A Case Study of the Socialist Mass-Housing Quarter in Vilnius
A Case Study of the Socialist Mass-Housing Quarter in Vilnius, Lithuania

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The study area of this thesis project is located in Vilnius - capital city of Lithuania.
Main facts about Vilnius in comparison to Amsterdam: Vilnius has very low density, and big administrative boundaries. Amsterdam and Vilnius are similar size cities, however density of Vilnius is four times lower.

Source: Justina Muliulyte
THIS IS VILNIUS...

Medieval old town and fast growing central business district
Photo by J. Maciulaitiene

Industrial Newtown district next to the old town
Photo source: miestai.lt

Large housing estates further from the city center
The chosen study area is this mass housing quarter located just in between the old town and large housing estates.
INTRODUCTION

This part is an overview of the research design and methodology applied in the thesis. It will provide the problem definition, research goals and questions. Then the approach will be discussed, elaborating on its theoretical and empirical parts.
PROBLEM STATEMENT

Many urban spaces during the course of time have lost their intended semantics, identities and representations, and might therefore be defined as post-spaces of various kinds, for example post-industrial, post-Soviet, post-Modernist, etc. In many cases these post-spaces require restructuring not only of their meaning and identity, but also of their functions and urban life. The socialist mass-housing neighbourhoods could be taken as a good example of such case.

In this thesis the specific attention is given to urban living environment, mainly focusing on a socialist mass-housing quarter located in Vilnius city centre, and its public space. Many of these residential areas in Vilnius were built over fifty years ago and have not been modernised ever since. Therefore they do not correspond to today's demands in terms of physical state of housing, quality of inside and outside spaces, etc. This thesis is based on a hypothesis that the redevelopment of public space of this particular residential environment could act as a catalyst for urban regeneration.
RESEARCH QUESTIONS & GOALS

QUESTIONS

In order to provide a solution for a redevelopment of a particular urban living environment, this research is based on the following question:

What are the key qualities of urban living environment and its public space, according to literature and users?

Sub-questions

- What defines public space within an urban living environment?
- What are the key spatial qualities of an urban residential environment, according to literature?
- What are the main advantages and disadvantages of the chosen study area, according to its users? How could the study area be improved according to its users?

GOALS

The main goal of the project is to propose regeneration strategy and design for a socialist mass-housing quarter and convert it into lively and attractive part of the future Newtown.

Goal 1

To uncover existing issues and qualities of a socialist mass-housing quarter situated in Vilnius city centre and to gain an insight into what qualities would be desirable in this residential environment, according to its users.

Goal 2

To formulate a comprehensive understanding of which qualities are necessary for a residential environment in general, according to some famous urban theories.
Study area in winter. Photo by author
RESEARCH METHODOLOGY

The research itself consists of two parts: theoretical-descriptive research and empirical research. Both parts depict urban qualities of residential environment and result in a set of urban qualities that can be later used as a framework for design proposal.

Main theoretical research sources: theory books and articles
Theoretical-descriptive research

This part is based on literature study. The focus of this part is placed on the main theories regarding urban public space and its characteristics. Firstly, this chapter will define public space, by explaining a difference between space and place, highlighting criteria needed for spaces or places to be public. Secondly, it will describe some important qualities of urban public space, introduced by urban theory.

Empirical research

This is an analytical part, which provides detailed information about the study area. The data is generated using both – quantitative and qualitative – research methods. The aim of the chapter is to evaluate the environment of the mass-housing area, or in other words to define its social and physical conditions. It should be noted that the chosen case is exemplary for this type of residential environments (socialist mass-housing areas) in terms of physical layout and social position. Nonetheless, it is unique in regards to its location: whilst many mass-housing areas are built in the suburbs of the city, this case is situated in the city centre.

The case study consists of:

- Site observation (during a site visit) - provides valuable information in order to understand the location, its morphological structure, physical conditions, issues in relation to its social use, shows possible room for interventions.
- Mapping - provides an overview of the location and its structure, helps to understand area’s layout and the relation to its surroundings.
- Statistics research – Census data provides overview of the social composition of residents.
- Semi-structured interviews – reflect advantages and disadvantages of the location from the user’s point of view.

For the interviews different areas in the neighbourhood are visited with the intention to interview people with a variety of backgrounds in order to get a wider view on the problematics of the site. Most specific user groups, such as: young families with children, young singles, middle-aged people and the elderly, are interviewed. In addition, the respondents are divided in two groups: residents and visitors. Later on, interview data is processed by transcribing field-notes and then identifying main themes (see Appendix). These themes are used as a basis for a final write-up of issues and qualities.
Vilnius in 1934. Cartography of Polish Army
EMPIRICAL RESEARCH

In the previous chapter urban design theory highlighted some important qualities of urban living environment. Now the research aims to focus on a more specific context, namely the socialist mass-housing quarter, located in Vilnius city centre. Firstly, this chapter will introduce study area starting with a wider context (Newtown district analysis) and continuing to the description of the site area. The chapter will present an approach and outcome of conducted interviews, and conclude answering a second part of the research question by defining qualities of this urban living environment according to local residents.
Newtown district lies to the west of the historical city centre. The district stretches from Neris River in the north to the railway in the south. It occupies 4.8 km² and has a population of over 23,000 inhabitants. Historically, Newtown district consists of two parts: the lower part, which has an old town structure, and the upper part, which contains many industrial buildings. Both parts are referred to as Newtown because they were planned around the same time – in the 19th century (fig. 1). More precisely, the lower part was planned in the beginning of the 19th century, whereas the upper part at that time was still almost completely empty. Stimulus for the development of the upper part was the construction of a railway: in 1875, some years after the emergence of St. Petersburg-Warsaw railway line, newly prepared Vilnius masterplan already included current street network. Newtown district was a product of 19th century expansion, which was minor in Vilnius comparing it to major metropolises of the Western Europe but, nevertheless, increased the Vilnius population fourfold.

In this research I will focus on the upper part of Newtown where a study area is located.

Up until World War I district underwent rapid development: industrial buildings were built next to the railway followed by large multi-storey houses and public institutions. During the Soviet times (1945-1990) the priority was given to industrial complexes. Many factories with residential areas around them to accommodate factory workers were built in that time.

Today Newtown has a number of different residential developments. There are old streets with historical buildings, which are considered prestigious to live in and are highly expensive. Secondly, there are transformed industrial buildings offering spacious and trendy lofts. This type of dwelling is becoming more and more popular as it can offer bigger spaces and original layouts. Thirdly, there are newly built residential buildings in the district with flats of various sizes. Lastly, there are Soviet-built residential areas of prefabricated blocks known as the most problematic type of housing within this area.
Newtown district today
CURRENT SITUATION OF THE DISTRICT

POSSITIVE ASPECTS

Connectivity

Newtown is very well located within the city. Vilnius central bus and railway stations are located in the southern part of the district. Hence, the district is well connected by public transport (buses, trolley-buses) with other parts of Vilnius and by train and bus services with the rest of the country.

