Urban Waterfront VS Suburb, Different Characteristics of Public Space of Malmö city — A comparative study about public space of Västra Hamnen and Hyllie in Malmö.

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Abstract
This paper sets out to compare public spaces at two locations with different identities and characteristics, one located at the urban waterfront and the other located in the peri-urban suburban land of Malmö city. The purpose is to manifest what constitute the urban planning strategy of Malmö in the first decade of 21st century and how the guidelines of detail plannings embody and characterize the planning strategy. So far, the focus of the urban planning strategy of Malmö has undergone several changes since the comprehensive plan in the 1950s. After entering into the new millennium, the attention of Malmö’s urban planning strategy was paid to the attractiveness of the city, integration of social life, regional center development as well as sustainable issues, and the pace of Malmö’s change has once again picked up speed after several ‘silent’ decades. Different detail plannings which follow this vision are still on the way. But how do the design guidelines differ when applied to varied sites within Malmö city? The study focuses on public space and the social life there. It is acknowledged that life in public space is influenced by the use of buildings and the interface between public and private. A comparative study on two developing sites in Malmö is conducted as the strategy to analyze how the public space and social life consequently are characterized by the specified contexts, by the means of observation as well as comparing maps and plans of each site. The two selected sites are respectively Västra Hamnen representing urban waterfront and Hyllie which represents the suburb of Malmö. By comparing the two cases from different aspects, it is suggested that, even though developed within the same period of of Malmö’s development and with similar strategies like sustainable approach and improving inhabitants’ living environment, urban waterfront and suburb express different appearances at most aspects. The comparison shows that Västra Hamnen has the characters of combining various activities in its public spaces attractive to a range of people, with higher priority to pedestrians and cyclers and with the vicinity to the city center, etc. Meanwhile, the longer distance from the city center does not cut Hyllie away because of its good tunnel connection and car friendly planning. But the public spaces express more efficiency than enjoyment as Västra Hamnen provides and the attraction is associated to the events organized from time to time.

Keywords
urban waterfront, public space, urban revitalization, suburb, Västra Hamnen, Hyllie, Malmö
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1. INTRODUCTION

1.1 Background
Malmö, which is the third big city of Sweden after Göteborg and Stockholm, with a population of 302,835 (January 1st, 2012) (Malmö Stad, 2012b), is a port city located to the southwest of Sweden, in the center of the Öresund Region with excellent connections in all directions (Image 1-1). Since the turn of the century, the city has gained great attention both internationally and regionally because of its gate role connecting Sweden with Copenhagen, the capital of Denmark by the Öresund Fixed Link as well as a series newly development within the city such as the City Tunnel, the new University College and the international housing exhibition Bo01. (Malmö Stad 2000) The emphasis of Malmö’s urban development itself, since the beginning of this century, is the city attractiveness, social integration, sustainability and so on so forth.

Image 1-1 Situation of Malmö Internationally and Nationally (Made by author)

The focus of Malmö’s city development has been changing according to the time as every decade a new comprehensive plan was established. For example, the focus during the 1960s and 70s was the expansion urban structure for the increasing population of the city (Image 1-2); and the conditions for the overall planning in the 1990s were identified as the uncertainty about the prospects for the city's expansion, the environmental problems, changes of land use as well as the fixed link across Öresund. (Malmö Stad 2012e) Each period has its own points of emphasis. But since the 1970s, the speed of development of Malmö has been slowed down
which can be seen from image 1-2 that the construction of residence across the city has been dramatically reduced.

After several ‘silent’ decades, the pace of change has once again picked up speed dramatically after entering into the new millennium. ‘The city’s long-term vision is for Malmö to occupy a significant position in the Öresund region, to develop into a city firmly rooted within the new European borders and having close international and cross-cultural links. It will be a city of up to date technological advances, providing regular employment and an ecologically-sound living environment – all in a region which is clean and healthy, centres round the Öresund channel, and enjoys to the full, the rich leisure and recreational advantages of the surrounding area.’ (Malmö Stad 2000)

The comprehensive plan of Malmö in 2000 set several primary goals reflecting these abstract visions of the city as: to continually develop as an attractive city for living and working in; social life in Malmö to be improved by creating a lively, attractive and pleasant public areas and all-round composite city districts that encourage integration; to strengthen its role as a regional centre in Skåne and southern Sweden as well as the Öresund region; and promoting an environmentally- friendly traffic system, limiting the exploitation of valuable natural resources and reinforcing biological diversity, to safeguard Malmö’s ability to develop a robust and sustainable society in long term (Malmö Stad 2000).

In order to fulfill these goals, several detail plannings were conducted within the framework of the overall planning strategy for example: Bo01, Universitetholmen, Bunkeflostrand, Yttre Ringvägen, Hyllievång and Svågertorp, etc. (Image 1-3, 1-4). All these updates of the urban structure, most of which are outside the traditional city center, contribute to the city’s future visions in some way, by following the primary goals of the comprehensive plan.
1.2 Research Motivation and Aims
The first decade of the 21st century has passed, and some of these detail plans have come into reality to some extent, even though not fully completed. For example, Västra Hamnen has undergone a mid-term examination done by the municipality—Halvtidsutvärdering av Västra Hamnen (Malmö Stad 2011a), which investigates its achievements and distance from its own goals. It is this decade that witnessed the implementation of the urban planning strategies with the new focuses and visions in the new century by these new development.

However, these detail plannings have their own identities which actually enrich the content of urban planning strategies for the city. The guidelines differ from place to place because of their own unique contexts. So what constitutes urban planning strategies in Malmö in the first decade of 21st century stays unclear from each site context which make up the whole planning strategy. The answer to this question will somehow play a similar role as the ‘Halvtidsutvärdering av Västra Hamnen’, but at a general level of the whole city. This will on one side examine the undergoing projects if they are following the same directions as the new visions described, and on the other side manifest the characteristics of the guidelines implemented within different
specific contexts. By answering this research question, it is also possible to see how the outcomes of public spaces and social life accordingly differ from one site to the other.

So the research question of this thesis could be described as: What constitute the urban planning strategy of Malmö in the first decade of 21st century and how the guidelines of detail plannings embody and characterize the planning strategy.

1.3 Thesis Structure
The thesis consists of mainly seven parts after this introduction. The coming chapter deals with the methodology of this thesis, explaining why the comparative case study was selected and why the two specific sites in Malmö were chosen. And what theoretical framework was adopted for different points of view, as the comparison was conducted at different level. After the theoretical framework, came the method of collecting necessary data for comparison. Chapter 3 discussed the changing face of urban waterfront in a general historical context, the history started from what are the situations of the two studied areas at present and then cast back to what the Västra Hamnen looked like before and how Hyllie was constructed. The evolutions of them were described. And then came to the new tensions between water and city, land and city aiming at addressing the potential problems and possibilities. This is the historical context. Chapter 4 concerned how the different locations of these two study areas became the factors shaping the public space, including the different distances to the city center, different natural recourses obtained from each area and different social identities for residents behind the natural ones. The redevelopment of urban waterfront somehow signifies the transferring focus from the sprawl back to the inner city, while the still on-going suburb constructions signify other merits valuable there. This belongs to geographical context. Chapter 5 discussed the public space at urban waterfront and suburb area within the sustainable context, which has become popular trend among cities to develop themselves. Here three focuses were put on the waterfront and suburb—different mix-use types and different infrastructure. This is within the strategical context. Chapter 6 went deeper into the site with the analysis of the hierarchy of the public space, focusing more about the conflicts between the public and private sphere. And Chapter 7 paid attention to the factors how people were involved into the public space and the different public lives achieved by the two sites. These two chapters together make up the spatial context for the research. Then Chapter 10 conducted some conclusions from previous analysis and comparisons.

2. Methodology
In this chapter, the reason why comparative case study was utilized as the strategy and the criteria of selecting the cases are further explained. Besides, since the comparing between urban waterfront and suburb was from different points of view, different theoretical frameworks were adopted, which will be explained in the second part of this chapter. And in the last part of this chapter, how the empirical data was collected, mainly by observation and documents, will be paid attention to.

2.1 Cases Selection Process
As explained in the motivation and aim of this thesis in last chapter, the purpose of this thesis is to understand what constitute the urban planning strategy of Malmö in the first decade of 21st century and how the guidelines of detail plannings embody and characterize the planning strategy. In order to answer the content of the strategy, one way which could be good is to jump
deep into the guidelines to see the guidelines from different contexts. And this make the case study approach an appropriate way. A case study about the planned public spaces and the social outcomes will embody the guidelines and the planning strategy from realistic aspects. Further, if the case study is made in a comparative way, not only the content will be shown but also how the planning strategy is characterized is manifested.

So the case study approach is applied to have an understanding in depth on different public spaces from varied sites of Malmö. And there are several merits by applying this approach. Firstly, public space under each situation and its guidelines have their own realistic carrier instead of general image. In the case of this thesis, public space at urban waterfront is embodied by Västra Hamnen and the opponent suburb is embodied by Hyllie (the selection will be explained below). Then the object can be observed or described from specified reality. Secondly, the study of each situation can be conducted in depth instead of in breadth. The strength of case study enable researcher to study things in detail. (Denscombe, M. 2007) And in this thesis, public space at each site is going to be studied in detail from different points of view. Lastly, case study approach considers the case as a whole, to discover how other parts affect one another. (Denscombe, M. 2007) As different points of view were provided to examine the public space at each site, it is appropriate to apply case study as strategy to hold them as a whole. The aim of redeveloping urban area is, at least one aspect, to engender good city life in general. And experiences can be gathered from previous projects for better performance of coming ones, which shows another preference of the method---case study.

After the comparative case study is confirmed as the strategy to conduct the research, it is necessary to choose the study areas accordingly in the next step. Until now, there are still mainly three expansion areas going on within the city: Västra Hamnen, Hyllie and Norra Sorgenfri, two of which are selected to be the study areas (Image 2-1).

Västra Hamnen is a district designated as a national example of sustainable design. The expansion of the Västra Hamnen is a high priority and the aim is to create a diverse city that is ecological, economic, and social and urban sustainability. (Malmö Stad, 2012a) In this thesis, Västra Hamnen represents the urban waterfront of Malmö city which has its own characterized guidelines.

