In Search of Sociable Squares
From a Human and Placemaking Perspective

Analyzing the Relationship between Built Environments and Social Life
in Two Stockholm Squares: Norrmalmstorg & Nytorget

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## TABLE OF CONTENTS

**Abstract** .................................................................................................................. 7

**Introduction** ........................................................................................................ 8

**Preface** ................................................................................................................... 8

**Purpose of the Study and Research Questions** ..................................................... 8

**Limitation and Delimitation** .................................................................................. 8

**Structure** ............................................................................................................... 9

**Research Methodology** ......................................................................................... 10

**Choice of Methods** ............................................................................................... 10

**Case Study** .......................................................................................................... 10

- Selection of the case .................................................................................................. 10
- Accomplishing the case studies ................................................................................ 10
- Literature Review ..................................................................................................... 10
- Empirical Studies ..................................................................................................... 11
- Observation ............................................................................................................... 11
- Interview .................................................................................................................. 11
- Conceptual mapping ................................................................................................. 12
- Literature Review ..................................................................................................... 12

**Limitation and Delimitation:** .................................................................................. 12

**Theoretical Framework** ......................................................................................... 15

**Sociability in Public Spaces/Squares** ................................................................... 15

**Square as a third place** .......................................................................................... 16

**Placemaking** .......................................................................................................... 16

**Environmental Psychology** .................................................................................. 16

- Space and Place ....................................................................................................... 17
- Place Identity/Sense of Place .................................................................................. 17
- Sense of awareness of an environment ...................................................................... 18
- Intimate Places ......................................................................................................... 18
  - Senses: .................................................................................................................... 18
  - Legibility: ............................................................................................................. 18
  - Safety and Security: ............................................................................................. 19
  - Crowding: ............................................................................................................ 19
- Distance estimation .................................................................................................. 19
- Urban microclimate and identity of place ................................................................. 20

**Physical Characteristics of Squares** .................................................................... 21

- Patterns and types .................................................................................................... 21
- Accessibility and modes of movement ...................................................................... 21
- Scale and Size ......................................................................................................... 22
- Enclosure .................................................................................................................. 22
The Two Case Studies ................................................................. 30

Nytorget: Neighborhood Square .................................................. 47
    Urban context ................................................................................. 47
    History ........................................................................................... 48
    Square Today: Physical Characteristics ......................................... 49
        Accessibility and modes of movement: .................................... 49
    Scale and Size ............................................................................... 49
    Facilities and Furniture: .............................................................. 51
    Square Today: Social Characteristics ............................................ 52
    Bridge Activities (Triangulation): .................................................. 54

Interviews ...................................................................................... 56
    Interview with local businesses ................................................... 56
    Interview with people ................................................................. 57
    Analysis of Interviews .................................................................. 58

Analysis ......................................................................................... 60
    Normalmstorg .............................................................................. 60
        Physical Characteristic ............................................................... 60
        Observed Activities of People .................................................... 61
Abstract

Our societies are changing towards more privatization and exclusion; issues of social life in public spaces and the relation of urban form vis-à-vis social life has not been given too much attention in urban planning and design, especially including issues of environmental psychology. However, the importance of public life is not deniable. High qualified public spaces are prerequisite for cities to become further inviting and more sustainable. This thesis raises the questions of if our public places are created by their physical setting or by social relation. It addresses the socio-physical characteristics of public spaces (squares) from human perspective. The aim of the work is to understand how it might be possible to improve social life and behavior in public spaces, where not only the center of attraction are the people but also the urban form that surrounds it. The study investigates sociability of the two squares in Stockholm, Norrmalmstorg and Nytorget, and analysis the contribution of physical and social attributes in creating sense of place and enriching social behavior. It draws from theories about environmental psychology, place identity and sense of place, likewise socio-physical elements of public spaces. Qualitative approach has been applied for data collection of case studies through combination of empirical methods such as observation, interviews and conceptual mapping. Through analysis of results, it is argued that strong sense of community at Nytorget is the consequence of people’s involvement in urban environment; whereas the lack of people’s engagement in urban setting at Norrmalmstorg, which is the result of place identity, affects the sense of attachment and social interaction in the square accordingly. The thesis debates that it is crucial to evaluate sociability of an urban environment by initiating human perspective and revealing the relationship between physical attributes and social activities.
Introduction

Preface

One of the main characteristics of livable city is about the quality of public spaces; which provide a place for gathering different community groups. Squares as one of these spaces play a vital role in enriching the quality of everyday life where people can meet, stay and exchange their ideas. A sociable square is where people interact and participate with each other, and also is a great deal of freedom (Crowhurst-Lennard & Lennard, 2008). It provides people to experience ‘physical attributes’ and ‘social activities’, which reinforce the ‘sense of community and sense of place’ in residents.

Sociability is ‘a difficult quality for a place to achieve, but once attained it becomes an unmistakable feature. When people see friends, meet and greet their neighbors, and feel comfortable interacting with strangers, they tend to feel a stronger sense of place or attachment to their community’ (PPS, 2012).

However, contemporary urban city planning principles and some ideas of 20th century has the lack of sociability in public spaces. Planning decision is made of far perspective regardless of human dimension (Gehl 2010). There is a temptation to make public squares too large but in real life they end up desolate and dead (Alexander, 1977).

’In a society becoming steadily more privatized with private homes, cars, computers, offices and shopping centers, the public component of our lives is disappearing. It is more and more important to make the cities inviting, so we can meet our fellow citizens face to face and experience directly through our senses.

Public life in good quality public spaces is an important part of a democratic life and a full life.’ (Gehl, 2009)

Several disciplines play vital role in planning qualified public spaces; however, far too little attention has been paid to environmental psychology and planning from human perspective. Through environmental psychology, planning studies the interface between human and its surrounding; analyzing the socio-physical characteristics of built environment and investigate how people react to them. The idea of ‘Placemaking’, originated since the beginning of the 60s, brought the view of city dwellers and social aspects into attention, offered designing cities and sociable public spaces from human perspective and for people (PPS, 2009).

As a result, a particular urban setting needed to create a realm for public life and social activities.

Purpose of the Study and Research Questions

So this master thesis aims to investigate the socio-physical characteristics of public squares. Through evaluating the relation between social behavior and urban environment from human perspective, it tries to bring out how public spaces (squares) can reinforce the sense of place and enrich social life. To achieve this goal, two public spaces (squares) with different characteristics in Stockholm will be analyzed; Norrmalmstorg in central city and Nytorget in Södermalm.

The research seeks to address these questions:
- Are public places created by social relations or by physical structures?
- What are the socio-physical characteristics of public spaces (squares) from human perspective?
- Regarding the idea of Placemaking, can Norrmalmstorg and Nytorget (the two squares in Stockholm) be characterized as sociable squares?

Limitation and Delimitation

There are several conflicts and concerns for planning public spaces from different disciplines such as political, economical, mobility, social or cultural. Yet, this thesis focuses more on social issues in planning public spaces (squares); and investigates ‘built form’ vis-à-vis social behavior through human perspective.
Studying human behavior and reactions in the place is a complex issue engaged with personal, social and place identity; yet the thesis focuses more on place identity which makes sense of place and influence out social behavior. It seeks to address social life based on people’s environmental role and their involvement in the place. Arising from type of study, specific context is chosen to analyze the relationship between urban form and social life; so the result is not necessarily applicable for other places. Environmental psychology is a multi disciplinary knowledge with different perspective; however the theories, which this project is mostly based on, is limited to David Canter (1977), an architectural psychologist, and also Edward Relph (1976), as a geographer.

Structure
As mentioned above, the first chapter (1) of thesis is the background of studies, current problems and research questions; it also contains the purpose of this research. Methodology of research in chapter two (2) defines modes of procedure and combination of different methods to conduct the research. Since each human environment in different scale has its own characteristics that should be examined by its own; so a case study approach was chosen. The two different squares in Stockholm have been dedicated to assess their sociability from human and Placemaking perspective. The third chapter (3) presents relevant theories used throughout the study of cases and divided in two main sections: The first section introduces the environmental psychology aspects and discusses definition of place and place identity and how human react to the environment; and the second section investigates the socio-physical characteristics of squares. A small section will be dedicated to placemaking idea and how sense of community can influences sociable squares. This chapter will end to evaluating places from human perspective, which will be used for case studies. Each case is analyzed in detail by its own physical and social characteristics in chapter four (4). Result and analysis of different methods and used theories for studying the cases will be presented at the end of this chapter. Last chapter (5) concludes the thesis; it discusses and criticizes all the concerns and conflicts that have been raised throughout the research process. It consists of recommendation for future human-oriented studies of public spaces.
Research Methodology

Choice of Methods
It seems a complicated issue and not clearly defined problem to examine an urban environment considering human perspective; so I have employed a qualitative exploratory study as a way to determine the research design, data collection method and selection of subjects. This exploratory research relied on reviewing available literatures, also empirical methods such as informal discussions with people and users of places and formal in-depth interviews with focus groups and conceptual mapping of places. Analyzing people’s behavior and revealing cognitive process of their interaction with place needs to examine both emotional responses in place and action description (Canter, 1977). So combination of methods has been used to study this explanatory research, such as literature review as well as empirical studies for data collection and generation:

- Literature review: Using relevant theories, considering the aim of project which is analyzing sociability in public spaces (squares).
- Empirical studies:
  o Informal discussion with people in the place (real users) and with designers
  o Formal in-depth interviews with focus groups
  o Behavioral observation
  o Conceptual mapping

By using combination of methods to explore this cognitive system ‘triangulation’ was achieved and it led to the same result.

Case Study

Selection of the case
Since each urban environment has specific context to influence its users; and causes different reactions and perception about the place, thus I decided to investigate two squares which have basically different characteristics and context. The aim is not to compare the two cases, but to analyze sociability influenced by socio-physical characteristics in order to collect interesting different data of each case. So this is the reason to select the two completely different places varied in scale and size, urban context, surrounded building activities and their origin within the city public spaces network. The purpose of studying the two cases in Stockholm is to evaluate and investigate whether they can be characterized as a sociable square; and how the quality of social life can be enriched in both places. One case study is Norrmalmstorg, located in the central city, and the other one is Nytorget in a residential area in södermalm. In fact, city needs both squares as different public rooms to prioritize the events and social life in each one. Depends on the degree of relationship between people, Normalmstorg is categorized as a city square and Nytorget as a community one (Childs, 2004).

Accomplishing the case studies

Literature Review
During the project, while studying and analyzing the case studies, I used several materials to find related theories which could support my study of the cases. I have reviewed the relationship between the built form and social life through its physical and social characteristics of urban environment and human perspective, and also have tended to assess the social life and behavior in public space. The literatures cover relevant studies from different disciplines. Theories related to place and sense of attachment are based on Lynch (1969), Relph (1976), Canter (1977) and Tuan (1977); likewise sociable public space
discourses are established by Jacob (1969), Whyte (1980), Childs (2004) and Crowhurst-Lennard & Lennard (2008). These literatures identify the sociability through human perspective. I also applied the ideas of PPS (Project for Public Space; A planning, design and educational organization founded in 1975 to expand on the work of William H. Whyte) for their placemaking approach.

**Empirical Studies**
Observation has been done in five days (including weekdays and weekends) to collect data about physical environment and people's behavior through notes, diagrams, mapping, photography and counting of activities. Interviews have been conducted on the other days and in English. Conceptual mapping was accomplished randomly (depends on the focus groups) such as KTH University or some cafés at the city center.
My perception about two cases as a background, created by experiencing the both environment previously, helped me for explanatory process which follows the same order of theory chapter. Physical attributes and built form will be explained first, then social activities and interaction will be addressed; and it ends with the result of other applied methods; and will combine to analyze and evaluate them at the end.

**Observation**
Through observation, I draw attention to how the physicality of the built environment affects activities and social behavior, through recording people's behavior and their reacting to urban environment. During observation of cases, following Canter’s theory for studying a place (1977:158), each square has been divided to objects in order to identify the physical attributes and to elaborate the qualities of place. In following, activities and social behaviors as the result of social characteristics of place have been examined. It became possible by observing and recording people's behavior, actions and emotion to find for instance the places where people mostly sit or stand, start the conversation or meet each other. Observation of users highlights the place/activities expectations, if users adapt to a place or personalizing a place. This is best used in combination with other methods to check if people act as it is expected or not.

**Interview**
The design of the interview was based on adjective practical and experimental questions to examine the people's consciousness about the place and to measure qualities. For coming up the result, there are adjective checklists in which respondents give rate on numbered scales between opposite description e.g. good/bad (Lew, 2006). Interviews also ask people directly about their feeling, the reason of being in the place and if they socialize with others there. This kind of questions will be complementary to the finding of other methods. (See also appendix 2&3)

**Focus groups**
During empirical study process for generating date, focus groups are asked about their perceptions, opinions and attitudes towards the case studies. The focus group includes both static users who have constant engagement with the place, and also mobile users who have experienced the place randomly and are not dependent on the place. Static users of each case are different; depends on the origin of place and also people's environmental role (which is the degree of involvement in each environment). Considering Norrmalmstorg as a city square, it welcomes different kind of individuals and groups; from passengers who walk through the city center and probably pass the square frequently, to permanent users who work at the offices and businesses around. Since there is no dominant group of people who use and stay at this square for long time, I decided to interview those who take benefit of presence of people at the square and also watching people during the day:
The main property owner of buildings and businesses around (and also big kiosk in the middle of square) called Hufvudstaden, who obviously capitalizes both the square and surrounding (never answered my request for interview).

- The local business owners at the square i.e. market stalls who sell different daily stuff such as food, bags, flowers and the convenient store, café and restaurant located in the big kiosk (Palmhuset).

On the other case study, Nytorget, considering the residential context as a neighborhood square, and with the respect to the people who have the most day-to-day dealing with the place that should be given the strongest expressions (Canter, 1977), there are two dominant groups decided to be interviewed.

- People who are present at the place (25 interviews done).
- Business owners around the square, consist of 13 stores which face directly to the square (6 out of 13 answered).

Conceptual mapping

The aim of using this method is to study how people perceive the place, as their past experiences (Canter, 1977). Considering the research question about evaluating places by people, this method critically examines how they identify the image of place through physical attributes such as landmarks, barriers, district, edges and major path ways (Lynch, 1969) or through some of the features of the place which contribute to the ability to form an accurate image of it (Canter, 1977:24); or through individual and group meaning of place which is provided by experience it. The result of this method will highlight the identity of place (Relph, 1976).

Accomplishing this method, I asked target group to draw or write their perception about Norrmalmstorg and to mention their perspectives and feelings about the square. They were given a basic prepared map of the square which helped them to find locations easier (the maps and responses are available in Appendix 3). The result is 20 conceptual maps. The target group were selected regarding the aim of covering different groups in age, gender and knowledge about the square (Stockholm citizens or temporary residents).

Literature Review

During the project, while studying and analyzing the case studies, I have used several academic materials such as books, papers and web pages for related theories; which support my study of the cases. I have reviewed the relationship between the built form and social life through its physical and social characteristics of urban environment and human perspective, and also have assessed the social life and behavior in public space. The literatures cover relevant studies from different disciplines. Theories related to place and sense of attachment are based on Lynch (1969), Relph (1976), Canter (1977) and Tuan (1977), related to sociable public space discourses are established by Jacob (1969), Whyte (1980), Childs (2004) and Crowhurst-Lennard & Lennard (2008). These literatures identify the sociability through human perspective. I have also applied the ideas of PPS (Project for Public Space; A planning, design and educational organization founded in 1975 to expand on the work of William H. Whyte) for their placemaking approach.

