Can resilient urban design support social resilience?

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Summary
This research is a small part of a bigger field of research made before by other authors regarding the humans in the urban public space. It has a small context compared to other studies, but a big impact inside the community. It aims at finding answers to questions that other researchers asked before, but under different circumstances and they displayed them through different ways such as documentary films (The social life of small urban spaces 1980, How to live in a city 1964).

After experiencing the city life of Malmö and some questions have been raised, the concept of resilience intersected with the interest of social public life in a neighbourhood. In order to have the theoretical framework to answer the research question, the thesis follows a literature review, where the concepts of resilience, urban resilience, resilient urban design and social resilience have been explored.

Next, after exploring the city of Malmö, some case studies have been chosen and studied through direct observation in different months starting with March and various times of the day. In the methodological approach section the methods are explained as well as a detailed presentation of the biggest tool used for this research: observational drawing. The tools used for the observation are field notes, observational drawings and photographs. The cases are spread throughout the city and are located in neighbourhoods with different urban tissues.

The results reveal all the observational drawings made during the field visits and the field notes written. They show how people use the spaces in all three case studies depending on the weather or other external factors.

The discussion reveals the complexity of the relation between concepts and the empirical data, following the initial aim of the research throughout the discussion. This thesis contributes with important outcomes to the field of urban studies creating awareness about the urban context and its influence on people. The findings of this study show a diversity and creativity of users in using the public space.

Key words: resilience, urban resilience, urban design, resilient urban design, social resilience, neighbourhood, perception, documentary film, observational drawing.
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Personal notes

During the spring semester when the thesis was conducted and written, I experienced different situations and feelings in this period of my life. The technique used to research the case studies was chosen not only to make me connect to my work, but also to help me overcome stress. Drawing was always a way to express myself and show the world what you can’t see during the daily activities. Drawing helped me to rediscover myself after a few years when I lost my passion. I used to lose myself for hours in the process of drawing and reminding this to my hands supported my brain and heart to appreciate more what I can really do. I realized drawing taught me again the way to combine my passion and my work and helped me to achieve a good result.
Terms and terminology

In order to have a common understanding of some new concept for the readers, definitions will be provided with the meaning used for this thesis. The main concept of this research paper is resilience, to which other concepts will be added according to the study.

**Resilience**, as found in many dictionaries under different words, is the ability to recover after a difficulty. When combined with other notions, its meaning gets more complex.

**Urban resilience** is used as a concept in this thesis to introduce a big scale perception for the readers. It is seen as the ability of an urban system to resist, adapt and recover after a disorder.

**Urban design** is a key concept in this research. It is the starting point for all the field observations and should be regarded as an important tool to create connections between elements of the urban system, creating a favourable ambience for its users (Vaništa Lazarević, Keković, & Antonić, 2018).

**Resilient urban design**, on the other hand, brings something new to the concept. It gives it the capacity to be multi-functional and have positive perceived qualities in a way which people will use the space regardless the urban design.

**Social resilience** is seen and discussed throughout this thesis as the ability of a community to resist in front of disturbances, learn from them and adapt in order to achieve social integration and thrive for a better life quality.
1. Introduction

The cities are constantly growing and, soon, most of the people will live in urban spaces. The urban lifestyles require a complex structure of “interconnected institutions, infrastructure and information.” (Da Silva & Moench, 2014, p. 3) The cities have a lot of advantages including economy, a better development and innovation, but they “are also places for where stresses accumulate or sudden shocks occur that may result in social breakdown, physical collapse or economic deprivation. That is, unless a city is resilient.” (Da Silva & Moench, 2014, p. 3)

Looking at the urban social structures nowadays it is obvious that they are not as strong as they used to be in the past. Following a series of processes in the city, people started to wish for more privacy, independency and they forgot how important the role of a social structure inside a community is. Therefore, this study is needed to create awareness among the residents that even though they feel comfortable with their social networks, it is always place for more and that a place can be well designed and functional but it also has to be resilient, and most of the time, this is linked to the people.

This thesis is trying to answer a challenging question. Can resilient urban design support social resilience? This question can be asked: can urban design support social structure? The reason why the concept of resilience appears in this research and is the core of it is because nowadays the world is exposed to many critical situations and there is a big need of the ability of recovery. Achieving resilience awareness and motivating the importance of it, it requires a collective work. Even if events happen at a small scale, it affects other locations, ending up having effects on the bigger system that the areas belong to (Meerow, Newell, & Stults, 2016). An example of why the research requires the usage of resilience will be explained next. A neighbourhood that has inside many small communities or blocks of housing, risks to lose its social structure. By having the physical resource of common designed spaces inside the neighbourhood, the spaces are expected to have the power to bring people together. This way, the urban design is able to support a recovery and become again the centre of the community, and therefore make the social structure become resilient itself. The following research presents a qualitative research conducted in the city of Malmö during spring 2018. The research has an open-ended research question and is relying on the direct observation of some case studies. The literature review has been made after having a main theoretical concept and an area of interest in the city, but the observations of the case studies have been made in the second part of the research. The question of this research aims at certain parts of the city where people are supposed to live as a community, where they create a network and spend time together, it aims to neighbourhoods inside or formed by residential areas.

1.1. Background

The interest in the concept of resilience arose last year when I found out about the Resilient Regions Association in Malmö and participated at one of their seminars with students. The concept of resilience was new for me and, as I started researching about it, a lot of directions have been opened in relation to my area of interest, the urban space. Last semester I conducted a research on gated communities and one of my case studies was Bo01 neighbourhood in Västra Hamnen in Malmö. During this research I noticed the common designed spaces present in the area and their functionality. I became curious in studying more these places and see if there are other similar spaces in the city: “Only time will tell whether
Bo01 can be socially sustainable.” (Lewis, 2005, p. 91) This drew my attention because I am very much interested in how people perceive and use public spaces, especially if they are part of a community.

In a global context, resilience has been analyzed and included in conferences, urban strategies and projects for a few years now. Following Habitat III conference in October 2016, the UN-Habitat published an analysis on urban resilience through a book called *Trends in Urban Resilience 2017*. Here, a detailed description of the evolution of the concept of resilience is made and shown how much its importance grew over the years. Also, the book reveals plans and strategies that have been used and that they will be used in order to achieve sustainable development. Resilience is present on the UN agenda since 2005, when it was referring to “communities and nations”, but planned to consider it for all sectors and the connection between them (United Nations, 2017).

Habitat I (1976) and II (1996) were the first two Human Settlements-based conferences, where issues that also exist today have been arose (United Nations, 2017). Habitat III, held in the context of contemporary urban challenges, contributed with an essential factor to the 2030 Agenda for Sustainable Development and “was an opportunity to understand sustainable development and climate change from an urban standpoint, investigating how these two trends critically interconnect with urbanization.” (United Nations, 2017, p. 23) UN-Habitat, in addition to this, mentions “its commitment to increase resilience of cities”. (United Nations, 2017, p. 25) Therefore, City Resilience Profiling Programme (CRPP) had been made in 2012 in order to help local governments to succeed towards resilient urban planning (United Nations, 2017).

The structure made of connections between Global Resilience Actors is a complex one. Chapter 4 in the UN-Habitat’s book explains and illustrates in detail this network and the commitment and understanding of resilience of each of them. Due to limited space and time for this research, more information won’t be explained, but it is important to mention the main four clusters of the network: “1) United Nations System and the European Union Network, 2) The Rockefeller Foundation and 100 Resilient Cities Network, 3) The United Kingdom Department for International Development Network, and 4) De-linked Actors”. (United Nations, 2017, p. 45)

To conclude this background section, the chosen topic has a meaningful relevance in the urban context and the conducted study creates awareness regarding the relation between public spaces and residents. The research creates a basis for future studies in a Swedish context regarding small-scale resilience, which will contribute to the urban resilience. In the following section the research question and the aim of the research will be presented.

1.2. Research Question

This thesis contains a research which has a centre of interest the relation between urban design and its users. In the context of a small-scale city (Malmö), the social structure is still very important for the complex system of the city. Next, there will be an explanation of the way the research question was formed and supported.

There are many research methods that can be applied when conducting a research: survey, history, experiment, case study and archival analysis (Yin, 2009). It is thought by social scientists that each method should be used for something in particular, for example case
studies are suitable for “the exploratory phase of an investigation” (Yin, 2009, p. 6), but it was proven that case studies method can be more than that, even explanatory or descriptive (Yin, 2009). In order to be determined what kind of research method is to be used, according to Yin, there are three factors to be considered: the research question, the actions in relation to behavioural events and if the events are contemporary or not. In the case study method, the research questions suitable to be asked are “how” and “why” type, focus on contemporary events and don’t have any influence on behavioural events (Yin, 2009).

In this thesis, the research question ‘Can resilient urban design support social resilience?’, which is the same as the title of the thesis, is a broad one, however supported by a series of other narrower ones. “How” and “why” questions require observations during a long period of time and are suitable to research behaviours of people inside of a community (Yin, 2009). Questions followed during this research paper are, for example: How is the urban design becoming resilient? How is it supporting the community? and How is the resilient urban design successful? or Why does the urban design has to be resilient? Why is it successful in some areas and why not in other areas? These previous questions are meant to be “explanatory” (Yin, 2009, p. 9) and favourable to case studies research method. However, the focus of the research will be the main research question mentioned in the beginning of the paragraph.