Hyllie is a neighborhood that is strategically important public transport mode. The new City tunnel station is expected to become the area's center of gravity and planning for the area's first housing (about 1700) around the east-west street in progress. (Malmö Stad, 2012a) In this thesis, Hyllie represents new suburban development as the opponent to the urban waterfront of Malmö city.

The two expansion areas--- Västra Hamnen and Hyllie--- are within the same phase of Malmö's development, with similar size and are both designed in sustainable strategy, etc. Because of these similarities and comparable factors, they are suitable for this research to conduct the comparison between detail planning sites within Malmö, to find out what constitute the planning strategy and how it was characterized by different contexts across the city.

Besides the explanation of the comparative case study approach of this thesis, it is also necessary to to explain the main objects. The guidelines of each site make up the urban planning strategy of the whole city, but how are these guidelines embodied? The built
environments are the direct reflections to the guidelines of different detail plannings. In order to illustrate the guidelines, the best way is to understand the built environments, which in this thesis is the public space. The social aspect is also mentioned because it is also one important goal described in the comprehensive plan’s primary goals. Meanwhile, it associates with the identity of the place as well as supplement the consequences of the public spaces. So the main objects of the case study in this thesis are the public spaces and its social life consequently.

![Image 2-1 Location of Västra Hamnen and Hyllie (Malmö Stad, 2010a)](image)

2.2 Theoretical Framework

As different angles---historical, geographical, strategical and spatial contexts---were imported to examine the identity of each public space, different theories were adopted for different contexts as theoretical framework. Before these theories are introduced, it is necessary to explain why there are different contexts to examine the same object---public space.

It was inspired by Ali Mandanipour’s book---“The Public and Private Spaces of The City”, in which he discussed and compared public and private space thoroughly, by the means of separating the definition of public and private at different levels, or in other words, from different points of view. Because the comparison between public and private is such a amphibolous definition: one can say everything inside our body or mind is private and outside is public; one can say everyone occupies some sphere around him/herself like a bubble, if others invades into it he/she will feel the private space aggressed; one can also say the room or the house or even the space inside a vehicle is something private which belongs to the owner; etc. (Madanipour, A. 2003) So he divided the object into several levels and discussed and compared from different
angles. Here in this thesis as well, the object—public space of urban waterfront and suburb area—can be defined and associated with different contexts, as how these public spaces evolved with the time, how they behaved according to the distance to the city center, how they are designed in a sustainable approach and how their inner arrangement affect the people who utilize them. For sure there should be other factors like financial and political ones affecting the faces of these public spaces, but in this research, the factors associated more with the built environment are taken into consideration. So the thesis study scope is within the four: historical context, geographical context, strategical context and spatial context.

For the historical context, it is more about the facts description of evolution process of each site, what the present status is and what the origins of these two sites are. For the geographical context, the theory of sense of place is applied to have general comparison between two cases, how the general image and natural resources separate them from each other. Some ideas from postmodernism were also applied to see how people are chasing after the identities for themselves. For the strategical context, mix-use/ sustainable infrastructure/ density ideas from some advocators of the sustainable strategy for redeveloping the city was adopted to analyze the life at the waterfronts and suburb, to examine if the sustainable approach is applied differently in different area of the city and if these differences create different public life. For the last context—spatial context—the ideas from Ali Madanipour was taken as the reference to discuss the conflicts between the public and the private sphere, in other words—the hierarchy of the space; besides the ideas from Jan Gehl in his book “Life Between Buildings” and “Cities for People” were adopted to compare the public life between urban waterfront and suburb area in public spaces.

All these theories together, composed the framework of complex examination of the constructed projects, they were not applied separately within each context or topic only. Instead, they overlapped with each other from time to time as the public space, from different points of view, has different meanings. For example, the sustainable approach can also be mentioned in the spatial chapter in order to explain some phenomenon associated with it.

2.3 Observation and Documents
The methods to collect empirical data for this research are mainly observation and documents. Observation mainly covers the aspects of public life in public spaces which cannot be found in the official maps or documents. For instance, the different waterscape and landscape from each sites and how people use the public space differently in each sites belong to this method. Documents mainly consist of the plans and maps of each site in different scales and the figures and facts about each sites, the land use and density for example.

3. Historical Context---Along The Historical Axis
In this historic context, the changing appearance of the public space at urban waterfront and suburb is the main object. By comparing with the old port area in history, the evolution process of Västra Hamnen manifests how public space was used during different age at the port and how people settled down at the waterside once upon a time. On the other hand, new suburb development is going on because of the node situation, by comparing Hyllie itself with its previous appearance, the transformation of the public space in suburb can be read. Further on, the new tensions at the harbor and suburb will be revealed.
3.1 Background of the two sites
It has been eleven years since the exploitation of Västra Hamnen (Image 3-1) and the old industrial land is converted progressively to a dense urban area. Residential, offices, schools, meeting places, bathing, etc. have been built and Västra Hamnen has become a popular homes and workplaces. Within Västra Hamnen there are about 4,500 residents (2011), about 10,100 gainfully employed (2009) and about 10,300 fulltime students at Malmö University. (Malmö Stad, 2011a).

The planning of Västra Hamnen area actually began in 1997, and the initiation of the project began with the decision to hold a housing exhibit called Bo01 in Malmö's Västra Hamnen in 2001. The area Bo01 is a climate neutral city development. It is a demonstration project and received financial support until the EU. Bo01 was successfully completed in 2001 but the area continues to develop and evolve with new residential and commercial buildings being gradually added. (Malmö Stad, 2008a)

The idea to extend Hyllie area can be dated back to 1960s. But it was only in the context of deciding on the city tunnel that the expansion began in earnest. With a station in Hyllie, a new center (Image 3-2) will be created in southern Malmö and also a profile area for the entire Öresund region. When fully built, the area will include approximately 9000 dwellings, and as many workplaces. The unique communication mode associated with urban areas, park areas and the Scanian landscape creates an attractive environment for residents, visitors and businesses. (Malmö Stad, 2012c)

The mayor of Malmö, Illmar Reepalu described the new development at Hyllie as an expression for the modern, young, cocky, international, expansive Malmö. “If the West Harbor has a profile directed against sustainable urban development, education, media, innovation environments and IT, Hyllie can develop into a likewise sustainable neighborhood, but with international overtones and a strong focus on visits to industries”, said Illmar Reepalu.
Västra Hamnen has undergone major changes in its relatively short history. From being housed one of the world's largest shipyard and a shorter time with the car, it has now become a residential and office area, together with a university. The conversion applies not only to the area's businesses and buildings but also the area in a physical sense. 100 years ago there was almost nothing of what is now Västra Hamnen. It was only the increasing industrialization that triggered the expansion of Malmö's harbor. (Malmö Stad 2005a)

The port's expansion really started since the Industrial Revolution in the late 1800's. During the 1840's and 50's, the harbor was built by cutting a triangular area west of the harbor and gradually filled out (Image 3-3). During the 1870s, Kockums Mechanical engineering became established in Västra Hamnen, and the company expanded both its production and its ownership of land in Västra Hamnen through pads in the strait.

There were no fillers until 1940s that Öresund was filled out west. Between 1945 and 1948 the foundation was provided by filling out for the area where the old Saab factory and Bo01 today are located. The fill in Öresund is at about 200,000 square meters with the advent of two slipways, a dry dock, expanded machine shop and a new sheet metal shop. The expansion of the Västra Hamnen in Öresund increased the capacity by fifty percent. (Image 3-4)

With the oil crisis and international recession that followed, while increased competition, particularly from shipyards in Southeast Asia, Kockums Mechanical engineering began to decline after the 1970s (Image 3-5). About the same time as Kockums discontinued its civilian shipbuilding announced Saab-Scania plans being established in Västra Hamnen. After renovation of Kockums Hall 7 moved Saab into one of Europe’s most modern car plants. This led inter alia to the recent filling of Västra Hamnen. The great basin was filled again, and was part of SAAB-establishment of Västra Hamnen. (Image 3-6) In 2001 was opened west of Malmö Exhibition Bo01, which marked the start of the Western Harbor as it looks today. (Image 3-7) (Malmö Stad 2005a)
Image 3-3 Västra Hamnen in 1870

Image 3-4 Västra Hamnen in 1965
Image 3-5: Kockums Shipyards

Image 3-6: Västra Hamnen in 1986
3.3 Evolution of Hyllie

Comparing with Västra Hamnen which has been evolving since the 1870s, Hyllie is an even younger developing area, with the image associated with farm and green landscapes. There was only the Hyllie vattentorn standing before the train station constructed. (Image 3-8)
3.4 New tensions between water and city, land and city
The space of urban waterfront has long been occupied by port activities, for example shipyards and manufacturing. These activities are far away from citizens normal life except who work there, and this alienation has lead these areas strictly guarded and inaccessible to the public (Sairinen, R. and Kumpulainen S. 2006). The image of urban waterfront is something noisy, steely and manufacturing associated with industry.

But now the traditional industrial urban waterfront changed its face, forwarding to a knowledge and habitat site. The Kockums crane was dismantled and shipped to South Korea in 2002. Now the Turning Torso tower symbolizes the post-industrial Malmö. (Malmö Stad, 2008b) Västra Hamnen representing a new modern neighborhood with residential, commercial and municipal service grows.

Then the new tension between water and city is no longer about how to increase the efficiency of the port industry, while it is about how to improve the living environment in this post-industrial area as well as providing citizens from other part of the city or out comers with enjoyable sighting spaces. The strength of the public space at urban waterfront lies at its unlimited waterscape view attracting both people to live there and pay a visit to. While the challenges still exist, for example, the industry has long cut the site away from the city and how to integrate it with the city again.

The suburb space, which used to be the farm and green areas, is heading for another sub center away from the old city center. The excellent location of Hyllie provides great opportunities to develop this sub center, even though there was nothing but agriculture and wildlife before. With the newly developed City Tunnel, both Copenhagen and center of Malmö become just minutes’ commuting distance.