Creative district potential

After Lithuania’s independence in 1990, many industrial complexes moved out to peripheral areas or due to a lack of efficiency have been abandoned. Such industrial complexes today are undergoing conversions to lofts or various venues for arts and performances. As an example, one of the largest loft areas in the district is situated in Soviet Radio Engineering plant. Lofts opened in 2008 and now are highly popular, leading to an increase of property prices around ten times after a conversion.

Currently Newtown is experiencing an intense economic, cultural and urban development. Considered to be one of the most promising areas of Vilnius, it is a district where many business centres and creative industries are located, such as artists’, designers’ and photographers’ workshops and studios, Vilnius design school, etc. District has become a major attraction point for innovative developers and citizens who want to live in the heart of the city.
Newtown identity today
CURRENT SITUATION OF THE DISTRICT

NEGATIVE ASPECTS

Prefab mass-housing areas

In these areas the quality of buildings and public space is even worse than in large housing estates in the peripheral areas of Vilnius, since these houses were the first mass-housing examples to be built in Vilnius. These standardized buildings areas next to the factories lack attention of investors and strategies on how to integrate them into the district and the city. Hence urban regeneration is a necessity.

Green areas

Even though the district borders with a large Vingis park, there are few local recreational zones within the area. The street grid of upper Newtown does not include any squares or boulevards. Some greenery can be found in between soviet-built housing, but it is underdeveloped and today mostly used for car parking.

Safety level of the district

According to recent police records Newtown is characterized as second most unsafe district in Vilnius after the Old town. In comparison to other districts, particularly common are issues like theft from vehicles, physical abuse and robbery.
Mass-housing built in 1959
1. Space between buildings. Children playground

2. Inner street parking

3. Older residential building surrounded by mass-housing blocks

4. Kindergarten

5. Social center

6. Drill factory. Ground floor rented to small businesses

7. Street elevation showing one of buildings with commercial ground floor
THE STUDY AREA

The study area is located in the upper Newtown and is known as the first standardized prefabricated large-panel residential neighbourhood in Lithuania. It was erected in early 1960s to accommodate workers from the adjacent Drill Factory. The site is situated approximately 2 kilometres from historical city centre and 1.5km from the central station. Perimeter of the site is 1300m, total area – 100 000 m². The site consists of 24 buildings: 22 of them are Khrushchyovka type low-cost, five-storied apartment building made of concrete panels or bricks. There is also a kindergarten and a day-care centre for single mothers with children in the centre of the site. A goal of that time was to make modern apartments available to as many Soviet families as possible, as quickly as possible. To achieve that, the rate of housing construction was increased significantly using simpler floor plans, cheaper materials and construction methods.

Some housing blocks on the northern edge of the site have a commercial ground floor, as well as one newly built residential building. Other blocks are mono-functional. Two houses in the site were built a little earlier – around the 1950s, hence they have brick construction and slightly different layout. All residential buildings are staircase-access slabs and each of them has 60-80 flats. The dominant type of dwelling is 1 - 2-bedroom flats with very compact layout.
AREA ANALYSIS

Street character

The area is surrounded by large traffic streets, allowing easy access to other city parts (fig.1) and commercially oriented streets (fig.2). Internal streets are used by residents to access their houses as well as for on-street car parking. As their continuation a pedestrian link is joining the area with a large housing estate nearby (fig.3).

Activity streets

These streets have plinths used for commercial activities. Most of shops and offices are from one particular business sector namely building construction and design as well as creative offices (fig.4). This, again, is related to the tendency of creative district mentioned earlier. As there are no leisure activities, like entertainment or food service, people who come to this area for a specific shop do not stay longer, so after working hours, the place is completely empty.

A void

The study area consisted only of residential buildings without groundfloor shops breaks the continuity of these activity streets (fig.5)

Fig.1. Traffic street  
Fig.2. Commercial street  
Fig.3. Internal street
Fig. 4. Activity streets

Fig. 5. Mass-housing block - a void
SITE ANALYSIS

Scheme : Accessibility

Scheme : Permeability

Scheme : Activities

Scheme : Functional diversity

Children play grounds
Neglected sports fields

shop
business/service
Food service

medical centers
hotels/hostels
municipal facilities

Cultural facilities
Kindergarten/day care
Educational facilities
Scheme: Permeability. Elephant paths

Scheme: Level of publicness

Scheme: Form diversity

Scheme: Spatial diversity

- new residential building
- socialist mass-housing with commercial groundfloor
- old residential building
- public care facilities
- socialist mass-housing
- enclosed long spaces
- spaces open to the street
- underdeveloped open spaces
After the Independence of Lithuania all apartments were privatized. Because of this reason today it makes it difficult to demolish or renovate this housing, as there are multiple owners who should reach for an agreement. On the other hand, the ownership of public space belongs to the State, whereas the administrative and maintenance-related issues are tackled by a private organization. Public space of the site is underdeveloped and underused. Previously here was a sports area in the centre of the site, which is now abandoned and has no equipment. Apart from this, most of public space is left for passive green zones with no designated function, which is in many cases used for car parking. It should be noted that an amount of parking spaces designed in the 1960s do not correspond to today’s demands, so there is a prominent parking space shortage.

CONCLUSION

The most visible issue in the site is the technical condition of buildings and a decay of public space between them. Apart from this there are more various issues. Because of mono-functionality the site area is excluded from the rest of Newtown district; it can be seen as mono-functional inclusion into the diverse and vibrant urban fabric. Therefore this area needs to have a stronger relation with its surroundings, as well as to become more beneficial to it. Besides programmatic mono-functionality the site has only one prevailing dwelling type. It lacks typological diversity, which could attract more diverse groups of inhabitants from various income groups.
INTERVIEW WITH RESIDENTS

When taking a user-oriented approach for designing, it is a common practice to take into account not just an average user, but in particular the most specific user groups. Within the context of socialist mass-housing neighbourhoods it seems relevant to focus on such user groups as young people and the elderly.

The basis for this argument is that mass-housing neighbourhoods, such as the study area, were predominantly constructed for workers of the surrounding factories, mainly standard nuclear families. However, during more than fifty years it became dominated with elderly people, though in relation to poor conditions of housing and public space, unattractive among young people – starters, young professionals, families with children. Therefore, it is important to find out how such environment have to adjust in order to correspond to current needs of the elderly residents and how to attract the target group of young people.

Nonetheless, in this research the intention was to interview people from different user groups in order to get a broad overview of the existing issues. Even though, the design focus might be placed on specific user groups, interviews still covered a little bit wider range of respondents: such user groups as young families with children, young singles, middle-aged people and the elderly were interviewed. Moreover, different parts of the neighbourhood were visited, having in mind that a location of residence might have an impact on interviewee’s perception of the environment. For instance, a person living closer to the police department could have a different feeling of perceived safety and so on. After this, all the data was transcribed and analysed, providing main qualities necessary for a living environment, as seen from user’s perspective.