1.3. The aim of the research

The aim of the research is to understand the level of resilience in urban design and to what extent it supports the social resilience of an area. Considering the aspects above part of the explained research questions used for this study, the purpose of the research is to understand the process by which some neighbourhoods accomplish or fail in their objectives of thriving for a better life quality. These objectives are directly related to social actions in the public spaces inside those neighbourhoods. In order to reach this goal, three neighbourhood case studies have been observed in the city of Malmö with an emphasis on behaviours, perceptions of that space and the use of the space, translated through activities developed there.

1.4. Research limitations and challenges

This thesis was conducted during the spring semester, between January and May months. Winter in Sweden can be long and this was also the case for 2018. Even though the case studies were chosen in time, the field observations could only be conducted starting with the end of March. The weather is one of the most important factors influencing the process of this research. The planned field visits didn’t fit with the actual ones, neither the dates, nor their number or duration. There were not few the rainy, cloudy or even windy days which stopped the observation from going forward. However, I tried t make the best out of the few number of sunny days through taking advantage of going even in all three areas in the same day, having short visits and through using also photographs to finish the drawings at home. Also, due to this weather limitation, it happened that most of the sunny days were only during some days of the week, which lead the observations to have very few weekend days.

A second limitation of this study was the time. This research has a topic still new both in academic literature and in real world. For this reason, it required a lot of time to find good
sources for the understanding of the concepts and to make the connection between them and the case studies. An opportunity to overcome this literature limitation, was being part of an NGO’s network in the city. It opened a lot of directions to certain studies through their connections around the world.

1.5. Layout

The present thesis was conducted throughout the spring semester 2018. It begins with an introduction, where a background of the study is explained, the research question and aim of the research are presented as well as the research limitations and challenges. Next, a particular aspect of this research is the inspiration from documentary films, which explains how they were used for the research. A literature review with the main concepts follows them and it contains four subsections where each concept is individually explained and the connection between them is made. After the literature review, the case studies are being described, located in the city and the motivation of choosing them is mentioned. Following, the methodological approach is presented, with the tools used and a broad explanation of each of them. The results and discussion sections introduce the findings of this research and answer the research question together with the aim of the research. Conclusions and future research are also mentioned, with the possibility of continuing this study over a bigger area and time-limit.

2. Documentary films as a source of inspiration

This section will present how two documentary films have been used before the start of data collection. During a previous course, I found out about a movie directed by William H. Whyte almost 40 years ago. I find the movie very interesting and useful as a source of inspiration for someone doing field observations with an emphasis on the usage of space. The film is called *The social life of small urban spaces* (1980) and it consists of direct observations of some public spaces in the city of New York. It “explores the successes and failures of public spaces” in the city. (Publica, n.d.) The movie comes as a “companion” to the book with the same name, which Whyte is calling a manual and that is only a first step to a final book. This final book was meant to be published after the completion of Street Life Project started in 1971, but because the study required more time than predicted, after 9 years, the movie and the manual were released. The movie lasts 55 minutes and the research itself was supported by grants from many organizations, among which the Rockefeller Brothers Fund and the Rockefeller Family Fund. Holly thanks in this manual to Laurence S. Rockefeller, who was the founding trustee for both these organizations, for his support throughout the project (Whyte, 1980a). The reason this detail is mentioned here is because The Rockefeller Foundation is one of the main global resilience actors in the present as stated in the analysis book on urban resilience *Trends in Urban Resilience 2017*, which will be presented in detail later in the thesis.

This documentary film teaches a lot of important lessons to its viewers. After creating a team of researchers in 1970 he went in the studied areas of the city of New York and started “looking at city space, talking with people, making notes, taking photographs and films, measuring the heights of benches and ledges, writing articles, helping to draft zoning ordinances, speaking in church basements and tall buildings, discovering the public places that people use and don't use, and why.” (Whyte, 1980a, p. 6) In the movie we can see they
were going several times to the field with maps and they were tracking down where people sat and their activities and behaviours, for example “the movable chairs” or “the number one activity is people looking at other people”. (Whyte, 1980b) This had as a result some categories of users and activities. An emphasis lies on places to sit in the space as being one of the most important characteristics of a functional public space. It was also shown how the researchers made charts based on the usage of space, gender and others. This documentary film opens the mind towards many things to consider while observing a space and towards understanding if and how small urban spaces function and what makes people come inside it or not. In the end of the movie, Whyte presents what he says there are the basic factors of a public space: “SITTABLE SPACE. STREET. SUN. FOOD. WATER. TREES. We’ve gone over the basic factors. But there’s one more. In a lack of a better form, I call it TRIANGULATION. By this I mean that characteristic of a public space to bring people together, strangers. It’s usually an external stimulus of some kind, be it a physical feature or a habit.” (Whyte, 1980b) Nowadays, there might be many other secondary factors to consider, but the important thing in this thesis is to see how the spaces are used the way they are designed in the present and not to make proposals for the spaces. Also, it is to a great extent that the concept of resilience can be seen in this movie even though it is not mentioned. Some spaces have the power to resist to changes and adapt, which means they recover after a disorder. It may be that the urban design of the space allows it to do that and also the people have the capacity to influence its usage according to their needs. The authors were talking about the usage of public space, without thinking of its capability of adaptation to new situations that are being exposed, for example, children playing on a road and so the road becoming their playground instead of a car road.

In almost the same extent as Whyte, George C. Stoney wrote and directed the film How to live in a city (1964). However, in this documentary, there are more characteristics of a “well-designed urban space” and how to manage to have it rather than observing an existing one, but it is still a good source of inspiration to train the researcher’s eye for future field observations. Things like complementary elements in a space are discussed (open/unopened space; the enclosure of a space/the space part of the city etc.) and shown through examples. Here, the characteristics of a proper urban public space are different than in the previous film and related a lot to the people: “Neither the spaces without the people, nor the people without the spaces will do the trick. It’s not a question of one or the other. It’s a question of both or nothing. To sum up, an open space in the city must first relate to the denser areas around it by being seen from them. Secondly, it should have a sense of shape or enclosure by the buildings around it, otherwise it might as well be a madhouse. And third, it must have a centre of interest, both in terms of form [...] and in terms of human activity. After all, being human it’s the human being that interests us the most.” (George C. Stoney, 1964)

Through these documentary films it can be seen how the literature on topics that nowadays are correlated with the concept of resilience were expressed. They are used in this thesis as a source of information regarding the presence of the concepts many years ago.

3. Literature review

In case studies research, a theory development is required before the beginning of data collection, whether the goal is to develop or to test the theory (Yin, 2009). In order to succeed this step in the research, a literature review is indicated for the desired topic (Yin, 2009). Next, the literature review for this thesis will be presented and it is aimed to clarify the concepts of resilience, urban resilience, resilient urban design and social resilience. In order
for this to be achieved, the literature review was divided in four subsections. First, an introduction to when and how the notion of resilience first appeared and what it means will be made. Then, a brief presentation of the term urban resilience will be presented, how authors offer various definitions for it and how it was included in many urban plans for developments in cities around the world. The next two subsections narrow down the discussion to the notions of resilient urban design and social resilience, showing in which circumstances they have been embraced and what was their contribution to the academic literature. Last, since the concepts are new and each of them was used in different contexts by its authors, an explanation of the connection between them will be presented.

3.1. Introduction to the concepts of resilience and urban resilience

Resilience is the ability to recover after a difficulty. The word comes from the Latin *resilire* and it means “to leap back” (Coaffee aut & Lee aut, 2016). In this subsection a history of the notion resilience will be presented and the process of being connected to the urban area. After that, definitions of the term urban resilience from different authors will be explained, followed by some characteristics of it. The term resilience was first discussed by Holling in 1973 as a descriptive word under the context of ecological systems. As this is the main focus of this thesis, it is necessary to show the entire quote in order to understand the context:

“It is useful to distinguish two kinds of behaviour. One can be termed stability, [...] But there is another property, termed resilience, which is a measure of the persistence of systems and of their ability to absorb change and disturbance and still maintain the same relationships between populations or state variables.” (Holling, 1973, pp. 14–15)

Nowadays, looking at cities in relation to urbanization and climate change, sustainability was not sufficient anymore, so the urban resilience appeared in front of it. Resilience in the urban space, having a bigger area of interest, contributed in the relation “between disaster risk reduction and climate change adaptation.” (Da Silva & Moench, 2014, p. 3) It aims to increase the power of resistance of a system when facing major events, instead of working on prevention of such events (Da Silva & Moench, 2014). Meerow, Newell and Stults (2015) made a study on the definition of urban resilience, gathering 25 definitions from different fields and then proposing a new one themselves. As they also state, “urban resilience is a contested concept and lacks clarity due to inconsistencies and ambiguity.” (Meerow et al., 2016, p. 40) Moreover, as mentioned before, the concept of resilience is currently discussed in many other contexts besides ecology: spatial and retail resilience (Kärrholm, Nylund, & Prieto de la Fuente, 2014); social resilience (McMillen, Campbell, Svendsen, & Reynolds, 2016); building resilience (Torabi, Dedekorkut-Howes, & Howes, 2018); resilient urban design (Vaništa Lazarević et al., 2018). Therefore, the notion has been adopted and discussed in different fields according to their needs and priorities.