Here, the tensions between land and city become both regional and local. From the regional perspective, demands of visitors forwarding for the events held there need to be paid attention to. On the other hand, the public space is also shared by the local residents who choose to live there, for them, the other values in a smaller scale, more important, such as moderate-sized residential area with nice yards, close to parks and access to good schools and municipal services. (Malmö Stad, 2012d)

4. Geographical Context--- Locality of Urban Development
In this geographical context, comparison between the urban developments at different locations of the Malmö city will be conducted. No doubt, different development phases are across the history of the city development, but the special locations and how the city arranges these areas characterize each development process. So by this competing ideas between different locations, it is aimed at showing how the public space is shaped and what social sequences are resulted from the revitalization at urban waterfront and newly developed suburb of Malmö, and how different geographical resources play a role.

4.1 Vicinity to the city center
In this section, the focus is on the distance to city center. It is about how the urban waterfront and suburb of the city with different vicinity to the city center influences the usage of the public
space. Movement and access are important issues for this section, with the analysis of how Västra Hamnen and Hyllie are connected to Malmö’s city center.

Hyllie, representing a new suburb center, has almost three times distance to Malmö’s city center as Västra Hamnen does. (Image 4-1) This distance difference generally determines that the spaces of Västra Hamnen have more opportunities to integrate with Malmö’s city center than Hyllie’s. But there are also other factors affecting this integration, as travel time, travel convenience and accessibility.

Travel time
As Västra Hamnen locates nearer to the city center, it has more choices to travel like driving, bus, bicycle and walk for this short commuting. And here the public transport--- city bus --- is selected to evaluate the travel time. There are two city bus lines (Image 4-2) (Image 4-3) connecting Västra Hamnen and the city center. And it takes around ten minutes from Västra Hamnen to the station, where further transition is possible. During the day time, the bus departs every five minutes which is quite high frequency for public transport system. This frequent and short-distanced public transportation between Västra Hamnen and city center guarantees the movement for both residents who travel sustainably and visitors who have a sighting at Västra Hamnen.

While for Hyllie, unlike other normal suburb area, the transportation depends more on the city tunnel (Image 4-4) to link directly with the city center. Even though there are city buses connection from Hyllie as well, but they head more for other parts of the city. So the train commuting is selected to evaluate the travel time for Hyllie. Although the distance between Hyllie and Malmö center is longer than Västra Hamnen, but the travel time is even shorter.
because of the fast train connection. It takes only 6 minutes from Hyllie to Malmö C and 3 minutes to Triangeln though the city tunnel. Besides it has extra merits for Hyllie to link Copenhagen directly. (Hyllie 2012) And the frequency of the train varies from 5 minutes to 10 minutes during the day time which makes the commuting quite fluent. The city tunnel differs from normal metro system which involve quite many stops and distribute people along the metro lines, while this tunnel system improve the center position of Hyllie where people living around gather there firstly heading for the city center.

Travel convenience
The public transport like the city bus connecting Västra Hamnen and other parts of Malmö provides quite much convenience for local and others. Besides the public transport, quite many people choose walking or riding bicycle as Västra Hamnen leads the sustainable development of Malmö. How the public space provides proper infrastructure for the bicyclers and walkers will be discussed in the coming chapter about the sustainable strategy. While to compare the travel convenience here, the city tunnel has more strengths than others because it has less possibilities to be disturbed by other transportation approach. For example, the weather and the traffic jam will affect the ground traffic quite much. From this point of view, Hyllie actually provides more travel convenience than Västra Hamnen.

Accessibility
The different transportation status and role of Västra Hamnen and Hyllie determines their different accessibility. Västra Hamnen used to be an industrial area which needn’t much accessibility from the city. To access Västra Hamnen area, there are mainly three connections serving as this function. This leads to further isolation of the public space of Västra Hamnen from the city because of the limitation of accessibility. (Image 4-5) But this limitation of accessibility has its own two sides. At one side, it isolates the harbor area. But on the other, it somehow reduces the usage of car driving because of the traffic jam.

Image 4-4 Commuting train passing by Hyllie
Source(http://4.bp.blogspot.com/_ef5Evefepq4/TK2h7ecVTPI/AAAAAAAACo/vluzELA6RVQ/s1600/Citytunnel_hyllie.JPG)
At the opposite side, Hyllie is designed to be the traffic node in Öresund region. Even though the long distance between Hyllie and the city center will lead to low integration, the city tunnel makes it accessible greatly. It works as a remote city sub center, gathering people either to live or to participate events in Hyllie or sending people to other important places like Copenhagen and Malmö.

According to these three aspects, the traditional suburb image which used to be far away from city center and time-consuming on transportation is broken. Hyllie as a newly developed suburb area performs even better than the harbor area which is near to the city center functionally, especially at the transportation aspect, with frequent and fast train connection. But this doesn’t mean that the harbor’s vicinity to city center performs badly. The vicinity enables people to choose bicycle and walking which contribute to the sustainability of the city and the coming chapter will pay attention to the built environment for these sustainable infrastructure. And no matter how fast the city center can be reached from suburb, there is the sense of place living away from the city which will be discussed in the coming section.

4.2 Landscape VS Waterscape--- Sense of Place (Natural resource)
This section discusses about different possibilities to utilize the public space by comparing landscape in the suburb and the waterscape at the urban waterfront. It focuses on the accessibility to those different natural resources, types of activities and so on so forth.

Once the city decided to bring public life back to the waterfront, splendid and open water view, fresh air with smell of the water, tourism on the waterlines had become the attractiveness for the public. On the contrary, the green at the suburb forms another landscape for the residents and public.
During the industrial era, urban waterfront was taken more as the working space or shipyards instead of serving as waterscape for citizen’s sighting or other public activities. But with the decrease of industrial activities, Malmö city is transforming itself into a knowledge city. (Malmö Stad, 2008a) So the port area is released to accept more citizens. As described in the background of this process, it is still a trend since the 1970s, and the need of public to access waterfront and the conservation of waterfront biodiversity as a natural resource have become an increasingly typical issue in urban policy. (Sairinen, R. and Kumpulainen S. 2006) Västra Hamnen is developed in this situation and characterized by the excellent waterscape.

The image of urban waterfront and suburb differs from each other quite much from normal sense. To compare this waterscape with landscape of Hyllie in order emphasizing each character, the concept---sense of place--- is imported here. According to John Montgomery’s diagram (Image 4-6), the sense of place is divided into mainly three parts, including physical setting, activity and image/meaning. In this part of comparing, more attention is paid to the first two aspects emphasizing the built environment and the activities inspired.

Both Västra Hamnen and Hyllie are designed in a dense block arrangement, with most residential buildings at the height of 5-6 floors high. This comes from the policy to build Västra Hamnen and Hyllie in accordance with the center of Malmö in terms of block formations that create density and green space. (Malmö Stad, 2011b; 2012c) This similarity creates a similar sense of the buildings with the same scale. But somehow the landmarks and the public realm differ from each other between the two areas quite much.

In Västra Hamnen, Turning Torso stands for the landmark of this area which is slender while visible from far away. On the contrast, in Hyllie, several huge volumes like the arena, shopping center and parking facilities make up the central public area. These images are associated with huge and land consuming volumes.
But it is the different public space system that separates the sense of these two places. From both places, water and greenery make up the natural sources. For Västra Hamnen, it is surrounded by waterscape in big scale and has both water and greenery inside with small scale. (Image 4-7) For Hyllie, it is surrounded by landscape, especially the greenery in big scale and has water and greenery inside with small scale as well. (Image 4-8)

This difference intensifies the different feeling even for the same activities. Jogging and walking for example, are quite usual for residents’ activities. At Västra Hamnen people jog and walk along the waterline (Image 4-9) enjoying the water view and at Hyllie people jog and walk through green landscape (Image 4-10).

Besides, the water from the waterscape plays a role to be seen and watched more than touched as the landscape does. So there are also cafes and restaurants which prefer to be set along the waterfront because of the excellent view. While for the suburb, having a sit in the greenery is more preferable. The transportation node’s role of Hyllie also enables itself to have big events for Malmö, involving thousands of people into the public space from time to time which Västra Hamnen cannot compete. There are more constantly visiting tourists or citizens in a peaceful residential environment at Västra Hamnen.

4.3 Chasing after new identity
This section is about how different built environments can endow different identity for the residents. Since the postmodern era, distinctive identity is chased after by people as the higher
middle class lead the trend. The waterfront sites provide special environment for living which corresponds the distinctive taste. So after the suburb and some new gentrified area in the city center, the waterfront becomes the new focus. Besides, as part of the city, this area also marks the new identity of the city. The newly developed suburb area, on the other hand, pays more attention to the efficiency instead of the distinctive identity. But in return, this efficiency gives Hyllie a new identity unlike other suburb area.

New identity for the city
Since the globalization of the economy and of culture foster, identity has become essential asset for every city to compete for investment and other resources for further development (del Rio, V. and Iwata, N. 2004). As Ali Madanipour described the new urban waterfront’s public space role for the city (Madanipour, A. 2003):

New public spaces of the city are therefore one of the vehicles of changing the image of cities in a very competitive global marketplace and a re-entry of a finite commodity, land back into the local markets.

For this competing purpose, urban waterfronts are often seen as strategic areas for the policy makers, because their usage has direct (or indirect) impacts on the image of the place and on social equity (waterfronts as areas of high price housing and gentrification), and at the same time they quite often represent natural resources or green areas in the urban structure (Sairinen, R. and Kumpulainen S. 2006). It further entails the deindustrialization of docklands which become gentrified by members of the new middle class and developed as sites of tourism and cultural consumption at the same time (Featherstone M. 1991). In this case, Västra Hamnen is treated as the energy to provide Malmö city a new identity.

As for Hyllie, it is an area from regional perspective on trade and events and from local perspective a dense but green and sustainable urban center for Malmö (Malmö Stad, 2012d).

