inhabitants and as discussed in the introduction and theory section, perception has its advantages and disadvantages in science. The perception is a person's primary form of cognitive contact with the world around them (Ittelson, 1960), but the exact nature of perception has never been sufficiently defined or theorised. This could result in that an effort to study conditions of cognitive function could not know whether a disruption of cognitive is due to perceptual or theoretical processes (Efron, 1969). However, this study of cognitive perception could be a good antidote to the impression that cities are populated by land uses rather than by people (Knox & Pinch, 2000). The city is not just a thing in itself but the city being perceived by the inhabitants (Lynch, 1969). This study presents the

perception of the inhabitants concerning the city's extent. It shows that the city is not perceived to be of the same extent as the land uses tells us it is. This might be because the size of the fractal world in our minds depends on the scale at which we interact with it (Crompton & Brown, 2006). Greater interaction with the environment would lead to a larger perception of that environment. Or it might be because conscious perception of space could be influenced by one's experience with that space (Creem-Regehr et al. 2004). Drawing upon the findings from figure 5.2, one could conclude that some districts in Malmö might lack the accessibility and proximity that would lead to greater interaction and thus greater perception of the environment. Districts that are less connected to the city center scored consistently lower than districts in the city centre (See figure 5.2,5.3).

The connectivity of the districts could reflect a lack of social cohesion in Malmö. Social cohesion is the capacity to recognize the existence of different social and territorial groups in a city and create institutions where these can interact with each other. Social cohesion is important for the perceived cohesion of the entire city. The overall socio-spatial structure of cities has a major impact on the functioning urban public sphere (Cassiers& Kesteloot, 2012). A city that forms a socio-spatial continuum linking functionally interdependent districts and creating interaction between different urban zones creates a social cohesion of the entire city, as well as an extensive perceived city. With the findings presented in figure 5.2 and 5.3 in mind, the perceived cohesion of Malmö appears to be a city that is of less extent than the administrative city. It could be that the districts that scored high in the perceived belonging also possess the social cohesion of the city and those that scored low are excluded from that cohesion. Thus excluded from what is perceived to be Malmö with the problems that follows when a city has a socio-spatial structure that creates segregation and exclusion.

The general perception of Malmö is that of a much smaller city extent than the administrative city extent. Not one of the districts scored over 80% and compared to Stockholm (see figure 5.5) where 4 out of 9 districts in the municipality scored over 90% in the perceived belonging to Stockholm. The difference of perception could be because Stockholm has an urban transportation system that is much more extensive than Malmö's, thus making the districts more accessible and creating perceived proximity between the districts. Note that it is perceived proximity, because in sheer size, Stockholm is much larger than Malmö but the perception of the extent of the city is much more developed. It might be that the interaction with the environment increases, which was a factor for perception of the environment, just by knowing that the districts are accessible easily with the subway.

Whatever the reason, the city of Malmö is perceived to be of less extent than Stockholm compared to what the administrative city extent is. Thus creating a gap

and a crack that needs to be bridged in order for Malmö to reach its full potential as a knowledge city with innovation. This is further discussed in 6.1.4.

6.1.2 Perceived city correspondence to administrative city

Research question 2: How well does the perceived city extent corresponds to the administrative city extent in Malmö and Stockholm?

The second research question concerns how well the perceived city extent matches the administrative city extent. A city can refer to two different facts, de jure city or de facto city. The de jure city is the administrative city and corresponds in greater extent with the historic city with its clear borders for commerce and defence. While the de facto city is the larger socio-economical agglomeration and corresponds to physical and socio-economical facts (Hermant-de-Callataÿ & Svanfeldt, 2011). The discussion about the perceived city extent and the administrative city extent connects to the discussion about de jure or de facto city. The findings from the survey as presented in figure 5.1 presents a well-defined picture of the perceived city extent in correspondence to the administrative city extent. With figure 5.1 in mind one can conclude that there is a difference between the perceived city extent and the administrative city extent and the difference is quite large in some districts. For example, Fosie scored only 66% even though technically it belongs to the administrative city of Malmö.