Limitation and Delimitation:

I should clarify the reason of applying ‘conceptual mapping’ method just for one of the cases (Norrmalmstorg) which is basically related to its different origin. For this method and in order to analyze people’s perception about the place, broad target group covering different ages and classes and aim of being at the place is needed. There are many people who know and remember Norrmalmstorg, and also being there frequently since it is located in the central part of the city; however, not too many people, more than neighbors around, have experienced Nytorget (probably many people know the square but not necessarily being there more than once). So, I decided to have deep verbal interview and informal
discussion with people and long time behavioral observation at Nytorget instead of applying conceptual mapping method for this square.

Despite of my efforts to gather information from ‘Hufvudstaden’ as the main property owner of buildings surrounded Normalmstorg and shops at Biblioteksgatan, it never came. Yet, I got informed about the property owners’ opinion and their wishes about the square by a primary proposal prepared by architecture and planning firm in Stockholm (BAU) to convey to Stockholm City Council (more details about their proposal are available in Appendix 1). This document used to figure out which kind of issues needed to change from this perspective.

I was supposed to interview all business owners around Nytorget and some close ones; however, 7 businesses refused to answer due to being busy or without any reason.

In last, I would like to declare that most of documents and information about the two case studies are available in Swedish. So the one applied for this research are Computer-assisted translated; however, I tried to check their certainty.
'[...] why are some public spaces consistently in use by people, while others remain relatively empty throughout the day?' (Whyte 1980)
Theoretical Framework

This chapter starts with a brief introduction of social life in urban environment. It draws attention to remarkable role of squares as city public spaces. Likewise, it addresses the Placemaking perspective in planning. In order to have deep understanding of place/space and sense of attachment, following section in this chapter is dedicated to environmental psychology and will argue several definitions by different disciplines. In next section socio-physical characteristics of public spaces (squares) through human perspective is identified. It ends with a brief argument of how to evaluate places by people. This chapter concludes with a short discussion at the end, over mentioned theories in order to define a general understanding; which will support the aim of this study, that is to investigate sociability of squares, and will be addressed for further study of cases.

Sociability in Public Spaces/Squares

In recent years there has been an increasing interest in solving the problems which happened in modernism era such as suburban development and car dependency, that have caused reduction of traditional function of the city spaces, and the entire planning result was less sociable spaces and not encouraging public life and community feeling.

In order to solve those problems, there are movements back to traditional planning goals and aim toward sustainability. New Urbanism is one of these anti-modernism movements which believe in a compact, mixed-use, diverse, transit-friendly and walkable city with a hierarchy of buildings and places that promote face-to-face social interaction (Kelbaugh, 2007). It highlights the importance of social interaction and surviving the community life which can be reinforced by active and lively public spaces as meeting places, active retail, recreational activities, walkability.

In addition, social sustainability is a current essential discourse in planning public spaces which aims to create equal opportunities for accessing common and inclusive city spaces for all types of people and groups in the society (Gehl, 2010). A sustainable community needs social interaction, participation and social networks and contains a pride sense of place.

In past decades there has been a concern with the environmental and economic sustainability of the community and there are significant implications to support the environment and physical form. Yet the community life is much more important and has received less attention. Jan Gehl, a Danish city planner offering expertise ‘concerning the human dimension in city and site planning’ for years, states that social sustainability which includes understanding a successful social life in a city is not recognized easily and the consequences of planning on people’s use of the city takes time (2010).

Square is an inclusive space where no one can be kept out, as a catalyst of social life and democracy (Crowhurst-Lennard & Lennard, 2008). For analyzing the social life in such urban environment, it needs to understand spatial quality; and how it influences people’s interactions. Mark C. Childs (2004) introduces squares as ‘common places enclosed by the urban fabric’. ‘Commons’ are physical places to which ‘a group shares a set of rights’; the group may consist of all citizens or some limited set of members’ (p22) in different personal role.

For analyzing people’s social life and interactions, it is important to uncover their environmental role; which is how they understand the urban environment and how they react to it (Canter, 1977). In public spaces such as squares, people’s different role makes different social interactions. Considering people’s role in an urban environment Mark C. Childs (2004) classifies common spaces to three types, regarding to the ‘degree of relationship between people’:

- Civic commons: (or as some call it public space) which are physical spaces […] that are open to all people for the exercise of their rights. Fellow citizens who do not necessarily know each other dominate a public commons. However, passive access is not sufficient to make a public
commons. Places which are only accessible to citizens rather than controlled by them through use, are not truly public places. The degree of access, control and participation are being used to measure the publicness or sociability of civic commons (p22).

- Community or neighborhood commons: differs from civic commons in the nature or degree of relationship between their typical users. Neighbors and acquaintances dominate a community commons. A place may serve as a neighborhood commons to the regulars and a civic commons to a broader public (p22).

- Private or membership commons: physical spaces that are shared by a limited group; could be called as membership commons. There could also be legitimate rules that one as member accept it (p22).

Square as a third place

'A good new space builds a new constituency. It stimulates people into new habits and provides new paths to and from work, new places to pause' (Whyte, 1980).

Ray Oldenburg (1997), an American urban sociologist, identifies third places or ‘great good places’ as the informal public places where people can gather and interact. He highlights that these places in contrast to the first and second places, which are home and work, are essential for community’s social vitality. They are places from a range of cafés, bars or even post offices welcome everyone in anytime to meet; and also make citizens feel home. It is important to be democratically open to everyone and serves activities to involve their users. These places have social identity which makes some people join them as a member of third places and creates sense of place for its users. Professor Yi-Fu Tuan (1977), whose focus is on humanistic geography, also brings up the importance of such places for each intimate exchange that are occasions when human beings truly connect and may be etched in the deep recesses of memory (p141). He mentions that how humble events can in time build up a strong sentiment for places. Squares, as an important component of third places, can play a vital role in social community for people to meet and stay. These places invite more people by such activities and create sense of place for them.

Placemaking

The idea of ‘Placemaking’ is originated in Jane Jacobs and William H. Whyte concept since the beginning of the 60s, brought the view of city dwellers and social aspects into attention, offered designing cities and sociable public spaces from human perspective and for people. They emphasized the importance of lively neighbourhoods and inviting public spaces. Jacob (1969) mentions the ‘eyes’ on the street that means more active and face-to-face social interaction. ‘Placemaking’ is a multi-faceted approach that ‘takes advantage of on a local community’s assets, inspiration, and potential, ultimately creating good public spaces that promote people’s health, happiness, and well being.’ (PPS, 2009)

Planning, for high quality public spaces for people to share and exchange their life, is not conducted by making huge open spaces. Flexible activities in urban places need to be defined; each open space does not ensure a livable space.

Squares have this potential to change into a desirable place with low-cost and high impact improvement through placemaking. It is a process that ‘incorporates the needs and desires of a diverse community that can go a long way to catalyze quick improvements and promote true livability’ (PPS, 2009).

Environmental Psychology

Planning a vibrant and sociable public space, which can promote social behavior and interaction, is a multidisciplinary task. Since this study is conducted through human perspective, environmental psychology could be a tool for substantial evidence of research; which so far not enough studies have
been done about it. Bonnes and Secchiaroli (1984) identified ‘environmental psychology’ which has an interdisciplinary nature. They traced its roots in architecture, ecology and geography, and studied the relationship of these subjects to the psychological habits with major social psychological approaches. Erika Lew (2006), a senior in Urban Studies and Psychology, states that environmental psychology studies the interface between human behavior and the socio-physical environment and search for ways to create positive, beneficial energies between people and places. Canter (1977) emphasizes on perception and cognition process in order to be aware of the stimuli in surrounding.

The notion of place has an important role in environmental psychology. The moment which a place is recognized from a space makes ‘sense of attachment’. Studying place identity clarifies the dynamic interaction between people and place. So in following, different definition of space and place will be addressed from human perspective; which helps for further study of people’s reaction to the environment and interaction with each other in public spaces/squares.

**Space and Place**

There are several argues about the space and place from different disciplines. The main two that have been highlighted in the following are mainly based on geographical and psychological approaches. Yi-Fu Tuan (1977), as a humanistic geographer, defines place as an object in which one can dwell, as a calm center of established values. On the other hand, space is movement directed or repulsed by objects and place. He points out to the location quality which should be experienced. ‘An object or place achieves concrete reality when our experience of it is total […]’, seeing a place from inside and outside reflects upon our experiences’ (p.12&18).

Christian Norberg-Schulz (1988) identifies place as a ‘concrete phenomena’ in terms of the environment. It shows the purpose he put into effect of the position and authority of architecture. Edward Relph (1976) has a different approach from a geographical perspective about space and place. Considering the psychology point of view for understanding place, he mentions the necessity to a deep understanding of people in the real place and place as it is experienced. He argues that space is not a container that holds place. He preserves the intimate engagement of space and place and considers them as structured in human environmental experience.

David Canter (1977), an architectural psychologist, identifies the place by two characteristics:

- As the result of relationships of physical environment and behaviors (p.158)
- Procedure for identifying the place and its physical attributes by dividing the space to objects and measures the size, color, shape and focus on them; Elaboration of qualities of places and relating places to each other (p.163)

Conceptualizing the place or ‘perception’ of place is the way people memorize places. It mostly roots to specific and strong image or experience they have from the places (Canter 1977). Kevin Lynch (1969), as an urban planner in his book about ‘the image of the city’, emphasizes on the image as a representation of the ‘real world’ toward an abstract conceptual system. This image is an aspect of a city that shows its readability (p23). For complex systems like modern cities, Canter (1977) proposes to ‘bring the symbolic structure of the urban environment into legibility’.

**Place Identity/Sense of Place**

Place-identity is described as how and why the individuals have incorporation of place. It is about our memories, symbols, meanings and interpretation about a place. Kevin Lynch (1969) defines the identity of a place as that which provides its individuality on distinction from other places and serves as the basic for its recognition as separable entity. Relph (1976) addresses place identity in terms of three components which are ‘inseparably interwoven in our experiences of places’ (p47):

- The place’s physical setting
- Observed activities of the people
- The individual and group meanings created through human experiences and intentions
Relph (1976) believes that there is another intangible dimension which embraces all three components; which is sense of place (our personal feeling about the place). In addition, each person has a personal identity that influences his feeling about the place and his perspective to seek a place. It results to place attachment. Place is a part of personal identity in place identity theory (Hauge 2007); which in this research I do not aim to involve personal identity in place identity.

Place identity is identifying ourselves with the place that we belong to; by the relationship between us and environment that called ‘place attachment’ (Gifford 2002). Place attachment occurs the moment a person distinguishes a place from the space (Hauge, 2007). It depends on the level of intention between a person and an environment (Relph, 1976). Each place that comes to mind represents a mix of values and impressions rooted in both objective and qualities (Hauge, 2007).

In order to understand the degree of attachment to a particular place, Relph (1976) addresses seven processes of boundaries. It depends on level of intentions and goals in the process of experiencing a place. They are from the strongest sense of ‘insideness’ to ‘outsideness’. This range of feeling is from experiencing place without self-conscious reflection such as know it as where you belong; to sense of an alien in place. Through this concept ‘different identities for different individuals and groups, and human experience take on different qualities of feeling, meaning, ambience, and action’ (Relph, 1976).

‘Feeling’ the place takes longer time; it is made up of experiences, in dramatic, repeated, blend of different senses; a unique harmony of natural and artificial rhythms (Tuan, 1977:183-184).

Sense of awareness of an environment

Canter (1977) has examined this sense in two scales: One is about conceptualizing place, and the next one is about visible and tangible boundaries that make place. From human perspective, differences between people and their roles make differences in their response to the environment and surrounding (Canter, 1977). So to understand this interface, it is necessary to study both ‘physical setting’, as Canter identifies them real objects understood by experience, and ‘environmental role’ which is involvement of individuals in the place (p178). Consequently, people are linked to places by their different roles (different objectives of being in a place). The role makes the conceptual system (p132).

Intimate Places

It is vital to understand what an appropriate environment is, in order to memorize it and to have sense of attachment. Such places are being supported by interaction between people and different experiences of individuals called ‘Intimate places’ (Tuan, 1977).

Senses: Tuan (1977) highlights the importance of our ‘senses’ in the organization of human space and in our awareness of an environment. As he believes the organization of human space is uniquely dependent on sight (p16). ‘Our eyes pause at points of interest, each pause is time enough to create an image of place that looms large momentarily in our view’ (p167). Sense of smell makes direction and distance estimation, touching creates sense of volume and spatial ideas, and hearing causes a strong sense of size and distance, it can dramatize spatial experiences.

Intimate places have some characteristics such as:

Legibility: legible setting helps a place to be read and to be memorized. Canter (1977) believes legibility affects our awareness of place. He proposes to ‘bring the symbolic structure of the urban environment into legibility’. Lynch (1969), who believes in the power of the image, mentions to legibility as identified powerful structured image of the environment; where objects are not only able to be seen (includes visibility), but are presented sharply and intensely to the senses. This image deals with the aspect of the city which is most represented.
Safety and Security: It is one of the crucial environmental factors that affect our interaction within an environment. However feeling ‘safe’, as Gehl (2010) identifies, has two sides: to be perceived and to be experienced. Perceiving a safe environment is the prerequisite for using common city space. Features of the physical environment convey signals of threat or safety (Appleton, 1975). The theory of ‘refuge and prospect’ provides the spatial and geographical mechanisms by which humans maximize their security and seek places that allow them to have control over the environment (Appleton, 1975). This place is where one’s back is protected and has a view of what is coming. Appleton (1988) states that humanity led people to prefer a setting in which, without being seen (refuge), they can see a broad vista (prospect) and such preferences increase their chance of safe life. This concept is examined for broad concepts. It provides understanding the security, visibility and enclosure, attractiveness and other responses of the environment.

Considering the physical elements that affect our behavior, there is a characteristic called ‘piano effect’ that leads gust to find furniture, corners, columns or niches within the edge zone that will support people for staying and help to define a special place (Gehl, 2010:139). People prefer to be supported with a physical element and dislike to be watched while they are waiting.

Fig. 3, Karimnia 2012, Refuge and Prospect

Crowding: Tuan (1977) brings up this concept as ‘to be in the company of human beings, even with one other person; It has the effect of curtailing space and freedom’. This is an important concept which studies people’s behavior in particular setting with respect to their surroundings. It arise the importance of personal distance and how it affect people’s social behavior. It is observed that people who assemble in open spaces usually congregate together rather than scattering over the larger area; for instance if a person is involved in his personal life, like reading newspaper, prefer standing close to the crowd. People come where people are; this is a self reinforcing process: something happens because something else happens (Gehl, 2010).

