Putting Malmö on the Map

Studying the city's transformation and the effects of its efforts in place marketing through a spatial analysis

Bachelor Thesis

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Abstract

The city of Malmö has gone through a remarkable transformation in the last 20 years, from struggling to adapt to the implosion of its industrial sector to a poster child of sustainable development. The focus of the present thesis is to study how this transformation occurred, how the city marketed it and what the effects of this place marketing were. For this a structured, indicator driven approach was adapted from Kostiaianen and Sotarauta to qualitatively study the transformation. This study revealed that Malmö is utilising place marketing to hide its industrial past and current social issues. To learn if Malmö is successful with this, a spatial analysis was conducted using geo-mapped photos from Flickr. The geo-location of these photos was then linked to four districts representing the old and new in Malmö. Over time popularity of places changed, showing a complete change in interest and attention in Malmö – revealing that attention towards the new has replaced the old.

Table of contents

List of figures

1. Introduction

The city of Malmö, Sweden has been the recipient of as much praise as it has received criticism in the last 25 years. The traditionally industrial, blue-collar city had to cope with the implosion of its industrial sector at the end of the 1980s and struggled to cope with the changed economic environment. During this time the city's fortunes were bleak and the mood depressed. Then, in 1995 Malmö started a transformation that remains without equal – or so the city's marketing would want everybody to believe. In the short frame of ten years the Örseund Bridge, the longest bridge in Europe, was completed, the city's own university opened, an internationally renowned housing exposition was held and the city's new defining landmark was constructed. So it seems the city has truly redefined itself, having cast off its industrial grit and replaced it with the glamour of an internationally renowned frontrunner for sustainable development. But, unsurprisingly, all is not well in the city of Malmö. The city, being the entrance-point from continental Europe to Sweden, has received a huge influx of immigration and the multicultural hotbed-district of Rosengård has been described as a "warzone" (The local se 2012), filling tabloids with stories about gang-wars and grenade attacks. All this has drawn attention to Malmö, while additionally criticism is being voiced that Malmö is not as sustainable as the city advertises, having concentrated on attention-grabbing flagship projects, but ignoring the *average Joe*.

In the end, the city of Malmö serves as a great case study for urban transformational development, which itself has become an interesting area of research due to its defining place in the lives for most people of the future. Malmö as a case is relevant for two crucial developments in city structural change: The decline of the industrial sector in the western world and the growing importance of sustainable city planning. Malmö can be called an archetype for the first and potentially a prototype for the latter.

The city of Malmö has recognised the potential of its perceived forerunner position in sustainable development and has been hard at work on creating and spreading the brand of the environmental, modern, knowledge-city Malmö, through place marketing; but critique has been expressed that the city is being too aggressive in

this strategy – Malmö would erase its industrial past and deny its present social issues. (cf. Mukhtar-Landgren 2008)

This rich canvas forms the background of the present thesis' research. The thesis will approach its subject from general to specific, narrowing the focus over the course of the study, following the path of a critical view on place marketing in Malmö. More specific, the thesis will first examine the city's transformation itself and with the learnings from this leading to the city's place marketing, its targets, success and effects. To evaluate its success, this thesis will utilise the innovative method of geo-mapping.

After this introduction, Malmö's transformation will be studied, firstly detailing the qualitative research design of the first segment. Secondly, an overview of the existing literature pertaining to urban transformation will be given, afterwards introducing the analytical framework from Kostiaianen and Sotarauta (2002) that will be utilised to analyse the city's transformation. Thirdly their framework: the *principal phases, critical incidents, actors, institutions* and *perceptions* in Malmö's development will be introduced. The concept of perceptions will form a cornerstone for the remainder of this thesis.

From chapter three on, the place marketing of the city will be in focus, due to its defining role in the city's transformational plan. To start off, the theory of place marketing will be introduced and then applied to the case of Malmö, showcasing the municipalities strategy and methods for the brand "Malmö" and how Malmö is perceived in the world. After this, a critical perspective will be taken on Malmö's marketing, showing the unpolished side of Malmö and its brand. The findings from this will form the basis for the data-analysis in chapter four. Here the methodology of analysing photo-taking in districts that receive marketing efforts and districts that the city tries to "hide" will be presented, before explaining how the data for the analysis was gathered and outlining the sample. Lastly, the actual geo-mapping and analysis will be conducted. The thesis will finish with a conclusion outlining and connecting the main findings.

2. The transformation of Malmö

2.1. Research design

As discussed in the introduction, the city of Malmö has gone through a remarkable transformation from an industrial town with no future to a poster child of sustainable economic and ecologic development. The main question therefore is:

RQ 1: *How did transformation evolve in Malmö? How and to what effect did the city utilise place marketing?*

How are answers to these questions attained? The research design is based on the work of John Gerring's (2012) methodological framework. As this thesis studies the case of Malmö inside the greater framework of urban transformation, it follows the design of a longitudinal case study. (Gerring 2012, p. 52 and pp. 285) Two main qualitative methods will be employed to find answers: literature review and content analysis. Both methods will be mixed where appropriate. Scientific literature from published books and peer-reviewed journals will usually form the basis, while primary sources, mainly from the city of Malmö, will be used to expand on those or gain a more in-depth knowledge.

According to Gerring, in a research design the term of the research needs to be defined first, afterwards it can be conceptualised into attributes that are identified to determine the term. The attributes in turn need to be operationalised into indicators that enable measurement of these attributes. Measurement and results (Gerring calls this the "phenomenon") follow.

The term follows clearly from the research question, the main subject that is investigated is urban transformation, to be precise the transformation of Malmö. The next question would be then: How can urban transformation be conceptualised? A multitude of possibilities exist, though this thesis will concentrate on a few, for practical reasons and due to its focus. Therefore, the main attributes will be the economic structure, the ecological profile, the image or brand of the city, the cityscape. The concepts of *principal phases, critical incidents, actors, institutions* and *perception* will be utilised as an umbrella for this. As this thesis aims

to examine place marketing in greater detail, correspondingly those aspects of image and perception will play a greater role. The following step, the operationalisation, asks for indicators to measure the aforementioned concepts. Generally, there are too many to list all here, and as the study of RQ 1 is also qualitative in nature, a clear outlining and separation of indicators is not entirely possible. Therefore, some examples will be given to illustrate how the concepts will be operationalised. The economic structure can be operationalised by jobs in industrial and creative industry and by the educational level. Examples of indicators of the ecological profile are sustainable projects, the focus on sustainable development in the different municipal plans and documents outlining the strategy of the city and reduction of energy use. In order to analyse the brand or the image of the city, the brand strategy of the city will be discussed, external views of the brand explored and an analysis of the keywords the city uses in their marketing will be conducted. The concepts of *principal phases, critical incidents, actors, institutions* and *perception* are adapted from Kostiaianen and Sotarauta (2002) and will be further discussed in chapter 2.3.

2.2. Literature urban transformation

While historically, city transformation was driven by factors such as religion, politics and industry, but at the same time limited through the "tyranny of distance" (Bayulken; Huisingh 2014), the 19th century brought mobility of information, technology and explosive economic growth alongside the change in economic structure away from agriculture, starting the urbanisation of the western world. (Ibid.) Today, more than half of the world's population lives in urban areas and almost all growth in the next 30 years is projected to happen in cities, while global wealth and resource consumption is also concentrated in cities. (Vojnovic 2014) Therefore, how cities evolve will have a defining impact on how the world will evolve. In this context, realising strong urban growth *and* a sustainable city is already and will increase to be a major challenge of the 21st century and with numerous issues stemming from this development, numerous possible perspectives on the subject arise, which has resulted in strong academic interest on the topic in recent years.

There is a "huge" (Kirby 2014, p. 1) amount of literature on urban transformation and urban sustainability with the subjects such as practical issues of economic and ecologic constraints (Picket et al. 2014), societal inequalities (food, housing, often from a position of mistrust towards government) (García et al. 2015) and urban agriculture (Badami et al. 2015) playing a leading role in the literature. (Kirby 2014) Additionally, a shift can be identified in the literature of recent years, altering perspectives from analysing change of the past to looking ahead and planning transformation. (ibid.) Another focus of research during the last years has been urban development in China, (Dong et al. 2013; Chen et al. 2015, Wang et al. 2015) fuelled by an urbanisation trend that has only started recently, investigating the effects of planned economy on sustainable planning. (Kirby 2014)

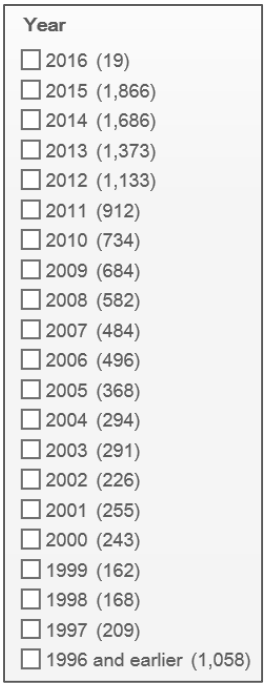


Fig. 1 - sciencedirect.com results for search term "sustainable city transformation" by year

While there are many in general, one central point from urban transformational literature, that is very relevant to this thesis, is that proactive planning by municipal government is dominated by cosmetic fixes for the affluent (cities) and therefore only "the fortunate few" benefit from transformation. (Holden; Scerri 2013)

This all shows that the research area of sustainable city transformation is a valuable and interesting research area that has received its duly deserved academic attention increase in the last years (see fig. 1).

2.3. Analytical framework

The municipal government of Malmö has established a clear narrative on the development of the city, a tale of a transformation that changed the city's fortunes in the span of ten years infinitely to the better. (City of Malmö 2015b) While there has been considerable research on the city's development (Holgersen 2012, 2014a, 2014b; Mukhtar-Landgren 2008; Andren 2010; Baeten 2012), no sources

exist that study the city's development utilising a structured, indicator-driven approach. One of the goals of this thesis is to deliver that.

Kostiaianen and Sotarauta have developed such a structured approach for their study of the Finnish city Tampere, which has, at least according to the city, gone through a similar development from an industrial city to a knowledge driven economy. The authors take a social science approach on analysing the city's development, incorporating the concepts of *resource*, *path dependency*, *actors*, *institutions* and *perception* (Kostiainen, Sotarauta 2002, p. 7). Informed through this, they identify five leading questions that need to be answered to successfully understand the development process of a city. Those questions will be introduced and explained here and thereafter applied to Malmö (cf. Kostiaine, Sotarauta, p. 8):

Q 1: What have been the principal phases of the development of the city?

While the meaning of principal phases is fairly self-evident in itself, there still are further implications to this, such as: What have been the most important resources in each phase of development? Kostiainen and Sotarauta understand resources as everything that can be used "to construct development", e.g. power and knowledge but also resources in a traditional sense as money. (Kostiainen, Sotarauta, p. 6) It is also relevant to investigate the dynamics of external and internal influences in the development. What role did global, national or regional influences play and was there a feedback loop? This leads to the more fundamental question whether the city even had the development in its own hand or if it was simply a bystander of external, far-reaching events. Additionally, the phases themselves act as a segmentation and structuring device for the other questions. Although earlier phases will be inspected through the principal phases, only the last principal phase, that started the transition in 1995, will be examined in greater detail utilising the four following questions.

Q 2: What were the critical incidents at those times?

A critical incident is defined as a "factor that significantly directs the course of future development. It opens up certain new future opportunities while excluding others."

(Kostiainen, Sotarauta, p. 7) In the context of the principal phases these critical incidents also inform the end and beginning of new phases, as they must have had a lasting impact on the city's development. (Kostiainen, Sotarauta, p. 8) It is also important to evaluate its future impact and ripple effects, meaning how the incident may have influenced later development, which in turn also requires one to examine how past developments were affected by the critical incident in question.

Q 3: Who were the key actors both at the time and/or in a given individual critical incident?

In this case actors can either be individuals or groups, as long as they are able to act. Again, the question concerning the influence is relevant: What actor(s) (groups) had an influence on the development, and what kind of influence did they have? Additionally, what were their relationships and how did they influence each other?

Q 4: What new institutions were born and/or how did institutions in general influence the course of development?

The institutions-concept does not only pertain to formal institutions but also "informal institutions and regularly recurring behaviour generated by culture – habits, customs and routines" (Kostiainen, Sotarauta, p. 6) are relevant to this process. This is also related to the concept of path dependency, "a process of cumulative causation where the dominant feedback loops are self-reinforcing" (Kostiainen, Sotarauta, p. 7), meaning that the chosen path cannot be left anymore.

Q 5: What was the prevailing perception during the time and how did it affect different actors?

Lastly and in the case of Malmö also critical is the question to the perceptions that the relevant actors were exposed to. This relates to the concept that "actors do not react directly to reality but rather to internally constructed perceptions of reality" (Kostiainen; Sotarauta, p. 8). The "spirit of times" is therefore an extremely important factor, that can fundamentally change the course of events and its influence should thus be examined, especially so as its influence does not only work

inwards but also outwards, regionally, nationally or globally - a fact the city of Malmö has learned to utilise.

These questions and their implications obviously inter-relate at times. This will be reflected in the forthcoming examination by prioritising the most fitting place over strictly abiding to the order of the framework.

2.4. Principal phases

2.4.1. Founding to industrialisation (1270 – 1840)

The first signs of humans in the Malmö area trace back to a 13 000-year-old settlement. (City of Malmö, n.d., a, p. 1) Though the first recorded mention of the city of Malmö was only in church records in 1270. In these records Malmö still holds a different name than it is known under today, though the connection is clear: Malmøi and Malmøghe (or the Icelandic Malmhaugar) all feature the aspects of "malm" (gravel or sand) and "höghe" (ridge), (Anderson 2014) Malmö itself translates directly to "Sand hill" (Björk, n.d.). During this time Malmö began to grow on the one side, due to the proximity to the new city of Copenhagen and resulting maritime traffic and on the other side because of its participation in the herring market of the Hanseatic League. As a consequence, during this time the location of Malmö depended mainly on the conditions of the Öresund region. (Björk, n.d.)

Fig. 2 - Öresund Region showing connection of Copenhagen and Malmö (Hospers 2006, p. 1020)

Malmö went through a formal founding process in 1437, when it received its coat of arms, which is essentially unchanged to this day. (malmo.com, n.d.) Historically, Malmö belonged to Denmark until the Treaty of Roskilde of 1658, although the Danes tried unsuccessfully to reconquer the Skåne area afterwards. As a result of the change of possession Malmö suffered a decline in economic importance and population (15th-century ca. 5 000 inhabitants to 3 862 inhabitants in 1800

(Anderson 2014)): while Malmö was a central trading town within the Danish kingdom its main purpose under Swedish reign was that of a stronghold against the Danes, as it lost its right to foreign trade. (Björk, n.d.; City of Malmö, n.d., a) Another war turned the tide again for Malmö - the Napoleonic wars from 1803 onwards revealed the meaninglessness of fortifications and therefore negated the strategic importance of Malmö. This turned the city into a major gateway for contraband from Britain to continental Europe, expanding its ports facilities. As a result, the military facilities were abandoned which opened the door for the developing industrialisation. (Björk, n.d.) The main resource in this principal phase therefore is strategic importance: The altered strategic importance after the change in rule and after the Napoleonic war resulted in profound changes for the city, showing that military concerns were paramount in this age.