New identity for residents
Quantity is no longer the focus of postmodern consumer culture, while it is more associated with distinctiveness. (Norcliffe G., Bassett K. and Hoare T. 1996) The excellent waterscape of the sea and great location near to city center endow Västra Hamnen a distinctive character, leading a way of life. This attractiveness of living on urban waterfront together with the growing population tends to raise the prices of living at urban waterfronts (Sairinen, R. and Kumpulainen S. 2006). And this further excludes those people who cannot afford it and much higher middle class occupy this area which in return reinforces the identity for them. The working class or the poor who used to live in these urban waterfront areas are driven out to other enclaves, disappearing with the image of old industry together. (Featherstone M. 1991)

The city spaces are taken more and more as consumption instead of the original concept by these new coming residents, whose tastes, desires and culture are similar to those of the experience seeking city tourist. So many services and facilities are combined with those which are for tourists. (Hayllar, B., Griffin, T. and Edwards, D. 2008)

As for residents living at Hyllie, it is the greenery and the transport efficiency that give them the identity. The faraway greenery from city identifies the atmosphere living outside the busy city, while the traffic node’s status attracts those commuters. These people gathering in the suburb make up a contrast identity against that from Västra Hamnen.
5. Strategical Context--- Entering into Sustainable Phase
This context refers to the new strategy for the city redevelopment--- sustainability. The redevelopment at urban waterfront and new construction at suburb of Malmö are put into greater scope. The residential area is mixed up with other usages like office, retails and so on so forth at Västra Hamnen, while at Hyllie there is another type of mix use. And the infrastructure representing another aspect of the public space is quite a gap between sustainable cities and unsustainable ones. It is about how the residents and the public transport between the waterfront and other part of the city as well as the suburb, and how the built environment promotes sustainable traffic approach.

5.1 Residents and the public in mix-use
Within this mix-use topic, the functional arrangements across Västra Hamnen and Hyllie will be analyzed firstly. How working, leisure, residence and tourism and so on so forth are combined in the total area and what are the differences and similarities between the two areas’ mix-use. The diversity becomes the main issue. Further on, the relevant outcomes or merits from this diversity will be discussed.

It has been argued by many researchers that the modern planning approach has caused poorer society and environment. The modern planning process seems to be rational and beneficial by arranging similar functions within shorter distance, increasing the efficiency, but the price is that a poor and more monotonous environment because the reduced contact with the surrounding society (Gehl J. 1996). Instead of keeping this planning approach, nowadays, the concept of mix-use has been applied broadly among developed countries as a sustainable way of developing the cities.

The mix-use can be classified into two levels: the area level and the building level (Image 5-1). The collage on left side expresses the idea that within an area, a neighborhood for example, that buildings with different functions are arranged, which indicates the mix-use in a general level. And the collage on the right side means that each building can still involve different functions, residential and shops combined in one building for example. The comparison between the types of mix-use of Västra Hamnen and Hyllie is conducted at these two levels separately.

Mix-use on different levels
On the first level, it shows some differences between the mix-use type of Västra Hamnen and
Hyllie. Västra Hamnen is basically a residential area with different forms of tenure workplaces, large and small businesses, education at all levels, sports facilities, commercial service and cultural institutions (Malmö Stad, 2011a). (Image5-2)

The redevelopment of urban waterfronts into mixed-use residential districts has become so widespread that generate its own subset of the redevelopment literature. (Hoyle B. 2002)

Residential is the foundation for the life at Västra Hamnen. At the beginning of 2011 there were 2586 homes in Bo01, Flagghusen and Dockan. To mix up with residential, other functions like working spaces, education, commercial and sports are involved. The number employed in Västra Hamnen was reported 10,111 in 2009. There are major employers in both the private, state and local government side. Diversity in the form of Västra Hamnen will offer different office sizes which have largely succeeded in all areas. Commercial function is arranged at Västra Hamnen, but according to the survey did for the midterm evaluation of Västra Hamnen, there is further demand for grocery store, bakery and bike shop, with a larger population increasing the support to expand the commercial service. The education within Västra Hamnen is at all levels, and institutions of Malmö University with 10,300 students consisting important part of the city life at Västra Hamnen. (Malmö Stad, 2011a)

Image 5-2 Mix-use type of Västra Hamnen on neighborhood level
Source (http://www.malmo.se/download/18.6e1be7ef13514d6cfc80008049/v%C3%A4stra+hamnen+i+siffror+2012.pdf)
On the other hand, Hyllie has another aspect of mix-use. At Hyllie, residential is not the absolute foundation, and the public life around the city tunnel station share the composition, with the arena, hotel, shopping center and parking facilities (Image 5-3). These functions different from those at Västra Hamnen not only set up special images with big volume, but also involve in characterized activities especially by the station and arena. The station involves people who commuting to elsewhere constantly every day, which indicates the main activities of the area. When there are events held in the arena, thousands of people swarm into this area which distinguishes the life dramatically at Västra Hamnen.

So between Västra Hamnen and Hyllie, the mix-use type overlaps each other at the residential, education and local service part. While the excellent environment attracts people to work at Västra Hamnen and the station of Hyllie send people to elsewhere. The arena call up mounts of people time by time because of the events held.

On the second level, there are more similarities between the two sites. In order to encourage public social life, both Västra Hamnen and Hyllie try to add retails or grocery store on the ground level combining other functions on top, apparently with residential most. The ground floors along the main passage are intended to be employed for stores and other extroverted operations. (Malmö Stad, 2010a)
The assets of mix-use for sustainable development
The approach of mix-use has mainly two merits contributing to the sustainable development. At the opposite side of land uses zoning, a mix of use and activities gains more possibilities to reduce the need for travel and assists in creating diverse and livable environment (Moughtin, C. 2005).

One of the main attractions of city living is proximity to work, shops and basic social, educational and leisure uses. Whether we are talking about mixing uses in the same neighborhood, a mix within a street or urban block, or the mixing of uses vertically within a building, good urban design should encourage more people to live near to those services which they require on a regular basis. (DETR, 1999) It is acceptable that within a mixed neighborhood, the demands to travel far away for shopping activities and local services are reduced. Nobody would like to travel far away for services ignoring the near ones. At Västra Hamnen, the MAXI shopping center and other local services (Image 5-4, 5-2) play an important role. They provide the opportunities for residents and other visitors to walk or ride a bicycle there because of the reasonable distance. Even though there is still a big parking area outside the MAXI shopping center, for those who live in Västra Hamnen, the distance for driving is reduced quite much. Hyllie has the similar situation with the shopping center in the central public area around the station (Image 5-5, 5-3). If the station is designed to be within reasonable distance for those new residents, it is the same to the shopping center. So it is apparent that the mix between residential and shopping and other services do help to reduce the travel distance, by which contributing to the sustainable development.

Image 5-4 Shopping center Maxi at Västra Hamnen
Source (http://vhamnen.com/index.php/tag/masthusen/)
There is also the mix use type which combines working places and living places in the same area. But unlike the shopping and local services, this type of mix use, especially in Västra Hamnen doesn’t necessarily reduce travel distance. For Västra Hamnen, it provides attractive working environment which involve not only who live in this area, but also those who live outside Västra Hamnen. It is risky to say this type of mix-use means proximity to work places and some further research need to be done in the future to examine whether this type works for sustainable development.

At Hyllie, there is the other situation. There are not as many offices provided as Västra Hamnen while it faces more against short term visitors. The arena and hotel facilities create the possibility for outsiders a short stay. As the parking lots are prepared and the location besides Malmö’s ring way, it cannot avoid that many cars driven from far away. But the city tunnel can assist to reduce the driving behavior because of its convenience. Some further research could also be done for this aspect in the future how the city tunnel balances the travel demands.

From these points, the mix-use at both Västra Hamnen and Hyllie help to reduce some travel behavior but at some aspects, there still remains uncertainty which need future survey.

Besides the environmental contribution, mix-use planning also create diverse and livable environment. At waterfront, new usages related to residentialization process, tourism increase and other public life improvement not only offer work opportunities, but also enhance urban attractiveness (Grossmann, I. 2008). Different people meet at Västra Hamnen, and this is also one of the goals of Västra Hamnen, building even more inspirational places where people with different experiences, knowledge and ideas can meet and interact (Malmö Stad, 2008a). The mix-use here provides a background incorporating all kinds of people for the diversity of public life. Within this background, other details of designing attract people by finely created environment which will be discussed in the coming Chapter 7 further.

For Hyllie, the type of mix-use doesn’t create constant attractive usage, because the arena and other events facilities hold events from time to time. Accordingly, the diversity of life at Hyllie depends on time very much. Outsiders and local residents meet at special time point instead of constantly.
5.2 Towards sustainable infrastructure
The transport system operating within the city and throughout its region is the key factor affecting the rate that society moves towards sustainable development (Moughtin, C. 2005). If “green mobility” that is traveled by foot, bike or public transport can occupy high percentage of the public transport system, the concept of sustainable city will be greatly strengthened. Good public space and a good public transport system are simply two sides of the same coin. (Gehl J. 2010) The main public transportation means of Västra Hamnen and Hyllie was discussed in previous chapter. Here in this sustainable infrastructure section, how the built environment promotes public transportation, bicycle and walking as well as reduces the usage of motors is the main objective. This sustainable concept covers both the ecological and social aspects.

Before comparing the built environments of each site reducing motor usage, it is necessary to build up a clear image of each site’s traffic mode (Image 5-6). The traffic mode in Västra Hamnen indicates an “either-or” mode. Depending on the distance of destinations, people from Västra Hamnen choose either walking, bicycle or public transport, driving. Of course, walking is always combining with other means. What makes sense here is that it differs from the mode of Hyllie which shows preference to “both-and” mode.

![Image 5-6](Image 5-6) Transport modes without driving. Mainly three differences: shorter distance to Copenhagen from Hyllie; few bicycle and bus transition at Västra Hamnen; longer distance to train station by bicycle and unsuitable for walking at Västra Hamnen (Made by author)

Because of the transport node status, it is quite convenient for those who live at Hyllie ride bikes to the train station and transfer for public transportation or even takes the bike onto the train. The set bicycle routes connected to station and ample bicycles’ parking (Image 5-7) make it possible and easy. And there are about 1500 bicycle parking spaces around the station. It can be less seen that someone rides to a bus stop and takes the bus further on at Västra Hamnen, and the behavior to ride till central station from Västra Hamnen belongs to long distance travel instead of everyday commuting scope.
Combining with the bicycle parking facilities in close proximity to the station, stadium, shopping center and other target points, the bicycle network (Image 5-8) connecting to the surrounding built environment is also the key factor to the "both-and" mode of Hyllie. From Image 5-8, it can be found that the cycle network is well organized with all directions, especially the north and east part where there are quite many existing residence.