Distance estimation
The quality of place influences our judgment about distance (Canter, 1977:96). When there are other options around that can motivate people to walk, it makes confusion about distance estimation. Walking along an active street with ‘soft edges’ is different experience than walking along closed facade buildings without any opening and social life (Gehl, 2010). There are theories of ‘Life space’ and ‘Psychological space’, with the concept of ‘Valence’. It indicates that liking or disliking of some particular states is usually demonstrated by attraction towards the area of the life space that have high ‘valence’. Areas of high valence produce distortion in life space and lead to inaccurate perceptions; it heightened desire or increased valence and made the distance seem nearer (Canter, 1977:97). In addition habitual mode of transport makes confusion in distance estimation.
Urban microclimate and identity of place

Climate is a “nested physical structure in place that may have a significant impact on functional as well as physical and emotional connotations of places (Knez, 2003). It is both problem and attraction for outdoor activities. ‘Necessary activities’ are usually facilitated to overcome the climate. However, it is essential to consider this issue for ‘optional and social activities’ in public spaces, for the reason that these activities are influenced by the quality of physical condition (Gehl, 1996). Comfort climate situation, such as shelters and shades for sun and wind, make public spaces more suitable for different purposes. ‘The characteristic microclimate is a property of an urban space that has a considerable impact on the range of possible activities and the actual use of it’ (Knez, 2003). So considering climate as making a comfort environment is related to people’s behavior and how they experience the urban setting.

Regarding place identity (as mentioned before), the microclimate that people experience, is a physical characteristic that affects their perception and awareness about a place. ‘Special climatic features may underline other impression and evoke associations to other feelings. The strong wind in open space, for example, could amplify a spatial feeling of desolation or the social feeling of being exposed’ (Knez, 2003). So there is a relation between microclimate and place identity. For a particular place, the microclimate is stored as a perceptual image that gives details about the level of events. So climate need to be taken into account because it may have a fundamental role in place identity and how people conceptualize the place. As a result, it affects people’s sense of attachment to that place, for their further activities or social interactions.
Physical Characteristics of Squares

Through analyzing theories about environmental psychology, different perspective of space/place have and how people interact with and within it (sense of place/place identity) been identified in last section. Studied place in this project is mainly public space and square. The aim of this section is to define physical attributes and social characteristics of these places in order to examine how the two social and physical factors are related and how they involve their users and enrich social life.

Patterns and types

The very primary matter about the physical space is its form or morphology. Visual and kinesthetic skills create the individual’s awareness of the form of the built environment (Carmona et al., 2010). Streets, junctions and roundabouts shape some spaces built in the progress which are a fraction of city’s spaces and cannot make sort of space that people require (Gehl, 2010). Urban morphology of squares is classified to five distinct spatial plazas (Zucker, 1959): the closed one (space self-contained), the Dominated Square (space directed), Nuclear Square (formed around the center), Grouped Squares (combined) and the Amorphous ones (unlimited).

The Closed square is defined by complete enclosure which is broken only by those streets leading. The Dominated one is marked by being directed towards one building or group of buildings. It can be towards a natural view like a mountain. Within the Nuclear Square, space is less perceived than Closed and Dominated squares; an element which provides powerful center defines it. The Grouped Square is similar to a sequence of rooms inside a palace, so each square becomes meaningful to the subsequent one. The Amorphous Square acts to catch-all some of the previous categories’ characteristics. (Zucker, 1959)

There is another classification of squares pattern, states by Sitte, which stresses more on the ‘enclosure’ as a prerequisite for any square. He classifies them in two types (the character of being determined by the nature of dominant building): the ‘deep’ and the ‘wide’ square (1901/1965).

Accessibility and modes of movement

The way people experience an urban environment extremely depends on the modes of movement and it can provide different perceptions. Some squares, as public spaces, have important traffic role in urban network, while some are prioritized for pedestrian and are accessible by public transport or walk. The issue of cars in public spaces such as streets and squares has been controversial and such disputed subject affects our sense of place. Prioritizing walking provides an environment to be experienced safe; however, more rooms and better condition for cars makes walking difficult and less attractive as a consequence. People must be able to move comfortably and safely in cities on foot or by bicycle (Gehl, 2010:91-93).

‘A good plaza begins at the street corner’ (Whyte, 1980:54); where the busy pace creates a natural flow of foot traffic. The connectivity between the street and the plaza also creates a lively, theatrical energy between passersby and seated individuals (Whyte, 1980). This corner is the point which Childs (2004)
define as ‘Catchment’. It is the area from which most users of the civic place arrive; an area of ‘social influence’. It defines arrival points and how to catch routes (p.25&127). Access by public transport is easier, more comfortable and economical; and discourages people from using the car (Crowhurst Lennard and Lennard, 2008).

**Scale and Size**

Christopher Alexander (1977), an architect who wrote the ‘pattern language’ for design in different scale, points out that every town or community needs public squares, as they are the largest most public rooms those places have. However he highlights that when public spaces are too large, they look and feel very deserted. Back to the patterns of traditional cities, which based on different experiences while traveling on foot, the result is human scale places adapted to the senses (Crowhurst-Lennard & Lennard, 2008). Nowadays cars and traffic are critical urban planning problems, and at the same time the sense of proportion and scale has gradually become more and more car oriented.

Proportion of the square to its surrounding is a central key which makes different senses. Gehl (2010) mentions to the importance of proportion and harmonized size and scale to human body and human senses, which are vital characteristic that define spatial quality. In recent years there is a tendency to make huge open spaces which are perceived impersonal, formal and cold; and generally not much to experience (Whyte, 1980).

The typical measurement of the square is 100*70 meters. Walking through the square, which is 60-70 meters, shows this experience that it is possible to recognize most people’s faces and observe facial expression at 25 meters (Gehl, 2010:38). The magical size of the squares is 40*80 meters, which means that people can see the entire scene, seeing the square itself and the faces of other people (163).

**Enclosure**

Enclosure is another feature related to safety and security in urban spaces. It is such an important feature of the environment that there is a specific region in the brain responding directly to environmental enclosure. Physical attributes such as walls, edges and floor define the environmental feature and their proportions cause impressions of enclosure. Zucker (1959) describes these physical elements in terms of ‘perceptual qualities of squares’ which can direct our movement and create dynamic tension. This concept is associated with territoriality and privacy. Physical elements that define enclosure are edges and walls, floor and frame.

**Edges and Walls:** ‘Enclosing walls’ are the set of building facades, trees and other vertical forms that surround the open portion of a civic room and provide the sense of enclosure (Childs, 2004:26). Edges are where city and people meet; the place to enter, walk or sit along, stay and wait, experience the activities, watch others and interact with them. Edges define territories for individual places, make the feeling of organized and secure, and reinforce life (Gehl, 2010). ‘If the edge fails, then the space never becomes lively’ (Alexander, 1977). There are two types of edges: ‘Hard edges’ that limit the visual field; like walls and passive façade; or ‘Soft edges’ that are permeable and let some of inside activities move out in a semi public area as an active façade. Soft edges are where people sit and take a pause instead.
of being inside (Gehl, 2010:75). Ground floors, as architectural commons which are seen and used mostly by people, have vital role for edges. Activities happen in ground floor supplement each other; the wealth of experience increases; walking becomes safer and distances seem shorter (Gehl, 2010:88). Our horizontal field of vision along walking is ground floor, which offers people interest and intensity. ‘If ground floor facades are rich in variation and detail, our city walk will be equally rich in experience.’ (p41)

Edges provide vibrant condition for staying in city space; help to cover your back and also protect you not to feel alone or signal that you are waiting. In addition people would like to have more visual connections between inside and outside of buildings and prefer to wait and to meet e.g. close to buildings with open windows and transparent facades (Gehl, 2010). So placement along edges is extra important and can be good support points as attractive places to stay. Jane Jacob (1961) describes that mixing function in buildings care for common space. Her expressions about ‘street watchers’ and ‘eyes on the street’ emphasize on walk safely in city space, which is a prerequisite for creating inviting well-functioning cities for people. Several attempts have been made to maintain an open society for people from all socioeconomic groups can move in the common rooms. These places have edges with enough transparency, wealth details and materials with mixed functions on the ground floors to create opportunities to attract walking pedestrians and supply attractive and cohesive city at eye level (Gehl, 2010:78). ‘One of the key principles to remember when trying to create a great public square is that the Inner Square and outer square must work together. Active edges (sidewalk cafes, museums, shops) feed into the center; in turn, a lively scene at the heart of a square creates a buzz that draws more people to the area, generating more activity for edge uses’ (PPS, 2012).

**Floor:** is the horizontal surface enclosed by walls. It may be composed of a set of pavements such as asphalts, planting beds, brick walking or a central pond (Childs, 2004:26). Pavement can be a critical component in the legibility of a place.

**Field and Frame:** Civic rooms have two milieus: Field and frame, which have different physical requirement and defining characteristic: the Field and Frame. (Childs, 2004) ‘Central field’ is the portion of the floor that is compositionally centered in a room. It is typically an open field with a ‘Central marker’ within it, such as a pond or a statue. It is the place which should be open and easily set and reset with props (p124). ‘Frame’ is the portion of the floor that surrounds the central field. It is the first place people sit, meet or hang out. A frame can have small fields within it and multiple layers. Within the frame there may be subspace or alcoves that provide a degree of enclose but open to the larger place (p26).

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**Facilities/Furniture/Art**

The furniture of public spaces improves the quality of places. They provide people the daily requirements and supply their pause, such as proper furniture to stay and sit, or enough light at night to have a safe environment. They have both functional and aesthetic role in urban environment.

There is wide range of urban furniture and facilities: For sitting designed benches (fixed or movable chairs) invite people to sit and stay; ledges and steps also provide sitting spaces in corners or around sculptures (more that their main role). Lighting elements supply safety and glory to the environment, likewise play a key role to enhance the place identity. Urban facilities such as bus and bicycle stations...
support people’s daily necessary activities, so it is essential to be designed and located well. Art pieces, such as a sculpture or a fountain, or greenery i.e. Trees or flower boxes are symbolic for human feeling and create their own space (Tuan, 1977:162). . Depends on the climate and weather, there are also some urban elements that provide protected areas as shelters e.g. from sun or wind. These physical attributes can play other roles during a year and in different weather. Likewise, as other urban facilities, they can facilities the environment and improve the quality of the space which cause people to remember it. So they are strongly effective in making place identity.

Urban facilities are classified in different role, such as aesthetic, functional or both. They are very powerful to involve people, or make them to stop and stay, and cause special identity to memorize the place; what exactly differentiate a place from space (Tuan, 1977).

Whyte (1980) describes that how well designed and correctly located physical elements support active life. They play more than their roles, for instance steps around a fountain easily become chair or table. Physical objects in the space cause sense and influence the place; for instance a literary art gives visibility and draws attention to areas of experience that we may otherwise fail to notice (Tuan, 1977).

Childs (2004) mentions the potential of public art and how it may promote dialogue by providing an excuse for strangers to talk to each other (p184). He believes that public art provide keys for way finding, or help make the functioning of the city legible. In summary it offers ‘Dialogue, Anchoring and Structure’ to the city.

Proper furniture of squares increases the quality and expectation of the environment, if they are suitably organized. So in order to enhance the ‘local identity’ of urban square, designers may be commissioned to produce ‘particular’ furniture (Carmona et al., 2010).

Social Characteristics

Activities:
‘... conversations can start when people are at ease, in particular when they are occupied with the same thing, such as standing or sitting side by side, or while engaging in the same activity together’ (Gehl 1996).

Jan Gehl (1996) classifies human outdoor activities to three categories: The ‘necessary activities, which are the one that should be carried out by individuals despite physical or social situation, such as going to

![Fig. 7, Karimnia 2012, The role of urban furniture or art in social life](image)

![Fig. 8: Gehl 1996, The relation between social activities and physical environment quality](image)
work, school, shopping or waiting for bus. ‘Optional activities’ are the one carried out by wish and there is no force to do it; so physical condition plays an important role for such activities to happen. They are in range of taking a walk to get a breath of fresh air, standing around enjoying life, or sitting and sunbathing. ‘Social activities’ depends on presence of other people in public spaces and can be both active and passive such as meeting and talking, conversations or children play. Proper physical condition helps prolong these types of activities.

Squares as public spaces provide an appropriate condition for combination of all activities, especially for social and optional one. Diverse and vital activities, which happen in public spaces, can make an intimate place (Tuan 1977). The range of activities on the square can be different, from temporary and seasonal market to performing. The activities have essential role to make communication and social interaction between people, encourage them to stay longer and offer further options. Optional activities, such as sitting or eating are possible one happen at the squares. Due to proper physical condition these activities stimulate other people’s senses and attract more people there, so they have possibility to change to social activities. ‘What attracts people most, it would appear, is other people’ (Whyte, 1980:19).

Squares can both affect and being engaged by urban fabric and surrounded activities. Active edges, as popular zones where people wait, stay or start a conversation, involve squares in social life. Ground floors of the buildings are an interface between inside and outside. Activities on ground floor are watched by people who walking along the edges, or by those sitting at the square. Activities, which involve people’s senses, cause pause in their movement. It has been observed that well positioned intimate experiences can even change people’s direction and destination. It is a show effect that people who eat attract far more people (Whyte, 1980). Intimate activities on the ground floor can take benefit of people and capitalize outside spaces, offer people to sit which attract further people.

A sociable square should not only have intimate activities to invite people, but also should have proper sitting places. There is a close relationship between sittable places and popularity of squares (Whyte, 1980). Sitting is an important optional activity which provides us for a longer stays, for waiting for someone, or enjoying the environment. People often stay or sit along the edge of the buildings, if they are well-designed; or on the steps around the fountain or in the corner of the street if they are comfortable enough, or use the available benches and chairs (Gehl 2010). Whyte’s (1980) long term investigation about people’s behavior in urban setting (American context) shows that people like to sit close together even though there are a lot of empty spaces. It shows the popularity of grouped benches than individual ones. He also highlights the importance of choosing where to sit; so movable chairs are one of the greatest choices for sitting. His experience of behavioral observation show that people frequently manipulate their chairs and rearrange them for any reason like enjoying the sun. However, individual fixed chairs do not work very well. Whyte (1980) as an urban anthropologist highlights that people also enjoy the freedom to sprawl. They create a barrier between themselves and others, depends on being able to choose between sitting in the sun or the shade, depending on the time of the year and the temperature of the weather. This type of social freedom is more valuable to people than sitting where is more comfortable, or interesting to look. A colorful, comfortable bench affixed to the ground may spruce up the appearance of the plaza from the perspective of an architect, but its static placement is unappealing to people who actually use the space (Whyte 1980).

**Bridge Activities (Triangulation)**

William H. Whyte (1980) argues that there are many ways to make it easier for people to meet and mingle. He suggests that there should be something in the space that people interact with, to stand around it, to touch it, or a sociable element like performers, called ‘Triangulation’. He introduces it as ‘the process by which some external stimulus provides a linkage between people and prompts strangers to
talk to other strangers as if they knew each other’ (p.94). Triangulation is about an activity or even physical element which makes communication more than its role. These physical elements or activities play the role of a ‘bridge and connect people which overcome barriers of age, culture, language, income; It gives people an excuse to come together productively and enjoyably and can be described as ‘social objects’.

'Social objects are the engines of socially networked experiences, the content around which conversation happens. Social objects allow people to focus their attention on a third thing rather than on each other, making interpersonal engagement more comfortable. People can connect with strangers when they have a shared interest in specific objects.' (Collaborate the Social Spaces, 2012)

**Fig. 9, Karimnia 2012, Role of ‘Triangulation’ as a linkage between people**

**Communication dimensions**

Communication between people requires a reasonable amount of space. So different forms of communication take place at different distances. Gehl (2010) identifies four types of distance which different contacts happen through it (p47):

- **Intimate distance**: 0-45 cm, contacts are more emotionally and tied to our feelings; the situation is secure and comfort.
- **Personal distance**: 45cm-1.2m, contact distance for family and friends conversation.
- **Social distance**: 1.2-3.7m, good physical expression for ordinary conversation.
- **Public distance**: more than 3.7m, formal contact and one-way communication, not participating in what is happening.