Population by main age groups

- **Vilnius city municipality**
  - People of working age 15-64: 64.33%
  - Young people 0-14: 18.25%
  - Elderly 65+: 16.68%

- **Newtown district**
  - People of working age 15-64: 68.37%
  - Young people 0-14: 19.95%
  - Elderly 65+: 15.90%

- **Study area**
  - People of working age 15-64: 64.14%
  - Young people 0-14: 15.90%
  - Elderly 65+: 21.17%

Population by source of livelihood

- **Study area**
  - **UNEMPLOYED**
    - Supported by family or state (by pension, grant, benefit): 55.3%
  - **EMPLOYED**
    - Salary or income from non/family business or property investment: 44.7%

- **55.3% - lives on benefits or pension**
- **44.7% - earns salary**
INTERVIEW OUTCOME

During the interviews residents were asked to describe their environment, to talk about the biggest advantages and disadvantages of it, as well as to give their vision of possible improvements. The interviews were held in order to understand which qualities are important to people in the desirable living environment (to supplement the theoretical knowledge from previous chapters), and to derive main issues to be tackled in the design proposal. The main advantage of the study area according to the majority of respondents was the central location, which leads to a good connectivity with the other parts of the city. Some respondents mentioned that the study area is well connected with the park, the station and the airport, and that they really appreciate that. One of the respondents said that this is the main reason why he lives in this neighbourhood.

One of the main disadvantages mentioned by residents was public space. This issue had two sides: some respondents mentioned poor maintenance of public space, that is warn sidewalks, streets, neglected yards; others highlighted poor provision of facilities such as children playgrounds, sports equipment and decent parking lots.

Moreover, common theme was open public space and greenery. Respondents noted that firstly the problem is related to poor maintenance – trees grow wildly, there are too many of them, they are degenerated. Secondly, it was mentioned that the kind of trees (linden trees) creates many problems, as it produces sticky substance during the summer and in this way gets parked cars dirty. According to interviewees, the solution would be well-planned and maintained public green areas, less trees and of more user-friendly kind.

The parking problem was mentioned by almost all respondents, however their opinions differed. Some respondents said that there are not enough parking spaces and that people need more of them. Another opinion was that there are too many cars parked within the study area; especially it is a problem for people who live on the ground floor, as there are cars parked right in front of their windows and they suffer from pollution and noise. Thus it is right to say, that in relation to this issue the common theme in all the interviews is the lack of decent parking facilities. Respondents suggested providing more parking spaces and making them rentable, accessible only to residents.

The last disadvantage discussed by the majority of respondents was social community issues. That relates to a lack of social cohesion and probably the lack of social interaction in the first place. It was mentioned that neighbours is the reason why the environment is unattractive and unsafe. As noted by many respondents, there are quite a lot of asocial people (alcoholics, people living on benefits) living in the area, as well as irresponsible people. Social interaction is weak, so community members do not know each other very well or even at all. Furthermore, homeless and drunk people from this and other neighbourhoods are constantly present in some places and this causes a feeling of insecurity. This issue could be connected with the lack of privacy zoning and high degree of accessibility. These were the main themes noticeable in the majority of the interviews. In addition, there were some other aspects mentioned, but they did not dominate. For instance, one respondent noted building issues, like poor quality of housing and poorly organised building of kindergarten, located very close to the housing block. Another respondent stressed out the need for more public transport, in order to reach the suburbs. The third mentioned that living in this neighbourhood feels like living in the village, which he saw as a positive quality.

To sum up, the main qualities of a successful (vital and attractive) residential environment are:

- Good location and connectivity
- Quality of public space and the provision of public facilities and amenities (parking, playgrounds, sport equipment, etc.)
- Nuances between public and private space
- Well-planned and maintained open public spaces (greenery)
- Social cohesion and sufficient interaction between community members
## CONCLUSION

Qualities and issues of residential environment from the user’s perspective

<table>
<thead>
<tr>
<th>Interview no.1</th>
<th>Interview no.2</th>
<th>Interview no.3</th>
<th>Interview no.4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>City centre location</strong></td>
<td>It’s terrible to live here</td>
<td>District has everything: cinema, park</td>
<td>I don’t like living here because of the neighbours</td>
</tr>
<tr>
<td><strong>Many asocial people</strong></td>
<td>So many cars</td>
<td>City centre location</td>
<td>Central location</td>
</tr>
<tr>
<td><strong>Feels like living in a village</strong></td>
<td>People are fixing their cars outside</td>
<td>Everything is close (train and bus stations, airport)</td>
<td>Housing is falling apart</td>
</tr>
<tr>
<td><strong>Park nearby</strong></td>
<td>There should be only a paid parking instead</td>
<td>Pollution</td>
<td>No decent parking</td>
</tr>
<tr>
<td><strong>I wouldn’t change anything</strong></td>
<td>It can’t be safe in this neighbourhood - many drunks</td>
<td>Trees are growing wildly</td>
<td>Trees pollute the surroundings - car gets dirty</td>
</tr>
<tr>
<td><strong>I feel quite safe here</strong></td>
<td>Neglected public spaces</td>
<td>Kindergarten nearby, children are screaming outside my window</td>
<td></td>
</tr>
<tr>
<td><strong>This neighbourhood is the best</strong></td>
<td>Needs more car parking places</td>
<td>Neglected public spaces</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cut some trees down</td>
<td>Obsolete sidewalks and streets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Needs children playgrounds, stadium, sports equipment</td>
<td>Degenerated trees</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Needs more public transport - to go to the suburbs</td>
<td>Don’t feel safe because of the people who live here</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Safety level is the same as everywhere</td>
<td></td>
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</tr>
</tbody>
</table>
THEORETICAL RESEARCH

This part will introduce the theoretical framework of the study. The goal of this chapter is to introduce a definition of urban regeneration, to formulate a comprehensive understanding of a public space in urban living environment, as well as to present some overall qualities of residential environment, as discussed by many prominent urban theorists.

TERMS USED:

MIXED-USE - urban development or a single building, that blends a combination of residential, commercial, cultural, institutional, or industrial uses, where those functions are physically and functionally integrated, and that provides pedestrian connections.

URBAN - relating to or concerned with a city or densely populated area.

LIVING ENVIRONMENT - surroundings that provide the setting for human activity
Urban Regeneration

The goal of graduation project is to define main issues, qualities, and possibilities for improvement of the study area. At the end of this project, the author seeks to propose an intervention, which would initiate future changes, leading to urban regeneration of the surroundings. This research is, indeed, a starting point, which would provide a framework to further design process.

As urban regeneration is an ultimate goal, it is important to understand the term. Stouten (2010) argues that “the regeneration process aims to modify the urban fabric to suit new conditions, social requirements and demands.” However urban regeneration is not entirely the same as urban renewal: “Urban regeneration term covers a much wider range of urban and regional issues than primary modernisation of housing and deteriorated areas.” In addition, Robert and Sykes indicate that “urban regeneration moves beyond the aims, aspirations and achievements of urban renewal, which is seen as a process of essentially physical change. Urban regeneration implies that any approach to tackling the problems encountered in town and cities should be constructed with a longer-term, more strategic, purpose in mind.” This gives us an understanding of the term.

Urban Public Space

“Public space is the stage upon which the drama of communal life unfolds. The streets, squares and parks of a city give form to the ebb and flow of human exchange. These dynamic spaces are an essential counterpart to the more settled places and routines of work and home life, providing the channels for movement, nodes for communication and common grounds for play and relaxation.”