The perceived city could be seen as the de facto city and the administrative city as the de jure city. But unlike what the literature says about the expansion of de facto city, thought to create a less clear boundary between urban and rural (Allingham & Raahauge, 2008). In the case of Malmö, the de facto city appears to be something less widespread than the administrative city. With the city extent perceived by the inhabitants of Malmö is less than the administrative city, a gap is created between what is governed and what is perceived by the inhabitants to be the city. Additionally, there is a gap between the respondents that lived in Malmö and the respondents that said that they live in the city of Malmö, shown in figure 5.6. These findings indicate that the Malmö, perceived by inhabitants is something considerably less extensive than the administrative city boundary.

When comparing these findings to the findings from Stockholm, presented in figure 5.5, Stockholm shows a different picture. Here more areas are perceived to be a part of Stockholm that is not a part of the municipality. For example, Solna was perceived to be a part of Stockholm at 60 % even though it technically does not belong to the municipality of Stockholm. The perceived extent of Stockholm presented the opposite picture compared to Malmö, with a perceived city extent that was larger than the administrative city extent.

Therefore, it might be time to start talking about cities again as places perceived and inhabited by people, as the administrative city, instead than city municipalities that are either smaller or larger than the perceived city extent. The obvious problem with the de jure and de facto city not corresponding is that the administration over the city either under administrates or over administrates the city. The gap between administrative and perceived city thus becomes a gap in what is administrated and what is the reality in the minds of the inhabitants. The urban planning of cities maybe should remain planning of cities instead of municipalities. And go back to what once at the heart of European cities - the idea that civil society remains to a practice of urban planning that is at the service of urban society as a whole, seeking to build a socially just city and cohesive city (Cassiers& Kesteloot, 2012).

6.1.3 The factors that affect perception of city extent

Research question 3: What factors seem to affect the perception of the extent of the city?

The third research question concerned what factors that seem to affect the perception of the extent of the city. In this section the first part of the analysis brings up what the research says about factors that affect the perception and in the second part the findings from the survey is discussed with regards to some of these factors.

The previous research about perception shows that associations involving measures of perceptions are by-products of compositional factors such as ethnicity, social class and stage in life cycle (Sacco, 1985). Furthermore, Ball et al., (2008) found that the misperception of the environment could be linked to certain socio-economic factors. For instance, less educated groups were more likely to show a misperception their environment. In the study, income level and neighbourhood socioeconomic status showed the same trends (Ball et al., 2008). This appears to suggest that the perception is influenced by different social factors.

In the results part of this thesis, the survey question was broken down on some of the background questions concerning income, level of education, gender, living in or outside of Malmö and frequency of traveling across the city boundaries. Given the current results from the findings all of the investigated factors appear to generate differences in perceived extent of the city, although the relation seems to be complex. It does not necessarily seem to be the case that in increase in income level directly equals larger perception of city extent as can be seen in figure 5.7. In figure 5.7 the income level with respect to the extent of the city was presented. It should be noted that the income level here is a crude measure based on the

respondents' categorization of their income as low, medium or high. Consequently, the result maps a relation between perceived income level and perceived extent of the city. In this comparison there is no clear linear relation between income and perceived extent of the city, but there is a relation. There is a clear difference in the perception of city extent between the high and low-income respondents but the medium income does not follow the pattern. Taken together, the result with respect to different income levels indicates correlation but not causality. Regardless of the reason for this lack of linear relation, the perceptions of city extent seem to be affected by the level of income. This follows what other research says about the perception of environment that is a by-product of socio-economical factors (see 3.1.3).

The second factor for perceived extent of the city is level of education. The results from the survey, presented in figure 5.8, seem to indicate that the higher level of education perceived the city to be of greater extent than perceived by the respondents with lower level of education. This follows what the research says about the misperception of the environment where more likely in less educated groups (Ball et al., 2008). It could be argued that people with higher level of education tend to have higher income and a spatially larger labour market giving them the freedom to commute not only across the city but also in and out of the city that as will be shown below contributes to a larger perceived city.