In the article *Defining urban resilience: A review* by Meerow, Newell and Stults, there are some definitions of urban resilience from authors in different fields which are relevant for this thesis. Next, these relevant definitions will be discussed referring to them as they are numbered in the table from the article. The second definition in engineering field says that urban resilience is composed of physical objects and people. It doesn’t mention urban resilience as being a quality of the city, but rather as a characteristic of the two elements constitutive. The definition number seven from environmental science field is closer to the meaning of resilience, but still at a general level, mentioning how systems are able “to
reorganize and recover from change and disturbance without changing to other states...systems that are “safe to fail” (p.341).” The sixteenth definition in the table from the fields of engineering and social sciences gets closer to the urban level by introducing the capacity to maintain the “main functions of living, commerce, industry, government and social gathering” despite the disturbing actions on the city. Definitions numbers nineteen and twenty from the fields of business management and accounting and social sciences summarize all the important qualities of resilience in the urban space: face the change through accepting it, learning how to deal with it and responding to it without affecting the system’s elements. Definition number twenty four from the fields of energy, engineering and social sciences introduces new facts in the definition. First, it only refers to the social, economic and natural elements of the city. Second, it doesn’t mention any particular way of what it means to be resilient, but only saying “future-proof”. This can be interpreted in many ways as it has a very broad area of explaining the expression. The last relevant definition, which is also the last in the table, number twenty five, comes from the fields of agricultural and biological sciences. This definition also introduces new notions such as “stress” and “survive” which give a new understanding of the meaning. It also has a smaller scale of appliance, focusing much on people, saying urban resilience is the capacity of a community to face disruptive actions (all quotes from this paragraph are from Meerow et al., 2016, p. 41)

The authors offer themselves a definition of urban resilience, combining the strengths from each definition and taking into consideration the six conceptual tensions: characterization of ‘urban’, notion of equilibrium, resilience as a positive concept, pathway to resilience, understanding of adaption, timescale of action (Meerow et al., 2016). Moreover, with this new definition, they offer the possibility of its usage in a broader field: “Urban resilience refers to the ability of an urban system – and all its constituent socio-ecological and socio-technical networks across temporal and spatial scales – to maintain or rapidly return to desired functions in the face of a disturbance, to adapt to change, and to quickly transform systems that limit current or future adaptive capacity.” (Meerow et al., 2016, p. 45)

The concept of urban resilience has developed fast in the last years across many countries due to major negative events happening in the cities. Some examples are the terrorist attack in New York and natural disasters such as tsunami, hurricane and floods. The notion of resilience is discussed when upon a system under the process of researching, external factors intervene and change the condition of the system or put its stability under pressure (Lang, 2011).

With new different types of research made on urban resilience, connections between sciences appear and form opportunities to discuss the social sciences in relation to urban change (Lang, 2011). In a smaller context, and without having effects of natural disaster or other external factors, we can still analyze the urban social structure. In Malmö, the Resilient Regions Association is creating an opportunity for many institutions, companies and other associations to gather, discuss and work together on the concept of urban resilience in Sweden and in Malmö. They define it as: “the ability to maintain and renew functionality under pressure, regardless of whether these pressures are chronic or sudden and shocking.”(Resilient Regions Association, n.d.) Also, following the same idea, 100 Resilient Cities have a similar definition for urban resilience: “the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience.”(100 Resilient Cities, n.d.) In order to build urban resilience, the complex system of the city has to be comprehended, together with all the smaller systems forming it and the structure that holds them together. This way,
stresses and shocks can be seen and explored leading to a better lifestyle for the citizens (100 Resilient Cities, n.d.).

100RC introduce a new approach to the city, translated through projects which aim simultaneously to challenges from different sectors, develop the services and save resources. It is called “resilience dividend” and it means the total amount of benefits accomplished when making these projects and taking into consideration a leading initiative, the awareness of possible risks and the ability of making them “inclusive and integrated.”(100 Resilient Cities, n.d.)

In a study made by ARUP International Development and supported by The Rockefeller Foundation, Da Silva & Moench (2014) identify the qualities of a resilient system and they develop them in order to support the definition of city resilience presented in the same report. This study is made based on the City Resilience Index, where information from cities around the world was brought together. It is made in order to comprehend what a city needs to be resilient. They state a system should be reflective, resourceful, robust, inclusive, redundant, integrated and flexible (Da Silva & Moench, 2014). The reflective quality means that a system is able to understand previous actions and use this learning for future actions. The resourceful quality is translated through the system elements’ ability to find immediately solutions to fight disruptive actions. Robustness is translated though system’s strengths which helps it to have as few as possible damages during disturbing actions. This also means the system is preventive for possible collapses of it. Inclusion focuses on supporting the most vulnerable elements of the system. Redundancy means a system reduces capacities on purpose in order for it to be easier during the disruptive actions. Integration aims at all supportive elements to be in constant connection and address common outcomes. The flexibility translates through system’s capacity of developing while adapting to new states (Da Silva & Moench, 2014).

To sum up, the notion of resilience evolved from the field of ecology to almost all the systems present in the urban space. The urban resilience is nowadays one of the most discussed characteristics of cities and besides trying to define it and enumerate its qualities, urban systems are trying also to achieve it. However, this can’t be accomplished by counting on general facts, but specific analyses must be performed for each situation in the city.

3.2. Resilient Urban Design

Resilience is a characteristic which can be attributed to many objects or processes. Looking at the urban space, it became an important aspect to think if the space itself can be resilient. The following piece of this research looks into the notion of resilient urban design and how this was used before in literature. As it was seen in the previous subsection, the concept of resilience was connected to the urban space and it was referred to it as urban resilience.

Urban design has the objective of accomplishing strong connections between different elements of the urban system and to integrate them in order to have a favourable context for people, “such as squares, streets, parks, gardens or quays.”(Vaništa Lazarević et al., 2018, p. 1133) It is, in some ways, connected to resilience and its objectives, because a “high-quality public spaces can produce a positive influence and play a major role in the resilience of wider urban areas.” (Vaništa Lazarević et al., 2018, p. 1133)
As Lazarevića, Keković and Antonić state in their article, even though resilience was introduced in one of the UN Social Development Goals, it can be discussed also at a “micro-level” (Vaništa Lazarević et al., 2018). The research of the concept can be adapted from macro, the urban level, to micro, the neighbourhood level. They are customizing in their paper the 10 principles of urban resilience to the urban design level. The first target to achieve resilient urban design is having “new and regenerated residential areas with viable focal points (squares and streets).” The second one refers to urban transport and presents an improvement regarding its intersection with other functions as well as “design for vulnerable people and groups”. The third one mentions public participation. The fourth principle puts an emphasis on the valorisation of urban heritage in the urban system. The fifth one says to minimise the “risks, disasters and hazards, proper actions in design to prevent or easily overcome the mentioned challenges.” The sixth and the seventh are connected referring to environment and urban greenery. The first one requires “friendy measures in urban design through “smart” design and the use of resilient and healthy materials” and the second one is about creating “networks of greenery in urban areas, use of green materials and solution in urban design.” The last two principles are also connected, setting the goals to achieve transparency in urban governance and local awareness through the use of “local tradition and materials in urban design, the link between urban design and urban context.” (all quotes are from (Vaništa Lazarević et al., 2018, p. 1134)) In a similar way, Dosch and Porsche enumerate directions of an “adequate” (Dosch & Porsche, 2011, p. 46) planning and design. It is not clear the meaning of this word in their enumeration and they do not explain it, but reading the following characteristics, it can indicate the development towards resilient planning and design. They mention detailed goals of cities and neighbourhoods such as the quality of dense urban areas and urban quarters, the use of energy in an effective way, power supply and creating favourable spaces close to residential and business areas (Dosch & Porsche, 2011). The questionable aspect here is if these elements are enough in order to identify an improvement in planning and design. One thing is certain and that is the uniqueness of each case study where goals are followed to gain their development or resilience.

Yamagata, Seya and Murakami talk about land-use scenarios in urban planning and urban design in order to help urban planners to achieve effective results. These results are directly connected to climate change and the concept of resilience. The “wise-shrinking” land-use scenario is thought to be “successfully implemented as recently advocated “climate resilient” development”. (Murakami, Yamagata, & Seya, 2016, p. 27) Moreover, the same scenario will make possible the achievement of “climate resilient urban design” through the consideration of “co-benefits and trade-offs between mitigation and adaptation strategies”. (Murakami et al., 2016, p. 27) In this book, the concept of resilient urban design is connected to urban disasters and discussed in relation to the climate. One of the disasters aimed is the flooding of areas, which has a great negative impact to the urban system with all its including elements. On a neighbourhood level, the most affected element when some common spaces are destroyed is the social one, who benefits most of them.

In addition, another important aspect at the community level which influences its residents is perception. This is not so aggressive and instantaneous factor as the one mentioned before, but it also has a negative impact on the community. This type of perception refers to users when they walk through the space, use some low speed transport to arrive in the space (skateboard, bike, kick scooter etc.) or stop and spend time in the space. When talking about the qualities of an urban design or its abilities to be resilient, the issue of multifunctionality comes into discussion. This is essential in “shock absorption and timely recovery.” (Sharifi & Yamagata, 2016, p. 268) It is the most important characteristic of an
urban space which has a resilient urban design. Also, the quality of an urban design which leads to this multi-functionality of the space manages the user experiences. One method to explore this is through analyzing the connection between one’s perception of “micro-level urban design features [...] affective experiences” (Johansson, Stermudd, & Kärholm, 2016, p. 257) and behaviours in the space. The perceived urban design qualities are unique for each place and influence users’ behaviours, therefore determine affective experiences. This way, one can observe if the user perceived positive or negative aspects of a place by his/her choices (Johansson et al., 2016).