Less than 100 meters is a distance for understanding body language and recognizing gender. In less than 25 meters it starts decoding emotions and facial expressions and less than 7 meters is a distance that all senses can be used to experience in detail (Geh, 2010:37). There is also distance for experiencing other senses such as smelling or hearing,
Theory Discussion

The theories mentioned above have been collected from different disciplines such as geography, planning, architecture, anthropology and psychology. The challenge of these theories is to define a ‘place’/environment, with its ‘social and physical characteristics’ which involve human to ‘experience’ it; so the result is a strong ‘image’ as ‘place identity’ which results ‘sense of attachment’ to that place. This place/environment is a proper base for dynamic and ‘social interaction’.

Though the notion of ‘place’ has examined in several perspective, they mention to the people’s engagement with physical environment. Yi-Fu Tuan (1977), as a geographer, identify place as a pause in movement which reflects upon our experiences. Edward Relph (1976), also as a geographer, adds the necessity to a deep understanding of people in the place and addresses space and place as structured in human environmental experience. David Canter (1977), as a psychologist, believes in place as the result of relationships of physical environment and behaviors (p158). He also highlights the importance of perception of the place to understand it and be aware of stimulus around. Kevin Lynch (1969), as an urban planner, mentions to the image of place that makes it unique. Jan Gehl (2010), as an urban designer, defines outdoor activities which are ‘social characteristics’ of an environment. He highlights that proper physical condition can increase the social activities. William H. Whyte (1980), as an urbanist, defines ‘intimate experiences’ which are activities that can make communication, such as sitting or eating. He believes that these experiences attract more people. He also highlights the role of ‘bridge activities’ (triangulation) as linkage, which connects strangers and make interactions between them.

Intimate places have unique and strong image in people’s mind on the grounds that they involve human feeling and senses (Tuan, 1977). These places are proper physical condition to strengthen social behavior and interaction. Regarding to environmental psychology, such places have some characteristics to be perceived by, such as legible (Lynch, 1969), safe and secure (Appleton, 1975), crowding to congregate others (Whyte, 1980&Gehl, 2010) and social comfort (Whyte, 1980).

Gehl (2010) identify a broad picture of physical attributes of an urban environment. He mentions to the importance of size, scale and proportion of buildings and spaces between buildings, corners of streets; which can reinforce social communication. Whyte (1980) states that if physical attributes are well designed and well located, people can ‘experience’ them and perceive the place with a strong ‘image’. Activities happen in an urban environment are the social characteristics of a place. The theories addressed that diverse activities and mixed use buildings increase the life quality of public spaces. Intimate experiences, that are the result of users’ senses engagement, highlights the vital role of edges around; especially in the level of ground floor that is the zone most of interactions between people occur (Gehl, 2010).

‘Experience’ of a place depends on ‘the level of intention’ between a person and an environment (Relph 1976). Canter (1977) also defines this experience as ‘environmental role’ which is involvement of individuals in the place (p178). They both highlight that ‘place’ is ‘experienced’ by users in different level and role which makes different perception and ‘image’. Lynch (1969) focus on this image and its power to make ‘place identity’. Relph (1976) mentions symbolic meaning of an urban environment, which is the result of human experiences. It is the contribution of observed activities and physical attributes that make ‘place identity’. Robert Gifford (2002), psychologist and environmentalist, marks that we identify ourselves with the place where we belong to; it is called ‘sense of attachment’. When a group of people have sense of attachment to an environment, it provides sense of belonging to a community, that people are proud of it. It cause sense of satisfaction and comfort of being there, result to dynamic interaction and social communication between people.
To conclude this chapter, I would like to address planning procedure proposed by Jan Gehl (2010) as ‘First life, then spaces, then buildings’ (p198). In fact planning from below and inside, which means respect to human dimensions and needs, can solve part of lacking sociability in the public spaces. However, regarding to this perspective and considering socio-physical characteristics of such places, there is a relation between social life and behavior in public spaces and the characteristics of the urban environment. Dynamic interaction between people is the result of both physical attributes (building/architecture) and social activities, and there is no prioritization. Fig. 11 demonstrates that if the relation between these two characteristics works well, then the place has an identity; which people perceive it and memorize it clearly. As a result, they have sense of belonging to that place which causes to improve sociability.

Fig. 10&11, Karimnia 2012, (10) Left: The Components and attributes of Sociable Square. Through Environmental Psychology (11) Right: The analysis of Sociable Place from Human Perspective
To understand an urban environment:

Objective reality: representing world by reality to a geographical and physical world which has a topological structure, understood by experiencing it.

Environmental role: involvement of individuals in the place, no matter influenced by any sort of things.

(Canter, 1977:178)
The Two Case Studies

This chapter deals with the two case studies which are both public squares in Stockholm; one is Norrmalmstorget in central city and the other one is Nytorget in Södermalm. Both squares have defined geometries and frame, surrounded by buildings and separated by streets. Geographically, Norrmalmstorget is located in heart of the city, surrounded by offices and within a shopping context; however Nytorget is located in a residential context. In this section, each case and its socio-physical attributes will be identified. Likewise, the sociability in each square will be discussed through related theories.

Each case is being described through cognitive system; and includes detailed qualitative information collected about both physical and social characteristics. It has been tried to reveal and understand the complex system of users and their environmental role (Canter, 1977). Description of the cases follows the same order as theories; it starts with brief introduction about the place and its role in urban context. Then physical attributes and social activities inside or around of the square will be mentioned, through environmental psychology and human perspective. The urban setting is also simulated by photos to strengthen the visual image of the environment.

Result of empirical studies, includes behavioral observation, interviews and conceptual mapping that examines people’s sense of place, will be analyzed by relevant theories. The results draw understanding of if and how the two cases are sociable squares that play a vital role to enrich the quality of everyday life.

Fig. 13, Karimnia 2012, The Urban Context of the two Case Studies, Norrmalmstorget and Nytorget
This section is dedicated to describe the square; a brief history of social and physical changes during the time, its current situation, and then studying the physical and social characteristics of the urban environment in order to identify the quality of place. It is by empirical methods such as observing and recording people’s behavior, actions and emotion.

**Urban context**

Norrmalmstorg has been located between Hamngatan and Smålandsgatan. The square is fairly sited in the central part of the Stockholm, by less than 5 minutes walk from the main city square (Sergelstorg). It is placed roughly adjacent to Kungsträdgården, which is popular as central park for different kinds of activities, hangout and meeting during the year. In the northern part of the square, Biblioteksgatan established as commercial and an entertainment street starts out as a pedestrian street until it passes Stureplan square (one of the main meeting places in Stockholm). Biblioteksgatan is well-known with many luxurious brand stores and one of the highest rent levels for retail in the city. Thus the square has strategic location in the commercial and official urban context, where in the Swedish edition of Monopoly is the most expensive lot. Norrmalmstorg welcomes all citizens in a wide range, those who work in the offices around or who come for shopping; likewise, it is simply accessible for tourists walking around the central city. The square is surrounded by traffic routes for cars, busses, bicycles and tram.
History

‘Norrmalmstorg is a very vital point in modern Stockholm and it is therefore surprising that the place has such a short and even colorless history […] It is simply an upstart, but that therefore need to add anything derogatory in the word. No. It is just like an accomplished businessman from a very modest origin worked his way up to a solid and respected position’ (Hellbom 2009).

Thorleif Hellbom (2009) reviews the history of the square and the evolution of built form: Up to the 1800s, Fiskartorget (Norrmalmstorg) was directly adjacent to one of the two main ports and was the place for inspected and repacked all the fish transported to the harbor. Over time, however the square was the Nybroviken entrance (the natural harbor) and founded a nasty stench spread from there. In the 1700s, criminal tools such as Wooden Horse and Copper Matte were moved from the Stortorget to the square. During the 1850s, the waterlogged area filled and laid out where Berzelii Park is located today. Other tools removed and replaced somewhere else. The port was down to its present location and the square has formed as it is today; with its proximity to both culture and transport hubs became a more natural meeting place for locals. The square was named Norrmalmstorg in 1853 which previously had been the name of Gustav Adolf Square. Through history, Norrmalmstorg is well-known far outside Stockholm related to its drama in 1973: ‘Stockholm syndrome’, when bank robbers took several bank employees hostages in a bank branch (Kreditbanken) at the square. It was one of the first occasions when criminal history was written directly in the Swedish media. Following the history of the square by surrounded buildings, in the beginning of the century, HolmBlom's race shop moved into Hamngatan, south of the square, which was a sign for Norrmalmstorg. A few years later, the fashion magazine Leja moved to a building there and long queues of women were almost to Nybroplan. In 1930s Ivar Tengbom built ‘City Palace’ in the west end of the square. The building would serve Stockholm branch of the South Swedish bank and also used as office and commercial buildings, and hotels, where the ground floor was organized for stores. In the early 1970s, Tengbom also built the Palmhuset (big kiosk) in the middle of the square as restaurant, bar and café (BAU 2008).

Among some ornamental and artistic objects found at the square, there is a historic calendar sign sits on the former Credit Bank building on south east side of the square, which besides time shows the day of week, month and year. The clock sat initially on building façade above Urfabriken on Drottninggatan 28 from the late 1800s until 1968 when the house was demolished. The clock was mounted up again in 1975 at the current location but did not make further fuss (Epstein 2009). During half century much has happened at the square. Rows of trees have been added around of it. There are art pieces standing and decorating the corners and also benches which have been located almost in the center and alongside the edges. In addition, there are a few changes happened, such as some businesses disappeared; old Mea is gone; Skomans replaced by McDonald’s yet Nessims carpet business remains on the corner of Berzelii Park. The airlines and banks billboards still dominate the buildings’ facades (Hellbom 2009).
Pattern: According to Zucker’s classification of the squares (1959), Norrmalmstorg is an enclosed plaza and complete enclosure, broken by streets leading into it. Morphologically, the square has a clear field with defined form, surrounded by 6 floors buildings. The streets and sidewalks between the square and buildings cause to perceive a gap between the edges and main field. The gap in southern part, where Hamngatan passes by, is too big, so the square is not supported by built form in this side.

Accessibility and modes of movement: Traffic and modes of movement is a challenging factor, which influences people’s perception about the square. The traffic route around Norrmalmstorg has changed constantly during the time. Currently, the square welcomes different modes of movement around of it. Hamngatan is the main street to provide access for cars, tram and buses. Previously there was a bus station along the street, which has been removed now. So there is not intense pedestrian traffic along this side that could affect the square.
Smålandsgatan, on northern side is accessible for cars, as well as pedestrian and buses. There is a bus station along and in the corner of the square. Covering this street in red stresses the pedestrian prioritization. Since Biblioteksgatan, as a pedestrian shopping street, starts out from the square on this side, people’s frequent movement dominates this spot. Side streets on the east and the west, both provide car access, yet their different size and pavement shows pedestrian prioritization. Due to tram lines on the east side, this street plays a crucial role in the traffic system.

Norrmalmstorg is accessible by different means of public transport. The square is very close to the center and two metro stations. There are also bus station and bicycle parking inside and around the square. However, following people’s movement highlights that the square is not easily accessible for people who walking to; due to the streets around of it. Regarding to the important role of street corners (Whyte, 1980) there is a bottle neck in south west corner of the square. Flow of foot traffic on both sidewalks of Hamngatan should pass this corner to enter the square. Those who walk from Kungsträdgården, heading to Norrmalmstorg, wait for traffic light. This corner is the main ‘catchment’ of the square, the area from which most users of this civic square arrive (Childs, 2004). There is another ‘catchment’ point on the north side, where Biblioteksgatan joins Smålandsgatan. In this spot pedestrian flows also have to cross the street to get to the square. So, from human perspective, Norrmalmstorg is detached from its surrounding. Even the streets have limited car traffic; psychologically people have to cross them as barriers.

Fig. 19-22, Karimnia 2012, Norrmalmstorg, Access and Modes of Traffic
Size and Scale: The size, and proportion of the square to its surrounding, does not make it to be perceived as a large square. The average dimension is within 100 meters, and the highest distance of surrounded buildings does not exceed 25 meters, which means that people can take the entire scene (Gehl, 2010). Despite the size of the square which is stretched more in north south direction, due to concentration of several physical attributes in the north part, the square is perceived differently: a blank field in the south and active part in the north.

Enclosure: There are different impressions of enclosure; both by built form and physical elements inside the square. These attributes in different proportion such as surrounded buildings as walls, rows of trees as the natural frame around the main field, and also market stalls and kiosks in the middle of the square, all affect people’s perception of the environment and enclosure.

Edges:
Six floors buildings facades, surrounded the square, define built edges. These edges with enough openings are permeable and provide ‘eye’ on the square; which cause safety (Jacob, 1961). The ground floors are mainly storefronts. Gehl (2010) emphasizes on the importance of rich ground floor which can activate the environment and provide safe walking area. However, edges around Norrmalmstorg are not active zones to enrich social life and activate the square. The ground floors are mostly large exclusive brand stores, with big windows and few doors, that used rarely by people. Except of one restaurant on the east side, there are no other intimate experiences along the edges. The main entrance door of McDonald on the south west corner, as one of the active and popular places around the square during the day and night time, does not open to the square. Therefore, edges around Norrmalmstorg do not accommodate people to meet, stay and socialize. The gap caused by sidewalks and streets around is another reason
that square cannot be engaged with its edges. So there is no wealth of experiences in the walking level; and ‘if the edge fails, the space never becomes dynamic’ (Alexander 1977).

Field and Frame:
The architecture of buildings around the square is modern and old combined, rich and detailed; yet there are no chances to place along the edges. Waiting or standing by the edges is possible due to wide sidewalks, yet the distance between this important zone and main field of the square does not satisfy the sense of being on the square. So those stand or stay in this zone does not have enough control over the square and life happening inside. Other physical elements, such as car barriers, row of trees and different flooring for each zone strengthen this gap; which is psychologically perceived as a barrier to access the square.

The principle of putting small spaces into a large space and modest human scale is seen in this square. These varied scales of physical elements such as kiosks can reduce the dimensions and make space seems smaller and more intimate (Gehl, 2010:165). The amalgamating of market stalls and kiosks cause
sort of impressions of enclosure. However, the proportion of the big kiosk (Palmhuset) to the whole space is too big and do not fit well in the plaza. Its massive design also discontinues the possible open scene around the square and disorders the main flow of people on the square.

Norrmalmstorg has special pavement, which is a grid pattern in gray and white that covers the whole main field. This grid is detached from other pavements by sidewalks and streets. Different combination of flooring is a critical component and makes the square not to be perceived as a readable and legible one (Childs, 2004).

The frame around the main field, as the first place people sit (Childs, 2004), has been furnished by some benches. However, these spots are far from the main catchments of the square and the intense flow of people. So the frame does not have strong and sensible entrances for people to meet, wait or sit.

**Facilities and Furniture:** Normalmstorg has been filled by several urban furniture and art pieces; Which in one way is a facilitated place, yet has visual complexity. Concentration of physical elements in one side makes the perception of a disarrayed space with too many objects.