The third factor for perceived extent of the city is gender presented in figure 5.9. In the comparison between men and women perceived extent of the city the results indicate that gender has some impact on the perception. Some literature on cognitive mapping (Antes, McBride and Collins, 1998) suggests that women have a less developed cognitive map of a city than a man. The results from this survey present a similar picture where a women's perception of the city is somewhat less extensive than a man's.

The fourth factor, whether or not the respondents live or outside of Malmö (figure 5.10) could seem to be quite straightforward. At least hypothetically the person that lives outside of Malmö would perceive the city to be of less extent than the respondents that live in Malmö. However, the results indicate that it is not a linear relation. The findings showed a different picture where in some districts the respondents from Malmö perceived the city to be off less extent than the respondents not from Malmö. It could be that the respondents living outside of Malmö travelled across the city boundaries more often than respondents that live in Malmö, which is the fifth and final factor of perception. In figure 5.11 the findings indicate that the perception of the city's extent increase with experience. People who commute or travel across the city border are more familiar with the extent of the city in all directions. This follows what the research says about perception of the fractal world increase with interaction (Creem-Regehr et al. 2004).

To sum up, the factors that the previous studies of perception had concluded affected the perception and misperception of the environment seem to be supported in this research as well. This research found that the misperception of environment could be linked to certain socio-economical factors such as income, level of education, gender, place of residence and travel habits.

6.1.4 Discussion about what difficulties limits to the perceived extent of the city can have for Malmö

Finally a discussion concerning what difficulties and challenges could arise with limits to the perceived of the extent of the city could have for Malmö. The first challenge is the most urgent and concerns the characteristics of cities as showed previously in the findings, people's perception of the city is not equal to its municipality. This raises several interesting issues, especially since cities in Sweden is governed though their municipality. The urban planning is conducted in a municipality scale and thus this creates a gap between the governing body and what it is supposed to govern. In Malmö the perceived city was of less extent than the municipality of Malmö. But as shown in the comparison with Stockholm, cities might very well stretch beyond the municipality into the neighbouring regions. As cities are becoming increasingly important for economic growth, innovation, culture and knowledge production, it is remarkable that relatively little attention is being paid to the governance level of city development. It is highly relevant to start talking about cities instead of municipalities. This is supported by a large EU study about the cities of tomorrow where one of the executive summaries were:

“The administrative boundaries of cities no longer reflect the physical, social, economic, cultural or environmental reality of urban development and new forms of flexible governance are needed.”(Hermant-de-Callataÿ & Svanfeldt, 2011:VI)

The report further states that cities can no longer be defined solely by their administrative boundaries and urban policies cannot only target city-level administrative units (Hermant-de-Callataÿ & Svanfeldt, 2011). In the case of Malmö, this means that the urban policies need to target a smaller geographical surface than the administrative boundaries and the opposite is true for the case of Stockholm. Alternatively Malmö could work on the coherency of the urban area and try to create social coherency in the city with the creation of a new kind of urban identity. As Castells (1998) says the territorial identity is a defensive identity, an identity with the known entrenchment to be afraid of the unknown. If

there were greater interaction between the different territorial identities or a creation of a new inclusive identity of being an inhabitant of Malmö, maybe the coherency and perceived extent of the city would increase.

The second concern is about the transformation of Malmö from industrial production to knowledge based economy where innovation and service based economy is at the heart. The misperception of the extent of Malmö could thus be an obstacle to economic growth. If one assumes that the theory about interaction and innovation is true, the lack of perceived belonging to the city and lack of coherency between the districts could become a hinder to the interaction between companies and people. Seeing how interaction between people is seen as vital for innovation there is a need for connectivity between companies and people across the city geography. As Crevoisier (2004) states innovations can originate from so much more than just registering of patents or research financing and here proximity and low barriers for contact is essential. A larger perceived city with greater cohesion is essential for the insurance that the city, to the fullest advantages, function as a knowledge-based economy and fosters innovation.

Here the solution might seem simple, build a socially coherent city without segregation and a mutual identity and the economy will prosper, but that is by no means a simple task in the harsh economic climate of today. One thing that might be an “easy” fix is to investigate if the governing body actually governs what it is supposed to govern and lets start talking about cities again and not city municipalities.