Definition

This thesis tries to define the key qualities of residential environment, and more specifically, its public space, that could create conditions for its success. This section of the Chapter 2 will elaborate on a concept of public space. In order to give a structured path though literature study, it will start with the social meaning of an (urban) area - definition of place and of space.

A comprehensive definition is given by Gieryn (2000), who makes a distinction between place and space: “Place is not space. Space is more properly conceived as abstract geometries (distance, direction, size, shape, volume) detached from material form and cultural interpretation.” Whereas place has three necessary and sufficient features:

1. Geographic location: place should be located somewhere
2. Material form: place should consist of physical elements
3. Investment with meaning and value: place only exist if it identified, interpreted, resembled, narrated, perceived, felt and understood by people

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1 Paul Stouten, Changing Contexts in Urban Regeneration (Techno press, 2010), 12.
2 Ibid., 11.
Therefore, place can be described as space filled up with people, practices, objects, and representations.\(^6\) This makes place something more that just a space.

Within this thesis an emphasis is placed on public space and place, hence this type should be explore more in depth. Public place can be described as place outside the boundaries of individual or small group control, used for a variety of often overlapping functional and symbolic purposes. Descriptively, public places have been multi-purpose accessible spaces distinguishable from exclusive territories of households and individuals. Normatively, these places are considered public if they have been provided and managed by public authorities, and have concerned the people as a whole, being open or available to them and being used or shared by all members of a community.\(^7\)

**Criteria for Public Space**

Benn and Gaus (1983) identify three dimensions of social organization: access, agency and interest, which constitute publicness of a space.\(^8\) Most definitions of public space emphasize the necessity of access, which can include access to a place as well as to activities within it. Benn and Gaus (1983) divide access further into four sub-dimensions: physical access to spaces, access to activities, access to information and to resources.\(^9\)

Public places and spaces, therefore, are public because anyone is entitled to be physically present in them. The stand of agency, whether acting privately or on behalf of the community, makes a difference to the nature and consequences of their actions. A public agency dealing with a part of urban space has a completely different mode of operation and aims than a private one. In the same way the dimensions of interest plays a major role in a determination of public and private distinction. Using the criteria of access, agency and interest, a space can be considered public if it is controlled by the public authorities, concerns the people as a whole, is open or available to them, and is used or shared by all the members of community.\(^10\)

Nonetheless, there could be two types of publicness identified: urban publicness and neighbourhood publicness. Neighbourhood public space, indeed, has different atmosphere than urban public space: it is clearly public space for the inhabitants and has a restricted use. Carr et al. advocated neighbourhood public space, saying that it is “the common ground, where people carry out the functional and ritual activities that bind the community.”\(^11\) Promoting the neighbourhood public space as a meeting point of individuals clearly emphasizes the importance of togetherness.\(^12\) The role of neighbourhood public space appears to be helping to establish the distinctive identity of the place and create the conditions in which the neighbourhood population can develop their relationships.\(^13\)

On the other hand, public space can be defined as the place that sustains and facilities public life.\(^14\) It can be seen as favourable for social interaction, which is considered to support

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\(^6\) Ibid.
\(^9\) Ibid.
\(^10\) Madanipour, *Public and Private Spaces of the City*, 111.
\(^11\) Public Space, 88.
\(^12\) Madanipour, *Public and Private Spaces of the City*, 219.
\(^13\) Ibid., 220.
social cohesion. In this regard, Madanipour (2003) describes public space as:

“The realm of sociability, where face to face communication takes place between people, who are not part of the intimate circle of household and friends. Here the relations of exchange between strangers, the management of this relationship as a performance, and the stage on which this performance takes place are crucial elements of the public sphere.”

Hence, based on aforementioned theories there are two main components that are considered crucial for public space success: physical environment and activity.

Urban Qualities from Theory

Theoretical framework is based on several literature sources investigating urban qualities that are common to the city. In the beginning of this research, several books regarding public space, neighbourhoods and cities were analysed (see Appendix for more detailed overview). Later, because of time limitations only some chosen theories were investigated further. The selection of urban qualities, which in author’s opinion are the most relevant to the study case, will be presented in this chapter.

Diversity

According to Jacobs (1961) and Bentley et al. (1985) diversity is one of the key qualities in urban environments. Variety of functions and variety of activities are the main factors that can ensure diversity of experiences while being beneficial and attractive for different groups of people. Since it requires a wide range of buildings and other types of built up forms this variety is difficult to reach, but when it is there, it provides a rich diversity in physical, spatial and functional environment with a high degree of visual variety.

“If development is not diverse in the mentioned ways, the result might be homogeneous built forms, monotonous urban landscapes or segregated social communities. This would result in a condition that not only causes physical, functional and spatial disorder, but also creates social, psychological and environmental problems.”

According to Jane Jacobs (1961) there are four preconditions in urban environments that create diversity:

1. Concentration of people and activities
2. Mix of primary uses
3. Short and pedestrian-friendly blocks and streetscapes
4. Mixture of building types in age and condition

16 Madanipour, Public and Private Spaces of the City, 108.
19 Jacobs, The Death and Life of Great American Cities, 190–228.
This leads to a conclusion that urban living environment must be compact, pedestrian-friendly and mixed-use. When the fundamental uses and functions are being clustered together into one unit, its users will get the opportunity to fulfil most of their needs while walking around their neighbourhood.\(^{20}\) Furthermore, a balanced mix of uses and facilities would be able to hold together various groups of residents in spite of their age, gender, education, income level and other differences. Hence, this variety of users and experiences within the neighbourhood will also bring about rich perceptual meaning to the neighbourhood.\(^{21}\) Sufficient urban population in a close proximity is needed to provide a basis for overall activity in an urban area.\(^{22}\) Such conditions enhance the effectiveness of a residential environment and stimulate a community life in this way making inhabitants’ life more pleasant and social.

### Diversity of Forms

Diversity of forms may be found in both built and natural environments. Diversity in built environment is a tool to create a good physical setting that would result in a sociable, well-functioning neighbourhood.\(^{23}\) Moreover, such urban living environment with a wide range of housing types and sizes can support a diverse population among neighbourhood. Diversity in natural environment within the neighbourhood (parks, green open spaces, trees in streets, green terraces, etc.) is an important factor shaping the urban form. Presence of green public outdoor space provides people with a place for recreational activities, and therefore, has a positive impact on a quality of their life, in terms of happiness and health.\(^{24}\)

### Diversity of Uses

Webber (1964) notes that a “successful urban environment should provide space for social, economic and cultural transactions in as diverse as possible way.” As the variety of uses

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\(^{21}\) Bentley et al., Responsive Environments: a Manual for Designers, 15.


\(^{24}\) Ibid.
within a residential environment tends to associate with each other and strengthen its character, at the same time it offers a mixed range of functions and activities within a walkable distance.\textsuperscript{25}

In addition to this, Gehl (1987) states that the outdoor activities have a direct link to the quality of public space and divides them into three categories according to their demands on the physical environment: \textsuperscript{26}

1. Necessary activities (going to school, work, shopping, etc.)

Because these activities are more or less compulsory, they are only slightly influenced by the physical framework. These activities will take place throughout the year, under nearly all conditions, and are more or less independent of the exterior environment.