Overall, it may be said the capacity of an urban design inside a community to be resilient is fundamental to the city. As seen earlier, the principles of urban resilience can be interpreted at the community level and contribute to the urban system. The quality of the urban design generates its integration in the neighbourhood.

3.3. Social resilience

Social resilience is one branch of the many associated with the concept of resilience. In this subsection the appliance of social resilience will be presented together with ways of maintaining it. Also, the concept will be narrowed down to the neighbourhood level, defined and discussed from this point of view.

In the event of a disaster on a city, immediate actions must be taken to restore resilience. However, due to the disruptive action, the community may have difficulties in responding fast, this keeping them longer in that new state and risking their ability to recover again. On the other hand, responding too fast may create superficial solutions which can affect them on a long-term. Therefore, resilience must be preventive and constantly taken cared of through “increased awareness, learning and collaboration across sectors [50,51], improved education, mobilization of experience and social capital, leadership, and multi-scale governance.” (Carpenter et al., 2012, pp. 3254–3255) Also, developing resilience through social integration is tightly related to “the quality of life, attractiveness, and also the stigmatized image of urban neighbourhoods, cities, and regions, but also initiatives which can be interpreted as regaining the ability of actors to act by overcoming negative self-images as well as negative images in the eyes of others.” (Kilper & Thurmann, 2011, p. 117)

(McMillen et al., 2016) have a good approach and introduction towards social resilience, which is similar with the purpose of this thesis. When talking about a small scale community it is important to see “the social dimensions of general resilience.” (McMillen et al., 2016, p. 2) General resilience is the notion to which all types of resilience refer to and it “is the capacity to absorb shocks of all kinds, including novel and unforeseen ones.” (Carpenter et al., 2012, p. 3250) The connections between natural systems and human understanding make the general resilience valuable through perceiving severe actions. It should prevent socio-ecological systems from human choices and possible future actions (Carpenter et al., 2012).

Social resilience contains economic, spatial and social elements and it demands integrative comprehension and analysis on different levels. However, it is rather defined at a small scale than at a big scale due to its institutional framework (Adger, 2000). When it is discussed at a small scale, social resilience is the presence, evolution and commitment of assets by the residents to prosper in a changing, unsure and unexpected context (McMillen et
In other words, it means the capacity of a community to withstand disturbances, learn from them and conform in order to gain social integration and an improved life quality.

In summary, social resilience plays an important role in the bigger system of urban resilience and has a close connection to other concepts. It has many factors depending on it and in the same time it depends on others. It brings an important contribution to the literature under many forms and appreciations.

3.4. The connection between the concepts

The relation between the social structure and the urban design of an area is one of the most important elements of a neighbourhood. Putting an emphasis on the social part, Pierre Mayol talks in the book *The Practice of Everyday Life. Volume 2: Living and cooking* (De Certeau, Giard, & Mayol, 1998) about the cultural element of it. He considers that in order to determine the urban behaviour of the residents, you need to look closer to their culture and in order to do that there are two directions to consider: “1. The urban sociology of the neighbourhood […] 2. The socio-ethnographic analysis of everyday life.” (Mayol, 1998, p. 7)

The first one is strictly related to the physical aspects of the area, while the second one deals with revealing its culture. In this research, the chosen method was to look at the external context of the neighbourhood to understand in which point in becomes an internal matter and has an effect on the residents. This way, instead of only having one point of interest, they were focusing “on relationships among objects, more precisely on the link that attaches private to public space.” (Mayol, 1998, p. 8) Mayol states the basis of the study is to observe “one of the conditions of possibility for everyday life in urban space” (Mayol, 1998), where the people make a distinction between private and public and this makes a space to be a neighbourhood.

The two subjects of Mayol’s study are behaviours in public space, which give the image of that space in a specific moment, and the results of these behaviours, which are connected to the residents’ culture (Mayol, 1998). Therefore, there will be diversity in the public space and each area will be unique in each neighbourhood, because it “is, almost by definition, a mastery of the social environment”. (Mayol, 1998) The result of living close to someone else and becoming neighbours, makes the residents to feel they belong to the place and learn to coexist. As a result, the neighbourhood is “an object of consumption that the dweller appropriates by way of the privatization of public space.” (Mayol, 1998)

Through perception, people process all the information they receive and are able to sort it and use it in a significant way (Legaspi, Narararatwong, Cooharojananone, Okada, & Maruyama, 2016). “Hence, perception can automatically influence behaviour.” (Legaspi et al., 2016, p. 97) Perception is tightly related to resilience thinking and has influences on it. This leads to exposing the impact of perception on social resilience. This is made by answering “the questions Resilience to what? and Resilience for what?” (Legaspi et al., 2016, p. 98) When discussing about social resilience, all related notions refer to “social units, from individuals and households to organizations or communities, and their ability to be resilient to environmental and social hazards.” (Legaspi et al., 2016, p. 98) The first step in identifying aspects of social resilience and maintaining it is to answer the first question, meaning to find the threat. The second step is to answer the second questions through recognizing “whether the individual is focused on self or others, as each would likely produce different consequences.” (Legaspi et al., 2016, p. 98)
Social resilience is usually connected to big-scale events which affect the population of a community, but in the case of this thesis it will be connected to the action of using a public urban space inside a neighbourhood part of a segregated city.

4. The description of the case studies

In this section the case studies will be presented after an introduction of the selected city will be made and a motivation of choosing it will be presented. Malmö is the city of interest for conducting the research of this thesis. It is Sweden’s third biggest city and it has a big number of immigrants compared to the Swedes who still live here. It is “a city with major social inequalities” (Alwall, Aguirre Sanchez-Beato, Troncoso, Pérez Campillos, & Saponaro, 2012, p. 1) and the differences come when we talk about income, housing, health etc. Due to these inequalities spread throughout the city, Malmö has become a segregated city. This is visible both through the statistics and the spatial outline of the city. The map doesn’t follow a general rule where the areas closer to the centre are more developed. In Malmö you can find low-income and disadvantaged areas only a few kilometres away from the city centre (Alwall et al., 2012). The following map illustrates 10 districts of the city, which are further detailed in the table with information leading to segregation. The source for both the map and the table below is (Alwall et al., 2012, pp. 10–11).
<table>
<thead>
<tr>
<th>City district</th>
<th>Non-immigrant children, preschool age %</th>
<th>Post-secondary education %</th>
<th>9th grade pupils eligible for secondary education (boys) %</th>
<th>9th grade pupils eligible for secondary education (girls) %</th>
<th>People not dependent on social welfare %</th>
<th>Average or good health (self-assessed), women %</th>
<th>Average or good health (self-assessed), men %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centrum</td>
<td>71</td>
<td>57,0</td>
<td>78,1</td>
<td>80,7</td>
<td>95</td>
<td>95</td>
<td>93</td>
</tr>
<tr>
<td>S innerstadan</td>
<td>53</td>
<td>47,3</td>
<td>60,7</td>
<td>65,1</td>
<td>87</td>
<td>92</td>
<td>90</td>
</tr>
<tr>
<td>V innerstadan</td>
<td>86</td>
<td>57,6</td>
<td>92,8</td>
<td>95,2</td>
<td>97</td>
<td>94</td>
<td>95</td>
</tr>
<tr>
<td>Limhamn-Bunkeflo</td>
<td>83</td>
<td>50,3</td>
<td>89,6</td>
<td>91,5</td>
<td>98</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Hyllie</td>
<td>44</td>
<td>32,8</td>
<td>75,9</td>
<td>77,6</td>
<td>90</td>
<td>87</td>
<td>88</td>
</tr>
<tr>
<td>Fosie</td>
<td>29</td>
<td>25,2</td>
<td>76,3</td>
<td>69,0</td>
<td>86</td>
<td>89</td>
<td>89</td>
</tr>
<tr>
<td>Oxie</td>
<td>67</td>
<td>27,0</td>
<td>81,3</td>
<td>82,1</td>
<td>96</td>
<td>95</td>
<td>96</td>
</tr>
<tr>
<td>Rosengård</td>
<td>14</td>
<td>20,4</td>
<td>46,3</td>
<td>50,0</td>
<td>74</td>
<td>82</td>
<td>84</td>
</tr>
<tr>
<td>Husie</td>
<td>74</td>
<td>34,3</td>
<td>83,5</td>
<td>79,2</td>
<td>97</td>
<td>91</td>
<td>94</td>
</tr>
<tr>
<td>Kirseberg</td>
<td>58</td>
<td>34,7</td>
<td>68,9</td>
<td>58,2</td>
<td>90</td>
<td>92</td>
<td>88</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>41,9</td>
<td>76,9</td>
<td>75,9</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The three public urban areas which are the case studies for this thesis are located in the city of Malmö. One of them is a square part of a residential area built around 17 years ago, another one is a public place close to the centre of the city and renovated around 4 years ago and the last one is part of a residential neighbourhood planned and built around 80 years ago. The cases don’t just have different locations in the city and functions around them, but they have also different living styles and qualities of life. The following maps are made using information received during a GIS course in 2017, with the indication of the three case studies.