6.1.5 Relevance to research

This research thesis aims to contribute to the research on perception of environment by investigating the perceived city extent and compare it to the administrative city extent in Malmö and compare it with Stockholm Sweden. To use geographical cognition and perception is a powerful antidote to the impression that cities are populated by land uses and pathologies rather than by people (Knox & Pinch, 2000).

In order to bring the discussion back to why this is relevant in urban planning the study presents a gap between the governing body and what it is supposed to govern. The findings have supported that there is a difference between the perceived and administrative city extent both in Malmö and in the comparison case of Stockholm. In the case of Malmö the perceived city was of less extent than the administrative city extent and the opposite was true for Stockholm. This could have implements for the political decisions made by the administrative government body, in this case the municipalities. If the city is perceived to be of more or less extent than the administrative city limits are, decisions regarding

areas that are perceived to not be apart of the city could be seen as redundant and unnecessary for the voters.

Furthermore, the study demonstrates a lack of cohesion in the perceived city extent of Malmö where the different districts have a different belonging to the perceived city. A lack of cohesion in the city could be seen as a testament of a segregation of the city. Where some areas are perceived to be apart of the city more than others and some areas, such as Oxie, are excluded from what is perceived to be the city. This research is important because it demonstrates a lack of cohesion and segregation in Malmö.

A cohesive city is also a city where it is easy to move about and take meetings on the opposite side of town. This brings us back to the notion of innovative environment, where the meeting amongst inhabitants, to share ideas and make innovation occur, is important. If the city has some districts that are perceived to not belong to the city, this is an unexploited source for the cities future. With the current discussion about cities being rurban and expanding into the rural area, Malmö appears to move in the opposite direction where the city is something of less extent than the administrative city.

One cannot stretch enough the difficulties that emerge when the governing body is not representative with what it is supposed to govern. The policies and urban planning is conducted on a municipality level over what is according to the land-uses is the city, but the city is a place populated by people and perceived by people. Therefore the administration either need to reorganize this and only govern the area perceived by the people or implement institutions to increase the social cohesion of the city and create a mutual urban identity.

In the comparison with Stockholm, the research discerned a pattern that could be used as a base for future municipality mergers in Stockholm. In Stockholm there was both a clear center of the city as well as a less clear perception of the city extent where some areas scored 60% belonging even though they are not apart of the administrative city. In Stockholm more than in Malmö, the findings indicate that a municipality merger could be a question for the future, at least according to the inhabitants.

6.1.6 Suggestions for future research

The main point of this thesis was to investigate how well the perceived city extent corresponds to the administrative city extent. The results raised some questions. First out further investigation could be made about the social cohesion of Malmö and try and find out if there is a mutual urban identity present in the inhabitants of the city. Previous research has suggested that the perception of environment is affected by the neighbourhood socio-economic status, thus a similar study of the

perception of city extent where more accurately participants are selected with degradation on neighbourhood level. Furthermore, previous studies have also concluded that the level of education affects the perception of environment and maybe further investigation into why that may be the case might be interesting. As well as why women possess a less developed cognitive map then men that could be of relevance to future research.

This thesis concerns two Swedish cities and a suggestion for future research could be a study that was conducted on cities of different nationalities. If a comparison instead would be between two cities with different nationalities the generalization would have to relate other sources of error such as culture, legal systems and governance structure.

7 Conclusion

This thesis examines the perceived extent of the city of Malmö using an opinion poll survey with 500 responses in and around Malmö. The perceived city is then compared to the administrative city extent of Malmö. In addition a comparison is made between Malmö and Stockholm was the same survey was conducted. This research has many application areas such as for political decisions and municipality mergers evidence of segregation or social cohesion.

The first and second research question concerned what the general perception of the extent of the city of Malmö and Stockholm among the inhabitants in and around the city and how well does the perceived extent correspond with the administrative city in both cities. The findings presented in this thesis demonstrate a gap between the perceived city extent and the administrative city extent. The gap consists of both an underestimation of the city in Malmö and an overestimation of the city in Stockholm compared to the municipalities. This presents a gap between what is governed and what it is supposed to govern. Furthermore, the perceived city is suggested to be the de facto city and the administrative city the de jure city. In Stockholm the de facto city seems to follow the general perception of an expansion of the city into the rural and creation of a rural situation. But in Malmö, the opposite seems to be the case with the de facto city being something that is of less extent than the de jure city.