2. Optional activities that take place only when exterior conditions are optimal (taking a walk, standing around, sunbathing, etc.)

These activities take place only when exterior conditions, like e.g. weather, are optimal, as well as these activities are especially dependent on exterior physical conditions. This relationship is particularly important in connection with physical planning because most of the recreational activities that are especially pleasant to pursue outdoors are found precisely in this category of activities.

3. Social activities that depend on the presence of others (children play, conversations, communal activities, passive contacts - seeing and hearing other people)

These activities could also be termed "resultant" activities, because almost always they evolve from activities linked to the other two activity categories. They develop in connection with the other activities because people are in the same space, meet, pass by one another, etc.

<table>
<thead>
<tr>
<th>Quality of Physical Environment</th>
<th>Poor</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Necessary Activities</td>
<td><img src="image1" alt="Diagram" /></td>
<td><img src="image2" alt="Diagram" /></td>
</tr>
<tr>
<td>Optional Activities</td>
<td><img src="image3" alt="Diagram" /></td>
<td><img src="image4" alt="Diagram" /></td>
</tr>
<tr>
<td>Resultant Activities</td>
<td><img src="image5" alt="Diagram" /></td>
<td><img src="image6" alt="Diagram" /></td>
</tr>
</tbody>
</table>

![Fig. 3 Relationship between the quality of environment and the activities. Source: Gehl, 2001, p.11](image7)

As we can see, all three categories of activities are interconnected. Moreover, there is a direct relationship between public life and quality of urban public space. When the quality of outdoor areas is good, optional activities occur with increasing frequency. Furthermore, as

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\textsuperscript{25} Melvin Webber, ed., “The Urban Place and the Non-Place Urban Realm,” in Explorations into Urban Structure (Pennsylvania, 1964).

\textsuperscript{26} Gehl, Life Between Buildings: Using Public Space, 12–15.
levels of optional activity rise, the number of social activities usually increases substantially\(^{27}\) (fig.1).

**Diversity of Users**

As already mentioned in previous sections, to encourage diversity of users within a neighbourhood, a variety of housing sizes and types is needed. Such diversity can make the neighbourhood attractive to various types of inhabitants, different in their age, family composition or profession. Allowing different inhabitants to stay in a same community throughout different stages of their lives it ensures the stability of a neighbourhood, making it more resistant to cycles of decline, concentrations of poverty and abandonment.\(^{28}\)

**Image**

"The individual image of a space is a set of feelings and impressions generated by that space."\(^{29}\)

Lynch (1981) argues that this individual image contributes to the legibility of urban environment. Legibility is known as an ability to recognise city elements (edges, paths, nodes, districts) and place them into a coherent pattern.\(^{30}\) However, not only features that concern form can influence this image. The image of urban environment can change in relation to stronger virtual connections that increase because of activities in that urban area. What is more, over the time users start to identify themselves with the place – that represents a sense of place identity. So it is right to say that level of legibility can increase over time, for instance the long-term residents produce a more complex image using landmarks, path, everyday activities and personal association.\(^{31}\) Additionally, public space itself is a powerful contributor to the legibility of environment. "By their proportions, sequences and the way they are interconnected with the cultural importance, they can generate strong symbolic meaning that affect the life in the city."\(^{32}\)

**Accessibility and Connectivity**

Accessibility and connectivity can be defined as links between areas or their parts and are highly important elements of every urban environment.

**Accessibility**

Accessibility within urban area would cause the difficulty or easiness for any type of person (age, background, race, illness) to gain access to activities, resources, services and information that they need.\(^{33}\)

Carr et al. identify three forms of accessibility of the public space: visual, symbolic and physical.\(^{34}\) Visual accessibility "refers to the possibility of seeing through an environment, and it has two main roles: to offer the possibility of judging whether a place feels comfortable,"

\(^{27}\) Ibid., 11.
\(^{28}\) *LEED for Neighbourhood Development Rating System*.
\(^{32}\) Ibid.
\(^{33}\) Ibid.
\(^{34}\) *Public Space*, 138.
inviting or safe, and on the other hand it serves as a gradation between the public and the private space.” Symbolic accessibility is more represented in the comfort within the urban fabric. For instance, it may be related to the psychological feeling of threat, which “may affect the entrance into the public space.”\textsuperscript{35} This type of accessibility is one of the key components of a public space that wishes to attract a big variety of people. Physical accessibility describes the physical setting within urban environment: width of street, street elevations and barriers, the distance between spaces, etc. Montgomery (1998) emphasizes that “the physical accessibility has two sides: the accessibility through public transport and by car, and the permeability of the space.”\textsuperscript{36} Moreover, the permeability of the urban fabric is of high importance, because people seem to be less inclined to walk long unbroken streets. Therefore, permeable urban fabric generates more street life and activates back alleys and courtyards. The importance of permeability is as well advocated by Jane Jacobs (1961), Carmona et al. (2003) and Whyte (2000).

Connectivity

Connectivity is closely related and highly important to accessibility. It is regarded as physical links between areas or within smaller parts of the area. Indeed, connectivity can be seen as full accessibility, in other words, there is no friction between any of links within a network. Alexander (1977) advocates the quality of an urban form where buildings and spaces are well integrated within a system of interlocking connections.\textsuperscript{37}

\textsuperscript{35} Ibid., 149.
\textsuperscript{36} Montgomery, “Cultural Quarters as Mechanisms for Urban Regeneration. Part 1: Conceptualising Cultural Quarters.”
## List of urban qualities derived from literature and analysed during the research