The median income is shown for the year 2013 as being the last year accessible. It is higher in Bo01 and almost the same in the other two cases (since the intervals are few and big, differences can appear when a detailed analysis might be made). Therefore, common public spaces can be observed both in high-income and medium-income areas.
The second map reveals the number of residential burglaries between 2006 and 2012. Since Konsthallstorget is a public square and the closest to the city centre, the risk for burglaries is increased. Therefore, it has the biggest number, followed by Eriksfält and Bo01.
All in all, the chosen case studies are meant to show the level of resilience of spaces and people in three different areas of the city and Malmö. As shown earlier, the city is characterized by segregation and looking at three spaces with different functions, a stronger outcome can be set regarding users and activities in each case.

Bo01

Bo01 neighbourhood in Västra Hamnen was built as a “showcase project” (Lewis, 2005) for an International Housing Exhibition organized in Malmö between May and September 2001. In the neighbourhood, there are many spaces used by people and especially areas with playgrounds. It is a visited place now during a warm weather by both locals of the city of Malmö and tourists due to its promenade along the shore. However, there are a few small places not so popular inside the residential tissue, mostly in the northern part of the area. The chosen square has a particular location close to the shore promenade and a design which responds to required objects in a space (for example a bench and a trash can), but not to the issue of efficiency in using the space while designing.

In 1995, Sweden hosted the European Housing Expo after the Swedish government proposed it and the housing ministers of the European Union decided to finance it. In 1998, Malmö’s comprehensive plan revealed the area where Bo01 was going to be built. In 1999, both the masterplanning and the design for public spaces began, and it was finished in 2001. It was created to explore ways of living, particularly sustainable ways of living in the future. The area leans on 100% renewable energy, combining the usage of wind, sun light, seawater and groundwater. Recycling the waste and rubbish and producing biogas for additional energy from organic material are also important aspects for which the area is recognized (Neal, 2003). The goals followed by the Expo were not referring to physical sustainability only, but also “to address the emotional and social needs in development suggesting that „beauty and humanism are the true foundation of a sustainable society”.” (Neal, 2003, p. 228) The area was thought to satisfy the needs of the residents and to create a tight connection between aesthetics, ecology and high technology (Neal, 2003).

Having an emphasis on sustainability and architectural solutions, the neighbourhood is impressive regarding landscape and ecological systems. The people are only targeted in relation to the economy of the area, as it is “exceptionally expensive” (Lewis, 2005, p. 91), but still, the selling rate has been almost 100%. It seems people are willing to leave the suburbs for the city under certain conditions. However, the levels of integration in the community have not been under research yet, and, as Lewis also claims “Only time will tell whether Bo01 can be socially sustainable.”(Lewis, 2005, p. 91)

In the following images are the maps made in 1999 as part of the Detailed Plan of the area. With a red circle is indicated the chosen case study.
The next chosen case study is located next to Konsthall, an old exhibition hall and one of the biggest in the city. Since the area was recently redesigned, it is useful to present a short evolution before discussing about the redesigning project, in order to understand the difference and impact this project is having to the area.

Konsthallstorget

Konsthallstorget (the Konsthall Square) was part of a project developed by White architects company in Malmö. The project was won at a competition where the city of Malmö wanted to find out the needs of people considering recent changes made in the area and it included also St. Johannesplan, a square in front of the Triangeln shopping centre and St. Johannes church. It was developed between 2008 and 2011, when the detailed plan was approved and it is still valid today, and the construction was finished in 2014. The area became a point of interest for the city once the city tunnel was finished and brought a lot of commuters in the area. Also, the exhibition hall plays an important role in the city’s culture. The purpose of this design was to connect the two areas and create a space suitable for everyday use, but also for weekend days use to relax and enjoy a pleasant background. The circulation infrastructure had a main role during the developing of the project and the public transport as well as the bike lanes part of the city’s system were taken into consideration (White Architects, n.d.-b). The Konsthall Square was designed as a space with multiple purposes and it can be used in different situations. It is paved with concrete 2x3m pieces and it can be easily used for different kinds of events or exhibitions. White architects already write on their website that some constant activities going on in the area are skateboarding, filming or other performances. For this, a round shape of concrete lifted from the ground was built in the square, where people can practice different activities (White Architects, n.d.-a). The shape can be used as a stage, as a bench or as a basis for all actions including wheels (skating, roller skating, riding kick scooters, biking for children etc.).

Skateboarding is listed as a dominant activity on Malmö city’s website, due to its many designed places in the city especially for this activity and also because in Västra Hamnen is the biggest skate park in Northern Europe and the host for annual competitions (Malmö stad, 2018). Moreover, in Malmö, there is a high school which included skateboarding as a part of its schedule. They have a hall designed for this sport and they are supporting young people from all over Northern Europe, who come here to study (Bryggeriet,
n.d.). They also have a website, skatemalmo.se, where they have listed Konsthallstorget as a spot for skateboarding. They write how the city of Malmö replaced the benches in the square because the material didn’t resist to the shocks (Skate Malmö, n.d.).

In 2017, after a donation was made to the city of Malmö by the art dealer Lars-Olov Börjeson, three sculptures named “Points of view” of the artist Tony Cragg were installed in the square next to the round concrete stage (“A lift for Malmö,” n.d.).

The following images are the drawn part of the Detailed Plan made before the redesigning of the area.
Eriksfält

The chosen studied area in Eriksfält neighbourhood is a green open area, which contains a ‘fenced’ playground by some vegetation. The square is on the route of a bike track and it has a linear green space going from place parallel with the bike route. The playground is surrounded by low height vegetation in the form of a circle, with some interruptions along it. Looking at the paths created on the grass and at the way the benches are situated, there are three entrances into the playground: one from the linear path, one from the corner towards the intersection and one from a street. The space is very close to an individual house’s entrance due to a narrow dead end street and the lack of sidewalks. This is the only building close to the studied area and the rest of the surrounding individual housing buildings are at a bigger distance surrounding the place. The rest of the space is only grass filling the space between two car roads, having some trees planted on only one side.

No information has been found about the time when this square was designed or redesigned. Nevertheless, it seems the playground has a name, Manetplans Lekplats, according to a blog found on the internet. The article on the blog analyzes the quality of the playground and mentions what it would be needed there (“Eriksfält | Lekplats Malmö,” n.d.) This name is not in any official records. However, the Detailed Plan for the entire Eriksfält neighbourhood is available and it was made in 1938. There is only one plan made for it and it is not very detailed, so it cannot be known if the design for the square has been made at that time or later. In the following image it can be seen the plan with the chose case study indicated with a red circle.
5. The methodological approach

The methodological approach used for this research aims at creating an image as clear as possible of the case studies together with the problematic of the research. Next, the research design of the study will be presented. It is necessary to explain it because it “is the logical sequence that connects the empirical data to a study’s initial research questions and, ultimately, to its conclusions.” (Yin, 2009, p. 26) Robson presents the structure of a research design in general, no matter what kind of research method has been used and it contains five main sections: the purpose and the conceptual framework leading to research questions which then lead to methods and sampling strategy (Robson, 2011). He creates connections, giving them order in the process. Yin, when talking about case study research design, which is closer to this research, suggests the same number of sections, but instead of the connections between them, he only writes them in a certain order as follows: “1. a study’s questions; 2. its propositions, if any; 3. its unit(s) of analysis; 4. the logic linking the data to the propositions; and 5. the criteria for interpreting the findings.” (Yin, 2009, p. 27) He puts an emphasis on the theory for a research, adding that this makes the difference between a case study research and other methods. The proper thing to do is a literature review related to the study area. This theoretical section is required by the first 5 elements mentioned above and useful in the final part of the thesis, when “the generalization of the case study results will occur.” (Yin, 2009, p. 38)
Thinking about both, their structures and sections, the design of this thesis is formed by: research question, aim, documentary films, literature review, description of the case studies, direct observation of the case studies, results and discussion. Based on the understanding of Robson’s scheme (Robson, 2011, p. 71), a similar one has been made for a bigger picture and better comprehension of this research design. The way of representation with continuous line arrows is inspired from Robson, but the position of the elements and the interrupted line arrows is drawn only for this thesis in particular.

First, the research question and the aim have been set for this research. Second, a series of documentary films have been watched and analyzed. The films are an important tool to create consciousness of the context in a different manner, which may be more suitable for some readers. They are also a place of inspiration and a way of learning how to observe the public spaces. Even though the films are made many years ago, the procedures and results are very much similar. Third, a literature review was conducted, where the concepts used in the research question have been considered. Fourth, as a method of collecting data, the direct observation has been used for this research, using the tools of observational drawing, field notes and photographs and taking into consideration all the previous steps of the research. Also, between the two types, this study uses formal observation, due to the clear aim of the case studies. The technique has the disadvantage of the researcher getting involved and changing the outcomes, but also the advantage of being direct and not going through other filters such as people’s opinions (Robson, 2011). Following the direct observation, the results have been presented and then, discussed in relation to the research question and the literature review.