2.4.2. Industrial rise and zenith (1840 – 1950)

The founding of the "Kockums foundry and mechanical workshop" in 1840 had a pivotal impact on Malmö's future, a company that later decided Malmö's condition until its bankruptcy in the 1980s, which itself triggered the transition Malmö is going through today. This moment therefore must be considered a critical incident in Malmö's history. Kockums started with the production of railway wagons but changed its focus in 1870 by establishing the shipyard, after free trade was introduced in 1864. (City of Malmö, n.d., a) With the emergence of the shipyards, industrialisation took its course in Malmö, accelerated compared to the rest of Sweden, as Malmö represented a gateway into Sweden from continental Europe. The industrialisation continued in different fields and brought prosperity and strong population increases (see fig. 3) to the city. It did not take long for the first worker's districts to be founded, although sometimes housing was in short supply. Malmö was also the birthplace of the Swedish labour movement with the first union and first "peoples park" founded there around the turn of the century. (Björk, n.d.) Consequently, Malmö also provided the blueprint for the Swedish social democratic welfare state in 1928, as it was considered as an example of how the good city and the good society could look like. (Björk, n.d.). The situation turned somewhat down mid-century when in the 1950s the textile factories began to close,

heralding another turn of the tide for Malmö, (Holgersen 2014a, p. 236) though this one will take almost half a century to fully realise. In this principal phase technology is the key resource, facilitating the industrial revolution, here the most important development for Malmö, heralding a change in priority from military to economy.

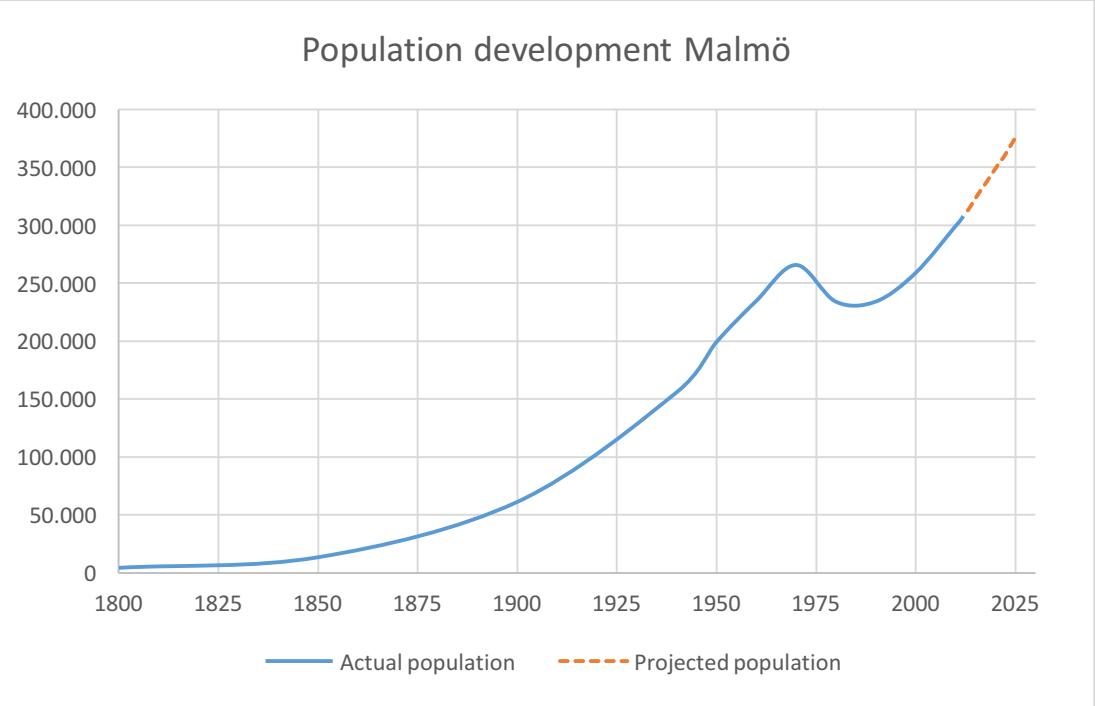


Fig. 3 - Malmö population development (actual population: Anderson 2014; projected population: City of Malmö 2015a)

2.4.3. Decline and implosion (1950 – 1995)

While Malmö was still regarded as one of the country's most prosperous cities in the 1950s and 1960s the first signs of a slow decline became visible. (Mukhtar-Landgren 2008, p. 55) After the textile industry, the metal industry folded in the 1960s and finally in the 1970s all industrial sectors in Malmö were shutting down or were in serious economic trouble (Holgersen 2014a, p.236). Malmö was especially vulnerable because its industry was mostly in the "low-tech" sector, areas that could be handled by cheaper labour abroad. (Holgersen 2014a, p. 236) This phase is very much the story of the Kockums shipyard. Until 1974 Kockums was the exception to the economic downturn, producing the highest tonnage of any shipyard worldwide in 1952 and 1953 and still expanding until the oil crisis hit in 1973, when the shipyard could not sign a single new contract. (Holgersen 2014a, p. 236) Due to the importance of the company for the city, the Swedish state nationalised the shipyard in 1979, but was unsuccessful in reigniting the business – the year 1986

marks the closure of the shipyard after 113 years of being the city's most important private employer. (Holgersen 2014a, p. 236)

Initially the city's reaction showed an unwillingness to accept the end of the industrial age for Malmö. In cooperation with the Swedish state and "enormous support from both central and local government" (Holgersen 2014a, p. 237) Saab agreed to open a factory in the area of the shipyard. This proved to be an unsuccessful endeavour, as the factory was closed again only two years later. (Holgersen 2014a, p. 236) Malmö lost approximately 27 000 jobs in this time frame, resulting in the city's population dwindling by 30 000 people, especially the resource-rich socio-economic group (Andren 2010, p. 37) - a downturn the city took almost 40 years recouping from. (See fig. 3)

The 1990s should also be seen in light of a development that will become Malmö's biggest issue today: the increase in immigration of financially poor groups. The combination of the economic decline, the resulting falling income and increased public expenditure due to unemployment, immigration and other unfavourable developments lead to serious economic trouble for Malmö (Mukhtar-Landgren 2008, p. 55), reaching a record deficit of one billion SEK in 1994 (Holgersen 2014a, p. 237). A critical juncture in the city's history was, when the newly elected "chairman of the municipal board" (a de facto mayor) Ilmar Reepalu, from the social democrats, warned the national government that "Malmö is threatened by something that can be called a financial meltdown" (Andren 2010, p. 38). Identifying the main resource of development in this principal phase is less straightforward than in the previous phases, as the development is marked by a lack of it, through an unwillingness to change. With that in mind the main resource for non-development here is the mindset in the people of this phase – this somewhat foreshadows the importance of perceptions, that will take play a crucial role later in this thesis.

2.4.4. New direction and transformation (1995 – present)

At this point in the narrative of the city the fortunes changed and the programme "Vision 2000", implemented in 1995, can be seen as the starting point, the critical incident of this change. Vision 2000 set the goals Malmö is known for today: a

sustainable, ecological, knowledge economy. For the economic recovery Malmö has went through in the recent years three main reasons can be identified.

Firstly, a change in the state-wide tax equalisation scheme (transferring money from rich regions to poor ones) in 1995 significantly improved Malmö's financial situation (Andren 2010, p. 38), freeing up resources for ambitious projects. Secondly, significant infrastructure investments were made, from here on, in relatively short time, many of the symbols of change were created. Malmö "buil[t] […] itself out of crisis". (Holgersen 2014a, p. 241) The Construction of the long-term project Öresund Bridge finally started in 1995 and was completed in 2000. This effectively founded the Öresund Region, creating an integrated economic region. (Garlick et al. 2006) Bo01, a sustainable living quarter exhibition was planned and finished in 2001 in the western harbour. (Anderson 2014, p. 12) Symbolically, in the same area as the old shipyard, the Turning Torso, the highest building in Scandinavia, was build in 2005 by star architect Santiago Calatrava, replaced the Kockums crane as the city's most defining landmark. Thirdly, the Malmö University College was opened in 1998 on Kockums' former dockside.

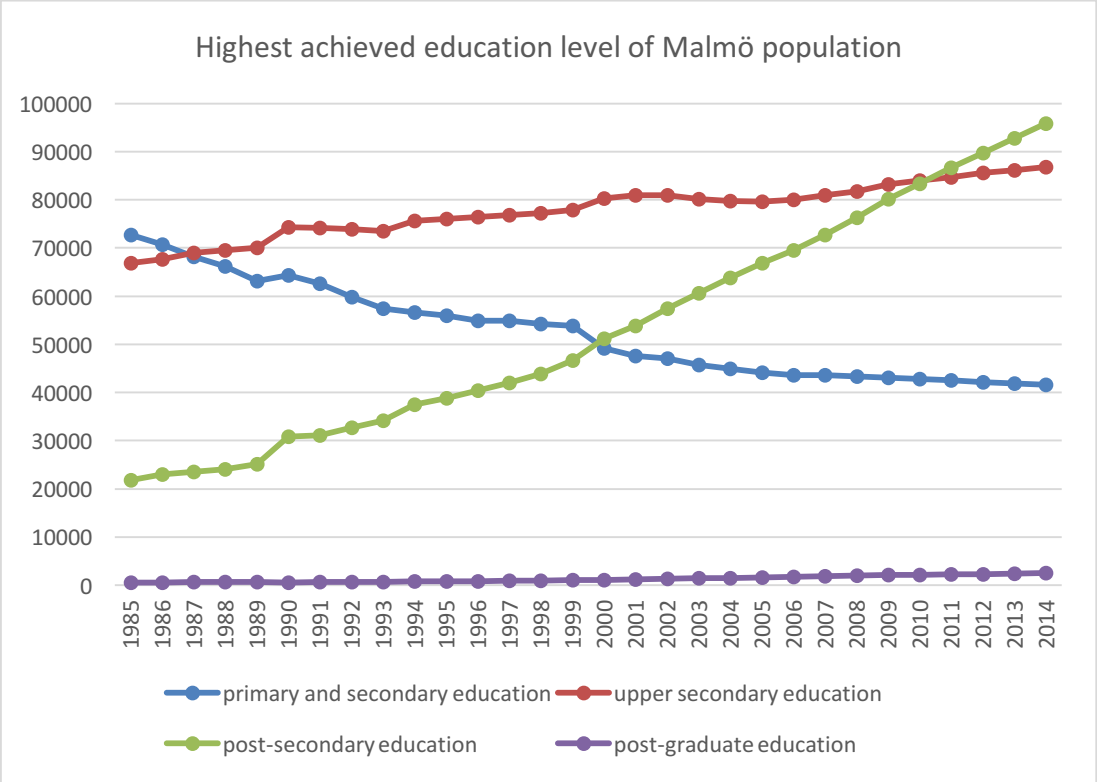


Fig. 4 - Highest achieved education level of Malmö population (own calculation adapted from Statistics Sweden 2015)

Having its own institute of higher learning was a prerequisite for the city's target to transform its economy from low-tech industry to knowledge based – in 1998, 35 per cent of open jobs in Malmö required tertiary education, but only 17 per cent of the registered unemployed were able to provide this (Holgersen 2014a, p. 238). The university constantly grew since its establishment and now has over 24 000 students. (Malmö University, n.d.) Education levels have risen strongly in the last 29 years, while in 1985 the most common highest education level was only primary and secondary education. In 2014 this is now post-secondary education, including tertiary education, but excluding doctoral education, meaning that a majority of Malmö's population now has a university (college) degree. Interestingly the trend to higher education levels was present, and even stronger, before the establishment of the university. From 1985 to 1998 the yearly increase in post-secondary education averaged 5.6 per cent, while from 1999 to 2014 it only averaged 5.0 per cent. This raises the question to the actual impact of the local university to education levels - but whether the university played a role in the change in the education levels or not cannot be answered here.

Type of industry/sector	1987	1996	2004	Change 1987 - 2004
Agriculture, forestry, hunting, fishing	4	2	3	- 25%
Extraction, manufacturing, energy and water provision	222	145	124	- 44%
Engineering industries	86	60	47	- 45%
Building industries	61	45	55	- 10%
Trading, transport, storing, communication	261	241	263	1%
Personal and cultural services, cleaning	103	101	112	9%
Banks, real estate, business services	110	127	197	79%
Public authorities, defense	42	39	54	29%
Research and development; education	74	74	131	77%
Health care, social services; veterinarians	192	179	179	- 7%

Fig. 5 - Employees in different industries in hundreds (Holgersen 2014b, p. 51)

Inarguably the increased education levels played a role in the employment structure of Malmö, which can be seen in fig. 5, showing a decline of industrial jobs (extraction, manufacturing, energy and water provision; engineering industries) and an increase of jobs in research and education as well as banking, real estate

and business services. Though there is a similar trend for Sweden in general, the described decline and increase in employment in the sectors was stronger for Malmö. (Holgersen 2014b, p. 52)

As noted earlier Malmö has seen a considerable influx from immigrants, with many refugees from Iraq and the Balkan countries, but also generally from East-Europe and Asia (see fig. 6). (Baeten 2012, p. 29) In 2006, 26 per cent of the population of Malmö were not born in Sweden. (Mukhtar-Landgren 2008, p. 64) Partly due to this Malmö has also become a transit city: between 1990 and 2008 almost 500 000 people have lived in the city for a year or more but only 23 per cent lived in Malmö for the whole of this period. (Commission for a Socially Sustainable Malmö 2013, p. 46)

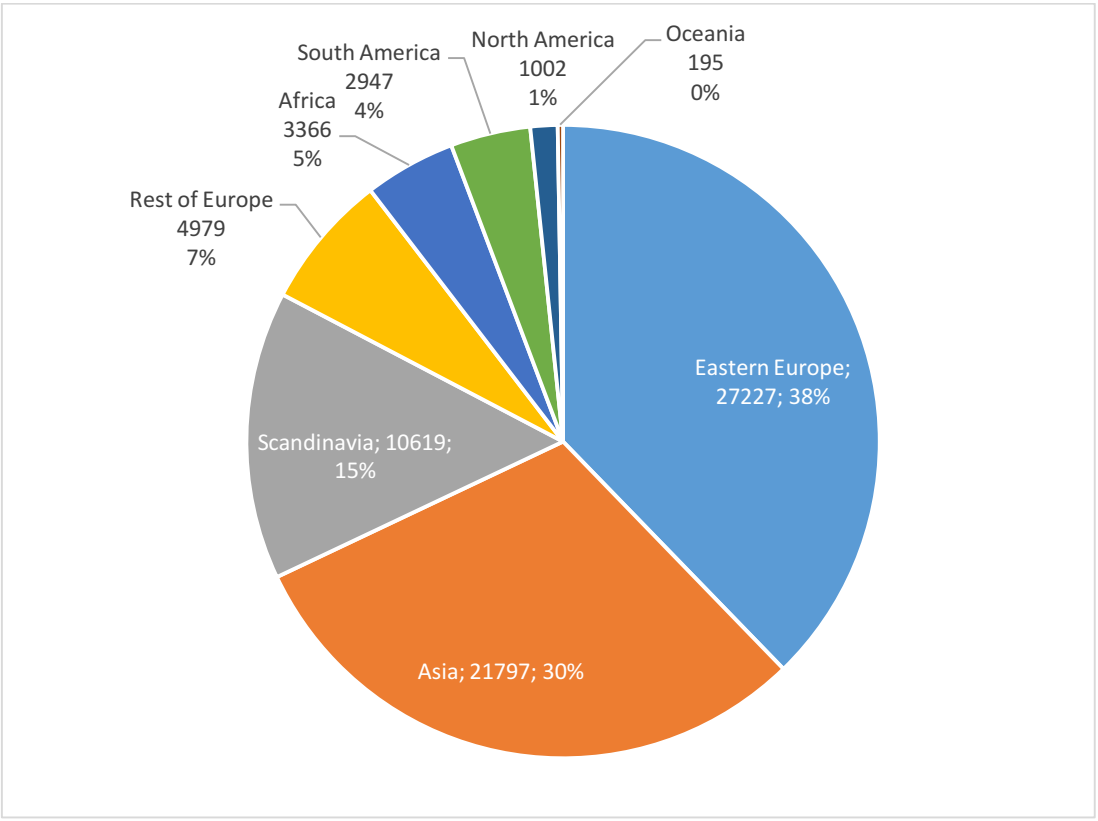


Fig. 6 - Origin of population from foreign descent (Adapted from: Baeten 2012, p. 30)

Malmö has also become a highly segregated city, with immigrants mainly living in the infamous district of Rosengård (59 per cent immigration share), that has become synonymous with poverty, social issues and riots. (Mukhtar-Landgren 2008, p. 64) These issues did not find the attention they needed to approach a solution. This stands in sharp contrast with the city's ambition and focus to attract

well-off creative people from Copenhagen. (cf. Baeten 2012; Mukhtar-Landgren 2008; Anderson 2014) In regards to the main resource of development in the examined principal phase, the concept has not changed since the previous phase, but is now displaying the opposite side: now the mindset does not prohibit but enables and even advances development.