<table>
<thead>
<tr>
<th>Urban design qualities</th>
<th>Performance criteria</th>
<th>Literature source</th>
<th>Description</th>
</tr>
</thead>
</table>
| Diversity              | A multitude of offered uses and experiences | J. Jacobs *Death and life of great American cities* | “Cities need a most intricate and close-grained diversity of uses that give each other constant mutual support, both economically and socially.”
|                        |                      |                   | “Diversity among uses creates diversity among users and their schedules.”
|                        |                      |                   | “Only diverse surroundings have their practical power of including a natural, continuing flow of life and use.”
|                        |                      |                   | “City diversity itself permits and stimulates more diversity.”
|                        |                      |                   | Conditions for city’s streets and districts diversity:
|                        |                      |                   | - Mixed uses
|                        |                      |                   | - Small blocks
|                        |                      |                   | - Aged buildings
|                        |                      |                   | - Concentration
|                        |                      | H. Barton et al. *Shaping neighbourhoods* | Types of diversity:
|                        |                      |                   | - Diversity of housing type and tenure
|                        |                      |                   | - Diversity of local work and service opportunities
|                        |                      |                   | - Diversity of modes of movement (choice)
|                        |                      |                   | - Wildlife habitat diversity
|                        |                      |                   | - Variety of aesthetic character
| Spatial continuity and enclosure |                      | J. Jacobs *Death and life of great American cities* | Spatial continuity: To use parks and squares, and public buildings as part of their street fabric; use them to intensify and knit together the fabric’s complexity and multiple uses.
|                        |                      |                   | Continues public street life and the fabric of these streets throughout a district.
|                        |                      |                   | Cross-use: Differing commercial and cultural facilities and different-looking scenes, must crop up all through.
|                        |                      |                   | Enclosure: “A definite shape made out of space, so that it appears as an important event in the city scheme, a positive feature rather that no account leftover.”
| Identity               | The quality that provides individual distinction from other places, the basis for its recognition as a separate entity | H. Barton et al. *Shaping neighbourhoods* | The recognizable, coherent pattern of urban blocks, buildings, and space
|                        |                      | K. Lynch *The image of the city* | |
| Permeability           | The extent to which an environment allows people a choice of access through it, from place to place | Bentley at al. *Responsive environments* | “The permeability of any system of public space depends on the number of alternative routes it offers from one point to another. These alternatives must be visible.”
|                        |                      |                   | Permeability is important at two scales:
|                        |                      |                   | - Links which connect the site and the city as a whole
|                        |                      |                   | - Links which connect the site to its immediate local surroundings.
| **Variety**       | The range of uses available to people | Bentley at al. *Responsive environments* | Different levels of variety:  
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>- A place with varied uses has varied building types of varied forms</td>
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<td></td>
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<td>- It attracts varied people, at various times, for various reasons.</td>
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<td></td>
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<td></td>
<td>- Because the different activities, forms and people provide a rich</td>
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<td>perceptual mix, different users interpret the place in different ways:</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>varied meanings.</td>
</tr>
<tr>
<td><strong>Legibility</strong></td>
<td>The indicator of how easily people can</td>
<td>Bentley at al. <em>Responsive environments</em></td>
<td>A readily understandable easily navigable environment. Important in</td>
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<tr>
<td></td>
<td>understand what opportunities</td>
<td></td>
<td>two levels: physical form and activity pattern. The patterns must</td>
</tr>
<tr>
<td></td>
<td>environment offers to them</td>
<td></td>
<td>complement each other.</td>
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<td></td>
<td></td>
<td></td>
<td>“Legibility depends on the relationship between elements, even more</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>than on the design of the elements themselves.”</td>
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<tr>
<td><strong>Robustness</strong></td>
<td>The extent to which environment can</td>
<td>Bentley at al. <em>Responsive environments</em></td>
<td>“Variety of activities must co-exist within public realm without</td>
</tr>
<tr>
<td></td>
<td>be used for many different purposes</td>
<td></td>
<td>inhibiting each other.”</td>
</tr>
<tr>
<td><strong>Visual appropriateness</strong></td>
<td>The detailed appearance of the place which makes people aware of the choices available</td>
<td>Bentley at al. <em>Responsive environments</em></td>
<td></td>
</tr>
<tr>
<td><strong>Richness</strong></td>
<td>The level of people’s choice of sensory experiences</td>
<td>Bentley at al. <em>Responsive environments</em></td>
<td></td>
</tr>
<tr>
<td><strong>Personalization</strong></td>
<td>The extent to which people can put their own stamp on a place</td>
<td>Bentley at al. <em>Responsive environments</em></td>
<td>Personalization of elements visible from the public realm communicates tastes and values to the wider community.</td>
</tr>
<tr>
<td><strong>Activity</strong></td>
<td></td>
<td>J. Gehl <em>Life between buildings</em></td>
<td>“In a good environment, a completely different, broad spectrum of</td>
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<tr>
<td></td>
<td></td>
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<td>human activities is possible.”</td>
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<td></td>
<td>A mix of outdoor activities: necessary, optional and social activities.</td>
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<td></td>
<td></td>
<td></td>
<td>“These activities combine to make communal spaces in cities and</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>residential areas meaningful and attractive.”</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>“The scope and character of outdoor activities are greatly influenced</td>
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<td></td>
<td></td>
<td></td>
<td>by the physical environment.”</td>
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<td></td>
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<td></td>
<td>“High level of activity in a certain area can be stimulated by</td>
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<td></td>
<td>ensuring that more people use the public space and by encouraging</td>
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<td></td>
<td></td>
<td></td>
<td>longer individual stays.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>J. Jacobs *Death and life of great</td>
<td>Activity contributes to surveillance and prevents crime. Sidewalks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>American cities*</td>
<td>need “users on it fairly continuously, both to add to the number of</td>
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<td></td>
<td></td>
<td></td>
<td>effective eyes on the street, and to induce people in buildings</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>along the street to watch the sidewalks in sufficient number.”</td>
</tr>
<tr>
<td><strong>Vitality</strong></td>
<td>The degree to which the</td>
<td>K. Lynch</td>
<td>Refers to the idea that good places should</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>be</td>
</tr>
<tr>
<td>Form of Places Supports Activity and Functions</td>
<td>Good City Form</td>
<td>Support Life and Health</td>
<td></td>
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<tr>
<td>-----------------------------------------------</td>
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<td>-------------------------</td>
<td></td>
</tr>
<tr>
<td>J. Jacobs</td>
<td></td>
<td>Bringing people onto the streets creates animation and vitality.</td>
<td></td>
</tr>
</tbody>
</table>

### Accessibility

<table>
<thead>
<tr>
<th>The ability to reach other persons, activities, resources, services, information, or places, including the quantity and diversity of elements, that can be reached</th>
<th>Carr et al. &lt;br&gt; <em>Public Space</em></th>
<th>Three forms of access:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>- Visual access (visibility): if people can see into a space before they enter it, they can judge whether they would feel comfortable, welcome and safe there.</td>
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<tr>
<td></td>
<td></td>
<td>- Symbolic access: cues can be animate or inanimate. Individuals or groups perceived either as threatening, or as comforting or inviting, may affect entry into public space, while elements such as particular kinds of shops may signal the type of people that are welcome there.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Physical access concerns whether the space is physically available to the public.</td>
</tr>
</tbody>
</table>

| K. Lynch                                    | Good City Form | Implies that people of all ages and classes will be able to get to the places they want to go. |

### Adaptability/Flexibility

<table>
<thead>
<tr>
<th>H. Barton et al. &lt;br&gt; <em>Shaping Neighbourhoods</em></th>
<th>“The environment has to adapt to changing conditions or decay. The aspiration for every neighbourhood is that it should evolve steadily and “naturally,” providing a healthy and convivial environment for residents and users at all stages.” This means:</th>
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<td>- Adaptable building forms (design for varied uses)</td>
</tr>
<tr>
<td></td>
<td>- Extendable buildings, adaptable streets</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
<td>- Evolving heritage</td>
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<td></td>
<td>- Keeping transport options open</td>
</tr>
<tr>
<td></td>
<td>- Making place available for next-generation households and businesses</td>
</tr>
<tr>
<td></td>
<td>- Avoiding fixed edges and barriers</td>
</tr>
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### Fit

| K. Lynch                                    | Good City Form | The concept of a good fit to describe places where activity and the built form are mutually self-sustaining. A city with a good fit provides the buildings, spaces and networks required for its residents to pursue their projects successfully. Importance of human scale. |