This research uses a flexible design strategy, which “evolves during data collection.” (Robson, 2011, p. 75) This type of design requires also a flexible researcher, who has the necessary qualities for conducting this kind of study, such as “having an open and enquiring mind, being a ‘good listener’, general sensitivity and responsiveness to contradictory evidence”. (Robson, 2011, pp. 133–134)

5.1. Direct observation of the case studies

For this research, the direct observation was chosen as a main method in order to have satisfying outcomes in relation to the case studies. Colin Robson presents in his book Real
World Research the types of studies and their characteristics. He names the quantitative researches as fixed designs, due to their strict requirement to set the design before the data collection and the qualitative researches as flexible designs. A first recognized characteristic for flexible designs is that it usually has “three influential design traditions […] which are commonly used for real world studies: case studies, ethnographic studies, and grounded theory studies.” (Robson, 2011, p. 131) Robson also presents the features of a ‘good’ qualitative research, based on Creswell’s work (Creswell, 1998), among which: different ways of collecting data, summarizing it and presenting the methods of collecting data; having a developing design, with the usage of the researcher in the process of collecting the data and putting an emphasis on participants’ perspectives; the understanding of different traditions of research and combining some of them in the study; the study has one starting idea rather than different types of connections between issues, which can appear later in the research; the paper has to be corrected with responsibility regarding “data collection, data analysis and report writing”; the analysis has to be discussed on different levels; the text has the capacity to help the reader to feel the realistic parts of the study and to be introduced into “the complexities of real life.” (Robson, 2011, p. 132) Groat and Wang provide a list of strengths and weaknesses of qualitative researches. They say as strengths to this type of research are: the ability to gather meaningful aspects of real-life context, a certain adaptability of changes throughout the process and awareness of the signification of objects and human actions. On the other hand, among the weaknesses we can find: big amounts of data to work with and a poor structure for the steps in the process (Groat & Wang, 2013).

According to Robson, when it comes to looking at the realism in flexible designs, “theory, rather than data or the methods used to produce that data, is central to explaining reality.” (Robson, 2011, p. 133) Therefore, it is the research questions which help creating the structure of a research design and they are in tight relation with the theory (Robson, 2011). Also, a very important aspect which applies to the current research is the role and qualities of the researcher. For flexible designs, the researcher is thought to be used as a tool and to support most of the work, rather than depend on external tools (Robson, 2011).

From the three types of flexible designs, this thesis introduces the research as a case study. The case study is one of the many methods in doing social sciences research, where the research strategy is firmly-set and the point of interest is on a case, which may be either an action or some people (Robson, 2011). Defining it as a research method, Yin claims it requires a lot of aspects to consider. The various kinds of cases subjects can be cited as “decisions”[…] “individuals”, organizations”, “processes”, “programs”, “neighbourhoods”, “institutions” and even “events”. (Yin, 2009, p. 17)

In order to conduct a case study research, there are six main sources of evidence, as stated by Yin: “documentation, archival records, interviews, direct observation, participant-observation and physical artefacts.” (Yin, 2009, p. 101) It is, of course, a broader list of sources, which can include films, photographs and “street” ethnography (Yin, 2009). As the case study chosen for this thesis requires field observations of the cases, and in particular, observing what people do, all the empirical data was collected through direct observation. Direct observation is a technique done by a “human observer” (Robson, 2011, p. 315) in order to collect data. Robson declares observation can be used as a supportive tool for other method of data collection (Robson, 2011), which in this case is the observational drawing as a research method. This technique has advantages and disadvantages for which, together with the nature of the case, can be determined if and how to use it. Robson says a big advantage “is its directness”. People are not being questioned, but only observed. Also, it is very appropriate to capture the “‘real life’ in the real world.” (Robson, 2011, p. 316) Yin claims the two
strengths of this method are its ability to cover events “in real time” and to cover the “context of “case”. (Yin, 2009, p. 102) Among its disadvantages it can be found: it is “time-consuming”, difficult to cover everything “without a team of observers”, “reflexivity – event may proceed differently because it is being observed”, “cost – hours needed by human observers” (Yin, 2009, p. 102), the observer can affect the situation observed – “reactivity” (Robson, 2011, p. 317).

5.1.1. Observational drawing

In this section a deeper explanation of the concept will be presented, together with the way this has been conducted for the current research.

In order to compensate some disadvantages of the direct observation method, the drawing has been selected as a method to research in this thesis. Another reason for choosing this method is an ethical one, protecting the privacy of users this way. Through drawing users and their activities in public spaces, the researcher can improve the connection with the observed case and can express facts from the experience which can’t be revealed through text. Also, drawing helps the researcher to feel more comfortable and belonging to the place while observing things that can’t be observed when photographing or just looking. It makes the researcher to feel more relaxed, creative and to pay more attention to observing and listening the environment around him/her (Kuschnir, 2016).

Little has been written about drawing as a research method. However, it is encountered in research under many forms and names: urban sketch (Urban Sketchers, n.d.-b), ethnographic sketch, ethnographic drawing (Kuschnir, 2016), field sketch (Geismar, 2014), urban drawing (Kuschnir, 2016), observational drawing (Côrte-Real, 2014; Rosengarten, 2012) and maybe many other formulations.

In Drawing the city. A proposal for an Ethnographic Study in Rio de Janeiro, Kuschnir writes a detailed presentation of the history of ‘urban sketches’. The notion first appeared on Flickr, when the illustrator and journalist Gabriel Campanario posted in November 2007 some drawings. After a year, this became a blog and then, in December 2009, the non-profit organization Urban Sketchers (USK) was founded. USK is mainly “dedicated to organizing events, raising funds and providing grants to artists.” (Kuschnir, 2011, p. 610) The organization has many connections in cities around the world where events are being organized. On their official website, USK declare their mission to the readers: “Our mission is to raise the artistic, storytelling and educational value of on-location drawing, promoting its practice and connecting people around the world who draw on location where they live and travel.” (Urban Sketchers, n.d.-a) As this phenomenon grew around the world, symposiums were held every year in a different country. During the one in Lisbon in 2011, Ruth Rosengarten presented a paper she wrote where she presented characteristics of the notion of urban sketch. Drawing urban sketches means conducting urban observational drawing. It requires being present during the moment when the drawing is made and transmitting through the drawing the reality and truth of the moment (Rosengarten, 2012).

Karina Kuschnir studied ethnographic drawing for a few years now and she writes in her work that “the visual record of drawing is not just a graphical documentation, but also a way of doing research and obtaining knowledge”. (Kuschnir, 2016, p. 105) She discusses John Berger’s work, where he claims drawing is a relation created between the drawer and the drawn object. He states when drawing an object you can see not only the object, but an object
being looked at (Kuschnir, 2016). Later in her article, she mentions another term for the drawing in research, “observational sketching”, which she believes is or can be connected to the fieldwork. The term comes as an introduction of various examples of drawing in art and anthropology (Kuschnir, 2016, p. 106). However, regarding to all these terms, the line between the concepts is very thin and because not very much has been written about the topic, the use of some notions regarding drawing in research can be confusing. For example, Geismar gives a definition of the sketch from which we understand it is a drawing, but not so many aspects are being mentioned: “the sketch—a form of drawing understood to be so immediate as to present us with a snapshot of both subjective and objective reality.” (Geismar, 2014, p. 99) In this thesis the term of observational drawing will be used as also some photographs have been used to finish the drawing and they are not under a rough form.

Kuschnir says through drawing, the researchers can study new things which now appear to them due to this tool. One example of these is “the ability to distinguish certain colours in the same way seen by their interlocutors (see Turner 2005)”(Kuschnir, 2016, p. 122) Also, observational drawing can register aspects of social life. When we draw we can to express relations, feelings and this helps the researchers to comprehend the sensitive part of the area which contains knowledge and signification (Kuschnir, 2016). Through drawing, distinguishing the research aims, evolution and findings becomes easier. This technique offers preserving informant anonymity, a classic concern of the ethnographic enterprise, and especially relevant in urban anthropology.”(Kuschnir, 2016, p. 127)

This thesis has a basis in an urban diary, which is divided into three parts for each case in the city and it contains maps in the beginning of each section to identify the place and direction where each drawing was made, the drawings themselves, field notes and information about the date, the time and the weather during the drawings. All the drawings and maps were made in pencil. When the first sketches were conducted, in March month, due to weather limitations, the cases were visited one at a time in different days and at different hours/times of the day. In April month, the cases were visited all in one day and one after another. Due to their location in the city, they can be visited following a straight direction and crossing the city from south to north or the other way around. The movement between the cases throughout the entire research has been made by bike.