Because of the suburb location, it cannot avoid that the driving system overlaps with the cycle network geographically. But in order to promote people using bicycle instead of driving, separated and safe pathways are arranged without disturbance from motor cars. When the
bicycle network meets driving system, the node is separated into different level without discontinuity (Image 5-9). This also benefits from the uneven landscape of suburb.

![Image 5-9](image_url) Flyovers for vulnerable road users at Hyllie (Image by author)

Differing from the unattached bicycle network at Hyllie, the bicycle pathways at Västra Hamnen (Image 5-10) is aside the main roads. In other words, cyclists ride along with the cars (Image 5-11). There are both strength and weakness of this arrangement comparing with Hyllie’s. For strength, it is more interesting to have different objects on the street instead of bald route. For weakness, the motor cars’ lanes somehow create barrier for the cyclists. Some instruments should be applied in order cycles are given priority over car traffic in the intersection points, and designed with a continuous bike lanes (Malmö Stad, 2010b). Guidance on the ground as shown in Image 5-10 is one measure, and elevated pedestrian and bicycle crossing is another measure applied at Västra Hamnen (Image 5-12).

![Image 5-10](image_url) Bicycle network of Västra Hamnen (Malmö Stad 2007)
Comparing with Hyllie, there are fewer bicycle parking facilities provided at Västra Hamnen. To facilitate the use cycle, the arrangement of the bicycle parking is an important part (Malmö Stad, 2010b). But these facilities are less than enough across Västra Hamnen, neither in front of the residential buildings (Image 5-13, 5-14) nor the spaces connecting to public transport. Bicycle parking is barely seen near bus stops at Västra Hamnen according to the observation of author. It is only around Malmö University that bicycle parking can be found (Image 5-15).
To increase healthy and sustainable means of traffic is one side of the coin, on the other side is the approach to reduce the usage of motor cars directly. Although Västra Hamnen (Bo01) has been marketed as an area with high aspirations for environmental sustainability, statistics and completed questionnaires show a relatively high car ownership. The results of the survey in Flagghusen (2008) showed the car ownership was to one car per apartment, and that about 15% of households did not have a car. The high housing prices has become one of the main reasons that generate more car trips than other areas. (Malmö Stad, 2010b).

The high car ownership (Malmö Stad, 2010b) and the limited entry points (Image 4-5) lead to the congestion at the peak time. And this becomes a dilemma for Västra Hamnen as better motor car network would lead to higher car ownership and more car usage, while the limitation right now may cause further pollution because of the congestion which goes against the sustainable concept.

But once entering into Västra Hamnen, it seems the situation becomes better especially along the waterside (Bo01). The driving behavior is limited and gives priority to pedestrian and cyclists. This is embodied by both the dimension for driving and the material used for the pavement (Image 5-16, 5-17). After leaving the main roads and entering into the residential areas, there are limitations for cars which allow only one car passing by at one time which will slow down the car efficiently. Besides, the pavement which is different from the main road and familiar for pedestrian provides the safe feeling and reminds the driver for care about pedestrian.
In order to reduce the usage of cars, the parking standards at Västra Hamnen is minimized. It is quite often to see cars parking besides buildings instead of formal parking lots.

All these approaches reducing driving among the residential blocks will contribute to better social environments. Here a survey previously done is cited as evidence (Image 5-18). This social effect is one of the attractions for Västra Hamnen involving not only the residents but also many visitors. The attractions will be discussed in Chapter 7 further.

Image 5-18 Social life and traffic loads. Comparing three San Francisco streets that varied in the amount of traffic travelling along them. Appleyard & Lintell (1972) found that, on the heavily trafficked street, people tend to use the sidewalk only as a pathway between home and the final destination. On the lightly trafficked street, there was an active social life: people used the sidewalks and the corner stores as places to meet and initiate interaction. The high-volume street was also seen as a less friendly place to live than the lightly trafficked street.
The situation of Hyllie is quite different from Västra Hamnen at this side. Firstly, Hyllie is located along Malmö’s ring road which is always full of traffic. The busy levels of all the roads are higher than those at Västra Hamnen accordingly (Image 5-19, 5-20). Even though the city tunnel could reduce the car trips dramatically, there is till the possibility especially when events are held. The station and other regional features such as arena, trade fair and shopping will create large amounts of car traffic to Hyllie (Malmö Stad, 2010a). For the purpose of understanding to what extent the car trips are reduced, some research can be done in the future.

Secondly, at Hyllie at least besides the station, high standard parking facility is provided. Against the way lowering the standard of parking at Västra Hamnen, Hyllie has a “big-box” parking building constructed besides the station. The box is named Park and Ride (Image 5-21) which gives space for 1 500 cars established by the Station Square. The Emporia shopping center will provide 3 500 parking spaces and remaining building projects in the area are responsible for catering to the parking need within their own local grounds. (Malmö Stad, 2010a)

So no matter how sustainable they want to be, neither Västra Hamnen nor Hyllie can abandon motor car's usage. But both try means to enhance the healthy and sustainable transportation and reduce the usage of motor cars, by either public transport or some detailed design. While still, each has different face as Hyllie shows higher preference to the motor cars than Västra Hamnen because of their location characters.
6. Spatial Context 1---Whose public space
By studying the Västra Hamnen case forward, more detailed interrelationship between the public space and the revitalization will be manifested. These include the analysis of the hierarchy of the spaces at waterside from the extreme private sphere of living spaces until the extreme public spaces along the water; the problems can be met as not every residential building is facing the water which causes uneven delivery of public resources; the detail arrangement in the public space for both the residents and the public and how the residential building as facade facing the public space affect the usage. Accordingly, the different mode and hierarchy of public spaces at Hyllie; what is the status of public resources’ delivery at Hyllie; different roles of residential buildings from Västra Hamnen are contrasted.

6.1 The mode and hierarchy of public space
Within the everyday urban fabric, there are some spaces where tourists and local share the same communal spaces for varieties of purposes, such as a hub for transport, a location for shopping or a venue for dinning (Hayllar, B., Griffin, T. and Edwards, D. 2008). Both Västra Hamnen and Hyllie somehow play this role by providing the communal spaces for different people. The mode and hierarchy of the spaces is studied basing on the plans for each case, in order to find out how the private and public coexist.

Before judging how the private and public coexist in each case, it is necessary and easy to have a general image of the mode and hierarchy of public spaces from each site (Image 6-1, 6-2). As the waterline of Västra Hamnen plays quite important a role, the main space attracting tourists is along the water, with the residential and other functions surrounded inner wards. And it can be found that the residential blocks are somehow detached from the station at Hyllie, which forms another mode.

The first mode shows that the public spaces in the residential area of Västra Hamnen are not only composed of the local residents, but also quite many tourists and citizens from other parts of the city. There are both strengths and threaten in this situation. The strength lies at that public people can help to form a lively environment for Västra Hamnen. The public rooms like Dania Park, Scaniabadet and Stapelbäddsparken are rich in experiences for both locals and tourists and stimulate interaction between people. According to the survey over the project, 95% of all the locals have visited Västra Hamnen (Malmö Stad, 2011a).

While on the other hand, these out comers are invading the private sphere to some extent which could cause the lack of privacy for residents who live in this mixed zone. (Krausse, G. 1995). The outer public space along the waterline is so close to the private sphere that it creates the risk of competition between the local residents and the tourists, especially during the peak time of tourism. Some previous experience from the USA has shown the downsides of the revival of seaport towns, as crowds and congestion, the need for more public services and housing, the displacement of water-dependent uses, and a seasonal fluctuation of the local economy due to tourism. This can cause the sensitiveness of local residents with the strongest expression of dissatisfaction related to congestion and high density; more specifically, to traffic and parking (85%) and pedestrians venturing. (Krausse, G. 1995). But as long as the necessary resources for local residents are not occupied or disturbed by the out comers, more people means better social life. It becomes another dilemma for Malmö’s municipality to balance the tourism and residents when achieving the goal of creating “meeting place” and “communities”. The tourist-host ratio needs to be kept at the point; neither residents nor tourists become
marginalized, resulting in less contact with each other. For example, stores and services on the waterfront should cover both sides. (Krausse, G. 1995)

Image 6-1 Mode and hierarchy of public spaces of Västra Hamnen
Source (http://www.malmo.se/download/18.6e1be7ef13514d6cfcc800032278/strukturplan+V+H+jan+2012.pdf; edited by author)

Image 6-2 Mode and hierarchy of public spaces of Hyllie
(Malmö Stad 2008c; edited by author)
Hyllie shows the other appearance for the meeting situation. If the station area is defined as public spaces, the residential area which has fewer destinations than the station can be defined as semi-public spaces. The mode with semi-public spaces kept away from public ones shows totally up-side-down image from Västra Hamnen at strength and weakness.

The strength of this mode lays at that the main public resource, the city tunnel in this case, is within walkable and cyclable distance, but not too many out comers going to disturb the residents. This is because the entire main objective like arena, shopping center and trade fair are located even closer to the station and parking facilities. The public sphere has no destination within the residential area, so the overlaps between the public and private stops at the transition from public to semi-public, but semi-public spaces are still accessible for everyone.