As mentioned earlier, the following four questions will only be discussed for the last principal phase.

2.5. Critical Incident

Looking back at the definition of a critical incident as a "factor that significantly directs the course of future development" the clear question here is: What incident has affected Malmö's future, that is the transformation process, most decisively? This thesis has argued before that the "Vision 2000" programme is this critical incident. There are other incidents that have heralded change for Malmö, the closing of Kockums, the election of Mayor Reepalu, but the "Vision 2000" programme has *directed* this change in the direction Malmö is following until this day, while the other incidents did not close options in the same way. For example, closing the Kockums shipyard was another indicator that the industrial age was over, but the city and state decided to ignore this and continue with the industrial course; having to watch the brand-new Saab factory being closed in 1991 did not trigger a major re-thinking either. The new mayor had ideas about change, but only the Vision 2000 programme formed a concrete vision, although bi-directional influences are apparent between the idea of the mayor and the vision that was later developed.

The programme consisted of eight working groups, all with representatives from the municipality, private actors and scientists. (Bächtold 2013, p. 91) The working groups made suggestions in many areas, including the transformation to a sustainable, post-industrial city. (Mukhtar-Landgren 2008, p. 58; Holgersen 2012, p. 142) The reports of these working groups were the basis for many of the following plans, (Holgersen 2014a, p. 238) including the important

"Comprehensive Plans" Swedish cities have to create, detailing the plan for the city's development in the respective timeframe. (City of Malmö, n.d., f)

Following through with the vision of the new sustainable, ecological, knowledge city required changes - the changes one can see in Malmö today, to some extent. The new economic direction required a new focus on education, on service, on business (Holgersen 2014a, p. 238) and that has been implemented through the opening of the University. Amongst others, the new shopping malls have created jobs in the service sector (today Malmö has the highest number of Malls per person in Sweden (Carlsson-Brandt 2013, p. 25)) and the city makes an effort to attract well-educated workers in the creative and entrepreneurial sectors, primarily from Denmark (Baeten 2012, p. 23; see also fig. 4 and 5). Sustainability and ecological awareness are linked to the new economy, they would require a change in the development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (Mainstream definition of sustainability according to Andren 2010, p. 71), an adjustment that would necessitate rethinking many areas such as energy, materials and transportation to only name a few. The city set itself an ambitious goal, to be "the best city in the world for sustainable urban development by 2020" (Andren 2010, p. 100) and it did make certain efforts in these areas, the sustainable-advertised district of Bo01, major expansion of cycle tracks and construction of solar cell installations, but they have not become as far-reaching as Malmö likes to broadcast (cf. Andersen 2014). Andren (2010) has studied the convergence of vision and reality of sustainable urban development in Malmö in great detail and has come to the conclusion that coming through on this goal "is nothing but quite unrealistic" (Ibid., p. 125), criticising Malmö for its fossil-dependency and lack of progress in the areas of transportation and heating.

As shown above, the "Vision 2000" programme opened new opportunities and closed others more than any other incident in the phase leading up to the transformation and is therefore the decisive critical incident.

2.6. Actors

The "standard story" places the 1994 elected social-democratic Mayor Ilmar Reepalu as the visionary leader, or "strong man" (Holgersen 2014b, p. 34) at the centre of the transformation. (Mukhtar-Landgren 2008, p. 58) Malmö, a social-democratic stronghold, had elected the party's candidates from 1919 until 1985 without exception, but the economic downturn led to a short conservative intermezzo. This resulted in increased political conflicts and even to some extent a new political culture. (Andren 2012, p. 39) Interestingly, the conservatives had similar intentions as Reepalu but were unable to follow through with them as a result of significant resistance, whereas a social-democratic mayor had the social capital to enact policies that can be described as liberal. (Baeten 2012, p. 37; Holgersen 2014b, pp. 34-35) From 1994 on the conservatives, the main opposition in Malmö, supported the transformation. Today the political culture can still be described as "fairly consensus based" (Holgersen 2014b, p. 35). Still, Reepalu has to be credited with having had a significant impact on the development, also lending his societal ideas to the process – revolving around knowledge, capital, communication and culture. (Bächtold 2013, p. 70; Andersen 2014, p. 12; Holgersen 2014a, p. 238) Ideas that, besides their influence on the Vision 2000 programme, surely influenced other actors as well.

Switching sides to the non-political actors, there are some institutions that had a significant impact as an actor on the development, like the Vision 2000 programme or later the Commission for a Socially Sustainable Malmö (cf. Commission for a Socially Sustainable Malmö 2013), but those will be discussed in the next chapter.

It is also interesting to look at the role of the press, as an actor, in the development process. The press has mostly supported or at least not attacked the new course of the city and was described as "compliant" and prone to cite positive statements from the city without scrutiny (Baeten 2012, p. 38), a position that will have encouraged the continuation of the transformation course. Though the Bo01 project did attract some critique: In a study over 25 per cent of 3700 press clippings collected in the timeframe from March 1999 and September 2001 displayed a negative attitude towards the project. (Holgersen 2014b, pp. 33-34)

2.7. Institutions

As it has already been described before, the "Vision 2000" programme had a decisive impact on Malmö. Somewhat less impactful, the (independent) Commission for a Socially Sustainable Malmö started its work in 2010 after politicians acknowledged the already severe and ever increasing social disparities in the city. (Commission for a Socially Sustainable Malmö 2013, p. 3) In general, the city of Malmö has commissioned various commissions and reports to local researchers and scientists, often trying to emphasise the independent nature of these institutions. (Mighton 2010, pp. 6-7; Holgersen 2014b, p. 79) For obvious reasons the city planning office of Malmö is a key-institution in the development, being not only responsible for the planning itself but having published numerous reports on Malmö's situation. (City of Malmö, n.d., b) The planning office keeps close relations to local private partners through initiatives, such as the "building and living dialogue" and the "Helix Centre" a meeting place for urban actors to discuss ideas concerning sustainability and also state actors. (Bächtold 2014, pp. 70-71) Path dependency was undoubtedly present and a serious issue for Malmö from the 1980s until the mid 1990s. The city's politicians demonstrated an unwillingness to accept that, while Malmö itself was in a crisis, the reason for this were not a few failed companies, but that the industrial city as a *model* was in a crisis. The reaction was to combat the industrial crisis with even more industrial policy (Holgersen 2014a, p. 233). The best example for this is the opening of the Saab car factory in 1989, after Kockums went bankrupt. The city and state poured considerable resources into attracting Saab to open a factory on the area of the old Kockums shipyard. However the factory was closed only two years later, as Saab was acquired by General Motors and had to reduce costs. (Bächtold 2013, p. 66) Additionally, the factory never created the promised 2700 jobs it was supposed to, but topped out at 1400 jobs. (Holgersen 2014a, p. 237) This made clear that the industrial model was not sustainable any longer even when being subsidised by city and state. Still it took another four years for the city to decide on a turnaround; a decision that was argued to have happened ten years earlier in the capital Stockholm (Holgersen 2014a, p. 237).

2.8. Perceptions

With the industrial decline in the 1980s and 1990s the mood in Malmö was bleak. (Bächtold 2013, p. 70) Somewhere between resignation and unwillingness to accept (Mukhtar-Landgren 2008, p. 58), the city continued its industrial course unable to free itself from the malaise that had befallen it since the Kockums shipyard had closed, a symbol of the city's prosperity for over 100 years. As depressing as the atmosphere was during the time, so quick did it change in the mid 1990s. From 1995 on the new course was developed and executed and with a very high frequency of new *signs* of change this was instrumental in inserting an idea of urge and drive of the transformation process into everyone's mind. Interestingly this method leads to a form of self-reproduction. As soon as the drive has been successfully established, the "frontline projects […] generate a 'positive spiral'" (Andren 2010, p 76). They create an opening that would be difficult to achieve with many small projects that are not as visual as the architectural approach the city has chosen. The high ambition of the projects and visual nature have enabled the transformation to be tied to them, making it possible for everybody to see the *signs* of change in their city on a daily basis. This will have had not only an impact on the population, but also decision-making actors, or as Andren put it, this method "to some extent affects the identities of […] actors and, further, the real outcome of decisions and policy orientation" (Andren 2010, p. 76).

But it also has to be said that while these "lighthouse"-projects did have a city-wide impact on perception, their impact on reality has been less than city-wide. (Andren 2010, p. 78) Malmö's concentration on few ambitious (and expensive) projects left many other districts very much untouched of the transformation which also lead to protest of citizens concerned about the city leaving "normal" people behind (Mukhtar-Landgren 2008, p. 61). Taken together this has shown a disparity of perception and reality. An interesting aspect of the city's development is also a certain inevitability that surrounded the transformation project. (Mukhtar-Landgren 2008, p. 60) Social-democrats and conservatives (the two major parties) were in agreement of the general direction the city took after 1995 and thus the need for the transformation in that direction was, after this point, at its core never questioned

(Holgersen 2014b, p. 34) and no alternatives were ever seriously discussed (Baeten 2012, p. 40).

After having shown how perceptions affected the city itself, meaning internally, the next chapter will look at how perceptions were utilised externally.

3. Framing and place marketing

3.1. Theory of place marketing

At its core place marketing is the idea of creating a brand of a place (or city in this case) whereby the place becomes a product to be sold. The brand acts as vehicle to distinguish the place from other cities or brands and the success of the selling-process is mainly determined by the question how customers perceive the product. (Hospers 2006, p. 1016) However, place marketing is not only about modifying the perception of a city, but also about modifying the place itself to satisfy the needs of the places' customers (Zhou; Wang 2014, p. 28)

The irrational nature of perceptions was already discussed in the prior chapter – it is described as a "mind game" whereby a person forms a simplified image, as humans have to decide under the conditions of "bounded rationality". (Hospers 2006, p. 1016) The knowledge people have of spatial units, such as regions and cities is called "the subjective knowing of a space", this knowing has been shown to be very selective and decision making being influenced by it. (Hospers 2006, p. 1017) As this "subjective knowing" can be influenced by marketing, cities have an interest to create a positive image of themselves and therefore influence the decision making pertaining to them. In this, cities have three groups of "place customers" that are relevant: (1) inhabitants that wish an appropriate place to live, work and relax, (2) firms looking for a place to locate their production facilities, do business and recruit employees and (3) visitors seeking leisure facilities in the cultural or leisure domain, (Hospers 2006, p. 1017) but these three customer types can be effectively marketed through a single marketing strategy. (Braun et al. 2014, p. 70)

In the best case the city's brand represents the characteristics the city is proudest of or wants to be known for and place branding has the goal of "close[ing] the gap between what an area really is ('identity'), what outsiders thinks [sic] about it ('image') and how the location wants to be known [for] in the outside world (its 'brand' […]) (Hospers 2006, p. 1017). Place marketing is a common instrument applied in urban revitalisation or transformation processes, such as former

industrial cities, where building iconic public buildings take a symbolic role of the reshaping. (Aboulkheir 2013, p. 4)

Architecture in general has taken an increasingly important role in place marketing: in a trend called "The Bilbao Effect" (named after the Guggenheim Museum in Bilbao that has brought attention and visitors to the city) cities attempt to replicate Bilbao's success by attracting famous architects to build eye-catching architecture in their city (Rybczynski 2002) – the Turning Torso by Spanish star architect Santiago Calatrava is one such example. Research has supported the notion, that architecture and the physical features of a place are the most important determiner of a city brand, (Braun et al. 2014, p. 69) which gives credit to those cities trying to influence their brand through attention-grabbing architecture.

A development that has also gained momentum and has migrated from corporate marketing to place marketing is the so-called "Greenwashing". Greenwashing describes the process of attaching an eco-friendly brand image to a product that is not actually ecological. (Anderberg; Clark 2012, p. 606) Cities are quick to brand themselves as "sustainable", "green", "clean", "smart", or "climate friendly" but might actually not meet those criteria. (Aboulkheir 2013, p. 5) This trend is particularly relevant to Malmö as the city's core keyword in marketing has been "sustainable" and is therefore under the threat of being an example of this trend.

Cities can utilise different instruments in their marketing mix – which are being categorised into "traditional media", e.g. TV, radio, billboards and so forth, "new media", meaning websites, newsletter, chat rooms and "new new media" (also called Web 2.0, or social media) which refers to microblogs as Twitter, Wikis, picture sharing website such as Flickr, video sharing websites and social networks such as Facebook. (Zhou; Wang 2014, p. 28) Traditional media, while potentially reaching a great audience, has the drawback of being expensive and without a feedback return channel. (Ibid., p. 29) New media can enhance the marketing mix, is less expensive than traditional media, but still mostly a one-way communication method. Social Media has the advantage of being relatively low-cost, while

enabling communication between the city and the user, thereby enabling real identification with the place. (Ibid., p. 29) Another benefit from social media is that users can act as promoters for example by posting positive mentions on the social media accounts of the city (see fig. 7), but cities can also interact with unhappy users. This also adds the ability to re-use content created by users and add those to the marketing materials the city can utilise.