There are certain aspects of an urban sketchbook which make it important for a research. One of them is “the commitment to observational drawing” (Rosengarten, 2012, p. 3), which is the main reason for creating it for this research and the process of the urban journey, usually by foot, but also by other means of transport (Rosengarten, 2012). The subjects of drawing are a main factor when conducting a diary. Rosengarten claims that “when the projects involved drawing the human fauna, objectivity became shaded with attitude.”(Rosengarten, 2012, p. 7)

The process of drawing was time consuming and, in the same time, hard to conduct. Many factors interfere with the researcher and make the observation a complex action. Following with the eye some subjects who are all the time on move is very hard. As Rosengarten also mentions “The inclusion of human subjects and living animals multiplies the problems because people and animals never so us the favour of keeping still, so that each capture is in some way an assemblage of many separate movements” (Rosengarten, 2012, p. 10) Moreover, the position of the researcher is also an influential aspect. Either sitting or standing, the posture makes a difference for the final results of the moment, but this is what makes the research credible and real. Together with the position of the researches comes also the weather: “External conditions count too: heat, wind, rain and snow turn what would be the
pleasures of drawing in the studio to an unsolicited conflict with the phenomenal world.” (Rosengarten, 2012, p. 10)

The notion of observational drawing is mentioned in many works of different authors because it is the base for other concepts. Eduardo Côrte-Real writes about observational drawing “as part of scientific methods.” (Côrte-Real, 2014, p. 1) When using drawing in research, observing is the basis for it. In his paper, Corte-Real discusses the concept not only from the urban point of view, but also as being used for all kinds of observational drawing in art or other fields. He claims the additional concepts of reality, image and depiction are connected to it and support the process of observing through drawing (Côrte-Real, 2014). Another mention of drawing as part of the research comes as the notion of ‘field sketches’: “field sketches are generally understood within a realist register as mediators between the “real” world and the curious subjectivity of the anthropologist.” (Geismar, 2014, p. 110) Geismar supports the ideas previously discussed, that this tool is a connection between reality and researcher, where the reader can feel the urban atmosphere, understand activities and users “of different cultures and languages.” (Ramos, 2004, p. 149) It is an effective technique to bring “together observer and observed.” (Ramos, 2004, p. 149)

One of the reasons this technique was chosen is the privacy of the participants. When illustrating an urban scene through drawing not only you observe details you wouldn’t notice before, but also keep a distance between people’s lives. Moreover, this method gives an advantage to manage to show the important things desired as results through putting an emphasis on objects in the drawings. Depending on what should be shown through the drawing, that specific part can be more detailed, while the rest can be drawn only in big lines. Putting colour on drawings is also a very strong way of catching one’s attention and directing it to a specific point. The type of colour, warm or cold, plays an essential role in the final perception of the reader of the research. The technique used for drawing as part of a research represents the author and gives the research a particular aspect and fingerprint of the one who carried it out. To sum up, when conducting a research through such a method it is important to pay attention to what are the intended results in order for the reader to receive the accurate message.

The methods chosen to manage the gathering of the empirical material worked together with both the time and weather limitations. The visits were short (maximum 30 minutes) and made at certain time of the day when it was likely that many people would spend time in those places. Also, because the observational drawing was chosen as a method to reveal activities and users, the drawings were only started on the field and then finished at home with the help of photographs. This allowed more visits in the areas when the weather was suitable. When choosing between drawing and taking photos as tools for research, it is important to see the differences between them. Both have strengths and weaknesses, but it depends on the nature of the research which suits best and how to use their potential. As Taussig also thinks about the distinction between them, he starts the discussion from the basic language difference. We refer to photos as ‘taking’ and to drawings as ‘making’. He thinks this is an important thing to consider and he points out John Berger’s opinion about this contrast: “a photograph stops time, while a drawing encompasses it.” (Taussig, 2009, p. 265)

Another ethical issue for the study was the privacy of the people. Two of the chosen case studies are small and inside a community. Gathering empirical data through photographs was not a strong option. Once someone new comes inside the space, the locals feel constrained and this influences their behaviours. Therefore, the observational drawings were preferred as a main method, among other reasons. Even though few photos were taken, that
didn’t influence the observations and the people were not unnatural during the making of the drawings.

Thinking about the case studies, they have been chosen in different areas of the city to have outcomes from different urban tissues. The distance between them was quite long (Eriksfält – 2.7 km – Konsthallstorget – 3.1 km – Bo01), but since the movement between them was made by bike, it was faster than walking or even taking the bus. Due to this location limitation, the field visits were made either in different days, or in the same day for all three case studies. This means the time was different every time in each area and this may influence some of the outcomes of the study.

The chosen studied areas have been selected for their diversity and potential in relation to the social network in the area. They have not been chosen in order to create a comparison, but to display different examples from the city. I chose the sites in the city of Malmö because I have been living here for two years and I am interested in the potential of a Nordic city. The zone is still a new ground for me and that helped me into seeing things from ‘outside of the box’ comparing to how a resident would perceive the spaces. I can’t say in what way this affected my research, but as one of the areas was included in a previous paper and another one is very close to a place studied last year during a course, I think I combined known with unknown places in the city in order to have a bigger image of the urban texture.

Moreover, other reasons for choosing these sites differ from one area to another. In Bo01 and Eriksfält, I was intrigued by the design and location of these public small spaces as well as the difference of periods when they were designed. I was very curious how spaces in such a proximity to private properties function. In Konsthallstorget on the other hand, I already knew the space brings a lot of people due to the art gallery, the Opera, Triangeln train station and other functions or factors, but I wanted to see how the space is used and to what extent.

When I selected the sites I wanted to observe three diverse urban textures, built in different periods, which have various functions surrounding the spaces, distinctive urban design and numerous flows. I already knew I was intrigued by Västra Hamnen neighbourhood and I wanted to know how the planning of the area succeeds in creating the social structure with the residents, but it took me a few weeks to decide on the other two neighbourhoods. Bo01 is a residential area built 17 years ago, Eriksfält is a residential area planned 67 years ago and Konsthallstorget is a public square more or less in the centre of the city and its construction after redesign has been completed 4 years ago.

5.1.2. Field notes

As part of the direct observation for this research, field notes have been used as a tool. They were written in the visual diary used, on the left page next to the drawing that they were referring to. Indications of the time and the duration of the field visits were written as well as information about the weather. The field notes explain the actions happening in the observed space, the number of users, their activities, locations and sometimes the duration of activities.
5.1.3. Photographs

Together with the previous tools, photographs have been taken during the field visits. This tool was used in order to overcome some of the limitations and manage to take advantage of the available time. The photographs have been taken during the drawing process on the field visits in order to finish the drawings after leaving the site. This way, some extra details can be observed without being pressed about external factors (weather) or being limited by visual memory during a time limit. This tool is used many times in research and it can be an effective way to show the findings: “Paradoxically, photography is an ideal medium for reconstructing the imaginary sphere and the invisible processes of social realities we were researching.” (Pink, Kürti, & Afonso, 2004, p. 32) However, in this research, the photographs taken during the observations will not be revealed.

6. Results

In this section the outcomes from gathering the empirical data will be presented. In order to collect the data, observational drawings have been made, field notes have been written and photographs have been taken in order to support the finalizing of the drawings when not on the field.

The outcomes from each visit will be presented separately in each case study, and supported by scans from the diary together with explanations for them.

In Bo01, a public square inside the residential area was observed through six visits. During the first visit, on the 26th of March 2018, around lunch time, I walked in the neighbourhood for an hour. During this hour, the place was not used by any person, even
though in the bigger area people were walking, jogging or walking their dogs. The weather was good for that time of the year (≈7 °C).

On the 2\textsuperscript{nd} of April 2018 the studied area was still empty, but someone who was living in one of the houses around the square was outside with his cat. The weather was good, sunny, but only 4 °C. Also, some people were sitting outside, in their interior garden, on the side with vegetation, as seen in the drawing.

The 18\textsuperscript{th} of April 2018 was a changing day, with both sunny and cloudy times, but there was no one spending time in that place.

On the 3\textsuperscript{rd} of May 2018 it was a warm and sunny day, but there wasn’t anyone using the big grass area but a duck. The streets were also empty.
During the last visit, on the 13th of May 2018, the weather was very good and the temperature was high for Sweden (~25 °C). The studied area seemed more lively than before. There were six boys spending time around the bench in the space. Some were sitting on the bench, some were sitting on the curved stairs and one of them was sitting on the concrete pile across the bench. There was also one boy standing because the other pile had a flower on it and they were talking, so their position facilitated the discussion. There was also something different in the area concerning the atmosphere because a pub was opened at the corner of a building next to the square. It is indicated on the map in the right lower corner. The pub was not opened during the previous visits.

In Konsthallstorget, there were in total 9 field visits. During the first one, on the 13th of March 2018 the weather was bad so no drawing was made. There were two people resting on
the bench next to Konsthall and the rest of the people were just passing by, either walking or biking. On the 10th of March 2018 the weather was good and a lot of people were crossing the area by foot, by bike or by other means of transport. Almost all benches were busy and there were also three skaters using the concrete scene and the concrete bench next to it.

On the other concrete bench close to the stage one boy was sitting and having coffee. Also, there was a group of three boys sitting on one of the benches along the bike track and after a while they went next to the concrete scene and stand there.

On the 30th of April 2018 the day was sunny, but cold (~3 °C). There were a lot of people sitting on the benches, walking, biking or jogging. Near the benches towards Triangeln train station there was one man doing push-ups next to someone in a wheelchair. He was most likely taking care of that person and decided to exercise while spending time in the square.
The zone usually used by skaters was now shared between two children, a boy and a girl. They were not together. The boy was riding a kick scooter on the stage. He was there with his mother and they didn’t spend too much time in the space. The boy was alone on the stage when he started playing and maybe he didn’t feel comfortable. The girl seemed like she was alone and a little older than the boy. She was skating on the stage and next to it, even on the concrete benches used by other skaters as well. Later, on the concrete bench most often used by the skaters there was one man having lunch with a view towards the square.

The 2nd of April was a sunny, but cold day. The visits were made at two times of the day: lunch and afternoon. At lunch, there were people sitting on the benches, someone with a professional camera was taking photos of the golden statues and a father was teaching his child how to bike.