**Tents:**
The two temporary tents selling flower and accessories occupy almost the west side. They set up every morning and are disappeared in the evening. Likewise a big kiosk called Palmhuset in 2 floors, located almost in the middle of the square. There is a convenience store, café and restaurant inside and an open terrace adjacent to its north side. There is also a sausage vendor in the corner of Biblioteksgatan.

**Benches:**
Group of row benches in oak resides in the centre of square; and no physical elements protect the back while sitting. There are also grouped benches between the kiosk and market stalls. These benches are located in the corner where people can sit and watch the entire scene of the square. They are supported by two high trees, which provide a protected zone in this area. This sitting spot is fairly popular cause people have freedom to choose in which direction to sit. Likewise, considering the weather, the trees are like shelters that encourage people to stay longer.

There are also row benches in granite with special design alongside Hamngatan; which face alternatively to the street and to the square. Sitting and watching Hamngatan, as a high traffic street, seems not so delightful for people. Grouped round benches on the east side are the last choice for people to sit.

**Urban Facilities:**
Bicycles parking sited on both north and south west of the square, have occupied huge spaces. Too many parked bicycle not only makes visual complexity but also force people to change their movement.
direction. A bus station alongside of Smålandsgatan, can play the role of triangulator (Whyte, 1980) and connect people who are waiting for the bus (which is a ‘necessary activity’ (Gehl, 2010).

Art:

There are some artworks at Norrmalmstorg: Four black and golden bronzed candelabras in each corner, three red granite columns with running water in the center of the square which symbolizing Baltic freedom struggle, and also the Bird sculpture in south east of the square (a hen with flapping wings, escapes the traffic) which signifies the increasing number of cars and reduced space for pedestrian. Considering the potential of public art to promote dialogue between people (Childs, 2004), none of these aesthetic elements involve people and influence social life at the square. As Whyte (1980) highlights, both design and location of urban facilities are important in order to guarantee their success. At Norrmalmstorg, there is no possibility to sit around of these elements. They are not located to the respect of neither people’s daily movement, or to the main catchment zones. These physical attributes do not have ‘piano effect’ (Gehl, 2010) to support individuals for standing and waiting.

The last but not least analysis of square physical elements is about the involvement of our senses in urban environment; which Tuan (1977) mentions it as an important aspect to create sense of place. The water running sculpture in the middle of square is very well-located; however, it has neither water sound to be heard nor enough visibility from the corners. So people are not pretty aware of this element to memorize it, and it is not strong enough to involve user’s senses and make a space around of it which encourage people, who are passing by, to stop and enjoy of it.

Fig. 32-37, Karimnia 2012, Norrmalmstorg, Facilities and Furniture
Today the square is mostly a place people pass by, taking the tram to Djurgården, buys the newspaper at the convenience store or hurry by to Biblioteksgatan. There is no real reason to stay at the square. (Catenacci, 2010)

Norrmalmstorg as a city square, according to Childs’ categories (2004), is open and accessible for everyone. The square welcomes various people every day working nearby or walking through the central city. There is no special group of users dominate the square and have control over it. People mostly pass it through to reach several options around, e.g. from Kungsträdgården heading to Berzelii Park and Berns, or to Biblioteksgatan and Stureplan; so the first impression of the square is a ‘transition place’.

The square is surrounded mostly by official buildings and shops on the ground floor; and the range of activities is from brand luxury stores, hotel, car concessionaire, fast foods and restaurant. In addition there are dissimilar activities inside the square including 5 small businesses i.e. 2 stalls sell bag and flower, a sausage vendor, a convenience store (Pressbyrån) and a café and restaurant. Except of the big kiosk, other businesses happen in temporary structures (tents).

Life at the square:
Norrmalmstorg has been located within the shopping context and in central part of the city. However, its life is not engaged with surrounded activities. One reason, described in last chapter, is due to physical distance (streets) between the square and edges around. The other reason is related to type of activities on the ground floor of surrounded buildings. They do not offer many intimate experiences which could attract people from the square to the edges in order to sit or walk alongside; and generally to cause a pause in people’s movement (Tuan, 1977). The only soft edge is on east north side of the square, which is a restaurant, has capitalized the sidewalk with its tables.
Following people’s movement highlights the constant flow of people between south west corner of the square and Biblioteksgatan on the north side. Surprisingly, the majority of people ignore wide sidewalks around the square and walk through an undefined path which crosses the square; it is actually the shortest distance between people’s two destinations.

During 15 minutes behavioral observation in a summer day, around 147 people entered the square from southwest corner; only 26 of them continued walking alongside Hamngatan to the east, 11 of them drop by the convenience store at the kiosk, 5 people stopped watching flowers, 8 took a seat around the kiosk, and the rest approximately continued their walk to Biblioteksgatan. This is not to be generalized; yet it highlights the people’s involvement and the reason of being at the square; which is mostly passing by and not really engaged with other activities and people.

Fig. 41-46, Karimnia 2012, Norrmalmstorg, Social activities and life at the square

Sitting is an ‘optional activity’ which needs proper physical condition to happen (Gehl 1996). At Norrmalmstorg, this condition has been provided in different zones: in the middle of the square, on the south and east side; which are popular for sitting respectively. There is also an option for sitting outside, while using the restaurant or café located at Palmhuset, in the middle of square. This place does not face to the square, therefore cannot share its activities with life at the main field of the square. The other zone for social interaction is around the benches, in the middle of the square: where people, individual or in a group, sit and stay. Though there are not proper benches or tables encourage people to stay longer, people prefer to sit and eat there. People would like to gather and prefer to sit close to each other and eat (Whyte, 1980).
Concentration of physical attributes in one side has caused two different life: different activities compact together, and scattered zone on the other side as the result. However, in the center of the square, dynamic and stationary activities i.e. people who pass by the square and those who sit and stay, overlap each other. The constant foot traffic has to cross among the benches, the sculpture and also bicycle parking.

Considering communication dimensions, social distance between benches provides ordinary conversation (Gehl, 2010), however fixed row benches are not proper enough for people to gather and talk face to face. The same issue is for benches alongside Hamngatan, yet this zone (southern side of the square) is affected by traffic, and is difficult to follow a conversation with the level of noise there. Those granite benches are relatively empty. As the result, Following Gehl’s categories of outdoor activities (1996), there are not many optional and social activities seen at the square; it is not only due to the physical condition, but also relates to people’s ‘environmental role’ which is mostly passing and heading to other destinations.

Bridge Activities (Triangulation)
There are some physical elements at the square that can play the role of social objects. They can provide a linkage between strangers, bring them together and encourage them to talk. There are also some urban facilities in and around the square such as bus station or bicycle parking to provide people their ‘necessary activities’ (Gehl, 1996); so people are present inevitably around these zones. By taking advantage of people it is possible to provide a proper physical condition for probable social activities. Childs (2004) states that art has specific role to promote dialogue between people; and Norrmalmstorg has been furnished with some sort of art pieces and sculptures in different corners. Nevertheless the physical elements seem not observable enough to draw people’s attention and make pause in their movement. Both design and location of these physical attributes are important in order to attract people and make social interaction (Whyte, 1980).

Considering the possibility of social activities, as a bridge between people (Collaborate the Social Spaces 2012), local businesses at the square i.e. flower market, has this possibility to give people an excuse to come together. It has been observed that the majority of people, who just pass by the square, take a look to this sort of activity and some change their way to be more close and get involved.

Fig. 47-49, Karimnia 2012, Norrmalmstorg, Sitting Zones and benches
Due to the enough space on the south side of the square, there are frequently plans for this zone such as some temporary installations or markets; e.g. a big screen for advertising fashion week, Christmas tree and New Year’s markets. However, it has been observed that the majority of people at the square do not get involved in those activities. Though the big screen was located well and extremely exposed to the people who enter the square from Hamngatan, it could not attract many people. It would be definitely successful if the idea was just advertising; however, not pretty satisfying if the aim is to make an active place and promote social life.

Norrmalmstorg is democratically an open place for everyone; however, to what extent people gather and interact there? Or set their informal meeting there? And if they perceive it as a place to belong to? Current activities at the square do not provide intimate experiences for people who would like to spend time or interact with others; activities such as cafés and bars or even public services. Those activities could attract people to stay, meet and socialize; and they provide a social identity for the place and their members; which could build up a strong sentiment for place (Tuan, 1977).

The Future of Square
Norrmalmstorg, with an important role in monopoly, is a challenging spot in Stockholm centre and is influenced by different authorities specifically the dominant real estate owner of the area called Hufvudstaden. Studying the future plans of the square is in order to be aware of ‘city vision’ and future policies for this spot. It can help to evaluate our place and analyze that how the expectation of people and policies are the same.

Enhanced squares sense: There is a history of traffic proposal for Norrmalmstorg by ‘Trafikkontoret’ (2008). The Traffic Authority in 2005 return to the Board with suggestions on how the square can get a better traffic situation, and also better markets condition and generally a clearer sense of square. The result of mapping indicates that Norrmalmstorg perceived as messy and disjointed square. In the spring of 2006, discussions were held between the Transport Authority and the surrounding property owners, whose vision was to create a venue that is a ‘natural link’ between Biblioteksgatan and Berzelii Park, instead of being surrounded by traffic on all sides. At the same time they wanted to move buses from Smålandsgatan to Hamngatan; and raise the level of the streets to the square and the adjacent streets is in the same level. It also wants to reduce the number of market stalls, discuss appearance of hotdog sales, not allowing commercial gimmicks and move on outside services. Despite of several proposals it was common note that the existing traffic records were the best. Debate continues for the solutions of tram line not to affect the square. In 2008, a new proposal for short and long term,
prepared by BAU Architecture and Planning firm in Stockholm; that is actually the property owners’ wishes to lease the market stalls. The proposal demonstrates ways to streamline and clarify ‘square's identity’ and role in the urban environment and to highlight the activities of real estate so that they clearly are involved in the square's life (a brief proposal can be found in appendix1).

The start of a fashion district: Hufvudstaden launched an effort to incorporate the streets crossing Biblioteksgatan in a larger shopping district called Bibliotekstan. The street Biblioteksgatan got its current name in 1885. ‘Bibliotek’ means library in Swedish and refers to the National Library of Sweden that is located in the nearby park Humlegården. The area has been brushed up to mark the start of the exclusive shopping part that we can experience today. The square is the starting spot of this expansion; however, it is not affected in this design and there is no defined or specific role for it (Bibliotekstan 2012). These two proposals show that despite the fact of special geographic location of the square, it suffers from a disordered situation, which is more caused by traffic system and market stalls on the square.

Interviews
In last section, sociability of Norrmalmstorg has been investigated by describing its socio-physical characteristics and by observing people’s action. Now, the aim of this section is to be aware of people’s emotional responses about the place and its influence on social life at the square. This method highlights what image people have about the square. Questions from static users (local businesses) who have constant engagement with the place show that how satisfy they are of being in place. Asking about their senses such as liking or disliking the place, sense of safety or comfort, highlights their sense of attachment and the place identity.

Interviews with local businesses
Focus group in this study consists of ten people involved in five local businesses at the square and has the main challenges of everyday life. They take benefit of presence of people, a sociable place and active square. The results of in-depth and qualitative interviews and informal discussion will be presented and analyzed. There are 8 straightforward questions i.e. personal information, their choice to access the place every day, their social interaction on the place, how built environment and people support their businesses, and additionally adjective experimental questions (for deeper insight, please look in appendix 2). Through this method I tried to investigate if the businesses are aware of their surrounding and the attributes of the urban environment; and if they have sense of attachment to the place.

Questions 1&2
All respondents live in Stockholm yet not nearby. The longest distance is one hour far from Stockholm center. They all take the train to T-Centralen or Östermalmstorg station and walk to the square. Two people working at the convenience store (Pressbyrån) have moved recently to Stockholm due to this job.

Questions 3&4
All local businesses mentioned that they have different customers during a day while they do not exactly know most of them. However, the staff at the café greeted with some people; and asserted that they know a few of them working around and have frequently coffee with their friends there. Respondents felt no thread for their business as long as they are in ‘Norrmalmstorg’ as a well-known place. They were content of their position, as a place located in city center more than the quality of their own business. From their point of view, it is really important to work on one of the main central square where there is constantly huge flow of people. The women who work on flower market consider their business as a locally known one, which attracts people around. However, market keepers i.e. accessories/bags and flower would akin to improve their place, to be more facilitated in winter. They have rented out their place permanently from Stockholm municipality.
Questions 5&6

The majority of respondents like the square in general and when it comes to numbered scales between opposite description (adjectives), almost all of them give positive adjectives. The maximum rate of feelings goes to livable place and the minimum rate is for an inviting/memorable place. The aspects of good cities are identified by Gehl as ‘safe, livable and sustainable’ (2010) and high quality of public spaces (squares) have specific role for a good city. By asking local businesses about these aspects, in general, Norrmalmstorg is a good square. It is being described as livable, warm and pretty safe public space. The majority of respondents were not sure if the place is memorable or not. Their only image of the square is a huge number of people passing by the place every day. Almost two-third of respondents did not rate the square as a highly inviting place which can attract various people. They were pretty convinced about the power of shopping area at Biblioteksgatan and how it is successful for inviting people. Respondents consider the square as a relatively beautiful environment. To them, different shops around and too many people in the square are the aesthetic factors of a beautiful square. Though people in charge of local businesses assert that Norrmalmstorg is a comfortable place, however, the whole setting do not give people opportunity to gather and to establish a setting for social interaction.

Questions 7

Roughly none of the people involved in local businesses would like to meet a friend at the square. They mentioned to other options around, where they prefer to spend time after work (before taking the train and go back home). They addressed to limited places to hang out around the square.

Questions 8

The majority of interviewed people have not noticed to the architecture and buildings around. When they were asked in detail, with a quick look they showed their interest and satisfaction about the whole built environment.

Conceptual Mapping

The present study was designed to determine the sense of awareness about Norrmalmstorg out of 20 people. This survey addresses to differences between people’s perception about the urban environment. Their responses are the result of experiencing the socio-physical attributes and individuals’ incorporation that makes feeling and memories of that place; which makes place identity (Relph, 1976). Consequently there are different perceptions of the square related to different respondents’ ‘environmental roles’ in the place; which’ is the result of their involvement (experience or intention) in the place (Canter, 1977:178). Accomplishing this method, by the selective focus group with disparity roles, helped to uncover different perceptions and consciousness about the square. The result, which conceives the place identity, has been classified into three components: physical setting, observed
activities and meanings and symbols; which are ‘inseparable interwoven in our experiences of places’ (Relph, 1976:47). For deeper insight and conceptual maps please look in appendixes 3.

Fig. 56, Karimnia 2012, An example of Perception Norrmalmstorg

**Physical setting**

Respondents mentioned to physical attributes that are classified as:
- The market stalls and Palmhuset (big built kiosk)
- The traffic system such as bus station and tram line
- The furniture i.e. benches and bicycle parking
- Trees

Surprisingly, the big kiosk (Palmhuset) is found on all of the maps and almost in correct location. Though the people were not sure about its form, they addressed to its activities in detail. Those who have noticed to the markets (almost half of the respondents) could not specify the number of stalls and their exact location.

Traffic on Hamngatan, the tram line on the east side and bus station has been noticed on most of the maps. Almost two-third of participants has indicated the bus station along Hmangatan, which has been moved to somewhere else, regarding to traffic changes. The other bus station along Smålandsgatan has not been marked in general.

One unanticipated result was about the facilities and furniture on the square. Over half of the respondents have just addressed row benches in the middle of the square; and the rest of physical attributes have not been touched on any map.