But during the first phase of residential construction, Hyllie shows the possibility of lacking of semi-public spaces. From the plan of Hyllie, there is only a piece of green inserting into the residential area which seems to be too little for so many blocks. (Image 5-3) It is more like a dense city center but without that many people walking through possibly. When all planned residences are finished, the water park is partly involved into residential area, which makes the hierarchy of spaces more completed, from public to semi-public until the residences. (Image 6-3)

So for Västra Hamnen and Hyllie, they are facing different challenges. For Västra Hamnen, in order to balance the direct conflict between the public and private, one important factor is to arrange the public resources like parking facilities appropriately as mentioned previously, and the other is to provide comfortable transition from the public to private sphere. Bad examples are those multistory residences with sharply demarcated borders (Image 6-4), where the
residents found himself/herself either in a completely private territory indoors or in a public area outside on the stairs, in the elevator, or on the street. This will make it difficult in many situations to move into the public environment if it is not necessary to do so (Gehl J. 1996). In Jan Gehl’s “Life between Buildings”, he also described:

*Residential areas have a diffuse interior structure and imprecise boundaries. It is not clear where the individual dwelling “belongs” or where the residential area “ends”. The design of residential streets rarely takes into account where and how communal activities can take place at all.*

The diffusing environments like the small squares at Bo01, places in Flagghusen and the dock to the marina dock, create ambiguity for people to read: is this a private or a public space? The underlying structure may indicate that the site is private, but systematically allowed public pedestrian and bicycle traffic. This ambiguity is not desirable. The community facilities for the squares, streets and small parks are formally good, but the ambiguity confuses many residents, making them unclear if that property is part of a joint facility and therefore respond for the maintenance of the facility. They do not understand that the municipality is not responsible, in particular, when the public have access to the surfaces. (Malmö Stad 2011a)

The transitions between private and public areas are also so important, that efforts which make them graduated and soften by building semiprivate and semipublic transition zones (Image 6-5) will increase the likelihood of contact from zone to zone. The residents will benefit from gaining the opportunity to regulate contacts and protect private life (Gehl J. 2010).
For Hyllie, the challenge lies at that the semipublic spaces provide nowhere for people to stay which will reduce the sense of community. Obviously the station square creates the space for people’s staying, but it faces all the public, but within the residential area, there is no place which can be the center for the residents. When the residents need to meet “others”, they have come out of the “community” to either the water park or the station square. It could be better if a third place located within the “community” is arranged with connection to the public spaces. Then the residents will have the opportunity to be with others at the semipublic level and choose to enter into the public at the same time. This concerns the same issue of sharp boundaries (Gehl J.1996).

6.2 Uneven delivery of public recourses
Since the entry into industrial era, many people uprooted from their towns or villages and poured into anonymous cities, which caused the fear of social disintegration and of uncontrollable masses, which drew the middle classes away from the cities, causing further social fragmentation (Madanipour, A. 2003). But after entering into the post-modern era, these middle classes lead another trend back into the city, the gentrification, as they can afford the distinctive identity they need while leaving the enclaves for other classes.

Many socialists call for the social integration against the fragmentation process. The very point of this is a mixed house and tenure types. Community stability is enhanced if the neighborhood is one with a variety of house types and where there is a mix of tenures. A mix of house and tenure types also gives more flexibility for families to change properties to meet changing need, without necessarily having to move out the neighborhood (Moughtin, C. 2003). A sense of community comes from the mixture of house types and tenures (Breheny, M., Gent, T. and Lock, D. 1993).

Västra Hamnen, as described in Chapter 4, represents a new characterized identity which the higher middle class are chasing after. To get a picture of residents' financial position at Västra Hamnen, the average income per earner can be an indicator. In 2003, average incomes in Västra Hamnen are 17 percent higher than average incomes in the city of Malmö (Malmö Stad 2005a). It is harder to get away from disintegration for Västra Hamnen if the price excludes other classes except the middle classes. Malmö Municipality needs to play its role against this total gentrification process, while improve the living quality for all.

Strategically, Malmö Municipality needs to ensure some proportion of the residences is not occupied by the middle class but affordable for varied classes. At the 2011 entry, there were 2586 homes in Bo01, Flagghusen and Doll. Of these, 32% are rental units and in Malmö, the proportion is 46%. As the landowners, the municipality has several strategies to stimulate construction of rental units as: transfer the land to developers that are considered long-term manager; conditions of rental units in transfer agreements; terms of purchase agreements for consideration in a conversion to condominiums within 15 years (Malmö Stad 2011a). The establishment of rental units will invite different groups living in Västra Hamnen, for example students, old people and so on so forth.

Spatially, as the sea is the biggest attraction for residents living in Västra Hamnen, there should be the opportunity that the price decreases as the distance increases from the waterline (Image 6-6). The central part of Västra Hamnen could suit better for lower price afforders than along the
waterline. Firstly, it keeps the accessibility to the waterfront and the distance is still acceptable for having a walk. Secondly, as the waterfront attracts more tourists than the middle, more residents for other classes than middle classes could help to keep the vitality. Thirdly, these groups have more chances to utilize the public transportation, and the central location will make line 2 (Image 4-2) and line 8 (Image 4-3) more convenient.

So nevertheless Västra Hamnen has the risk to form a disintegrated area from the city socially, there is still the possibility to endow mixed tenures by municipality’s strategies and appropriate spatial arrangement. And these efforts will increase a community sense for the whole area instead of anonymous public spaces.

The identity of Hyllie is based more on the city tunnel playing the regional and local role of commuting. People who live here are less demarcated as Västra Hamnen. As long as someone needs the predominance of the city tunnel, Hyllie is a good choice. Here is the limitation to compare Hyllie with Västra Hamnen now, because the residential area has not been constructed right now at Hyllie. It is difficult to judge the composition of the residences. But from the delivery of the public resources, it seems to be more even than Västra Hamnen. As the sea is the resource for sighting and the waterfront has the absolute predominance. The city tunnel is on the other hand associated with usage. Even though the nearer, the more convenient. It is no more than five minutes’ difference within the newly planned residential areas of Hyllie by walking or bicycle. (Image 5-3) As described from Utbyggnadsområden of Malmö Stad:
Housing in Hyllie center provides close proximity to everything. Here you will meet city and landscape, large-scale and small-scale, green areas and colorful architecture.

6.3 The extra role of the residential buildings
As analyzed at the beginning of this chapter, Västra Hamnen has a different public space mode from Hyllie which makes the residences encounter the public space directly. At Hyllie, the role to shape the main public space is played by the public function as the arena, the parking house and the shopping center, etc. And the residences actually draw back to form the semipublic spaces. In this section, the extra role of the residential buildings is discussed.

The residential buildings at Västra Hamnen define the public space by their facades. They are both the physical border and the visual objects for visitors. It is not only the sea view but also the excellent designed architectures standing for an exhibition that are attractive. Of the visitors to Västra Hamnen, 16% highlight the architecture and the walkways are the best of Västra Hamnen (Malmö Stad 2011a). It is the strategy from the municipality to involve many different construction companies, architects and other actors into the building process (Malmö Stad 2008a). Consequently, many buildings with high standard of architectural design are “exhibited” at Västra Hamnen (Image 6-8) such as: Turning Torso, Region Building, Urban Homes (Image 6-9), the Court of Appeal, the garage the hull, etc. Many of the buildings are award winning for its architectural design. Malmö urban price has for years gone to the buildings in the Western Harbor; Kasper Salin Prize has been awarded to Urbana Houses etc. (Malmö Stad 2011a)
The same strategy is applied that different architects are responsible for each block at Hyllie. But this cannot compete with Västra Hamnen at the value of architectural design because of Västra Hamnen’s waterfront background. The excellent environment provides the opportunity for those architectures to be seen. At Hyllie, destinations are concentrated at the arena and the trade fair. The events themselves are more important than the architecture design.

But the point from Jan Gehl supports Hyllie more than Västra Hamnen at this aspect. He insisted that the life between buildings is both relevant and more interesting to look at in the long run than any combination of colored concrete and staggered building forms (Gehl J. 1996). In the coming chapter, how the public life is going on based on the built environment at each site is the main objective.

There is also another role of the residential buildings that cannot be ignored--- sense of security. The direct interact between the residences and the public spaces provide the “eyes on the street” (Jacobs, J. 1961). At the waterfront of Västra Hamnen, the public space has the residences on the back, which provides constant sense of security. There are also desolate areas (Image 6-10) because of the construction going on, that makes the residents at Västra Hamnen feel unsafe during the night (Malmö Stad 2011a).
While as the residential buildings are detached from the main public space at Hyllie, there lacks the “eyes on the street” which will make the station square “unsafe” during the night when few people come out from the tunnel.

7. Spatial Context 2--- Creating public life

Previous chapters have discussed and compared Västra Hamnen and Hyllie from different points of view, which are more associated with the issues of the whole area. It is time to jump into the concrete public spaces comparing each other, to see how different public life is stimulated from specific built environment. The public spaces along the waterline of Västra Hamnen (Image 7-1) is selected and so is the station square of Hyllie (Image 7-2), because of their public characters and their completed construction.
7.1 Public life in virtuous and vicious cycle

In Chapter 5, the mix use of different functions within one neighborhood was mentioned as one of the strategy of sustainable development. It is also in Chapter 6 that the mixture of housing types and tenures was mentioned to discuss the relationship between the residence and the public. All these mixture, with people from different age, groups and experience, will contribute to the social sustainability at the same time, taking the public space as meeting places. There seems to be a chain for people’s activities as strengthened by Jan Gehl: Something happens because something happens because something happens… (Gehl J. 1996) The activities in public space play a triggering role which can cause the virtuous cycle of public life.

If better city space is provided, use will increase is apparently valid in large public space and individual city spaces and all the way down to the single bench or chair (Gehl J. 2010). Jan Gehl pointed out thousands of times in his books that the activities are so important for the public life. It is because when someone begins to do something or activities and people are gathered, there is a tendency for others to join, no matter they are just to experience what others are doing or they participate themselves. It is a self-reinforcing process, to be stimulated. (Gehl J. 1996)

As in Västra Hamnen, there are quite many attractions especially the sea draw people in and the urban environments are well prepared. (More detailed analysis about the attractions will come in next section). Civic gathering are most important during the early stage of waterfront renewal because positive public perception and support are essential for success. (Krausse, G. 1995) Activities along the waterline start the virtuous cycle for the public life at Västra Hamnen (Image 7-3, 7-4). These activities make both the tourists and the local residents desiring to join in and share the public spaces. “The more residents are outdoors, the more often they meet, and the more greetings are exchanged and conversations develop.” (Gehl J. 1996) As here in Västra Hamnen, more people along the waterside, more exchanging could happen which
correspond one of the five goals of developing Västra Hamnen that making Västra Hamnen a more inspirational place where people with different experiences, knowledge and ideas can meet and interact (Malmö Stad 2008a).