### Safety

| K. Lynch                                    | Good City Form | |

### Stakeholders Involvement

| H. Barton et al. <br> *Shaping Neighbourhoods* | |

### Connectivity

| H. Barton et al. <br> *Shaping Neighbourhoods* | “Connectedness between as well as within localities is essential for vitality, viability, and choice. Rather than fragmented, agency-by-agency pattern of provision it is the links between activities and between places that helps ensure their success.” |

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| K. Lynch | Good City Form | Implies that people of all ages and classes will be able to get to the places they want to go. |

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<th>Degrees of publicness</th>
<th>Transitions between the various categories of public space</th>
<th>J. Gehl</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><em>Life between buildings</em></td>
</tr>
<tr>
<td>“The establishment of the social structure and corresponding physical structure with communal spaces at various levels permits movement from small groups and spaces towards larger ones and from the more private to the gradually more public spaces, giving a greater feeling of security and a stronger sense of belonging to the areas outside the private residence.”</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>O. Newman</td>
</tr>
<tr>
<td>“Graduation of outdoor spaces with semipublic, intimate and familiar spaces nearest the residence also makes it possible to know the people in the area better, and the experience of outdoor spaces as belonging to the residential area results in a greater degree of surveillance and collective responsibility for this public space and its residences.”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sense of place</td>
<td>The factor that makes one place different from another</td>
<td>G. Cullen</td>
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<tr>
<td></td>
<td></td>
<td><em>Townscape</em></td>
</tr>
<tr>
<td>“Characteristic visual expression contributes to giving a feeling of a sense of place and through this inspires people to be in the space.”</td>
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<tr>
<td></td>
<td></td>
<td>K. Lynch</td>
</tr>
<tr>
<td>Three variables of sense of place are:</td>
<td></td>
<td><em>Good city form</em></td>
</tr>
<tr>
<td>- Legibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Perception of and preference for the visual environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Compatibility of the setting with human purposes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning should involve sense of place in three meanings:</td>
<td></td>
<td></td>
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<tr>
<td>- Psychological responses to designs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Preservation of the past of a place</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Creation of a sense of place for future environments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sense</td>
<td>The degree to which the place can be clearly perceived and structured in time and space by users</td>
<td>K. Lynch</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>The image of the city</em></td>
</tr>
<tr>
<td>“It is that shape, color, or arrangement, which facilitates the making of vividly identified, powerfully structured, highly useful mental images of the environment. It combines both the ability of the physical object to project a strong distinctive image, as well as the ability of the observer to mentally select, process, store, organize, and endow the image with meaning.”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imageability</td>
<td>A quality which gives a high probability of evoking a strong image in any given observer</td>
<td>K. Lynch</td>
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<td></td>
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<tr>
<td>Requires three attributes: Identity, Structure and Meaning.</td>
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<tr>
<td>Five key elements that provide urban</td>
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</tr>
<tr>
<td>Category</td>
<td>Definition</td>
<td>Reference</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Control</td>
<td>The degree to which those who use, work or reside in places can create and manage access to spaces and activities.</td>
<td>K. Lynch, <em>Good city form</em></td>
</tr>
<tr>
<td>Comfort</td>
<td>The dimension of sense of comfort includes environmental factors, physical comfort, and social and psychological comfort. The latter is dependent on the character and ambience of the space. This is a deep and pervasive need that extends to people’s experiences in public places. It is a sense of security, a feeling that one’s person and possessions are not vulnerable.</td>
<td>Carr et al., <em>Public space</em></td>
</tr>
<tr>
<td>Relaxation</td>
<td>A state with a body and mind at ease. In urban settings, natural elements and separation from vehicular traffic help accentuate with the immediate surroundings and make it easier to be relaxed. May, however, obstruct visual access (visual permeability), creating safety problems and discouraging use.</td>
<td>Carr et al., <em>Public space</em></td>
</tr>
<tr>
<td>Passive engagement</td>
<td>The need for the encounter with the setting, albeit without becoming actively involved.</td>
<td>Carr et al., <em>Public space</em></td>
</tr>
<tr>
<td>Active engagement</td>
<td>A more direct experience with a place and the people within it.</td>
<td>Carr et al., <em>Public space</em></td>
</tr>
<tr>
<td>Discovery</td>
<td>Desire for new spectacles and pleasurable experiences</td>
<td>Carr et al., <em>Public space</em></td>
</tr>
<tr>
<td>Livability</td>
<td>The perceived livability of an environment is formed by the apparent livability. The apparent livability focuses the attention on this interaction, the perceived livability approaches this interaction from the point of the people, and the supposed livability approaches this interaction from the point of the surroundings. An important aspect of these forms of livability is the control over social interaction an individual has in a neighbourhood.</td>
<td>M. van Dorst</td>
</tr>
</tbody>
</table>
Conclusion: qualities advocated by urban theories:

<table>
<thead>
<tr>
<th>SPATIAL DIMENSION:</th>
<th>FUNCTIONAL DIMENSION:</th>
<th>PERCEPTUAL DIMENSION:</th>
<th>SOCIAL DIMENSION:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fit</td>
<td>Diversity</td>
<td>Imageability</td>
<td>Access</td>
</tr>
<tr>
<td>Permeability</td>
<td>Vitality</td>
<td>Identity</td>
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CONCLUSIONS

This part will summarize the findings and propose recommendation for a design project.
In order to formulate a comprehensive understanding of a concept of public space within residential environment this thesis started with definition of public space. A distinction was made between place and space, noting that place is more than just space, as it is filled up with people, practices, objects, and representations. Three criteria, which constitute publicness of a space, were identified. Using the criteria of access, agency and interest, a conclusion was made, that a space can be considered public if it is controlled by the public authorities, concerns the people as a whole, is open or available to them, and is used or shared by all the members of community. Public space was also divided into urban public space and neighbourhood public space. The role of neighbourhood public space appeared to be helping to establish the distinctive identity of the place and create the conditions to strengthen social interaction. Furthermore, public space was defined as the place that sustains and facilities public life. Ending the chapter, it was concluded that there are two main components that are considered crucial for public space success: physical environment and activity.

This research was driven by a question:

What are the key qualities of urban living environment and its public space, according to literature and users?

By summarizing theories introduced in the previous sections one can conclude that there are three main characteristics that urban living environment and its public space have to meet to be pleasant and attractive to the user:

- Diversity of form, uses and users
- Image
- Sufficient accessibility and connectivity

On the other hand, according to residents from the chosen case study, the main qualities of a successful residential environment are:

- Good location and connectivity
- Quality of public space and the provision of public facilities and amenities (parking, playgrounds, sport equipment, etc.)
- Nuances between public and private space
- Well-planned and maintained open public spaces (greenery)
- Social cohesion and sufficient interaction between community members

In addition to qualities desired in residential environment, main issues of the study area were identified as well. They consisted of:

1. Decay of buildings (housing, kindergarten, day-care facility) and public space between them
   Design recommendation: Buildings need modernisation, whereas public space needs to be redefined increasing its vitality and use. Based on user’s opinions, there should be a new solution for parking: more parking spaces, more control of it. Also the study area should be restructured in terms of privacy zoning – undefined public space could be divided into courtyards, small parks, meeting spaces, etc, hence increasing the level of safety.