**Activities and Events**

Respondents noticed to few activities of surrounded building, yet mostly remember the local ones at the square, as listed below:
- Shopping area at Biblioteksgatan
- Car showrooms on Hamngatan (south side of the square)
- Nobis hotel, disco and Italian restaurant (on east side)
- Bank (on the north side)
- Stores on the corners
- Markets, convenience store and restaurant on the square

Unquestionably all respondents were aware of the activities on Biblioteksgatan, which some of them have been marked on the maps or mentioned as the main reason for passing by the square. Actually being located adjacent to Biblioteksgatan, was one of the first respondents’ impression about Norrmalmstorg.

Activities along the edges on ground floor of south and east sides are bolder on the maps. They have clear image of some stores and activities; and pointed out dissimilar activities on the south side as well.
Surprisingly between all the activities on the north side of the square, many people referred to the bank, as the main reason for passing the square. William H. Whyte (1980), who has studies pedestrian behavior and city dynamics for years, highlights the important role of street corner that how it can make a ‘good plaza’; which was clear in this study. Most of respondents emphasized on activities on the corners and remembered them. Among local businesses at the square, as mentioned above, half of people had image of the café and restaurant in the big kiosk, and all of them mentioned the convenience store. Those who addressed to the markets could not remember them in details and their exact location.

**Meanings and Symbols**

Meanings and symbols are the result of respondents’ intentions and experiences on the place. The majority of focus group has not experienced the square in a long term stay, but as a transitional zone to reach other destinations. Though, there are few temporary installations (such as seasonal markets or events for New Year), not many respondents have noticed them. One-third of maps indicates a big empty space on the southern part which people could not remember what is happening there. Participants notified to some their feelings and meanings such as:

- a boring square
- not appropriate for chill out and sit down
- place for upper class people with brand stores around
- a formal and lovely urban square

**Analysis of Interviews**

Focus group for this method was selected due to their constant use of the square, and questions were mostly about their personal feeling and experiences. However, unexpectedly they did not have much sense of belonging and attachment to the place. In fact local businesses at the square do not seem to care about the environmental qualities. They ‘like’ the square because of the geographical location in the central city and specially Norrmalmstorg which is one of the most expensive lots. The respondents showed their interest of working there referring to number of people who passing by the square constantly.

Adjective qualities, as environmental descriptors, help respondents to evaluate the square through senses. It highlights that they would like to socialize yet somewhere else; and they realize the lack of sociability at the square.

**Analysis of conceptual mapping**

In fact, by investigating people’s perception about the place (conceptual mapping), it tried to highlight which characteristics of urban environment could affect strongly users’ image of that place. Canter (1977) believes that our perception is fairly depends on how we experience it. The results show that the square is experiences mostly through walking and passing by; and people are not quite much involved in what square offers. This method truly shows people’s blurry awareness of socio-physical characteristics of Norrmalmstorg, whereas, they all like the place.
Nytorget: Neighborhood Square

Urban context
Nytorget is located in eastern side of Södermalm Island, south of central Stockholm. It is one of the local interests in SoFo district. SoFo is an invention of local entrepreneurs who have attempted to re-brand the area as a centre of creative and innovative fashion and retailing since 2003. In particular, many Swedish fashion designers are located in this area. SoFo also offers a wide selection of restaurants, bars, coffee shops, and art galleries. The square is out of this traffic and is calm enough to sit and relax on Sunday afternoon, while listening to Sofia church bells and children play. It has been located at the end of Nytorngatan and cross to Skånegatan. The square is placed in an affluent residential context, by less than 10 minutes walking from the main street of Södermalm (Götgatan) and also from train station. It is positioned nearly to a mountain park (Vitabergsparken) and an old church (Sofia kyrka) on the highest point. Today Sofia church is a well-known landmark of Stockholm's skyline. The square has typical users from neighborhoods around, due to be located within residential context. However it welcomes a broader public from different areas in Stockholm. The degree of relationship between users classifies the square as a 'Community or Neighborhood' plaza (Childs, 2004).
History

'No one with a sense of realities wish back to the turn of the century of Södermalm. But enough, I imagine that it was then more hustle and bustle here among the shanties around Nytorget, whether it was Sunday or not. Horse-drawn carriages on the iron-shod wheels, guys with pull carts, women with a yoke over her shoulders, carrying buckets of water from the well. Kids scream at their mothers and mothers who shout after their young. Smell of burnt tar from stove fires horses clatter up, leaving midday meal on the street to the chattering sparrows. …' (Tjemeld 1950)

Staffan Tjerneld (1950) describes Nytorget and brings up the historic events happened during evolution of the square: The name suggests that it can be a place with a short history, visual perception gives sense of oasis and idyllic. However, the square was famous already from 1670th as a hiding place for impurities. Over there bumpy and a muddy square put out footbridges. It was the location where Jacob Johan Anckarström, the supposed assassin of Gustav III of Sweden was exhibited in wooden shackles so the farmers could throw stones at him before his execution in 1792, which took place in another section of Södermalm. In October 1801 a severe fire plummeted at Nytorget and about fifty houses burned down. Later on, a fire station organized on northwest side of the square for the benefit of the fire victims. In 1855 the same tragedy happened again. Afterwards the fire station turned to food market hall which exist today. Through history, Nytorget is well-known far outside related to a rumor that was about potatoes in stores at Nytorget which called ‘potato riots’. It happened in 1917, the most difficult year of Sweden during the First World War.

Following the history of the square by surrounded buildings, in 1660s, the textile factory owner built a factory Adjacent Malmgårdsvägen and Nytorget (on the south side). The house, which served as school and later artists’ studios, still stands and called Malongen. The house is Stockholm's oldest factory building. On the west side of the square a theater was opened in a newly built house in 1909 which called Nytorgs-Theatre. From August 1911 changed room to the cinema with 400 seats. Last film screening was on 26 March 1961.

There are a row of wooden houses on east side of the square from 1750, which exist more of this type of housing alongside of Nytorgetsgatan.

Nytorget, the same as Norrmalmstorg, was famous as a bumpy and dirty square that later on the narrow wooden walkway led to it. At the beginning of 1920 it began a cleanup of the area and making a paddling pool (pond) and playground. In 1935 a small sculpture called ‘play’ was unveiled in the playground which still exists there (Skulptur 2009).

Brief history about the square points out that Nytorget has been surrounded by local cultural and recreational activities since long time ago.
Square Today: Physical Characteristics

Pattern: Nytorget is an ‘enclosed’ square (Zucker. 1959) by its surrounded six floors buildings in north and west side, two floors wooden houses on the east and three floors buildings on the south side which do not face directly to the square (a parking lot makes distance in between). However, the proportion of surrounded buildings is not the same and there is no continuity of buildings on east and south sides. Therefore the square is not perceived as an enclosed place. Morphologically, Nytorget has a clear frame and defined form. It is categorized as a ‘deep’ square, considering the enclosure of dominant building (Sitte, 1901/1965). The square is divided in two parts: on the north, there is a park with a lawn field inside and a pond in the middle of it; and on the south, a playground with different equipment for children has occupied the square. The later is located in lower level, yet linked to upper side with two set of stairs. Nytorget is detached from its surrounding by streets and sidewalks.

Accessibility and modes of movement: Nytorget is positioned in a neighborhood context; it welcomes both adults, parents with pram, and children. It is experienced both locally and regionally; however, mainly people come by foot. The square has car access, three minutes to the closest bus station and less than 10 minutes walking from Götgatan, and metro station. Bicycle parking, alongside the main frame of the square, shows the popularity for those who bike there. Nyторгsgatan and Skånegatan, on west and north sides, have the main role for spreading traffic around the square. Wide sidewalks close by the main field provide not only safe and comfortable walking path for pedestrians, but also enough space for prams.

The square is detached from the street by a green zone, almost two meters wide. The greenery and row of bushes limit the accessibility of the square from everywhere. There are ten openings through this frame to enter the square: five open to the main field, and the rest open to the playground; which have lockable gates to provide safety for children. South side of the square is defined with a metal guard which disables the accessibility on this side. The southeast corner of the square is widely open which the main access to the playground is.

The two openings on the northwest corner are the most popular spots with flow of foot traffic. This corner is the main ‘catchment’ area where most arrivals happen (Childs, 2004). It creates a lively zone and encourages people to take a look inside and probably tend to drop by there.

Scale and Size: Nytorget as a neighborhood square has large scale. Its size is different in compare with other community squares of traditional cities. The square is around 55 meters wide and 90 meters long, which means that people can take in the entire scene. However, its proportion to the surrounding is not perceived as a huge space. The main reason is that the square divided in two complementary spaces
on north and south side by a green zone, some trees and some benches in between. These two spaces have different characters by means of users and their activities. One is more dynamic, while the other is more static. In addition these spaces have different ground levels. Therefore the scale of the square is influences by this division and is not perceived as a huge space from human perspective.

*Enclosure:* is one of the important factors, related to safety and security in urban environment. As mentioned above, the square is mainly enclosed by a green zone surrounded the square, with rows of bushes and trees. The green belt defines the environmental feature of Nytorget. The square has two types of edges: buildings’ façades which are not continuous all around and the other is a natural wall made by bushes and trees. The green edge is wide enough to make a gap between sidewalk and the square. The natural edges are soft and permeable and let some of the inside activities be seen from outside. The bushes on the east side are too high. They make a hard edge, neither visible nor accessible from inside. It offers a safe environment for children to play freely and stroll around.
Green edges, around the square, are proper zones for sitting, while covering your back, and protecting you not to feel alone or signal that you are waiting. Nytorget is rich in placement along edges, both attractive places on the ground floor of buildings; and also enough space to sit or stay around the main field.

Nytorget has well-defined field and frame. The pond in the middle of central field has the role of ‘central marker’ within it (Childs, 2004). Defined frame separates the sidewalks and the main field. It is wide enough to provide a zone; as the first place people can wait or meet.

Horizontal surfaces also define various territories and fields at the square. The field is covered by sand everywhere; whereas the inner main field covered by lawn draws into attention. In corners, where there are opening to enter, brick pavement of sidewalks continues inside the square and highlight these spots.

**Facilities and Furniture:** Nytorget has been furnished by simple and natural furniture; which provide a legible and clear space. The square provide daily requirements and offer the proper physical condition for optional activities e.g. to take a break, sitting, laying down on the green grass or watching others. All the facilities have been arranged in the main frame around the central field.

The pond as a marker in the middle of the main field is very powerful to attract people and offer them to stay. The proportion of the pond provides a gathering space respecting the ‘social dimensions’ (Gehl, 2010). The pond has a small fountain, which can be seen and heard far out, and involve both adults and children to experience the water as an ‘intimate experience’ (Whyte, 1980), and encourage people rather to stay longer. Such experiences engage our feelings and help to memorize the place (Tuan, 1977).
There are fixed wooden benches all around the main frame and short distance within them. On playground, there are also grouped benches with tables which parents can sit together, watch their children or feed them.

One of the important physical attributes of Nytorget is the wooden rail (approximately 25cm wide and 50cm high) around the square inside and outside. Though its main role is to preserve the green gap between the sidewalks and the square, people use it in other ways as well. The width of this wooden rail is not very comfortable for sitting; however, it gives this opportunity to choose where to sit; and as Whyte (1980) mentions, it is very important for people. This is a key aspect at Nytorget that each location is sittable; so it provides an active edge everywhere, both on street side and square side. The simple wooden rail fulfills other daily needs such as place for locking bicycles and feed dogs.

Southern part of the square has been occupied by playground equipments. A sculpture called ‘Play’ stands on the north part of it and symbolizes this place.

A billboard, at one of the entrances of playground, points out the square as a local community for the neighbors. There are several local ads on it, which highlights that the square has a social identity and permanent members.

**Square Today: Social Characteristics**

Nytorget as a neighborhood or community square is absolutely accessible for everyone, while neighbors and acquaintances dominate it. The square welcomes willingly different social groups and ages. It serves a neighborhood community life to its constant users and also to a broader public. Looking into the square more closely, Nytorget could be said consist of two main parts with two different life: one being a space with a relatively large green field and benches around it; this could be a physical condition for ‘optional
activities’; and the other is a playground located on the south side which offers more ‘social activities’ (Gehl, 1996).

The two complementary spaces define Nytorget with various social lives. Public spaces to be lively and successful they need to have the combination of both moving and stationary activities (Gehl 1996). The former space welcomes all people who would like to be outside and for instance take a sit or read a book, as individuals or groups; while the latter has its own specific users and is popular for children. However, several benches around the playground provide caregivers (adults) to stay and socialize with others while watching their children.

During observation time, on a sunny weekday around lunch time, there were more than 38 people staying on the main field, and around 21 people (children and adults) on the playground. More than 50% of them had prams; they came either alone to sit and rest, or in a group to meet and talk to each other. Nytorget is classified as a popular place for sitting. People have different options; they can use the fixed benches around the square, or the movable chairs of the kiosk in the corner, or even sitting on the wooden rail around; in all cases people face the main field and can watch others. They willingly sit on the grass, depends on the weathe. Following sitting process, individuals prefer to occupy firstly the frame around the square, using the benches or the wooden rail. As Appleton (1975) highlights, people seek places that allow them to have control over the environment. However those are in a group of two or more, they simply enter the main field and preferably sitting on the middle of the square.

Nytorget in Whyte’s (1980) word has ‘social comfort’; it means that people choose where to sit, or make distance to have more privacy during eating lunch. So the physical condition has this potential to prolong ‘optional activities’ in order to make ‘social activities’. The minimum time one individual person stayed at the square was 20 minutes, and 35 minutes for groups.

Nytorget current popularity with its picturesque appearance is also correlated to the activities around of it. The range of activities on ground floor of surrounded buildings is mostly recreational ones such as several cafés and restaurants, convenience store, cloth shops and hair salon. Some of these small businesses with several doors and openings offer sitting both inside and outside; and provide enough ‘eyes’ on the street. They furnish sidewalks with tables, which is an appropriate condition for optional activities like sitting and hang out with friends. As mentioned before, SoFo, where Nytorget is located in, is a well-known district for youth and offers a wide selection of restaurants, bars, coffee shops, and art galleries. Some of these activities are happening around Nytorget on the north side. These intimate experiences attract people to stay longer and probably cause social interactions (Gehl, 1996).

Even though streets have caused physical distance between Nytorget and its built edges, people ignore this gap. Following their movement highlights a strong linkage and dependency between the square and activities around. Life on Nytorget today is the result of people’s engagement with the edges and the square.
There is a small wooden kiosk, on the north east corner of the square, which is a branch of Vurma café on the other side of the street. It is fairly popular and attracts many people in this corner to grab a coffee and take a sit. It has both fixed and movable chairs, which represent an ideal combination of comfort and choice (Whyte, 1980:35). People manipulate their chairs to face the square, watch others and enjoy the sun.

On the northwest corner of the square, there is a big food market (Urban Deli) which is a restaurant, café and bar as well, which serve neighbors fresh food during the day and late at night. It has a vibrant life inside and outside, with several tables alongside the sidewalk; which strengthen the social life on the main corner and entrance of the square.

What distinguishes the role of square in its neighborhood is the playground. It is a great opportunity for people to sit in a calm environment or in a café while children’s play can be heard. Gehl (2010) mentions that how children activities bring interactive opportunities, involve more people and creates perception of safety. It is also an opportunity which can not only involve children but also young adults to interact with each other regardless of their background and culture.