Fig. 7 - Retweet from Malmö's tourist Twitter account (twitter.com/malmotown)

While in place marketing, especially in cases of cities, the municipality takes the lead role, enabling the cooperation of government departments, local firms can also have significant importance in promoting a place. (Zhou; Wang 2014, p. 28)

A critique that has been voiced in regard to place marketing is that in its effort on attracting businesses, investments, talented people, visitors or wealthy residents it focuses the city away from the needs of the city's existing population. (Aboulkheir 2013, p. 4)

3.2. Place marketing in Malmö

> *"The disappearance of traditional industries was so fast and so complete that we had nothing to be defensive about. We simply had to come up with a new approach. And we decided that the way forward was to create a modern city which was at the very top when it came to environmental issues"*
>
> Anders Rubin, Deputy Mayor for Housing and Urban Environment (cf. Givan 2010, p. 5)

This quote fits in very well with the narrative the city of Malmö has constructed, of the "sudden" downturn of the industrial sector and the following decisive action of the city for transformation – a narrative that has been shown to be not entirely accurate. But the message is clear and is being send across all available channels: Malmö is "a modern, green" city (City of Malmö 2015b, p. 5).

Malmö's tourism department was tasked with creating a brand strategy for the city and first proceeded to analyse the city's strengths and weaknesses according to the SWOT (Strengths, Weaknesses, Opportunities, Threats) schematic (see fig. 8), based on interviews of visitors and residents. Through this structuring approach the city gained insights on where Malmö needed to improve and where it was already performing well.

SWOT analysis Malmö brand	
Own Strengths	Own weaknesses
- Located in the middle of the Öresund region - Availability - Modern stadiums - Attractive city environment - Large selection of shopping - Good access to commercial accommodation - Positive & loyal residents	- Too small to emit metropolitan atmosphere - Limited reach compared with big cities - Weak regional ties
Opportunities of the business environment	Business environmental threats
- Increased international interest in Sweden as a tourist destination - Environmental focus in travel trends increasing tourism from the immediate region - Success of Copenhagen provides spill-over effect on Malmö	- Stronger currencies in relation to Danish krona and the euro - Recession - Negative media image

Fig. 8 - SWOT analysis Malmö brand (Adapted from City of Malmo 2011)

This analysis has shown that the geographic position is one of the defining factors for Malmö, as the proximity to Copenhagen and the Öresund region is a source for strengths, weaknesses, opportunities and threats alike. On the one hand Malmö can benefit from spill-over effects from the Danish capital and the region in general, but on the other hand Copenhagen also surpasses Malmö in most areas, concentrating attention to itself and away from Malmö. The focus on transformation is identified as a considerable strength and opportunity, increase the attractiveness of the city and being on trend for visitors.

Based on this analysis a "Brand Pyramid" was created, this pyramid has the purpose to visualise the target aspects of the brand the city wanted to create. "Essence" is described as the core value of the brand. "Personality" aims to encapsulate the city's "personality" in an imaginary person. Next, what "Values" do visitors connect with the city? Sentiment describes the atmosphere and spirit of the city. The "Distinctive key factors" are the unique features, the aspects that distinguish Malmö from other cities. And last, "Actors" are all that are taking part in shaping the brand.

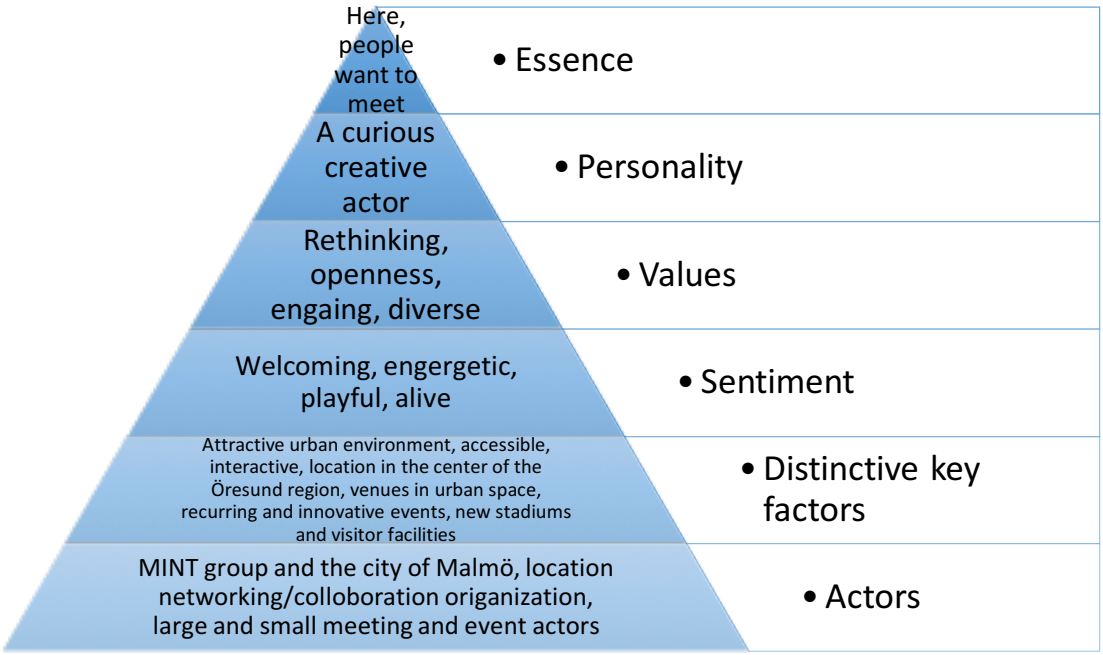


Fig. 9 - Malmö Brand Pyramid 2011 - 2015 (Adapted from City of Malmö 2011)

It is striking that the plan for Malmö's brand apparently does not feed off the transformational tale and ecological image Malmö has built for itself, featuring more generic characteristics as "openness" and "welcoming". Some elements, like the "creative" city Malmö wants to be and Malmö's diverse ethnic background are incorporated and additionally Malmö's close ties with the industry is represented in the relevant actors, but nonetheless, the disconnect from the achievements of Malmö's actual brand (as already shown and further discussed in this chapter) is perplexing.

Malmö has been working hard to create a brand of the city and this has been described as a successful endeavour, (Andren 2010, p 76) as "Malmö has gained international fame thanks to its futuristic and iconic eco-district of Western Harbour" (Aboulkheir 2013, p. 6). Additionally, the Öresund region in general has been

highlighted as a best practice of place marketing (Hospers 2006, p. 1019). Malmö has also gained considerable attention by being very active in EU-sponsored international network projects, hosting and participating in conferences and also through its extensive use of flagship projects, often placing them high in "green cities" rankings. (Anderberg; Clark 2012, p. 598) The city also created the Institute for Sustainable Urban Development (ISU) in cooperation with University of Malmö and has been recognised widely for its ecological focus by a multitude of awards. (City of Malmö 2008, p. 49-58) However the city has also been criticised for, apart from the flagship projects, only implementing national goals and policies, instead of being a forerunner in sustainability. (Anderberg; Clark 2012, o. 603)

The municipality has focused on promoting Malmö's ecological and innovative features over the historic city core. An examination of key words of 30 English language municipal documents (and therefore potentially serving a promoting purpose) showed that the municipality mentioned words pertaining to the (recent) ecological development of Malmö over ten times more often (802 vs 77) than words pertaining to the city's tradition. Sustainability in particular was used almost inflationary and in itself over five times more than all words pertaining to tradition. The words and their assignment were identified by qualitatively examining sample documents for words the city uses often and can be connected to the concepts of sustainability, modernity and history.

Fig. 10 - "City Development" sidebar highlighting use of "Sustainable" (malmo.se/english/sustaina

Words pertaining to the modernity complex were, while still being mentioned 2.7 times as often as the historic complex, only used 27 per cent as often as the sustainable complex. Comparing mentions of landmarks also showed a clear prioritisation of the new over the old. The Turning Torso was mentioned 35 times in all documents, the city's most famous old-town buildings, the Malmöhus and Lilla Torg, were only used three times in total, meaning that the Turning Torso was mentioned almost twelve times as much. It is important to note that this means (and

is supported by the other indicators), that Malmö is not promoting its new districts and saying that there is a historic centre or other history to visit to complement the new districts, Malmö is more or less hiding their history from the outside. Additionally, the Turning Torso was featured on the cover of 9 of the 30 documents or 30 per cent. Considering that some documents did not feature Malmö in general (e.g. only Hyllie or the Skåne region) and some others featured abstract illustrations this represents a very high share and shows the extraordinary importance of the Turning Torso for Malmö's place marketing efforts.

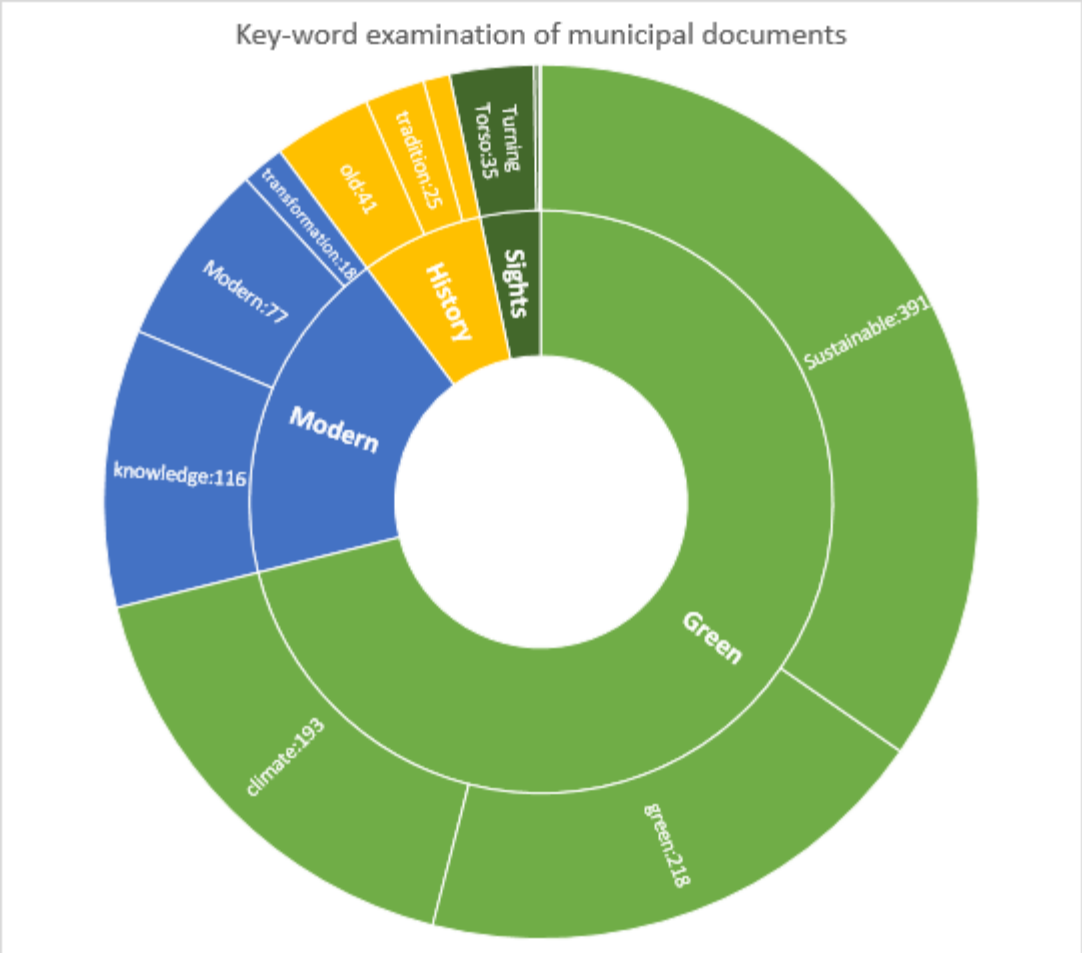


Fig. 11 - Key-word examination of municipal documents (own analysis)

Malmö being only a mid-size city does not possess the benefit of "built-in" coverage a capital city receives and therefore depends on unique (or at least interesting) features when it comes to attracting press attention. Malmö has had a mixed history in this regard with positive and also negative examples. On the one hand, there has been significant positive coverage of its transformation process, especially in regard to becoming a sustainable, green city. The sustainable district Bo01 has

served as a popular hook for theses stories. (Senthilingam 2014; Guevara-Stone 2014; Laurence 2006; Hawkins 2014; Wistrom 2014) But there is also another side to press coverage and this side pertains to the most pressing issue in Malmö: immigration. In an influential article *The Economist* discussed growing inequality issues in Sweden, but especially in Malmö, criticising immigrants being "stuck in Rosengård [sic]" (Anonymous 2013). With Rosengård being the connective tissue when reporting negatively about Malmö it only recently received coverage for gang-wars involving hand-grenades (Deutsche Wirtschafts Nachrichten 2015) and a, by now, infamous FOX News broadcast from 2004, reporting on Malmö reaching a "Muslim Breaking Point" (Andersen 2014, p. 12) – Baeten (2012, p. 30) called the report a "xenophobic mix of lies, misrepresentations and scaremongering".

It is evident that positive and negative associations alike are being associated with districts (Bo01 and Rosengård) in the case of Malmö and the city therefore has an interest to actively work with the districts reputation. The municipality, represented by the tourist office, does maintain an online presence for tourists with the visitor-facing organisation of "Malmotown". Active and well maintained Facebook, Instagram and Twitter accounts as well as a website promoting the city are being contrasted by YouTube, Flickr, Scribd and Google+ presences laying waste without any updates or care. Malmö also maintains social media accounts for a great number of departments targeted at the city's inhabitants with many of them communicating on a daily basis with citizens.