In an attempt to answer the research question that concerned what seems to affect the perception of the city extent the findings were broken down with respect to some of the background questions regarding socio-economic factors. Three of the factors stood out in perceived extent, income, level of education and habits of travel. Although it is not evident that increased income directly equals a larger perceived city. The result with respect to different income levels indicated correlation, but not causality. However, like previous research also indicated, the level of education seems to affect the perception of environment. The least educated respondents were most likely to misperceive the city extent. Additionally the findings indicate, much like the previous research about perception that the perception of environment grows with experience. The respondents that frequently travel across the city boundaries perceived the city to be of greater extent.

The discussion about what difficulties can limit to the perceived extent of the city have for Malmö and the findings demonstrate a lack of cohesion in the perceived city extent of Malmö. The lack of social cohesion could indicate

segregation in Malmö. The investigate districts have a different level belonging to the perceived city where some districts like Oxie seem to be excluded from what is perceived as the city. This has implications for the development of a city and especially since Malmö is redeveloping itself to a knowledge based city where the innovation is seem as one of the most important thing. This brings us back to the notion of innovative environment, where the meeting amongst inhabitants, to share ideas and make innovation occur, is significant. If the city has some districts that are perceived to not belong to the city, this is an unexploited source of people, their knowledge and potential innovation and companies. The perceived coherency of a city could be a source of economic growth and a city that lacks the coherency has an unexploited source.

With the findings in mind, both from Malmö and Stockholm, it seems evident that cities can no longer be defined solely by their administrative boundaries. Furthermore, urban policies cannot only target city-level administrative units. There is a need for multilevel governance that has been strongly underlined by the European Parliament and the Committee of Regions (Hermant-de-Callataÿ & Svanfeldt, 2011). In the case of Malmö there is a need to create urban policies that target a city of less extent or alternatively work on the social cohesion and the coherency of the urban area and foster a mutual urban identity that is inclusive to all the different territorial identities presented in Malmö. In Stockholm however, the city is perceived to be larger and this could be seen as a factor for future municipality mergers in the greater Stockholm urban area. But primary, at the administrative level it is time to start talking about the development of cities and not municipalities. This research support that the city is not equivalent to the municipality both in Malmö and Stockholm.

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Bor du i...?

- Kävlinge
- Lomma
- Staffanstorps
- Burlöv
- Malmö
- Lund
- Vellinge
- Trelleborg
- Svedala
- Annan kommun

Tillbaka Nästa

Rensa Stäng

Provided by Survey Generator

Hur ofta reser du utanför staden?

- Dagligen
- Flera gånger i veckan
- Någon gång i veckan
- Någon eller några gånger i månaden
- Någon eller några gånger per kvartal
- Någon eller några gånger om året
- Mer sällan
- Aldrig

Tillbaka Nästa

Rensa Stäng

Provided by Survey Generator

Vilken sysselsättning har du? Är du ...?

- Förvärsarbetande
- Studerande
- Arbetslös
- Hemarbetande
- Pensionär
- Annat

Tillbaka Nästa

Rensa Stäng

Provided by Survey Generator



Är du...?

Man

Kvinna

Tillbaka  Nästa

Rensa Stäng

Provided by Survey Generator

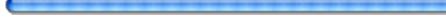


**Vilken skolutbildning har du?
Har du...?**

Grundskola

Gymnasienivå

Universitetsnivå

Tillbaka  Nästa

Rensa Stäng

Provided by Survey Generator



**Anser du dig som höginkomsttagare, medelinkomsttagare eller
låginkomsttagare?**

Höginkomsttagare

Medelinkomsttagare

Låginkomsttagare

Tillbaka  Nästa

Rensa Stäng

Provided by Survey Generator



Vilket postnummer har du?

5 siffor utan mellanrum!

Tillbaka  Nästa

Rensa Stäng

Provided by Survey Generator