**Bridge Activities (Triangulation):** The pond with the fountain, in the middle of green field, attracts more people to sit around of it and makes possibilities for communications. It is a ‘social object’ which people can experience it and interact around of it (Collaborate the social spaces, 2012). The playground itself can play also the role as a bridge, to connect children and parents. It overcomes the barriers of age, culture, language and income. It gives people an excuse to come together productively.
and enjoyably, watching their children, playing with them, eating together and interacting with other adults. Standing beside a swing can cause a conversation with another interested person. Among the activities around the square, the food market and the second hand shop in northwest corner have made a mini community. It has been observed that people exchange their ideas about the food or clothes there. The square could be a proper place to support these activities and their social activities.

Nytorget as a Third Place: In fact Nytorget is an inviting public space for community needs. It has this potential where people gather and interact, and its life depends on neighbors around. The square as a community public space provides several local activities which is an essential for community’s social validity (Oldenburg, 1977). It is fairly possible to stay long at the square, to meet a friend or chatting with neighbors on the playground. People, who may know each other and meet regularly at the square or around, have community feeling, in fact Nytorget has social identity which its users are proud of it and of being a member of it. During observation, I found small-scale intervention, planned by people based on their interest, culture or economy which are the factors of placemaking idea. A corner of the square was simply occupied with a neighbor to sell the second hand items. She explained how it makes her to communicate with other neighbors. Nytorget as a third place rise the occasion for optional and social activities. However, SoFo identity is strong enough to invite other people to gather at Nytorget. It seems the square is rather open for everyone to express their feeling and exchange their ideas.

Fig. 82&83, Karimnia 2012, Nytorget, Triangulation

Fig. 84-88, Nytorget, Square as Third Place, (88) right, Karimnia 2012,
Interviews

In last section, Nytorget has been analyzed as a sociable square by describing its socio-physical characteristics through empirical methods. Now, the aim of this section is to unfold people’s emotional responses in order to challenge their sense of place. This method highlights what image people have about the square. Questions from static users (local businesses and neighbors) who have constant engagement with the place show that how satisfy they are of being in place. Asking about their senses such as liking or disliking the place, sense of safety or comfort, highlights their sense of attachment and the place identity.

Interview with local businesses

There are 8 straightforward questions i.e. personal information and their choice to access the place every day, their social interaction at the place, if built environment and presence of other people support their businesses or not, and additionally adjective experimental questions to examine their consciousness about the square, in order to measure the qualities (for deeper insight, please look in appendix 2).

Questions 1&2

All respondents live in Stockholm. The closest one is just two blocks far. They take mostly the train, either to Medborgplatsen station or Slussen station and then walk to the square, or take the bus to Renstiernas gata station (north east of the square).

Questions 3&4

Asking about their customers, there is a wide range of customers, from neighbors living around to even tourists. A number of businesses consider their activities unique or famous enough to attract people not just locally; i.e. the Jewelry/silver store and Urban Deli (food market). Some activities are chain businesses such as the food market (Urban Deli), Vurma café and the second hand shop. They believe in the importance of their location adjacent to Nytorget; that can take benefit of many people who hang out there and also several tourists in summer time:

‘… though to the park (Nyttorget), there are many tourists here, they take food or coffee and chill out on the grass to enjoy the sun with their friends […] yes they love here’ (says shopkeeper at Vurma café).

‘… Our business is expanded on the other side of the street as well, so we have facilities such as lunch boxes, extra forks and knives for those who get food and go to the park, obviously depends on the weather (says shopkeeper at Urban Deli).

The majority of businesses felt no thread. They have their own local and regional customers. For instance the ice cream store, which is famous for its long queue in the summer, can survive only by 7 months working per year.

According to many of businesses, though there are lots of cafés and restaurants at Södermalm and specifically in SoFo area, people still prefer to have all facilities and recreation close to their place. ‘We serve green and healthy food, the prices are high, and that’s what people who live in an affluent area want. The opening hours (late at night) provide our customers to stay long, enjoy their drink while sitting outside’ (says shopkeeper at Urban Deli).

Questions 5&6

The majority of respondents like Nytorget, mainly because it is a calm environment and many people around. When it comes to numbered scales between opposite description (adjectives), all local businesses give mostly full points to positive adjectives. Nytorget, according to local businesses, seems as a safe, inviting and livable place. It is as a warm and comfortable referring to the activities around. In compare with other places at Södermalm, the square is fairly calm. Many people perceive it more as a park more than as a square. They like Nytorget as a beautiful place, with green grass and a pond and
fountain in the middle. To them, this is as an ordinary place for individuals and families more than an eventful (memorable) one.

Questions 7
The business owners would prefer to meet their friends at the square or in the cafés around rather than somewhere else. Though there are many other meeting places in the region, they assume the square and the whole environment as a perfect combination to spend an evening with a friend. Each local business thinks pretty positive and supportive about other businesses. Surprisingly for instance a café owner has spent time or met a friend in another café, which from their point of view all are a small community who live together and take benefit of each other strengthen.

Questions 8
The architecture and buildings around are not the point of attention for almost none of the respondents. They notified the historic colorful wooden houses on the east side of the square yet no more details about other surrounded built environment.

Interview with people
As stated in methodology chapter, there have been 25 interviews done in 5 days, out of around 70 people in the area at lunch time. In order to cover all variety of users, the respondents have been selected in different age, gender, in a group or individual and with or without children; however, as young parents dominant the square, they have more votes than others (for deeper insight, please look in appendix 2).

Questions 1-4:
Most of the respondents live in Södermalm; and the majority of them (parents and children) are even living nearby. They mostly have family; and two-third of them with children. They visit the square and use activities around approximately once in a month, however, it depends on the weather and their family situation. Those, whose goal is playing with children, drop by around once in a week and mostly on weekends.

Questions 5&6
The majority of respondents ‘like Nytorget’ strongly, because of the various options; and mainly due to combination of activities for children and adults. Young parents are satisfied to have coffee and enjoy the sun while keeping eyes on their children playing. They do not perceive separate social life at the square and its surrounding. Some neighbors mentioned Nytorget as a calm place, detached from traffic of Södermalm; which sometimes encourage them to have a short pause there before going home. Likewise Nytorget is a landmark for people of Södermalm. They set their meeting point there, even though they have another destination to go. People’s reason for sitting at the northwest corner (catchment zone) was waiting for someone to join.

The respondents gave full points to Nytorget as a ‘beautiful, safe, warm and livable’ place: ‘beautiful to stay long and enjoy the water sound, warm for community meeting and join other activities, safe with the small yet well preserved playground, livable place as a combination of many people in different ages and intimate activities’.

However, considering the rest of adjective qualities, the majority of participants came to this term that Nytorget is not characterized greatly as comfortable, inviting and memorable place. They desired to rate it by half point. Some young adults prefer to mingle far from the playground. To them children’s screaming is uncomfortable and mark the square as a family type place. Square is not inviting for individuals without the activities around. They call Nytorget more as an ordinary place than a memorable one.
Questions 7&8
80% of those interviewed indicated that they usually use the café and restaurant to mingle. According to their responses, it would be a great chance to choose sitting in the café or at the square on the grass, all depends on the weather. Close neighbors and parents meet each other frequently at the square and on the playground respectively.

Questions 9
Surprisingly when it came to talk about architecture, the majority of respondents mentioned the old wooden houses on the east side which was hidden behind the bushes; others had no idea about the architecture around.

Questions 10
By asking about missing functions around the square, I could not detect so many activities which respondents would like to add. However, few parents addressed to their children’s need and wish if the playground could have better equipment or the square could be furnished by winter activities. The majority of respondents are convinced that even though recommended function (mentioned by interviewer) could strengthen the neighborhood, they might miss the calm area.

Analysis of Interviews
Concluding the result of interviews with both focus groups shows that Nytorget is a ‘good’ place for them. The majority of respondents address to the combination of activities for both children and adults as the square’s key point. Most of them have already experienced the activities around such as shops and cafés. Business owners are pretty aware of their location and potential of being adjacent to the square; which can support their activities. From their opinion, square is not extremely eventful, inviting and memorable, however as an ordinary and comfortable place for its users. Surprisingly, none of the respondents noticed the streets as barrier that has to cross to reach the square. Businesses do not also perceive their activities detached from the life happening at the square.
The link between place and activities, and the expectation of finding certain people in certain places, all indicates how a particular physical location can have its psychological power from a 'location' to a 'place' (Canter, 1977:123).

Fig. 89, Karimnia 2012, Nytorget
Analysis

This section follows the result of applied empirical methods to analyze human behavior and social interaction of the two case studies in order to investigate the contribution of physical and social attributes in creating sense of place and enriching dynamic interactions and social behavior.

Norrmalmstorg

Norrmalmstorg has a long history with an ignored possibility to become the obvious centre for all Stockholmers and a display-window (Catenacci, 2010).

Drawing Norrmalmstorg and users’ behavior into attention clarifies that the urban environment is fairly affected by its geographical location and urban context. Flow of people, just passing through the square; address other more attractive destinations around Norrmalmstorg. Following movement pattern highlights a hidden as the shortest way to cross the square between south west corner to/from Biblioteksgatan, that people pass it by frequently. This intense foot traffic and also other transport stations (bus and tram) cause Norrmalmstorg to be perceived more as a transition place than as inviting square. It affects the identity of the place, and as the result the sense of attachment which is not relatively strong.

As mentioned comprehensively in last chapters, place identity is in terms of three components: physical setting, observed activities of the people and the meaning created through human experiences (Relph, 1976). Therefore, not strong identity and sense of attachment at Norrmalmstorg is the result of lacking in one or more of these attributes.

Physical Characteristic

- **Well-located / Well-designed attributes**: Some physical attributes are not touched upon by people and cannot draw their attention. Result of conceptual mapping also addresses people’s conflicts about some physical elements of the square which could be the problem of ‘design’ and/or ‘location’ of these attributes (Whyte 1980 & Fig. 92). Some of well designed items are not well-located to be visible enough for people. Well-located means where people are, due to their role at the place. It could be e.g. the edges zone (Gehl, 2010), street corners (Whyte, 1980) ‘catchment’ zone (Childs, 2004). Regarding to environmental psychology, well-located also means to provide safety, e.g. where your back is protected (Appleton, 1975); which none of the sitting zones at the square have this characteristic. Respectively, even some well-located items at Norrmalmstorg, are not fairly well-designed; which in this case, does not mean specific style or material; it should be human oriented and scaled and arouses human ‘senses and feelings’ (e.g. the water running sculpture which is very well-located, is not visible enough and does not have the water sound).
- **Real Field / Perceived Field**: Due to traffic streets that cross all around the square, what people perceive as the square is the field enclosed by streets not by surrounded buildings. It means that the square is detached from its edges which are essential zones to place people and engage them at the square.

**Observed Activities of People**

- **Intimate Experiences**: Surrounded edges and walls do not support social life on the square. Though Norrmalmstorg is enclosed by storefronts, yet the range of activities do not create intimate experiences, and as the result, cannot engage people’s senses to attract more other people.

- **Inviting Place**: Result of empirical studies reflects that a few numbers of people are engaged in the activities at the square. For users, Norrmalmstorg is not an inviting sociable public space with activities that encourage them to stay or even to cause a pause in their movement. For instance, Norrmalmstorg is not properly sittable; which affects the popularity of the square (Whyte, 1980). Row benches do not let people to communicate with each other. In addition, stationary and dynamic activities are overlapping each other; which cause people cannot enjoy of their stay for a long time.

**Image of Place**

- **Legible Structure**: Norrmalmstorg’s physical setting affects people’s behavior in the environment. Concentration of most of physical attributes on the north side cause people to congregate together inevitably on this side, rather than scattering over the large and empty side (concept of crowding, Tuan, 1977). This contrast of accumulation vs. emptiness at the square impacts people’s perception and image of the place and does not create a legible picture of Norrmalmstorg.

- **Transition Place**: The people’s Image of Norrmalmstorg as a transition place is based on the location of the square. People’s environmental role is to pass by the square; It reveals one of the reason that why users of the square are not involved in the activities.
Nytorget

A green beautiful park to chill out, combined with facilities for children, surrounded by cafés and shops has made a livable and inviting environment for Södermalm's residents. Nytorget is a proper physical condition for 'optional activities' (Gehl, 1996), such as sitting, walking, reading or other activities one wishes to do. Result of empirical methods reveals the strong sense of place and sense of community center at Nytorget. In following the identity of square will be analyzed through the factors mentioned above.

**Physical Characteristic**
- **Simple and Flexible attributes**: Though square has few simple furniture, regarding to human perspective, it provides people a flexible setting; e.g. it is possible to sit anywhere at Nytorget: individuals sit around the main field, people in group who would like to stay longer can sit on the green field (depends on the weather), and those who stay for a while or who are waiting, prefer to sit on the wooden rail around the square. The flexibility of place creates social comfort.
- **Well-located**: The furniture of the square is very Well-located, it means that they are where people are; e.g. the edges zone and along the main frame (Gehl, 2010), at street corners (Whyte, 1980) at 'catchment' zone and openings where people enter (Childs, 2004). Regarding to environmental psychology, well-located also means to provide safety, e.g. where your back is protected (Appleton, 1975). All fixed benches are being supported by green gap, between the square and street, and also make it possible to watch others and the entire scene.

**Observed Activities of People**
- **Soft Edges**: Activities of the ground floor of buildings, surrounded the square, invite people for intimate experiences and the result is ‘soft edges’ which are ‘human scaled’, ‘transparent’, ‘appealing to human senses’ and ‘mixed function’ (Gehl, 2010:78). Combination of soft edges and legible physical structure dramatize people’s experiences; and identify Nytorget as a place.
- **Combination of activities**: Mix of functions, both around and inside the square, makes it as a place for everyone. Result of studies indicates that the playground field and presence of children at the square creates a safe and livable place for neighbors around.

- **Social Identity of Third Place**: Nytorget and its surrounded environment offer a ‘third place’ to its users. Located at SoFo district, a center of creative and innovative of fashion and retailing strengthens its popularity. The place has social identity which people have sense of community to join it.

- **Environmental Role**: Users’ ‘environmental role’ has the main role which influences identity of the square. Canter (1977) mentions that people are linked to places by their different roles and different objective of being in the place. Nytorget, is a place for gathering of neighbors. Mix of values and impressions, rooted in the quality of the square, creates strong sense of attachment and belonging for its users.

**Image of Place**

- **Legible Structure**: The physical setting of the square provides legible structure, which makes it easy to memorize the place. Defined natural frame by bushes and trees, clear field with a pond in the middle and also a playground, are the attributes that make people’s perception of Nytorget. Combination of greeneries and playground creates an image of a park for many people.

- **Sense of safety**: It is one of the characteristics of intimate places. This sense at Nytorget is relatively defined by physical attributes. Following the theory of *Refuge and Prospect* (Appleton, 1975), sitting places along the edges make it possible to have control over the environment. All sitting places have been located where the back is protected by green frame. In addition, soft edges of the square, especially in the north side, create not only the perception of safety for those who are in the square, but also provide standing or staying zone while not being watched.