This virtuous cycle of public life is against the ordinary suburban single family housing area or a multistory housing area (Gehl J. 1996) image, where nothing happens between buildings and this further leads to vicious cycle of the public life. That is what the socialists like Jane Jacobs has argued against in her book “The Death and Life of Great American Cities”. What is going on at Västra Hamnen set a positive image for the whole city to come back to the urban life.

But this virtuous cycle of public life is limited by the weather and season. The wind and the coldness along the waterside are the negative factors. Summer is the favorable season as people can have a touch on the water (Image 7-5) and the weather is enjoyable to stay outside. While in winter, there are fewer people staying outside (Image 7-6).
At Hyllie, there is another situation. It does not belong to the vicious cycle because it is not an ordinary suburban single family housing area or a multistory housing area where nothing happens. But there are not too much to be seen for example at the station square, so although the benches are provided, nobody utilizes it (Image 7-7). This excludes it from the virtuous cycle of public life.

Through normal days without events, the public space falls into the passage for commuting people passing by. But the chance lies there when events are held and this public space will play an important role. It can be imagined that something will happen and attracted people to join in.

It cannot be required that the public space is full of life all the time, while it requires the capability of this public space, when the virtuous cycle of public life starts, to accommodate it. Both Västra Hamnen and Hyllie have been well designed to provide the possibility to hold the public life, and both of them are somehow be effected by the time. Weather and season are more obvious for Västra Hamnen and artificial time of the events for Hyllie. But still there are more opportunities at Västra Hamnen because of there are the basic stimulation to start the first activity as the sea and the urban environment do.
7.2 Attractiveness and dimensions of public space

It was discussed in last section that the activities of people trigger further activities, with more people joining in. In this section, the built environment is analyzed according to the principles from Jan Gehl’s book “Life between buildings” and “Cities for people”, to understand what are the precondition for public activities. These include the “edge effectiveness”, the pedestrian and biking environment, the functional contents of the ground floor and the scale or the dimension of the public spaces.

![Image 7-8 Jan Gehl's diagram of relation between qualities and use (Gehl J. 1996)](image)

According to Jan Gehl, the public activities associate with the built environment quality quite much. He divided the outdoor activities in public spaces into three categories: necessary activities, optional activities and social activities. The first includes those compulsory like going to school or work, shopping, waiting for bus or a person, etc. which are required to participate. The second are those participated in if there is a wish to do so and if time and place make it possible, for example, taking a walk to get a breath of fresh air. The third are all activities that depend on the presence of others in public spaces like greetings and conversations and seeing and hearing other people. Necessary activities occur no matter the quality of the outdoor areas, but the optional activities’ frequency will increase dramatically (Image 7-8) when the built environment invites people to do so (Gehl J. 1996).

At Västra Hamnen, how these optional activities occur upon its public spaces? And what is the situation at Hyllie?

Firstly, the waterfront is at the edge of the open sea view, which somehow creates the “edge effectiveness”. It is enjoyable for pedestrian if the walking routes are placed at the edge of an open space with two worlds on both sides. One side is closeness, intensity and detail while on the other side is a fine view of the whole open space (Gehl J. 1996). The waterline of Västra Hamnen fulfills this principle very well. On one side, there are the well-designed residences with modest scale. This edge provides both the protection for the waterfront space and the eyes on the space which create the sense of security. It also draws pedestrian’s attention and curiosity to wonder what is happening on the other side of the wall (Image 7-9). On the other side, there is the great sea view opening one’s sight. The arrangement of space is so different from those could be provided in the city that it is charming for any citizen and tourist. The west facing orientation also enables the watching of beautiful sunset (Image 7-10). The edge is so important at creating public life that Christopher Alexander in his book “A Pattern Language” (Alexander C., Ishikawa S. and Silverstein M. 1977) said:

<table>
<thead>
<tr>
<th>Quality of the physical environment</th>
<th>Poor</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Necessary activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optional activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Resultant’ activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Social activities)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If the edge fails, then the space never becomes lively.

Image 7-9 Detail and closeness of residences at Västra Hamnen (Image by author)

It can be found from the survey done by the municipality that, most of the event sports and meeting places are along the waterfront (Image 7-11). The promenade, Dania Park, Scania Park with pool and dock are well known and frequented by the residents (Image 7-12). These sites were also among the top people of Malmö in general. (Malmö Stad 2011a)

Image 7-10 A cloudy day with visible sunset at Västra Hamnen (Image by author)
Image 7-11 Event spots and meeting places of Västra Hamnen.  
(Malmö Stad 2007)

Image 7-12 Favorite places of people, survey done by the mid-term examination.  
(Malmö Stad 2011a)
The public space of Hyllie, different from this edge mode, is centralized. The focus is the center of the station square instead of the edge: most benches are settled in the inner part of the square with the approach of creating small edge for each bench (Image 7-13). It is also the limitation of the natural resource that confines the edge mode to develop at Hyllie. But the outcome is that the square is seldom used during normal days without events (Image 7-7).

Secondly, the pedestrian and biking environment guarantees the peaceful atmosphere at waterfront of Västra Hamnen. The potential for a lively city is strengthened when more people are invited to walk, bike and stay in city space. Cars play the role threatening the conditions necessary for people to engage in city life, and this invasion from cars in great numbers all over the world was started since 1960 (Gehl J. 2010).

Leading the sustainable development of Malmö, Västra Hamnen has been contributing itself to a sustainable area providing more spaces for pedestrian and biking. This not only reduces the pollution from car trips as mentioned in Chapter 5, but also attracts more people to be engaged into the public life especially along the waterfront (Image 7-14). As life takes on foot, it is only “on foot” does a situation function as meaningful opportunity for contact and information in which the individual is at ease and able to take time to experience, pause, or become involved. (Gehl J. 1996) It is one of the goals of Västra Hamnen’s development that providing biking and walking environment, which enables one to feel encouraged to keep delving into the area to discover more of its qualities. (Malmö Stad 2008a)
It is the same strategy to prioritize the pedestrian and biking system applied at Hyllie that benefits the station square. Even though there lacks the view to attract people to stay, the car-free area makes people feeling safe and comfortable at least. Then there is opportunity to stop and communicate with others because of the low speed and no disturbance (Image 7-7).

Thirdly, lacking the view is not the only factor making the gap between the public activities of Västra Hamnen and Hyllie. Another key point is the functions on the ground floors which have the most interact with people passing-by. Short walking distances, attractive public spaces and a variation of urban functions constructs a reasonably cohesive structure which invites people to walk. These elements increase activity and the sense of the security in and around the city spaces. There are more eyes along the street and a greater incentive to follow the events going on in the city from surrounding housing and buildings. (Gehl J. 2010) The four sides of Hyllie’s station square consist of roads on two sides (present situation), the arena on one side and some service functions on the last side. Maybe when the hotel is constructed on one of the road side, the situation will be improved, but now there lacks the interactive function on the ground floor. Some retails and restaurants on one side are the positive factors but not enough to form the basis for outdoor activities (Image 7-15).

On the other hand at Västra Hamnen, because of its linear space, the varied functions on the ground floor along the waterfront increase the possibility to save people. Cafes, restaurants and retails are examples (Image 7-16). The design principles of Västra Hamnen require the bottom floors of the buildings on the larger streets should contain commercial or organizational activity in order to maintain a lively and stimulating environment. Every building facing a main street or
avenue should contain at least two of the following: residences, services or commercial activity. (Malmö Stad 2008a)

Unfortunately, this kind of service is not along the waterfront everywhere. As mentioned in last chapter, there are many residential buildings with sharp transition from public to residence (Image 7-17). This reduces the quality for outdoor activities to some extent. According to Jan Gehl’s survey, the city life in front of active facades will be seven times more than those inactive (Gehl J.2010).
There is an extra example from Hamburg--- the HafenCity. The ground floor is full of service which somehow increases the outdoor life. (Image 7-18) Combining with the port view of Hamburg, the built environment is rather attractive for people.

During the midterm survey for Västra Hamnen’s development process, some local residents express the desire to have more retails and shops among the neighborhood (Malmö Stad 2011a). The mix-use’s goal and principle is applied at Västra Hamnen already and there are quite many different retails and shops (Image 7-19, 7-20). The further desire shows that there is still space to develop this strategy for both the residents and the out comers.

![Image 7-19](image1.png) Distribution of retails and shops at Västra Hamnen. Source (Malmö Stad 2007)

![Image 7-20](image2.png) Bottom floor service means possibility for communication and activities (Image by author)

Lastly, the varied spatial dimensions at Västra Hamnen allow different activities. The experience of comfort and well-being in cities is closely tied to how city structure and city space harmonize with the human body, human senses and the corresponding space dimensions and scale.
Unless good places and a good human scale are provided, crucial city qualities will be lacking. (Gehl J. 2010) The spaces along the waterside of Västra Hamnen starts from the part aside Bo01 project with scale for walking and sitting. But this part cannot be called open spaces. Within this space, the distance allows people to see each other and the residents can have a control of what is happening outside. When extending to the Daniaparken and Scaniabadel, the space is enlarged to be open spaces where allow many people to gather. And the distance is too long to see the detail from residences to the waterside.

So the narrow passage before Bo01project is more like the “balcony” of the residences with vicinity while those open spaces are more occupied by tourists. Different activities are stimulated by the built environment. And on Hyllie side, it seems to be lacking some small scale associated with the public space which can inspire more activities.

8. Discussion and Conclusion
The purpose of this thesis is to understand what constitutes the urban planning strategy of Malmö in the first decade of 21st century and how the guidelines of detail plannings embody and characterize the planning strategy. In order to answer the research question, it is useful to make some case studies to see the concrete aspects of the the urban planning strategy, which in this thesis reflected by the public spaces and the social life consequently. Two undergoing projects are selected to be analyzed which are Västra Hamnen and Hyllie in Malmö city. By comparing these two cases, the content of Malmö’s urban planning strategy in the first decade of 21st century is manifested, and the characters of the guidelines of specific sites are shown as below:

Similarities
Both Västra Hamnen and Hyllie have been and are still on construction. They provide new homes, new working places and different public life for Malmö city. They have similar size and strategy and are constructed in the similar period of Malmö’s development. All these factors make it possible to conduct this comparison. And the comparison is done mainly from four angles as: historical, geographical, sustainable and spatial aspects which could be concluded respectively.