In the afternoon, the place seemed having more activities and users. There were children roller skating, all the benches next to Konsthall were busy, some people were walking their dogs and there were also some tourists maybe because they were taking photos.
with the golden statues in certain positions. Also, there was a big group of young people (~16) skating on the concrete stage. They seemed like they were together because all of them gathered their things in one part of the stage and they were talking one to each other while listening to music to a common device. One boy was skating by himself on the concrete benches, but probably left his things together with the others. One boy and one girl were sitting on another bench close to the road and concrete stage with their skateboards next to them.

The 18th of April 2018 was the first visit at this studied place when metal fences for some constructions appeared. The area was visited two times, in the morning and in the afternoon. In the morning there were only two new objects in the square, which are 2 round trees. The fountains were also on, but it was cloudy so there were no people using the space, just passing by. In the afternoon, the fences were set around the fountains and occupied most of the square.

On the 3rd of May 2018 the day was warm and sunny and the visit was made in the afternoon. Besides the fence, there were also some containers which were set in the square, this time making the space even more crowded. Probably there were working at the fountains. Because the square is very hard to cross coming from Triangeln and going to the north, now most of the users are young people who use the concrete stage and the concrete benches next to it. Also, the bench next to Konsthall and the ones next to the bikes parking are among often used places as well.
On the 4th of May 2018 the day was warm and still sunny in the evening, so a big group of skaters was again at the concrete stage skating, sitting on it and listening to music.

On the 7th of May 2018 it was a warm and sunny afternoon. In the beginning the area was quite, two girls were sitting on the concrete stage and two other girls were sunbathing on the bench next to Konsthall. There was also a mom with her child sitting on the concrete bench next to the stage. Later, two skaters came and started to skate on the stage.
On the 13th of May 2018, during the last field visit in this area, the weather was very warm (~25 °C) and the available space in the square was used for many purposes. On the concrete stage there were both skaters and street dancers. Not only this was the first time when dancers appeared in the area, but now they were also more than skaters. A lot of people were sunbathing on the benches and the area was also crossed by many others.

In Eriksfält, the first field visit was made on the 19th of May 2018. It was during the afternoon and the weather was good. There was a mom in the playground with two children. One was a baby so she had to carry him and the other one was in the swing. There were also a lot of other children passing by with backpacks, which means that there are many of them living in the area and then they were coming from school.
The 30\textsuperscript{th} of March 2018 was a sunny day, but cold (~3 °C). There were still areas of snow left on the grass. There was no one in the space. On the 1\textsuperscript{st} of April 2018 it was cloudy and cold and again, the square was empty, even though people were passing by.

During the 18\textsuperscript{th} of April 2018 in the morning there were two women with a group of seven children, coming probably in a school break. The children were small, maybe around 2-3 years old and their biggest attraction was the train in the centre and the sand area. One of the women sat in the train with them. They left shortly after the observation began. People were passing by, walking their dogs or biking.

On the 3\textsuperscript{rd} of May 2018 in the afternoon it was warm and sunny, but there was no one in the area. On the 13\textsuperscript{th} of May 2018 in the afternoon, when the weather was very warm
(~25°C), there were two children (around 10-12 years old), a boy and a girl, with a man, probably their father. Before I arrived to the square probably there were more children because 2 of them (around 6-7 years old) ran at home one I was there. The older children they were using the space and the objects differently. The girl climbed on top of the train and then the boy wanted to do the same, but he helped her to get down. After a short while they left and it seemed like they stopped here on their way somewhere else. The atmosphere of the area was mixed, because you could hear loud music from one house and at another house workers were cutting some wood and doing some concrete to renovate it.

7. Discussion and concluding remarks

The empirical studies in this thesis relied on the direct observations of the sites made through observational drawings, field notes and photography to support the completion of some sketches. This has been a satisfying methodology for the exploration of users and activities in the public space. However, I am fully aware of its requirements in order to have solid results (observations made through a long period of time and with a strict schedule in order to capture the space’s functionality at all times of the day, all days of the week and even all seasons of the year). This method exposes short-term activities and it lacks the analysis of long-term actions, effects, patterns and other processes involving both insiders and outsiders of the studied area. I have looked into the development of the case studies and tried to reveal significant changes in appearance, which in one of the areas may still be new for users.

The outcomes of this thesis are meant to take part in the field of urban design and urban planning, looking both at the connection between the theoretical concepts and at the case studies in the city of Malmö. The knowledge of a new connection present in the city has
been added to the field and opened up towards further studies. As a source of inspiration for conducting a satisfying research, some documentary films have been studied. From there, a lot of real-life advices have been adapted for this thesis.

The square in Bo01 has a particular urban design and the existence of some objects is questionable. First, there is a bench placed with the back towards the green space and with the view towards a corner of concrete fence. Second, a trash can is placed far from the bench and almost in the middle of the street. The street corner next to these 2 urban furniture objects is empty and not used, while the street was filled with small ‘obstacles’. Also, there is a concrete ramp built there, but one you are up on the green square, everything is grass and it can be difficult to go with a wheels object during bad weather. Moreover, there is no visible reason to on the grass because it is just an empty flat area. A wooden structure is built to protect from the sun, but the level of its ground platform is at least 10 cm higher, so even if someone with a wheel object would go up they can’t be protected from the sun. Another important aspect of the space is its proximity to the houses surrounding it. It may be both an advantage and a disadvantage. The advantage would be because you wouldn’t have to walk much to be in a green space and maybe even sit on the grass with your children or even play some games without being afraid of cars passing by. The disadvantage of the space is when some houses already have interior gardens besides these public areas and spend most of their time there, so the space is unused. Hence, during the field visits it was observed and proved that the square has definitely some issues and it didn’t do a good job having a resilient urban design. There was only one day, when the weather was really warm and a pub was opened next to the square, when some people were using the bench, but the green area was not used even with the sun being up all day long.

If thinking of the 10 principles of resilient urban design customized by (Vaništa Lazarević et al., 2018), the space fulfils some physical requirements, but it clearly lacks the social connection. It is to be studied more, during more seasons, if the residents feel confident to use the space in any desired way and put their fingerprint as being part of their residential area. Hence, the first case study doesn’t have enough supporting arguments to prove its resilience of the urban design and this doesn’t encourage the social resilience of the community after it has been separated in small individual units with their own interior gardens.

Konsthallstorget, on the other hand, is a good example of resilient urban design supporting social resilience. Throughout the field visits, many users and activities have been observed and this shows the multi-purposes usage of the space. The square has a generous space where activities can be conducted both by adults and by children, it has all the required urban furniture (for example benches, trash cans, flower pots, lightning, bikes parking) for a place to be functional and it allows people to use some areas in which way they want. The concrete stage is a place where people get creative and use it for skating, dancing, sitting and sunbathing, sitting and listening to music, standing and leaning on it and for many other purposes. Even in the last part of the research, when the fountains in the square were under construction, the space still allowed users to spend time there. An important factor for bringing people together is the location of the case study next to a train station and a shopping centre. Also, a main bike lane in the city crosses the area and this way it brings a lot of flows to the space. The vegetation has an important role as well for providing sun protection around some of the benches and offering possibilities for different types of users.

In the last case study, Eriksfält, the space is different as its main point of interest is a playground. Therefore, the main users would be children and adults joining them. From this
point of view, the playground has success with many objects present in the space to play with. It can bring children of different ages, as it can be observed in the drawings as well, from around 3 years old until around 12 years old. Even though the playground seems to be designed for a small residential area, outsiders come there also to use it. For example, someone is writing a blog with different playgrounds in the city of Malmö and this one is on the list. The blog mentions both strong and weak points of the space. The first ones are the vegetation, the train for children and the ticket booth, while a weak point is the lack of bikes parking even though many people bike along the square (“Eriksfält | Lekplats Malmö,” n.d.). Nevertheless, the studied space is not formed only by the playground, but also by a large grass area. From the field visits the conclusion drew is that the grass is not used and it loses its importance due to the playground. It is not used by adults or children to play there or for any other purposes, but only a way to create an open space between the houses located around the square. It has potential of usage in the future due to some trees planted along the street, which can offer sun protection while there.

When asking the research question of this research, the last case study answers both positive and negative, being divided in two parts: the playground, where the design is resilient and can support the social network, and the grass area, where no one goes on, so it is not used for any purposes.

This thesis aims at having conducted a similar research as the one made by Whyte and shown through his movie, but due to certain important limitations, this remains an open research with the big possibility of continuing it later. The distinctive thing this thesis has compared to Whyte’s research is one of the tools used to capture the users and activities, and that is the observational drawings. It has been seen through this research that the city of Malmö has awareness of its public spaces, but in some cases fails to manage them. Resilience makes its presence known in the city not only through spaces, but also through people and associations creating consciousness in the urban space.

8. Further research

The current thesis was conducted during around four months in spring 2018. It opens up a public interest subject for the city of Malmö and it has potential of being continued for a larger area in the country or for other cities as well. Considering the chosen method, the research could have been conducted for at least twice the time in order to have stronger outcomes. As an additional investigation, if the necessary resources are provided, the study can be conducted during the summer. This would require a fixed schedule for field visits and maybe even a supplementary method of interviewing the users. Regarding the theoretical concepts, a deeper research into other sources from different fields and researchers would be efficient and useful for a better understanding of the phenomenon of resilience in the city.
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