Fig. 12 - Malmotown logo present on social media accounts

Remarkably, the city of Malmö failed to capitalise on, what surely has been the biggest marketing opportunity it ever had, holding the Eurovision Song Contest (ESC) in 2013 in the city's own Malmö Arena, when Stockholm was unavailable. The ESC attracts a staggering 180 million yearly television viewers, especially from Europe, and is therefore the world's biggest music show. (European Broadcasting Union 2014) Usually the show features impressions of the hosting city and the country in the opening sequence and presents them in a positive light during the so-called "postcards", that are shown between the different performances. In the

case of Malmö though the city was only featured very briefly in the opening sequence with a short showing of the Öresund Bridge and the Turning Torso by night, before progressing to the concert hall. The postcards did not display Sweden or Malmö at all, but showed the contestants in their own hometowns. After the opening sequence Malmö was mentioned a few times in short, humoristic videos, that were supposed to show Sweden to the world, but the ironic tone did not serve Malmö well – the "reporter" first found herself in Copenhagen instead of Malmö, because of its implied insignificance, and after "finding" Malmö presented Zlatan Ibrahimovic's (a well-known football player) childhood football grounds, frankly in a less than stellar state. On the other hand, Copenhagen and Stockholm received positive mentions, increasing the perceived disparity between the two capitals and Malmö. It is unclear what kind of influence the city (could) have exerted on the programme, as the national TV station is responsible for the broadcast, but it was certainly not a success for the city. Though this did not stop the city from commissioning and publishing a report by a consulting firm lauding the "huge success" for the city. (City of Malmö 2013, p. 6)

3.3. Building the past away

Baeten (2012) has brought an interesting aspect to the discourse of Malmö's place-marketing. He argues that Malmö is trying to replace its industrial history with "fashionable architecture and high-class lifestyle" (p. 38), to "attract wealthy white westerners" (p. 23). As has been discussed in this thesis before, the city of Malmö utilises architecture heavily in its transformation, something that could be attributed, among other factors, to Mayor Reepalu being an architect by education. Baeten also assumes the "seductive power of architectural aesthetics" (p. 38) has been instrumental in building consensus for the transformation course by bringing the change down to a concrete, experienceable way. Continuous press compliance in reporting about architectural competitions, construction progress and so on has also helped in gaining attention. (p. 38) As discussed before Malmö also managed to gain external coverage, with international press reporting positively about its transformation but also negatively about immigration issues. Presumably also in some part due to this Baeten constitutes that the municipality wants "Malmö to

develop along modern lines, thereby erasing the past: the industrial past, the unemployed, the (ethnic) poor, the non-adapted to the 21st - century service economy, and their necessary replacement with the creative classes" (p. 37). For the industrial areas, especially the harbour, this means symbolically constructing new, modern buildings on the sites of Malmö's industrial manufacturing, thereby replacing them. The other aspects, besides Malmö's undesired industrial past, is its present social issues in the unrest-laden district Rosengård. Due to the conditions in Rosengård Mukhtar-Landgren (2008) calls Malmö the "dual-city" (p. 56), on the one side the very modern, sustainable and presentable new districts of Västra Hamnen (Western Harbour) and Hyllie and on the other Rosengård, that has been called a "warzone" in the media (The Local se 2012). Having been ignored (or pretended it doesn't exist) for many years of Malmö's transformation period socially deprived Rosengård has started to receive a small dosage of the "Malmö formula" treatment in the last years. Since 2010 the city has begun implementing smaller projects with a sustainable focus in Rosengård too (City of Malmö, n.d., c) focusing on twelve projects that aim to make the district more sustainable in ecological, social and economic areas (City of Malmö, n.d., d). This project is planned to be crowned by another Malmö eye catcher, the Törnrosen Tower (Business Sweden 2014, p. 27; see fig. 13).

Fig. 13 - Törnrosen Tower (Business Sweden 2014, p. 27)

Baeten does come from the point of view of a critique of neo-liberal planning and therefore features the most elaborate criticism (though others such as Mukhtar-Lundgren 2008 and Holgersen 2012, 2014a and 2014b echo this in a less severe manner), but the aspects are still worthwhile without the critical theory perspective. He shows a process of erasing history, replacing it with the new and "desirable" and this concept will form the basis for the data-analysis in the forthcoming chapter.

4. Replacing old with new - spatial analysis

4.1. Methodology

As chapter four has shown, Malmö has tried to replace old with new in regards to its image and the aim of this chapter is to further the understanding of this development. This thesis aims to add another perspective to the existing discourse by conducting a spatial-analysis of photos taken in Malmö to gain an insight in movement patterns of residents and visitors alike. This method was chosen as it can provide an additional understanding of the phenomenon that is not based on primary and secondary literature or interviews, which, as sources, are always to some degree subjective. The spatial analysis provides a sample that, while not completely random (e.g. individuals with no computer or camera are not part of the sample) has a very high number of subjects and items and therefore should be quite reliable. This method is clearly quantitative in nature and can also be categorised as following a (limited) big-data approach. Through this method, the concept is, it will be possible to evaluate if the city has been successful in steering attention in the desired direction. The following research question was formulated:

RQ 2: *Is the city successful in focusing attention to Malmö's transformed districts and steering attention away from its industrial past and current social issues?*

The question has two main aspects, or sub-questions: First asking specifically if Malmö has been successful in focusing attention to the transformed districts and in the second part asking, on a higher level, if the city was successful in "hiding" its industrial past and present social issues.

In order to answer the first aspect of the second research question photos from the photo sharing website Flickr will be collected and then geo-mapped. Through analysing the position where the photo was taken and adding further data like the district the location belongs to, the date the photo was taken and if the photo was taken by a resident, a domestic or foreign visitor hopefully a meaningful answer to this aspect of the research question can be produced. The second aspect will, in

addition to the aforementioned method, incorporate findings from chapters two and three.

Again, following Gering's framework, the term, attributes and indicators for this research question must be identified. As the second research question asks for further analysis of one of the attributes of the first research question this changes the level of analysis, going one level deeper. Due to this, the term is now image and not transformation. To analyse if the city is successful in changing the image this question is conceptualised into examining if the city is successful in drawing attention away from its un-modern districts, which is the attribute. Therefore, measuring the attention, the districts receive via photos will be analysed, which is the indicator. Four districts were chosen to represent the "new" and the "old". The new districts are identified on the basis of the previous chapters: Västra Hamnen and Hyllie represent the transformation of Malmö like no other, they feature the new landmarks and sustainable projects. The old is represented by the historic city core, personifying Malmö's history, and Rosengård, standing in for Malmö's social issues. The districts borders are based on the administrative borders before the reform of 2013, but are not identical, to better represent the attached concepts. The districts exact border will be shown in the district heat maps later on.

The actual data analysis will be separated into three parts, each investigating a different aspect of photo and user distribution in Malmö and contributing its own findings to answer the second research question. Firstly, in chapter 4.3.1, heat maps will present an overview of Malmö and the focus districts of the historic city core, Västra Hamnen, Hyllie and Rosengård. This distribution and frequency visualisation has the purpose to get an impression on which areas are popular and which are not. It also creates the ability to examine hotspots on a more detailed level, enabling the identification of popular landmarks inside the district and revealing movement patterns. The heat maps will not provide as much hard data as they will provide context. Chapter 4.3.2 will change the perspective from visualisation to statistics. In this chapter the actual number of photos shot will be analysed by district and over time. Although non-residents (i.e. visitors) are mainly of interest, due to sample size and to improve reliability residents will also be

analysed. As the photo count can be confounded by for example a high number of photos by a single user at a specific place, another analysis was conducted in chapter 4.3.3. Though analysing the photo count still offers an interesting aspect, as the amount of photos one shoots of a specific place also shows interest, especially for architectural sights. Looking at the number of users that have shot photos in the analysed districts. For the same reasons as before visitors and all users will receive separate examinations. Lastly, as a consequence of chapter 4.3.3 the district visiting patterns will be analysed in chapter 4.3.4. This will give insight on the number and combination of visited districts, revealing if users tend to visit only one or more districts and which combinations are popular. This has implications on the question if the city successful in drawing *singular* attention to and from the desired districts, or if increases and decreases are related to generally visiting more or less in Malmö.

Image, or the idea people have of a place, informs what they will visit. Visitors usually only stay a short amount of time in Malmö - 62 per cent of international visitors only stay for a single day (own calculation adapted from City of Malmö 2012, p. 8) – there probably is not enough time to visit a lot of places, therefore, the visitor has to prioritise. Malmö tries to implant the images of a modern city into the heads of potential visitors and if they are successful visitors will choose these "known" places for their short time in the city.

It is important to note that this thesis aims to add another methodological perspective on the existing research of this topic, with Baeten, Mukhtar-Landgren and Holgersen most prominently already providing insights through document reviews and expert interviews. The spatial analysis hopefully will provide new insights that are unique and only possible through this kind of method and therefore enrich the knowledge on the perception of Malmö's transformation. Certainly there are weaknesses of this method, as the question remains to what extend the photo taking of residents and visitors alike can represent the attention given to districts truthfully, although this author would argue that photos are a good example of the concept of attention. It additionally can be questioned if the choice to attach the concepts of old and new to city-districts can encompass all implication

that come with those concepts, which represents a risk to external validity. Also the data can have a multitude of confounding factors, for which some can be filtered, but essentially can only be controlled for through sample size, in the best case.

4.2. Data gathering and sample

People in general and tourists alike make great use of photo sharing websites. Flickr had 92 million registered users in October 2014 (Smith 2014), about 1.6 million photo uploads every day in 2013 and accumulated about 4.25 billion photos as of December 2014 (Michel 2015). Smartphones have overtaken traditional point-and-shoot and DSLR (Digital single-lens reflex) cameras in usage and are now widely used to make and share photos (see fig. 14). These devices usually include a GPS (Global Positioning System) sensor (Urry 2011) able to pinpoint the exact position where a photo was taken and save this data to the EXIF (Exchangeable image file format) metadata container in the form of latitudinal and longitudinal position (CIPA 2012).

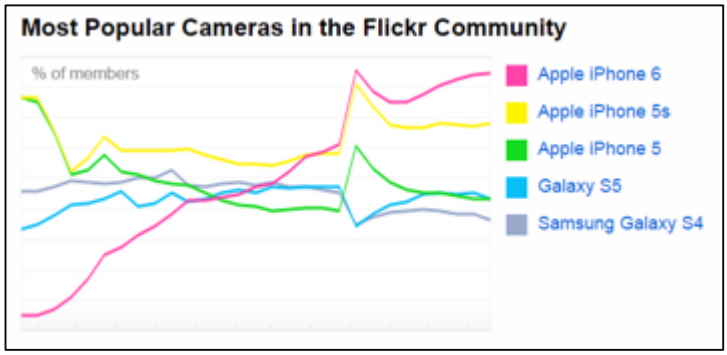


Fig. 14 - Most popular cameras on flickr (flickr.com/cameras)

When photos are uploaded this location information is preserved and can be utilised to map a large amount of photos. Flickr was chosen as a data source as it is the biggest publicly accessible photo database and also has an API (Application Programming Interface) that allows public access (hence available to everyone and not restricted). An API is, in its essence, a system of pre-defined functions that can be utilized by a program to request a certain set of information and works in the way of a question and answer system. (3scale, 2012) Additionally, the common usage as a photo backup service (Flickr offers 1 TB of free photo storage) enables the pattern of people uploading a complete set of photos, or all photos, allowing for a much more complete movement history than Twitter or Instagram, where often only the “best-of” photos are shared.

An example close to the field of this paper would be a programmed request for photos in a specific area, to which the Flickr API would answer with a list of photos meeting the specified criteria. Though API's are far more powerful than this relatively simple request. For example, a lively ecosystem of 3rd party Twitter mobile and desktop apps exists utilizing only the public Twitter API.

Through the API method "flickr.photos.search" it is possible to retrieve photo meta-data with a multitude of restricting filters or arguments.[1] For this thesis all photos in the area of Malmö were generally of interest, so restrictions were only applied on a spatial level (10 km radius from the city core). As the Flickr API only allows 4000 results for a unique query (after the 4000 first results further answers will be duplicates of earlier ones) additional filters had to be enabled to restrict each answer to under 4000 results, this was done through adding a time restriction, only requesting photos for a short time-period. Additionally, Flickr only allows 500 results per answer and paginates the results after this. Since a standard reply by the Flickr API includes only limited information, additional variables had to added by requesting them. These include the name of the owner of the photo, the exact geo-location (in latitude and longitude format) and the date the photo was taken. Assembled the following query is exemplary for the API requests (min_upload_date, max_upload_date and page need to be change regularly):

> *https://api.flickr.com/services/rest/?method=flickr.photos.search&api_key=7743745452578875c6ff38a52df24ea0&min_upload_date=2015-04-01+00%3A00%3A00&max_upload_date=2015-07-31+23%3A59%3A59&lat=55.592479&lon=13.014960&radius=10&radius_units=km&extras=owner_name%2C+geo%2C+date_taken&per_page=500&page=1&format=rest*[2]

After receiving this request Flickr will return an answer in the XML format (a standard markup language, other formats like JSON can be requested, see fig. 15) that can be viewed in a web browser and then downloaded or directly requested through respective software. In this case Microsoft Excel was used to request and

[1] API documentation here: https://www.flickr.com/services/api/flickr.photos.search.html
[2] This request will not work anymore as the API key expires after a short time and needs to be renewed.

import the data into an Excel workbook. About 150 such requests had to be send due to the Flickr restrictions.

Fig. 15 - Sample Flickr API answer

In total 80 717 photos were returned by the Flickr API, which included 3 054 unique users, with the first photo taken in 1900 (usually the taken date will be automatically filled in by the camera according to the time and date the camera has available, but it is possible to modify this), but with most data in the 2005 to 2015 time-range.

As not all data was either of interest or of the desired quality 28 945 photos were excluded from the sample. Reasons for excluding photos include inaccurate GPS location (the camera saves an accuracy rating and only the highest rating was included), a high number of photos from one user on one exact geo-location (there are tools to add a geo-location to photos if the camera did not actually save this information, but bulk-editing this will result in all photos having the exact same location) or the photo not actually being in the Malmö borders according to the city's maps (City of Malmö, n.d., g).

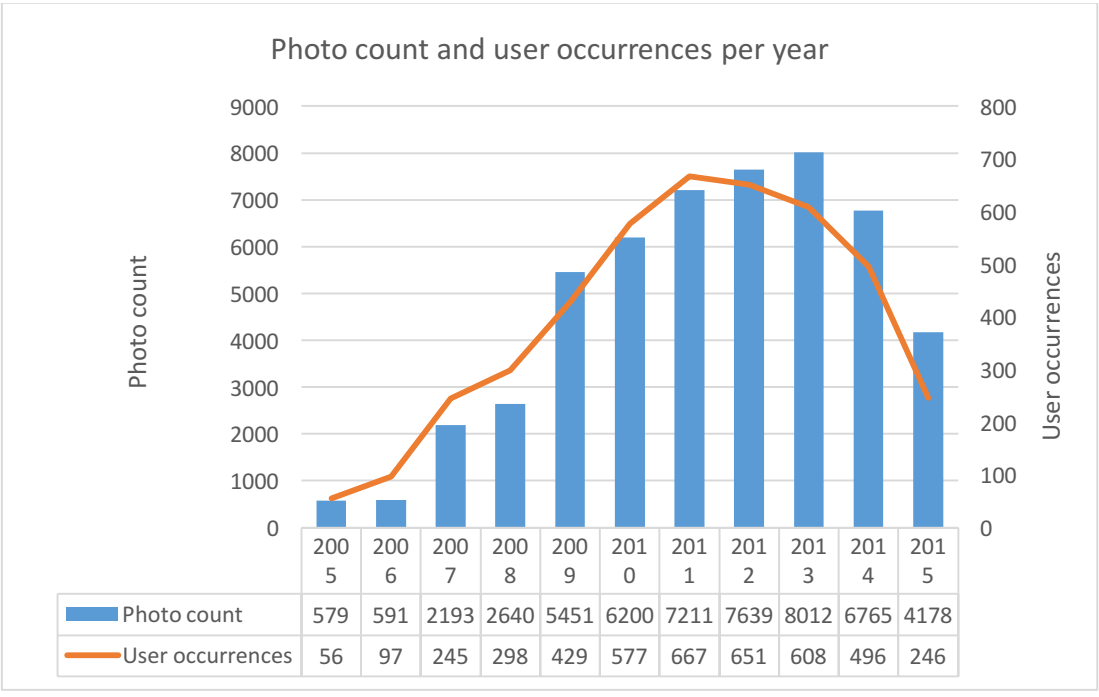


Fig. 16 - Yearly photo count (bars, left axis) and user occurrences (line, right axis) in sample

As the study relies on further information, additional variables were added through either research or computation. First, as visitors of the city's are of special interest the hometown and country of the users were identified. Some users add this information to their Flickr profile, for those who do not the membership to groups, albums and photos were analysed to gain an insight into the hometown and country. This was done for all users that have uploaded ten or more photos in the area of Malmö. For 56 of 954 analysed users, or 5.9 per cent, this information could not be determined with reasonable certainty and marked accordingly. 214 of these users are Malmö residents, while 656 users are non-residents and 419 of these foreigners. This leaves 237 Swedish visitors not living in Malmö.