2. Lack of functional diversity, which lead to area’s exclusion from diverse urban fabric of the district
   Design recommendation: The study area needs to have a stronger relation with its surroundings, as well as to become more beneficial to it. It could be improved by making the site more mixed-use, changing the programme on ground floor level.

3. Lack of typological diversity
   Design recommendation: To attract diverse range of inhabitants, diverse dwelling typologies (small, medium, large flats, live+work flats, etc.) are needed in the study area.
**BIBLIOGRAPHY**


APPENDIX

Interview transcripts

*Interview no.1 – Young man (around 30-35 years old). Nuclear family*

I – Do you live in this area?
R – Yes, I live in this house. It’s house number seven (points out the building).
I – How long do you live here for?
R - For four years now.
I - Why do you choose to live in this area?
R – Well, it’s where my wife comes from, and I also work nearby.
I – Do you spend you free time in this area?
R – As you see, I’m spending time with my son outside in the yard right now.
I – How would you describe this neighbourhood?
R – It`s the best.
I – What are the main advantages of it?
R – Well, it is the city centre.
I – And the disadvantages?
R – Hmm… there are still many asocial people around.
I – How could you describe public (outdoor) space of the neighbourhood?
R – I am positive about it... Well, lets see - we live in the city, but it feels like living in a village. There’s a park almost in our yard. It’s well taken care of... Sidewalks too. It’s good in here... there’s a bit worse further (point out the other side of the area), but in here - it’s good.
I – Very well. But is there anything you would like to change or improve?
R – Hmm... No, I wouldn’t change anything.
I – Do you feel safe in this neighbourhood?
R – Quite safe.

*Interview no.2 Elderly lady (>65 years old)*

I – Do you live in this area?
R – Yes, dear God, it’s terrible to live here.
I – Why do you think so?
R – So many cars around, there’s no air to breath. I can’t open my window, it smells outside... the smell of gasoline. All the time people are fixing their cars outside, all over the place. Lets walk a bit further, you’ll see (walking around the corner). There was a car parking over there, but it’s not enough anymore, so people place their cars over there too. They
place them everywhere... It’s a terrible, terrible situation. There was a small garden with bushes and flowers, but not anymore. And people live here... Can you believe it? Many different kinds of people, old people, ill people... It’s terrible. And no one pays attention to this problem.

I – What would you suggest in this case? What should be done?

R – In my opinion there should be only a paid parking instead. This would be the best. Decent paid parking, no more cars in front of our windows. So many cars! Very rarely it’s less crowded; this is the usual situation. You should walk around, you’ll see.

I – Do you feel safe in this neighbourhood?

R – Well I don’t go outside in the evening or at night, you know. But in my opinion it can’t be safe in this neighbourhood. Too many drunks around...

[Box: Interview no.3 Middle-aged man (around 55 years old). Used to live there, now only visiting his son]

I – How long did you live here for?

R – I was born here, lived here for 24 years and then moved to one of the micro-districts further from the city centre.

I – Looking back, what were the main advantages and disadvantages of this area?

R – This district had and still has everything: cinema, Vingis park... It’s located in the city centre. Train station, bus station, airport, everything’s close. The main disadvantage, at least back then, was the pollution of air, since it’s surrounded by factories. Drill factory and Loom factory were located here, you know, producing all this machinery, you could smell it in the air... And also the railway. Air pollution was a problem. Now not so much, although I think the soil could be contaminated too, you should look into that.

I – How could you describe the public (outdoor) space of the neighbourhood, in comparison with the old times?

R – There are many trees in here, growing wildly, seems like no one looks after them. I suppose their blocking the sun from coming inside. Neglected public spaces, it’s what I see right now. In winter it might be ok, with these trees, during hot summer days might be too, but in general...I don’t know.

I – What would you like to change or improve here?

R – I would say more car parking places. Cut some of these trees down. Provide more, bigger and better children playgrounds to play basketball or tennis. There was a stadium in the middle of the neighbourhood, although its abandoned right now, no sports equipment left. Another thing – more public transport. There’s only one bus route passing by, and for example to reach my micro-district takes quite some time, since I have to change buses at least once. Bus all in all, here in the centre you can just walk everywhere on foot... It’s more of the problem to go to the suburbs.

I – And what about feeling of safety in this neighbourhood?

R – I wouldn’t exclude it from other places. Same like everywhere.
**Interview no.4 Young man (around 25-30 years), single**

I – Do you live in this area?  
R – Yes, I live here.  
I – For how long do you live here?  
R – Four years now. I think.  
I – Why do you choose to live in this neighbourhood?  
R – I inherited this flat when my grandparents died. That’s the reason.  
I – Do you spend your free time in the neighbourhood?  
R – No, I don’t.  
I – So do you like living in this neighbourhood?  
R – No, I don’t like living here actually, mainly because of the neighbours. If I had another option, I would move out, but for now, I have to stay here.  
I - What are the main advantages and disadvantages of this neighbourhood?  
R - The main advantage is the location. City centre. On the other hand, it has more disadvantages, I would say. Housing is falling apart. No place to put a car, no decent parking. Also the trees – these trees pollute the surroundings, these are linden trees with honey dropping from them during the summer. For me it’s a problem because my car gets dirty with this sticky substance... Moreover, there’s a kindergarten nearby and children are screaming outside my window. I don’t like it at all.  
I – How could you describe public (outdoor) space of the neighbourhood?  
R – As neglected. Obsolete sidewalks and streets, degenerated trees.  
I – What would you like to change or improve here?  
R – I would cut down the trees and place more people-friendly ones. Take care of sidewalks, streets, parking facilities.  
I - Do you feel safe in this neighbourhood?  
R – No, because of the people who live here.

**Interview no.5 Middle-aged man (around 55 years old). Visiting day-care centre**

I – Do you live in this area?  
R – Oh no no, I’m just a guest here.  
I – OK that is fine, I have questions for visitors too. Do you come here often?  
R – No, not often at all. Now I’m on my way to the day care centre...  
I – But still you could describe this neighbourhood, right? Your impression. Do you consider this place to be pleasant, attractive?  
R – Hmm, let me think... I wouldn’t like to live here. I would better live in the village... No, definitely not here.  
I – How could you describe public (outdoor) space of this neighbourhood?
R – I don’t know. It’s always easy to criticise things… Everywhere.

I – Do you feel safe in this neighbourhood?

R – In this neighbourhood… In daytime… Safe. But at night, I don’t know, there might be dangerous, although I would doubt that in this case. I think there are much worse places in terms of crime and lack of safety in the city. Other districts.

Interview no.6 Middle-aged man (around 45 years old). Visiting a friend

I – Do you live in this area?

R – No.

I – So what is the purpose of your visit here today? Do you come here often?

R – I am visiting my friend who lives here. I come quite often.

I – Do you consider this place to be pleasant, attractive?

R – Very! I would certainly like to live here.

I – Why so?

R – Well, it seems it’s a very safe neighbourhood, especially in the evening, at night, I never had bad experiences in this area.

I – And what about public (outdoor) space of this neighbourhood?

R – It’s fine, seems ok… I compare it with my neighbourhood and it looks more green, more cosy over here, less disturbance from traffic.