- **Nytorget: Landmark of Södermalm**: The behavioral study also highlights that Nytorget is ‘a plaza serves the purpose as a landmark’. It indicates that people have made a purposeful decision to meet there over somewhere else (Whyte, 1980). It emphasizes on the identity of the square and how its users have sense of belonging to it.
Discussion

The link between place and activities, and the expectation of finding certain people in certain places, all indicates how a particular physical location can have its psychological power from a ‘location’ to a ‘place’ (Canter1977, P123).

Conclusion

This study analyses the relationship between built environment and social behavior in public spaces in order to understand how it is possible to improve the social life. It has been investigated through environmental psychology. The interface between human and socio-physical characteristics of squares is addressed by the theory of place identity/sense of attachment and also by the theory about squares as crucial public space for social life. Through Placemaking idea, this research examines people’s sense of community and explores the potentials of neighbors which can encourage social life in public places. Two case studies were accomplished by using the addressed theories and through empirical methods. It provided deep understanding of each place and uncovered the relation between built environment and social life.

The work started from this point to analyze the two public squares and their crucial role in public spaces network; which each case welcome different kinds of people and life. Norrmalmstorg, as city square located in central city and close to other public spaces which have strong identity as sociable squares, and Nytorget as neighborhood square, which support daily recreational activities for neighbors and situated at the most alternative region (Södermalm and SoFo).

Initiating human perspective and triangulating of different methods for data collection, furnished this study to have a complete picture of real life in each case. This is the value and aim of the project that, through environmental psychology, makes further remark for analyzing socio-physical characteristics of an urban environment. Evaluation of sociability of places derives critically from ‘place expectations’ which is comparison of:

- ‘Observed action in place’
- ‘Expectations of actions in place’
- ‘Actions based on expectations’

Combination of this three is necessary to provide and identify a complete picture of place (Canter, 1977:160)

Investigating the place expectation at Norrmalmstorg highlighted a blurry picture of the place. It is the result of conflicts between observed actions and expectations of the place; which has been described in detail in last chapter (Analysis); e.g. conflicts in movement pattern, people’s environmental role or expectation of some physical attributes such as benches.

There is also conflict between the origin of place and the expectations. Generally, Norrmalmstorg is influenced strongly by the urban context, and a variety of options and destinations around of it. People perceive it as a transition place and their conception is limited to few physical attributes and activities that people experience there. However, future planning of the square, addresses further expectation of the place. It tries to reinforce the quality of public space for both optional and social activities. There are also different approaches to improve this urban environment. From property owners’ view, it will be accomplished through removing the market stalls. Professionals’ concepts is to emphasize on traffic calming and enhancing the square sense. Norrmalmstorg has been planned and altered repeatedly (several temporary installations and occasional activities), which on one hand shows its flexibility and how the city can take advantage of this place; yet, on the other hand it indicates that Norrmalmstorg was not a successful paradigm to make sense of place for dynamic interactions.

Nytorget is successful in making sense of place. Result of analysis shows that people are where they are expected to be. Concerning the notion of place, it is situated in a neighborhood community; so it is a
center for optional and social activities, influenced by user’s environmental role. This clear image reinforces the place identity and sense of place. Through Placemaking idea, which takes advantage of local community, square is a spark in Södermalm. It supports not only neighbors’ social life but also successful to invite more people to share their ideas and strengthen face-to-face interaction.

To conclude, no one can deny that Normalmmtorget and Nytorget are valuable public spaces for the city and successful in terms of providing various activities and services to the urban fabric. However, the strong sense of community at Nytorget has came as a result of people’s involvement in the urban environment; whereas the lack of people’s engagement in social and physical setting at Normalmstorg, which defines place identity, affects strongly the sense of attachment and social interaction in the square accordingly.

Towards a Sociable Square
The question is ‘how Normalmstorg as a transition place could be memorized? How to create place identity and improve sense of attachment and social life?
It is not so simple to set of relationship to make the ‘sense of place’. Canter (1977) mentions the role of designers to uncover the completed situation, which has been so far accomplished through this work. However, what I recommend is to change Normalmstorg from a ‘location’ to a ‘place’. The users should experience the three items which contribute to define place identity, which are: activities, physical attributes and meaning and symbols created through their intentions (Relph, 1976). This is a process which clarifies the square identity and its role in the city network. Recommendations presented in following are both short and long term proposal, in different scales; so as other planning proposals, it requires to be prioritized during time.
- Clean-up the square and street from excessive signage and furniture (to make legible structure)
- Remove the tram rail (to activate edge zones), and pedestrian prioritization on the whole square
- Expand the current pavement of the main field (black and white concrete pattern) to cover the whole space and replace all different flooring (to activate edge zones)
- Remove barriers and differences between floor surfaces (legible structure)
- Remove benches from the center of the square to the corners in order to be protected by existing trees (safe sitting, regarding the concept of refuge and prospect, Appleton, 1975)
- Re-design a water running sculpture. Sound of water could involve people’s senses, even while they are passing through the square. Water should be visible from all different corners of the square. So the best location is along Hamngatan on the south side (the current location of row benches in granite), which is perceived as a gap between the square and street traffic. Considering the climate during winter time, light can replace the water and makes people to memorize the place by an image of light/water
- Furnish both catchment zones, by chairs or steps which creates the ‘piano effect’ (Gehl, 2010) and protect individuals, standing or waiting there
- Redesign market stalls, not as temporary tents, but as fixed and transparent kiosks, which serve intimate experiences (such as flowers) that invite people and attract others.
- Use the possibility of bus station as ‘triangulation’ to provide linkage between people to talk (Whyte, 1980). Create a better condition around of it, e.g. for eating and socializing
A Final Word…

Instead of looking for ‘right’ physical forms, we need to supply them with the knowledge to work with people who will be using those physical forms (Canter 1977, p.182).

As a final word, I would like to emphasize on the lack of social life and face to face interaction in public spaces (squares), which are crucial for a good and sustainable city. New planning proposals and urban design materials underline public spaces, as a potential to gather people in different ages, groups and cultures. They show this idea for new public spaces by illustrating them as lively, energetic and active space, full of different activities. On the other hand, current public spaces in cities face the threat of losing their livability. The thesis tried to highlight the important role of people; and how their perspective, needs and desires define their behavior and action in urban environment. Without studying this, we might design something and have different expectations.

Analyzing the two squares through environmental psychology has brought out the complete system. It revealed the conflicts between what designers/planners expect of a place; and the way people react to it. Understanding the reason of why some places are so powerful for social interaction is not possible unless through a multidisciplinary study, which environmental psychology has a big role in it. The research addressed how a designed square with valuable physical attributes and planned social activities cannot fulfill social interaction; while strong sense of community could be the result of simple yet human oriented design.

Initiating people’s potentials, ideas and senses in planning and design can not only result low-cost improvement in quality of place (the concept of Placemaking), but also can make certain that it will support both people’s action and designer’s expectations.
References

Books and Papers
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Internet

**Figures**

- Figure 14 http://www.bing.com/maps/
- Figure 15 https://maps.google.se/maps?hl=en&tab=ll
- Figure 16 http://en.wikipedia.org/wiki/File:Normalmstorg_1900talet_ugglan.jpg
- Figure 17 https://maps.google.se/maps?hl=en&tab=ll
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- Figure 87 http://raketa-nightshift.blogspot.se/
- Figure 96&97 http://www.bau.se/sv.aspx#/sv/urbanism/stadsrum/normalmstorg.aspx
Appendices

Appendix 1

Normalmstortget in the Future

The proposal has been prepared by BAU architectural firm in 2008 initiated by property owners at the square. The proposal demonstrates the ability to streamline and clarify the square's identity and role in the city as well as to highlight activities in the buildings, so that they clearly are involved in the square life. The place has a varied history hard to find a common thread in, swamps, pillory, traffic unit and hub in Stockholm's financial center. Here it's more about what qualities are missing, and how the square can supplement, linked to and interact with the other public rooms in the area. Lifting Square from today's cluttered storage tray of street furniture for an open airy square where the buildings participating in activities and defines square room. The proposal has been divided in short and long term suggestions (BAU, 2008).
Appendix 2

Interview questions, Norrmalmstorg

This interview has been done by 9 people working at 5 different local businesses:
- A sausage vendor
- One in charge for accessories & bags stall
- Two women busy with flower market
- Two young sellers at the convenience store
- Three people working at the café & restaurant

1. Interview questions of local businesses at the square:

1. Do you live nearby? If not where?
2. How do you come to work? Walk, bicycle, car, train, bus?
3. Who are generally your customers?
4. Why you are here? Do you think your business will survive in the future? If no, what is the biggest threat for your business?
5. What do you like/dislike about the square?
6. How do you like the square? Asking by scaled adjective 5-point scale ranging from 1 (opposite adjectives)
   - livable-inactive (appealing-unappealing)
   - memorable (eventful)-ordinary
   - warm - formal or alienating
   - safe-unsafe
   - comfortable-uncomfortable
   - inviting- repelling
   - beautiful-ugly
7. Have you ever made a meeting with a friend or neighbors here? If yes: where? If no: Why?
8. Do you like the architecture and buildings around? Do you think they have a good quality? If no, what don’t you like about them?

2. Interview questions of Property owners: Hufvudstaden (no response received)

1. Do you live nearby? If not where?
2. What do you like/dislike about the square?
3. How do you like the square? Asking by scaled adjective 5-point scale ranging from 1 (opposite adjectives)
   - livable-inactive (appealing-unappealing)
   - memorable (eventful)-ordinary
   - warm - formal or alienating
   - safe-unsafe
   - comfortable-uncomfortable
   - inviting-repelling
   - beautiful-ugly
4. Do you like the architecture and buildings around? Do you think they have a good quality? If no, what don’t you like about them?
5. Have you ever met a friend or colleague here? If yes: where? If no: Why?
6. Which qualities do you see at the square? And what kind of improvement do you like to see?
7. How do you see the relation of the square with Biblioteksgatan as a shopping street?
8. Do you see this square as a transition space or as an inviting place?
9. Do you have any responsibilities about this public space?
10. What changes would you like to see in the future?

Interview questions, Nytorget
The questions have been done by 7 local businesses (out of 13 local businesses around):

1. Urban Deli: Food market, west side
2. Stockholm Stadsmission: Second hand shop, northwest corner, opposite side of the square
3. 7/11: Convenience store, north side
4. Juvelerare H. Rudberg: Silver and Gold, north side
5. Vurma café: coffee shop, north side
6. Ice cream store, north side

1. Interview questions of Shop keepers

1. Do you live nearby? If not where?
2. How do you come to work? Walk, bicycle, car, train, bus?
3. Who are generally your customers?
4. Why you are here? Do you think your business will survive in the future? If no, what is the biggest threat for your business?
5. What do you like/dislike about the square?
6. How do you like the square? Asking by scaled adjective 5-point scale ranging from 1 (opposite adjectives)
   - livable-inactive (appealing-unappealing)
   - memorable (eventful)-ordinary
   - warm-formal or alienating
   - safe-unsafe
   - comfortable-uncomfortable
   - inviting-repelling
   - beautiful-ugly
7. Have you ever made a meeting with a friend or neighbors here? If yes: where? If no: Why and where?
8. Do you like the architecture and buildings around? Do you think they have a good quality? If no, what don’t you like about them?

2. Interview questions of people present at the square

1. Do you live nearby? If not where?
2. Do you have family? Children?
3. How often in a week do you come here? At what time of the day?
4. What is the biggest reason for you to come here?
5. What do you like/dislike about the square?
6. How do you like the square? Asking by scaled adjective 5-point scale ranging from 1 (opposite adjectives)
   - livable-inactive (appealing-unappealing)
   - memorable (eventful)-ordinary
   - warm-formal or alienating
- safe-unsafe
- comfortable-uncomfortable
- inviting-repelling
- beautiful-ugly

7. Do you usually use the café and restaurant around this square?

8. Have you ever made a meeting with a friend or neighbors here? If yes: where? If no: Why and where?

9. Do you like the architecture and buildings around? Do you think they have a good quality? If no, what don’t you like about them?

10. What would you like to add to the park or activities around it? What is missing? Like library, shopping mall, bus station, …
Appendix 3
Conceptual Mapping

The base map prepared to accomplish conceptual mapping; asking people to draw or write about their impression of Norrmalmstorg. The focus group is 20 people in different environmental role, age and gender. The maps and responses are addressed in following (Map no., gender: F/M, age, living area, reason of being at the square).

- Map 01, M, 39, Akalla
  The aim of being at the square was going to biblioteksgatan. I often buy something from Pressbyrån and eat at the square.

- Map 02, F, 31, Södermalm
  The aim of being at the square was passing over it to Kungsträdgården or shopping. To her, square is not a place to hang out, sit down or chill out; and it is affected by the traffic of Hamngatan.

- Map 03, M, 46, Kista
  He works close to the square, yet the main aim of being there is mostly the bank in the northeast side.

- Map 04, F, 26, Telefonplan
  The aim of just ‘passing’ the square was running between NK (big shopping center in west of the square) and Stureplan (on Northern side).

- Map 05, F, 27, Gullmarsplan
  To him the square is pretty busy place and the aim of being there was heading to the bank (Handelsbaken) on the north east corner.

Fig. 84, Karimnia 2012, Norrmalmstorg, Base map and questions for conceptual mapping method.
- Map 06, F, Södermalm
He works close to the square and lives in south of Stockholm. He wished the square had better seats to sit and stay longer, and could be more protected from the traffic around.

- Map 07, F, 29, Täby
He could hardly remember it as a square more as a passing by open space. He liked the size and architecture of the square and he has just passed it by.

- Map 08, M, 26, Universitetet
She, as an architect, dislikes the south side of the square that she usually walks heading to Berns. To her the square is not an appealing area. The aim of being there is just to pass by. She has never been motivated to cross the square and see all its sides.

- Map 09, M, 23, Kungshamra
He loves the brand stores around which are his main aim of being at the square.

- Map 10, M, 30, Swedish student, Solna
He mentions to the important role of the square as a transit hub, and also a well-known disco in the east side which are his main reason to being at the square.

- Map 11, F, 24, Hammarby
She has been at the square several times while hanging out in town and walking from Sergels Torg or kungsträdgården toward Stureplan.

- Map 12, M, 27, Stockholm
He has worked for 1 year at Pressbyrån (convenience store). He emphasized to the real estate and how it affects the area; also the changes happened traffic wise around the square several times.

- Map 13, F, 21, Swedish student, Liljeholmen
To her the square is a bit ‘gray’ and boring and dominant by upper-class people. She passes there on the way to Djurgården with tram.

- Map 14, M, 27, Uriksdal
His experiences of the square are most often by night time on his way to Nobis hotel (east side) or Stureplan.

- Map 15, M, Solna
He has just passed by the square frequently. He could remember the clothing stores surrounded the square in general. He mentions to the benches in the middle of the square.

- Map 16, F, 20, Skarpnäck
She passes by Norrmalmstorg while going to work. She was excited about the square due to the Christmas tree. She also added the traffic system (tram line and bus station) and the club on the east side of the square.

- Map 17, F, 35, Stockholm
She likes the square and visits there for shopping.

- Map 18, F, 21, Södermalm
She works at Stureplan and passes the square almost every day.

- Map 19, F, 38, Sundbyberg
She passes the square from Sergelstorg to Stureplan while hanging out around the center.

- Map 20, F, 32, Solna
She usually takes bus from Norrmalmstorg and sometimes sit on the benches to take a rest.
Result of Conceptual Mapping, Normaismstorg

Map 01

Map 02

Map 03

Map 04

Map 05

Map 06