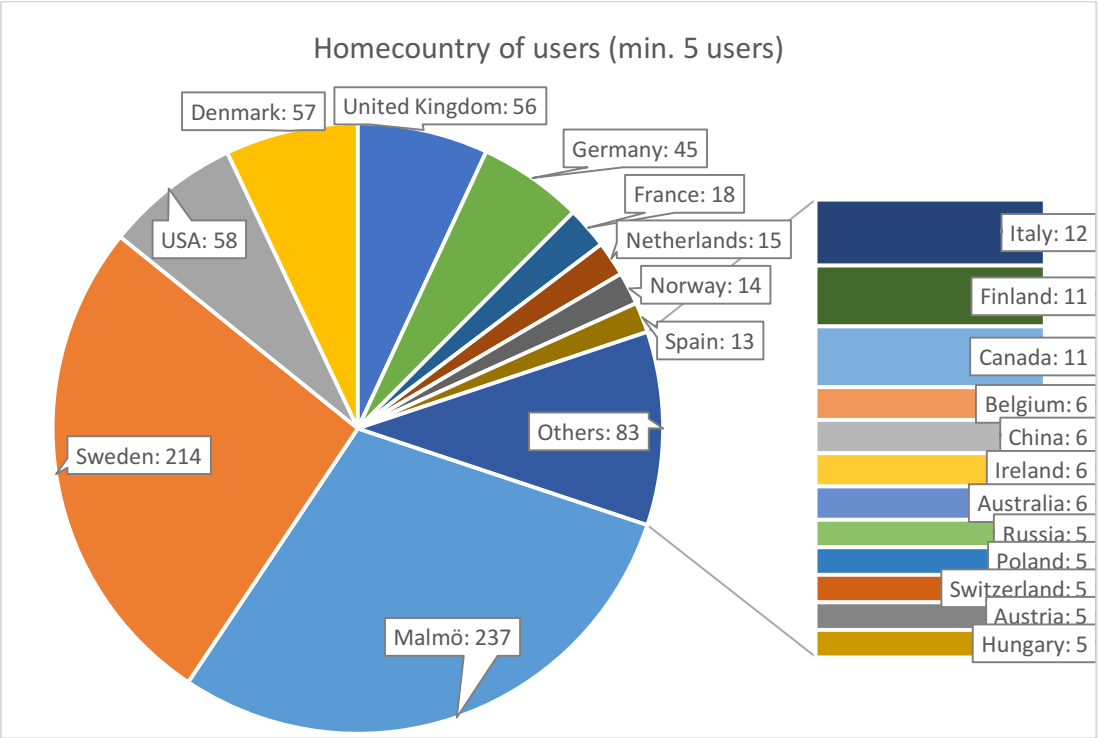


Fig. 17 - Home country of users in sample

It is apparent that Malmö mostly attracts visitors from Sweden and Europe. The high number of visitors from the United States may be due to a higher proliferation of photo-sharing websites in the US, as the city of Malmö has considerably lower number on United States visitors. The share of the other countries is, while naturally not identical, reasonably similar. (City of Malmö 2012, p. 13)

Next, to enable the actual study, the districts had to be identified and photos had to be allocated to the districts. For this the districts borders were identified using Malmö's official maps web-app (City of Malmö, n.d., g) and with this information a

district box with the corresponding geo-location data was created, enabling identifying for every photo if it was shot in the districts Västra Hamnen, historic city core, Hyllie or Rosengård. The heat maps were created utilising the Google Maps API. (Google 2015) The data was edited with Excel to fit the format the Google Maps API expected. Then a HTML (HyperText Markup Language) file was created integrating the needed HTML and JavaScript code with the Flickr geolocation data. The resulting Google Maps API heat map allows higher precision in the visual analysis of the Flickr data.

4.3. Data analysis

4.3.1. Heat maps

First, to give an overview of the photo distribution in Malmö and to identify hotspots, the below heat map shows the whole city, highlighting the areas that were especially popular from a picture-taking perspective. This data includes all photos taken in Malmö by non-residents.

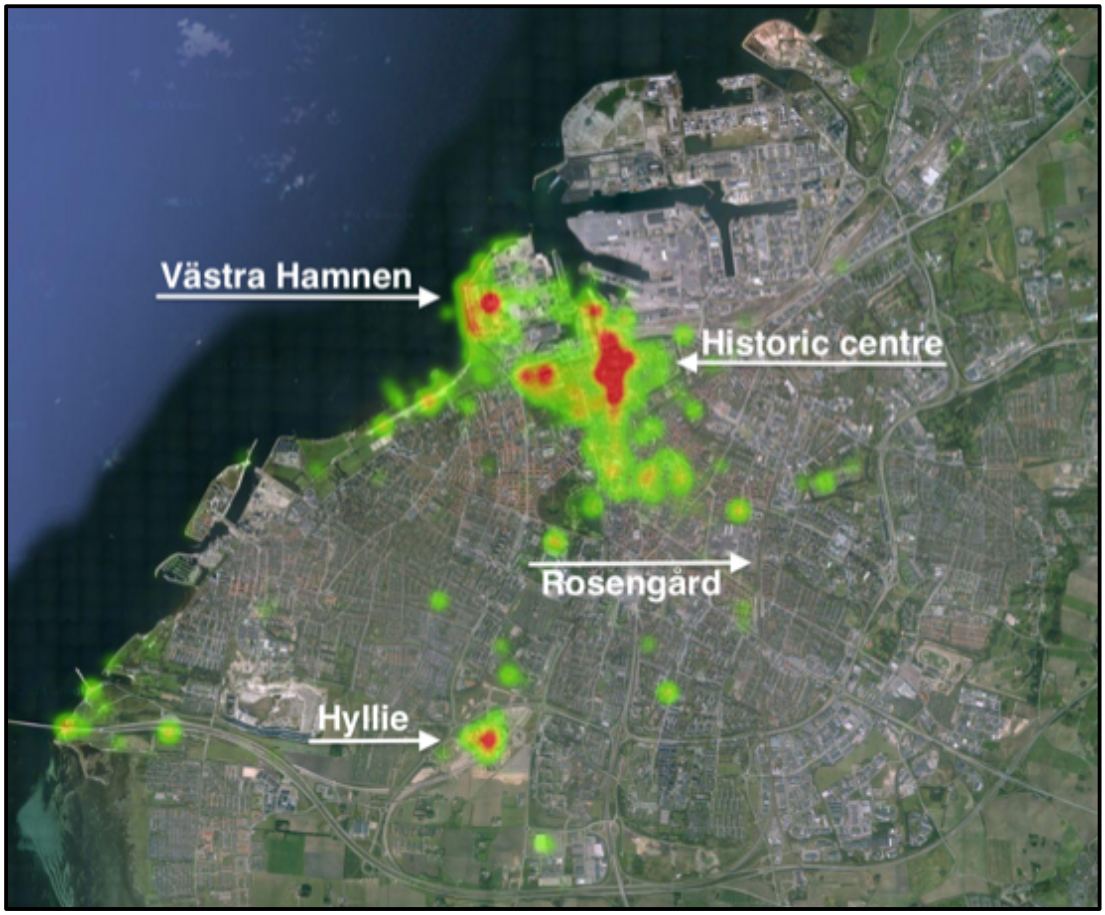


Fig. 18 - Heat map overview of Malmö

It is immediately visible that there are three focus areas in Malmö: The city centre (this especially includes the historic city core with Malmöhus, Stortget and Lilla Torg), Västra Hamnen and Hyllie. The exact borders of the districts are marked in the following detailed district maps. These are the only areas that attain enough pictures, relatively, to be marked as hotspots. Other areas that attract attention are mostly those, that offer a water-view, which seems to boost the number of pictures taken at that location.

Next, the first focus area will receive a more in-depth look: Västra Hamnen and the city core.

Fig. 19 - Heat map overview of city centre, district borders in white

This heat map shows that photos concentrate on the water-side promenade of Bo01 and the Turning Torso in Västra Hamnen. Looking at the historic city centre Malmöhus (the park) and the city core with Lilla Torg and Stortorget are the hotspots. Although a "path" from Malmö Live in the north to the end of the city core in the south is also visible. Looking at all photos of Malmö (not only the visitors) a total 9011 photos of the 51 772 sample (or 17.4 per cent) are located in the Västra Hamnen area, while the city centre comes in at 10 186 photos (19.7 per cent). Taken

together both areas unite 37.1 per cent of all the photos in Malmö on their two areas. When only looking at visitors their share actually decreases. With a sample of 21 856 photos by visitors Västra Hamnen now takes the lead with 3568 photos (16.3 per cent) taken there and 3035 in the historic city centre (13.9 per cent), combined coming in at 30.2 per cent of all photos. Though still clearly the most popular areas, the reason for the decrease of popularity for the most tourist-centric areas of the city is unclear.

Following is a closer view of the brand new, but still partly in construction Hyllie district. Hyllie is, beside Västra Hamnen, one of the two from the ground up constructed districts in Malmö. Started with a shopping centre and multi-purpose arena Malmö Arena, the city has ambitious plans. Construction of the expensive city tunnel was completed in 2010 linking the, still mostly empty, Hyllie directly with Copenhagen (12 minutes from Hyllie to Copenhagen airport) and Malmö central station (three minutes), (District of Hyllie, n.d., a) creating privileged transportation options over other districts in Malmö. Linked with this is the purpose of Hyllie to attract wealthy Danes to Malmö, providing much needed tax revenue for the city. (Beaten 2010, p. 32) For this purpose luxurious apartments will be constructed that share the space in Hyllie with glass-high-rise office buildings, (District of Hyllie, n.d., b) creating a modernist feel to Hyllie that exceeds even that of Västra Hamnen. As a newly built district in Malmö Hyllie is naturally labelled “climate smart” and “sustainable” (City of Malmö, n.d., e)

Fig. 20 - Heat map overview of Hyllie, Hyllie borders in white

Hyllie shows a clear concentration of photos on Malmö Arena (the ESC surely having some impact here), the train station connecting Copenhagen and Malmö central station and the Emporia shopping centre. In total 1787 photos were uploaded with geo-tags on Flickr (3.4 per cent) and 639 photos by visitors (2.9 per cent). Clearly Hyllie does not receive the same kind of attention as Västra Hamnen and the historic centre, though a look on how this has developed over time will provide some context.

Lastly Rosengård will receive a closer look.

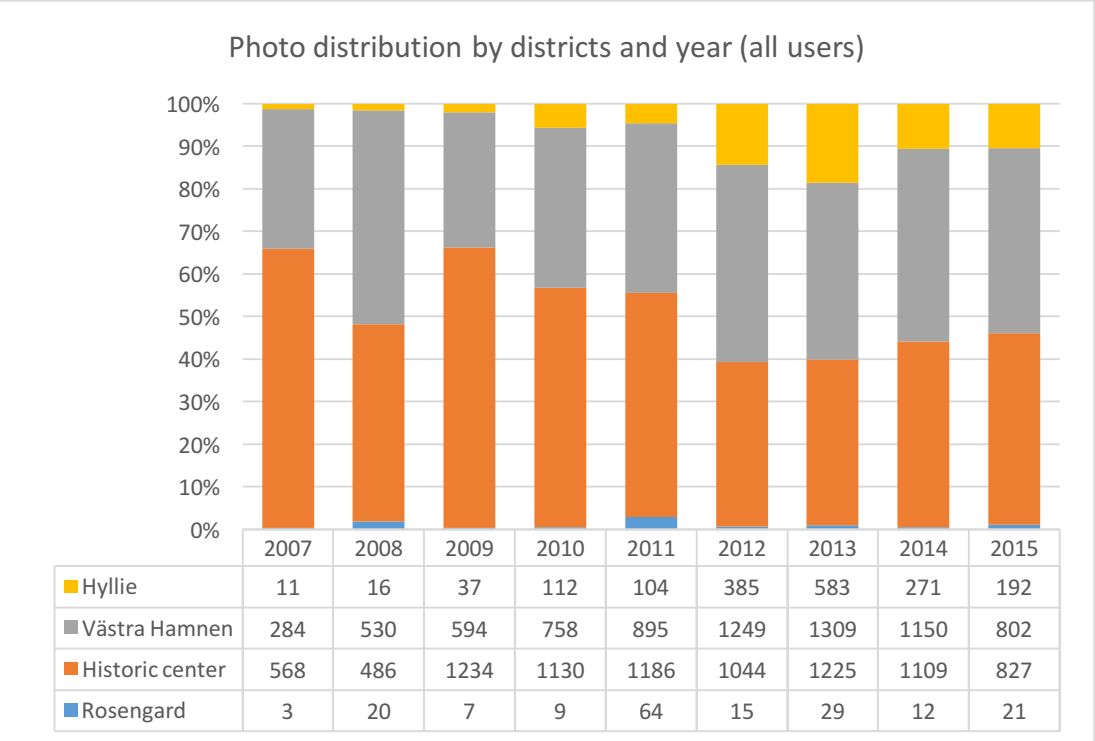
Fig. 21 - Heat map overview of Rosengård, Rosengård borders in white

As is apparent, there are almost no photos by visitors in Rosengård uploaded on Flickr. As an almost exclusively residential area this in itself is not a surprise, but still a valid indicator. There only exist 201 photos (0.4 per cent) on Flickr shot in the Rosengård area and only 82 by visitors in the sample (also 0.4 per cent). In both cases the amount and share of photos can be classified as negligible.

4.3.2. Photo distribution with temporal variation

After having conducted a visual inspection of the city and its focus districts, the following set of analysis will add an important time-factor to the investigation. This allows trends to be identified and as the hypothesised attempt of the city to replace

old with new in its image is still a "work-in-progress" will give insight if the city has become more successful in this or not.