Evolution of sites
Historically, Västra Hamnen was evolved from one of the world’s largest shipyard since 1870s. During the 100 years period, it has been for car manufacture for a short time and now has been developed into an important constitution of Malmö city’s habitat and knowledge. The development of Hyllie is much younger even though the idea to develop it came out since 1960s but it came into action only in recent years. The origin of Hyllie is basically farm and green landscapes with fertile soil. Along with the evolution of each site, different challenges are faced respectively. The harbor focuses no longer the efficiency of industry while paying attention to the living environment in post-industrial era as well as providing comfortable sighting public spaces for tourists. The suburb changed its appearance from nature to man-made habitat as well as transportation node, involving both out comers for events and locals for living.

Location
Location is rather a determining factor because not only the sense of place, but also some other consequences talked in latter part of this thesis is relatively associated with this factor. It affects
the decision for developing strategy and spatial arrangement quite much. But if the geographical factor is purely treated, three main conclusions could be summed up here.

Firstly, even though Hyllie has three times the distance to the city center than Västra Hamnen, the travel time is dismissed by the fast public transport. Västra Hamnen has mainly two bus lines connecting to city center with the travel time around 10 minutes while with the city tunnel, the city center is reachable within six minutes from Hyllie. It cannot be said that the vicinity between Västra Hamnen and city center is poor, but the traditional image of suburb which is far away and not integrated with the city should be changed. Actually with only three entrances linking Västra Hamnen and city center, the harbor is less accessible as imagined. Besides, Hyllie has shorter distance and more convenience travelling to Copenhagen than Västra Hamnen does.

Characteristics of setting
Secondly, the sense of each place is distinctive. Even though both Västra Hamnen and Hyllie is constructed in a similar way to the city center with 5-6 floors blocks, there are other factors characterize each location. The Turning Torso tower represents the harbor area as a landmark while the image of Hyllie is associated with the arena and shopping center, etc. Both water and green make up the two sites but with conversing pattern. Västra Hamnen mainly consists of waterscape while with some parcels of green spaces inside. Hyllie is mainly made up by green landscape but water is taken as extra elements for example in the water park. Waterscape is somehow untouchable in most situations while the landscape can be full of activities.

Identity
Thirdly, these two sites represent different identities. Västra Hamnen is associated with some new identity by living with water, which makes the living price higher and excludes some other classes except the high middle class. On the other hand, Hyllie is more practical location with the opportunity to incorporate different classes who need the convenience and efficiency of the tunnel. One stresses the living environments and the other focuses on the efficiency.

Mixed-use pattern
Sustainable strategy is both applied at Västra Hamnen and Hyllie, while showing different characters. Both Västra Hamnen and Hyllie are made up by mix-use pattern, however the functions mixed differ from each other. Mixed use occurs in different scales. On a general level, Västra Hamnen is mixed up by residence, working places, education, commercial and sports functions, with the residence as foundation. Hyllie is mixed up by residence, arena, hotel, shopping center and parking facilities which are more voluminous than Västra Hamnen. They overlap mainly at residence part while differ at other attractions. Västra Hamnen is more attractive to involve people to work while Hyllie is more convenient to send people to other place to work. Both sites show the dubiety of sustainability at the same time. Although Västra Hamnen is an attractive working place, but it does not necessarily mean the people live near to these work places; Hyllie attracts thousands of people during some events, they may also choose driving because of the facilities provided. These need further research and survey.

Cycling infrastructure
Both sites are also trying to reduce car trips by providing sustainable infrastructure. Cycling for example, are paid attention to. At Hyllie, bicycle parking facilities are well arranged in position and quantity which enables people to ride to the station and further utilize the public transport.
The routes for bicycles and walking are separated from the driving routes which make the riding and walking much safer. On the other side, Västra Hamnen does not as well as Hyllie at providing bicycle parking facilities and the bicycle routes are aside the main road. When coming to the crossing nodes, Västra Hamnen’s approach is to elevate the pedestrian and bicycle aiming at slowing down the cars while at Hyllie, cars flyover with bridge connection. So the strength of Västra Hamnen lies at its combination of traffic which promotes life and the strength of Hyllie is its well-arranged facilities and safety.

Car accessibility
Because Hyllie is located next to Malmö’s ring road, it is still a car friendly planned place. Parking standard is high and only the station square is car free space. But on the Västra Hamnen side, car trips are reduced because of the low parking standard, narrow dimensions for driving through and pavement for pedestrian as reminding. So it can be concluded here that cars cannot be abandoned in both areas, but both Västra Hamnen and Hyllie contribute themselves much at reducing car driving by providing public transport and other infrastructure for sustainable choices.

Relationship between public and private spaces
When comparing the two sites at spatial aspects, there are quite many differences. Firstly, at Västra Hamnen the public sphere encounters the private sphere directly. This assists to create public life around the residence but he somehow lacks of transition from the public to private especially along the waterline. The overlapping of private and public creates the ambiguity of reading spaces for the residents. On the other side, Hyllie’s private sphere is put aside the public spaces with better transition from public to private, but in the private sphere, less life is promoted because fewer people meet and there also lacks meeting places for residents. The residential buildings of Västra Hamnen also play the role of attracting tourists because of the high architectural value and providing sense of security. However, these merits cannot be found in Hyllie.

Outdoor activities
In Jan Gehl’s books, he stressed quite much on the importance of activities. The activities along the waterline of Västra Hamnen has more possibilities to trigger further public life as: firstly, it has the ‘edge effectiveness’ with open view on one side and details and protection on the other side; secondly, the pedestrian and biking environment promote more social connection; thirdly, the retails, stores and cafe on the ground floor attract more people to take part in activities, especially along the waterline; the varied scales of public spaces also involves varied activities and feelings. Accordingly, the public space of Hyllie is centralized, with benches inside the square but not used frequently; even though the station square is car-free space, the roads surrounding the square however cut it from other directions; only one side of the square has some related functions on the ground floor which is not forming enough public life; and the public spaces are not varied at scales.

According to these detailed comparison, the public space of Västra Hamnen has more possibility to promote activities which will start the virtuous cycle of the public life. This is very against the image in traditional suburb image without much social connection and public life in outside homes. And the fewer people outside, the fewer people would come outside is the vicious cycle. Hyllie, however, lies at the situation in-between these two cycles as in normal
days, with most people only passing through with the destination of city tunnel. But it reserves
the possibility to accommodate public life especially during the events’ time.

Until now, the conclusions from the four main contexts are conducted. There is still some
overlapping and similarities between the two cases, but differences seem to be more
predominant showing the characteristics of each site. And how the two cases differ from each
other and characterize themselves is manifested. The concluded comparison with different
characters can be seen in the following table.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Västra Hamnen (VH)</th>
<th>Hyllie (H)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous land uses</td>
<td>Landfill</td>
<td>Agricultural land</td>
</tr>
<tr>
<td>Previous functions</td>
<td>Shipyards, car factory</td>
<td>Farm</td>
</tr>
<tr>
<td>Distance to city center</td>
<td>Around 2 km</td>
<td>Three times of VH’s</td>
</tr>
<tr>
<td>Travel time to city center</td>
<td>About 10 mins</td>
<td>6 mins</td>
</tr>
<tr>
<td>Travel convenience</td>
<td>On ground traffic</td>
<td>City tunnel without</td>
</tr>
<tr>
<td></td>
<td></td>
<td>disturbance</td>
</tr>
<tr>
<td>Accessibility</td>
<td>Only three main links</td>
<td>Ring road and city tunnel</td>
</tr>
<tr>
<td>Building volumes</td>
<td>5-6 floors block formations</td>
<td>5-6 floors block formations</td>
</tr>
<tr>
<td>Landmark</td>
<td>Turning Torso</td>
<td>Arena/shopping center/etc.</td>
</tr>
<tr>
<td>Environment</td>
<td>Mainly waterscape with green parcels inside</td>
<td>Mainly landscape with water ponds inside</td>
</tr>
<tr>
<td>Identity</td>
<td>Mainly high middle class</td>
<td>Practical location</td>
</tr>
<tr>
<td>Mix-use type</td>
<td>Residence as basis mixed up with working places, education, commerce and sports</td>
<td>Residence, arena, hotel, shopping center, parking facilities</td>
</tr>
<tr>
<td>Bicycle infrastructure</td>
<td>Ample bicycle parking facilities; bicycle routes separated from motor routes; flyover nodes</td>
<td>Lacking of bicycle parking facilities except university area; bicycle routes combined with main roads; elevated nodes</td>
</tr>
<tr>
<td>Motor infrastructure</td>
<td>Low standard parking; dimensions control; pavement reminder</td>
<td>High standard parking; car friendly planning</td>
</tr>
<tr>
<td>Space hierarchy</td>
<td>Public and private encounter directly; creating public life but lacking of transition from public to private sphere; ambiguity of reading spaces</td>
<td>Private sphere is put aside the public sphere; less interruption while less public life; lacking of meeting places for residents</td>
</tr>
<tr>
<td>Extra roles of residential buildings</td>
<td>Exposition attracting tourists; ‘eyes’ on the street providing sense of security</td>
<td>No such role for those buildings around the public spaces</td>
</tr>
<tr>
<td>Public spaces detail-1</td>
<td>‘Edge effect’ with open view on one side and detail design and protection on the other side</td>
<td>Centralized public spaces with benches in the center of square but without frequent use during normal days</td>
</tr>
<tr>
<td>Public spaces detail-2</td>
<td>Pedestrian and biking environment promoting more</td>
<td>The car-free square reserves the same opportunity but no</td>
</tr>
<tr>
<td></td>
<td>opportunity for activities</td>
<td>other places</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Public spaces detail-3</td>
<td>Ground floor retails and stores and cafes, very helpful but still not enough</td>
<td>Only one side with relevant functions on ground floor which is far away from enough</td>
</tr>
<tr>
<td>Public spaces detail-4</td>
<td>Varied scales of public spaces</td>
<td>Monotonous scale of public spaces</td>
</tr>
<tr>
<td>Activity cycle</td>
<td>Virtuous cycle</td>
<td>Virtuous cycle from time to time but better than vicious cycle</td>
</tr>
</tbody>
</table>
Reference