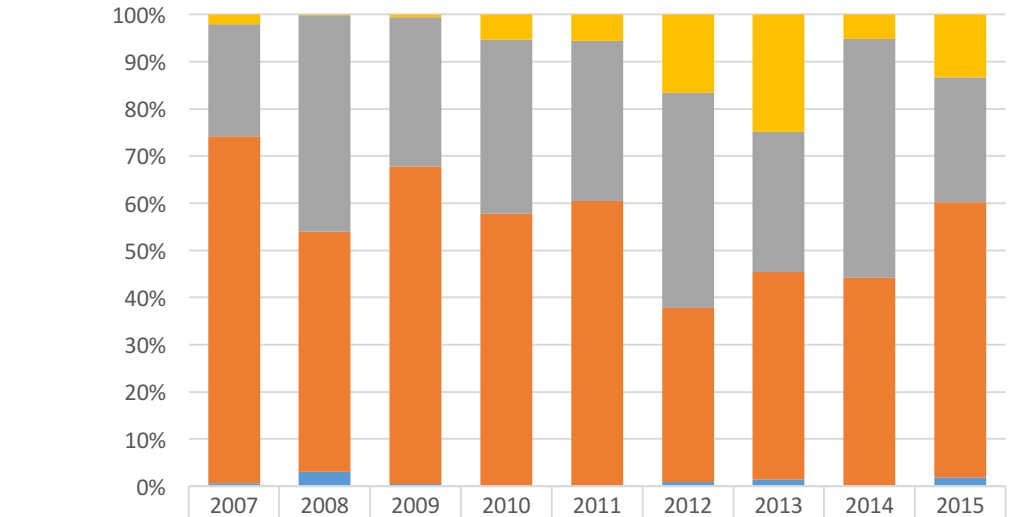
	2007	2008	2009	2010	2011	2012	2013	2014	2015
Hyllie	11	16	37	112	104	385	583	271	192
Västra Hamnen	284	530	594	758	895	1249	1309	1150	802
Historic center	568	486	1234	1130	1186	1044	1225	1109	827
Rosengard	3	20	7	9	64	15	29	12	21

Fig. 22 – Photo distribution of photos by district and year for all users

Firstly, looking at the relative numbers – the photo share of the historic centre dropped significantly from 66 per cent in 2007 and 2009 (with a single dip to 47% in 2008) to around 39 – 45 per cent in the 2012 to 2015 range. Västra Hamnen being only responsible for about 10 per cent of this development while Hyllie makes up the (higher) rest.

From an absolute numbers perspective, the historic centre topped out in 2009, stagnating from there. While Hyllie and Västra Hamnen have been growing until 2013, the stop in further increase can probably be accounted to 2013 receiving a boost through the ESC.

This data is for all users and as existing residents are not targets of place-marketing it therefore could be less representative in regards to the posed research question. Therefore, the amount of photos for non-residents only will also be discussed.



	2007	2008	2009	2010	2011	2012	2013	2014	2015
Hyllie	11	1	6	58	65	240	411	59	127
Västra Hamnen	125	287	324	400	396	659	494	581	254
Historic center	387	319	692	626	706	534	729	505	557
Rosengard	3	19	5	0	0	13	23	1	18

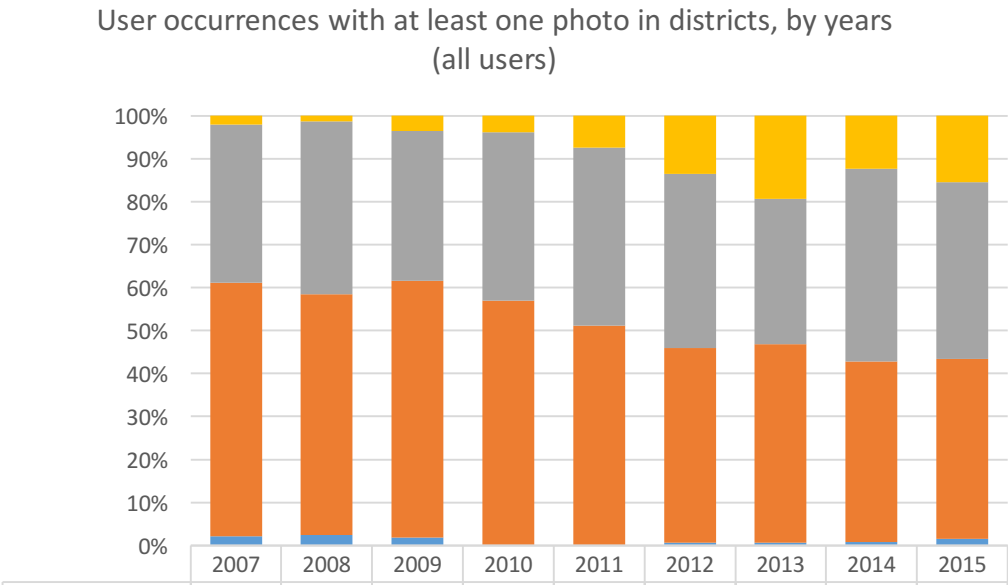
Fig. 23 – Photo distribution of photos by district and year only for non-residents

While still showing the basic trend of the all-user data, the results here are more erratic. As the sample in this case is significantly reduced (sample of all users having taken photos from 2007 to 2015 is 2853 while only including non-residents reduces this to 604) the erratic-ness could simply be caused by a reduced reliability. Still, as the trend of an increased relative share of photos in Hyllie and Västra Hamnen remains, it does support the hypothesis.

4.3.3. User occurrence distribution with temporal variation

The issue with this data is that the amount of photos a user has taken could confound the data – for example a single user who takes 10 photos will only have a 10^{th} of the impact a user that took 100 photos will have. Although it may mean that a specific building or view may be especially interesting and therefore "photo-worthy" (and the Geo-map shows such hot-spots) it is not as meaningful a data point in regards to how many people go there. Therefore, next, the number of users' occurrences, having shot at least one photo in the analysed districts comes into question. It is important for the understanding of this examination to shortly discuss the unit of analysis for this chapter. This unit is not users, but occurrences of users in the years. A user that shoots at least one photo will be counted once in

every year and in that year once for every district where at least one photo was shot in. A closer examination of the patterns that emerge in regard to combinations will follow in the subsequent chapter.

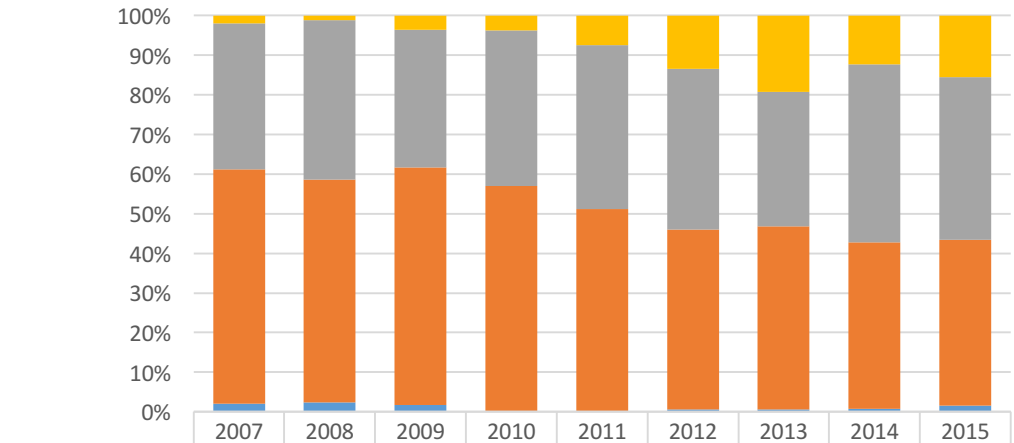


	2007	2008	2009	2010	2011	2012	2013	2014	2015
Hyllie	1	1	4	4	10	20	33	17	20
Västra Hamnen	18	33	39	42	56	60	58	62	53
Historic center	29	46	67	61	69	67	79	58	54
Rosengard	1	2	2	0	0	1	1	1	2

Fig. 24 - User occurrences by district and year for all users

This data shows a clear trend. Again, looking at the data from an absolute perspective the historic centre piques in 2009, as it did with the photo count, while Hyllie and Västra Hamnen reach their highest number of users in 2013, probably through the ESC. Rosengård develops no significant user-count. From a relative perspective there is another clear result. A change in the majority share occurs, where the historic centre had a share about 60 per cent in 2007, this is reduced on a constant basis to about 40 per cent in 2015. Though this change is only in small part due to an increase in Västra Hamnen, but most of the growth in the "new district" category can be attributed to Hyllie.

Here again all occurrences are considered and therefore residents could confound the data and conclusions, another sample was created only including non-residents.



	2007	2008	2009	2010	2011	2012	2013	2014	2015
Hyllie	1	1	4	4	10	20	33	17	20
Västra Hamnen	18	33	39	42	56	60	58	62	53
Historic center	29	46	67	61	69	67	79	58	54
Rosengard	1	2	2	0	0	1	1	1	2

Fig. 25 - User occurrences by district and year for non-resident users only

The cleaned data shows little difference to the all-user-including data, while the sample size is reduced (2853 vs. 604 users). As the behaviour of non-residents is primarily determining for this examination, this supports the conclusions drawn from the previous table.

In the above calculations if a user-occurrence made photos in more than one district they will be counted for every district, meaning that a user having shot a photo in the historic centre and Västra Hamnen will be counted for both districts. To understand the extend of this factor it was further analysed.

4.3.4. District patterns

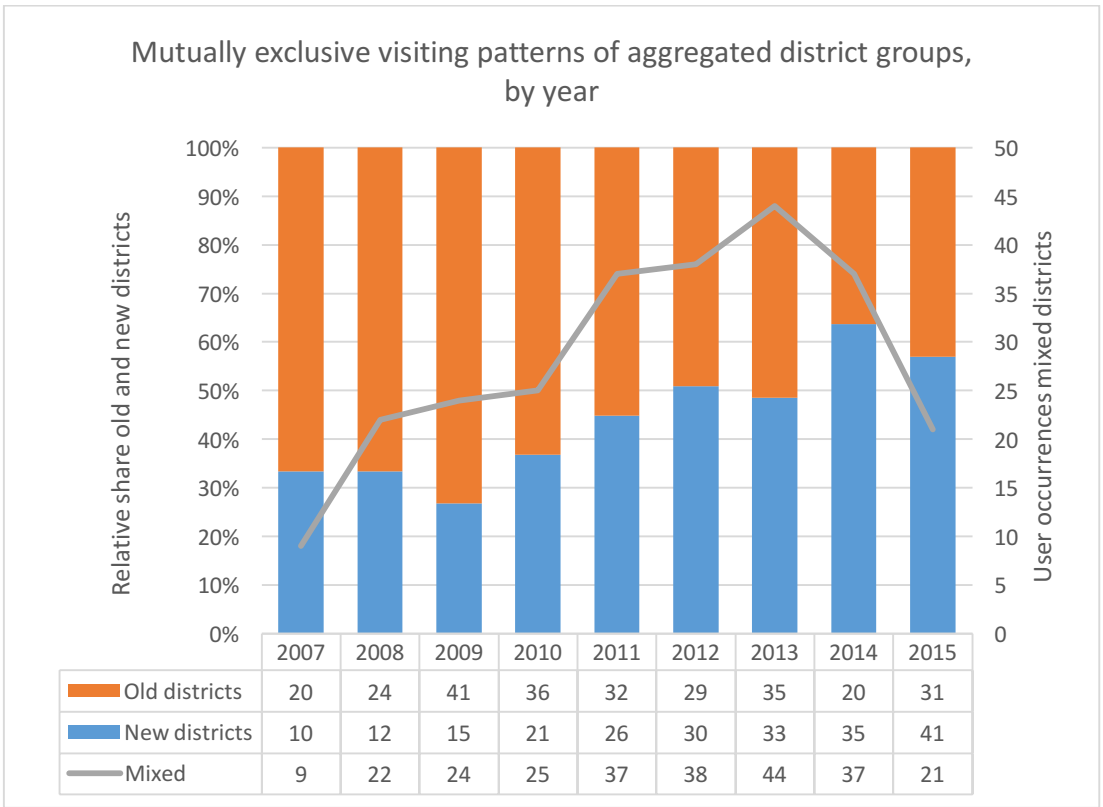
Fig. 26 shows the amount of visitors that have visited either none of the examined districts, one, two, three or four in the years 2007 to 2015 (meaning that shooting a photo in one district in 2009 and shooting another in a different district in 2010 will count as "visited 2 districts"). It reveals that 43 per cent, and therefore the clear majority, have visited only one district in their journey(s) to Malmö, which supports the city's numbers on

Visited 0 districts	108	17.9%
Visited 1 district	256	42.5%
Visited 2 districts	198	32.8%
Visited 3 districts	39	6.5%
Visited 4 districts	2	0.3%

Fig. 26 - Table of amount of visited districts

this topic. This, in tandem with users that have visited two districts (33 per cent) forms the biggest block. More than two visited districts are quite rare. About 18 per cent did not visit any of the examined districts at all. It is additionally interesting to look at which districts were visited, especially for the users that have visited more than one district. Fig. 30 (see appendix) shows a consolidated view on district visiting patterns over the years.

First, to further the understanding of pattern development over time an analysis will be conducted by aggregating the possible district combinations to the "old districts" (all combinations that feature exclusively, but not mutually exclusively the historic centre and Rosengard), the "new districts" (all combinations that feature exclusively, but not mutually exclusively Västra Hamnen and Hyllie) and the remaining mixed combination. The unit of analysis remains occurrences of users, as above. In comparison with the analyses conducted in chapter 4.3.3 this analysis will separate the districts into mutually exclusive groups. In other words: where the chapter 4.3.3 analysis checked if the user visited the district, this analysis will check if the user visited only one of the aggregated district combinations and no other.



	2007	2008	2009	2010	2011	2012	2013	2014	2015
Old districts	20	24	41	36	32	29	35	20	31
New districts	10	12	15	21	26	30	33	35	41
Mixed	9	22	24	25	37	38	44	37	21

Fig. 27 – Mutually exclusive visiting patterns of aggregated district groups, by year. Left axis pertains to relative share of old and new districts. Right axis pertains to absolute numbers of mixed districts.

This analysis findings support and even amplify the previous findings, but also reveal the temporal dimension. On absolute numbers, the old districts gain yearly user visits until piquing in 2009 and from here on experiencing a slight decrease in visits. The new districts though, gain visits in every single year from 2007 to 2015. Tellingly, while in 2007 the old districts had twice as many visitors as the new districts, in 2014 and 2015 this situation has almost reversed. This leads to the finding that in 2007 the clear majority of visitors saw only the old districts, in 2014 and 2015 the majority saw only the new districts, revealing a complete turn-around in interest.

For a more in-depth look of the above visiting patterns the following analysis will break the aggregated groups down to the combinations. The years 2009 and 2014 were chosen to compare the development of popularity. Though the analysis has previously usually started in 2007 the sample size would be too small for a singular view of the year and 2014 is latest full year available.

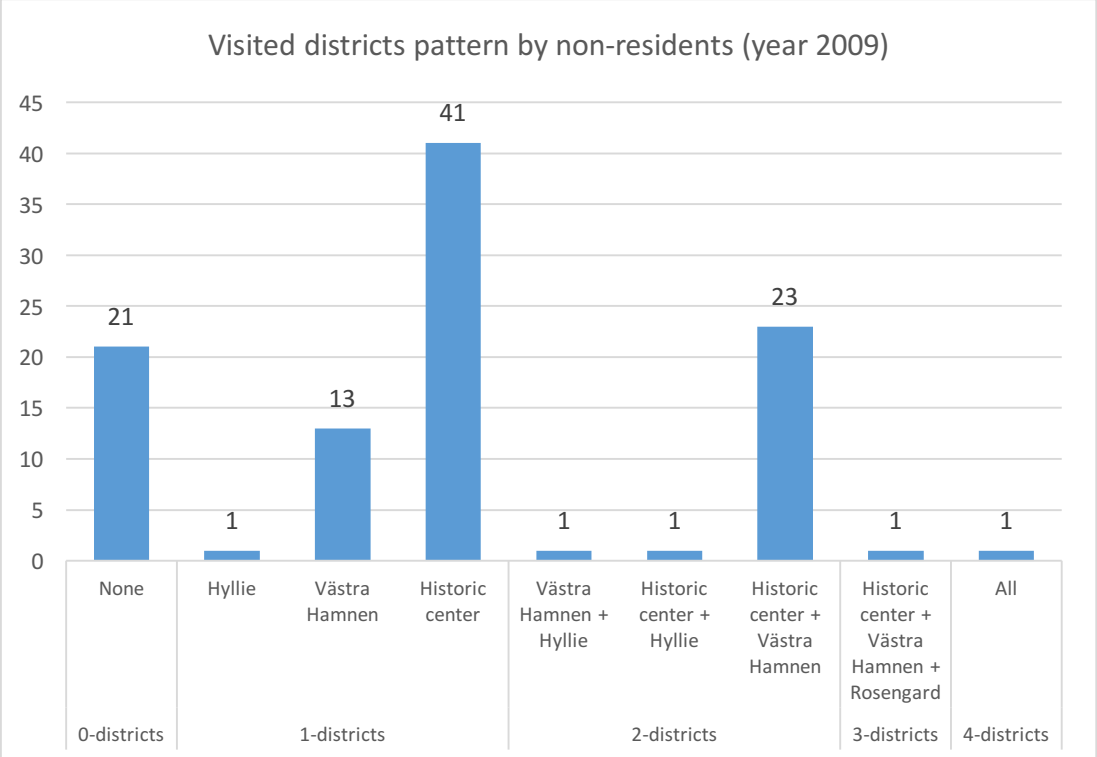


Fig. 28 - Visited districts by name and combination and amount, year 2009

In-line with the previous results the historic centre is more popular when looking at older data, in 2009 more than three times as many people visited only the historic centre and the combination of the historic centre and Västra Hamnen is now not

the most popular choice anymore, with the historic centre claiming this position. Other options play essentially no role.

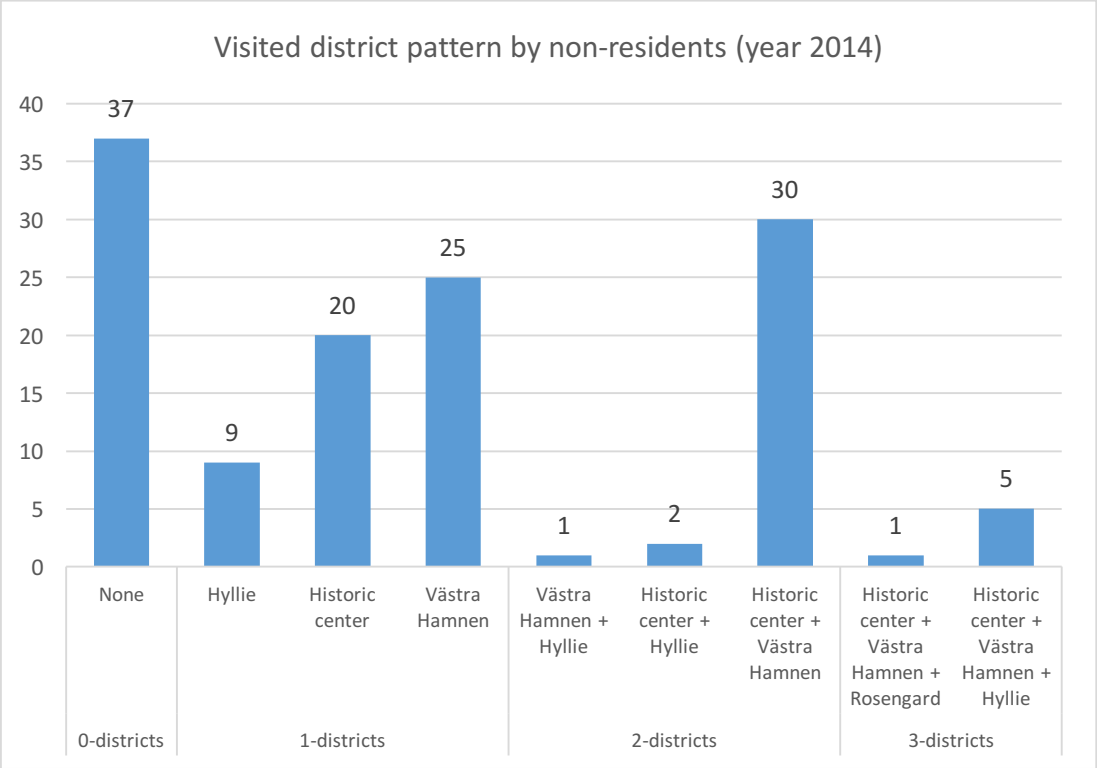


Fig. 29 - Visited districts by name and combination and amount, year 2014

The situation has turned around in 2014: Västra Hamnen now claims the first position in the one visited ranking, with Hyllie is a new contender. In total the historic centre plus Västra Hamnen combination has reached the first position, showing that an increased number of visitors now visit both, while the attention has shifted somewhat from the centre to the harbour. Still, aggregating results shows that the new districts have superseded the old districts.

The data analysis has shown that the city is at least in many parts successful in redrawing attention away from the old districts to new districts. The amount of photos, amount of users in one district or the combination of districts show that the new districts have gained increased attention, while the old stagnated. Though the district of Rosengård cannot be studied sensibly with the data at hand as the sample is too low, showing a constraint of the method as well as a lack of interest.

5. Conclusion

This thesis had a twofold goal, both formulated in the two research questions:

> RQ 1: How did transformation evolve in Malmö? How and to what effect did the city utilise place marketing?

For the first research question there cannot be a single answer, as in studying how transformation evolved in Malmö and how the city utilised place marketing the answer lies not in one sentence or aspect, but in the study itself. Nonetheless there are some key findings that expand on the existing literature. One of those findings is that Malmö's path was engulfed in external events more than the city would like to admit today. From trade with Britain facilitating the construction of the Kockums shipyards, to the decline of said industry and even to some degree the direction chosen for the city, external circumstances proved to be defining for a *unit* as small as a mid-size city. Though naturally not all developments originated from external causes: some actors and institutions proved to have had an important role. Especially noteworthy are the Malmö mayor Ilmar Reepalu and the Vision 2000 programme having their impact on directing Malmö on the path of sustainability and ecology. The concept of perceptions also proved to be an important factor, internally and externally, in the city's development. The visual path chosen by the city enabled support by the population and press, fostering compliance for the chosen path and therefore decisions were met with surprisingly little resistance.

Changing the perspective to external perceptions this thesis has shown that Malmö has been quite successful in marketing the city in general, creating the image of a modern and green city, though the brand-plans did open up some questions. Malmö uses green key-words extensively, especially "sustainable", to link Malmö's brand to this concept, while ignoring or even trying to hide the city's heritage. The city has also created a form of "standard" story of the transformation that is being used on every possible occasion. Social media and other Web 2.0 platforms are being utilised to spread Malmö's story. But the city has not been able to control the story completely, critique of a "shallowness" of the sustainability of the city have come up and press has reported extensively about the problem-district Rosengård.

Additionally, the Eurovision Song Contest held in Malmö has to be categorised as a huge, but missed opportunity. Lastly Guy Beaten's critical research has played an important role in forming this thesis quantitative examination. Beaten spearheaded a critique directed at Malmö for using city planning and, especially relevant to this thesis, place marketing to erase the city's troubled past and current social issues, replacing it with a brand of a clean, ethnic-free city, aiming to attract rich white people. Baeten's finding was adapted to test the successfulness of the city's plans.

RQ 2: Is the city successful in focusing attention to the city's transformed districts and steering attention away from its industrial past and current social issues?

To find an answer to this question, photos from the photo-sharing website Flickr were gathered and analysed. The movement patterns of the photographer are supposed to give insight into the popularity of the districts. The location of the photos was linked to the four districts identified to present old and new in Malmö. The analysis revealed clear hotspots in Malmö, showing that photos and also people are concentrated on the historic city centre, the new sustainable district of Västra Hamnen and to a lesser degree Hyllie. Closer examining the development through temporal variation and looking at user groups as well as the different combinations of districts that are possible revealed that the old district of the city core *was* undoubtedly the most popular district in Malmö for tourists and residents alike. But in recent years a trend has developed that started to change this, Västra Hamnen has become the most popular district for photos and unique users, while Hyllie has also risen in popularity. Analysing district combinations with temporal variation supported this finding, but has also revealed that although visitors increasingly visit the historic centre as well as Västra Hamnen, the majority now visits only the new districts. It seems the historic district has lost its power to attract visitors singularly to itself. The problem-district of Rosengård has attracted only very little photos and users, uncovering its low popularity, but preventing a deeper analysis. One can subsume that the findings indicate that the city is successful in focusing attention to the new districts.

Though, the question to the limitations of this indicator remains. Does an increased number of photos and user count in the new districts actually mean that the city *is* successful in overwriting the past? This cannot be answered with complete certainty and the link between this indicator and the concept could be stronger, representing an issue for the external validity of the research. Ultimately, I argue that the operationalisation is sufficiently successful to give an answer to the second research question and that the findings of this thesis can legitimately enrich the existing qualitative research that is based on literature review, content analysis of primary sources and interviews by adding the first quantitative and also spatial-based indicator to the mosaic of research.

The answer to the research question is closely connected to the findings, but previous research results also add to it. As was discussed in the methodology the question has two main aspects: First asking specifically if Malmö has been successful in focusing attention to the transformed districts and in the second part asking, on a higher level, if the city was successful in "hiding" its industrial past and present social issues.

Answering the first aspect of the question is much more straight forward. Malmö has been quite successful in increasing attention directed at the new districts and this is even amplified when realising that "focus" asks more for singular attention at one thing. Aggregating the districts into mutually exclusive district types of old and new districts has shown that while in the past the majority of people only visited the old districts, in recent years this has changed to the majority of people only visiting the new districts. The second aspect of the question can only be answered by incorporating the findings from chapters two and three. With regards to the findings, the replacement of Malmö's industrial past can be called a success. Malmö has built that past away, industry in Malmö is unequivocally linked with the past, both the qualitative and quantitative examinations have had the same result in this regard. The prevalent social issues, on the other hand, do receive considerable attention and the city is therefore not successful here. While the photo geo-mapping was shown to be unsuitable in studying Rosengård, especially press

attention is a clear indicator towards Malmö's dual-city image of sustainable city transformation and social unrest.

For the city, the findings are positive, as it means their concept of replacing old with new is mostly successful. This conclusion also opens up the question what this actually means for Malmö and on a bigger scale for other cities on a similar path. In the introduction Malmö was called a "possible prototype" for sustainable city planning and I want to argue that while Malmö could definitely be utilised as a prototype, from a normative point of view, that may not be for the best. This thesis has shown that Malmö's transformation was in part more an, albeit mostly successful, exercise in communicating the perception of transformation and sustainable city planning rather than executing it on a wide *and* deep scale.

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Appendix

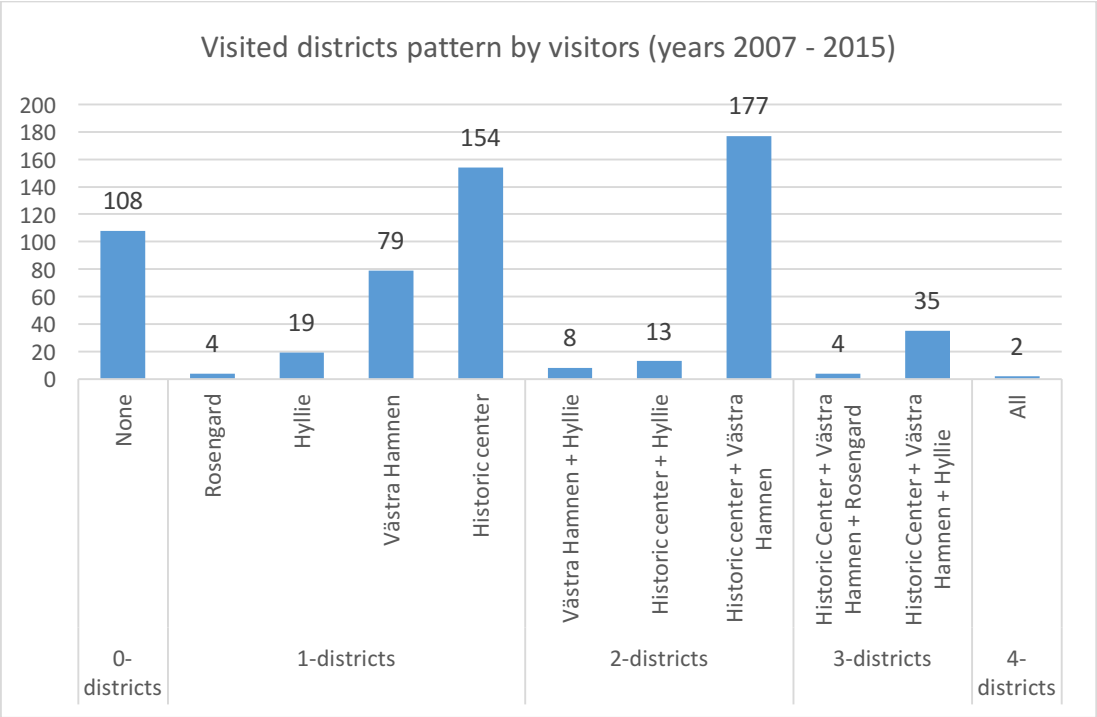

Fig. 30 - Visited districts by name and combination and amount, years 2007 and 2015

Fig. 30, as does fig. 26, aggregates multiple visits over the years. There are a few interesting takeaways from this – firstly, for users that visited only one district over the course of the years the historic centre is almost twice as popular as Västra Hamnen. It appears that Västra Hamnen as a place cannot create as much attraction as the historic centre for visitors stopping by for only one place (or is less known). At the same time the (simple) majority of users visit both the historic centre and Västra Hamnen, this could be connected to the fact that the Turning Torso in Västra Hamnen is only 3.1 kilometres, or 30 foot-minutes apart from Lilla Torg in the city core. Other combinations are by far not as popular or only when the historic centre and Västra Hamnen are included. With a distance from Lilla Torg to Hyllie and Rosengård being 5.5 kilometres and 4.3 kilometres respectively and both taking either a few minutes less or more than one hour on foot, this may play a role. Visiting the historic centre and Västra Hamnen seems almost to be a prerequisite when going to Malmö.

Declaration of Academic Honesty

I hereby declare that to the best of my knowledge and belief, the bachelor thesis in hand on the topic

Putting Malmö on the Map - Studying the city's transformation and the effects of its efforts in place marketing through a spatial analysis

is the result of my own independent work and does not make use of other sources or materials than those referenced and that quotations and paraphrases obtained from the work of others are indicated as such.

Münster, 23.09.2015