



**A Housing Research
Through Individual Border Experience**

reflections on two housing projects in between Sweden and Türkiye

Melike Kavalalı
Degree Project in Architecture
LTH

Department of Architecture and Built Environment



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LTH - Faculty of Engineering | Department of Architecture and Built Environment

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Author: Melike Kavalalı

Examiner: Jesper Magnusson

Supervisor: Mattias Kärrholm

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Melike KAVALALI.

Abstract

As humans, we experience many spaces/ borders throughout our life flow. The borders of countries, the houses we live in, the borders of a playground, or the borders between two people. Sometimes we shape the borders, sometimes the borders shape us. However, irrespective of the circumstances, these borders exert discernible influences on the trajectory of our life flow. Each of our border experiences affects the other. For instance, the geopolitical boundaries of our residing nation exert an influence on the demarcation of housing limits that we encounter.

Individuals dedicate a significant portion of their lifetimes to indoor or residential environments. Consequently, it is imperative to critically assess the spaces we inhabit, exploring the constraints and potentials they present. Furthermore, an inquiry into the ramifications of our personal identities and cultural lifestyles is essential in comprehending their role in shaping spatial environments.

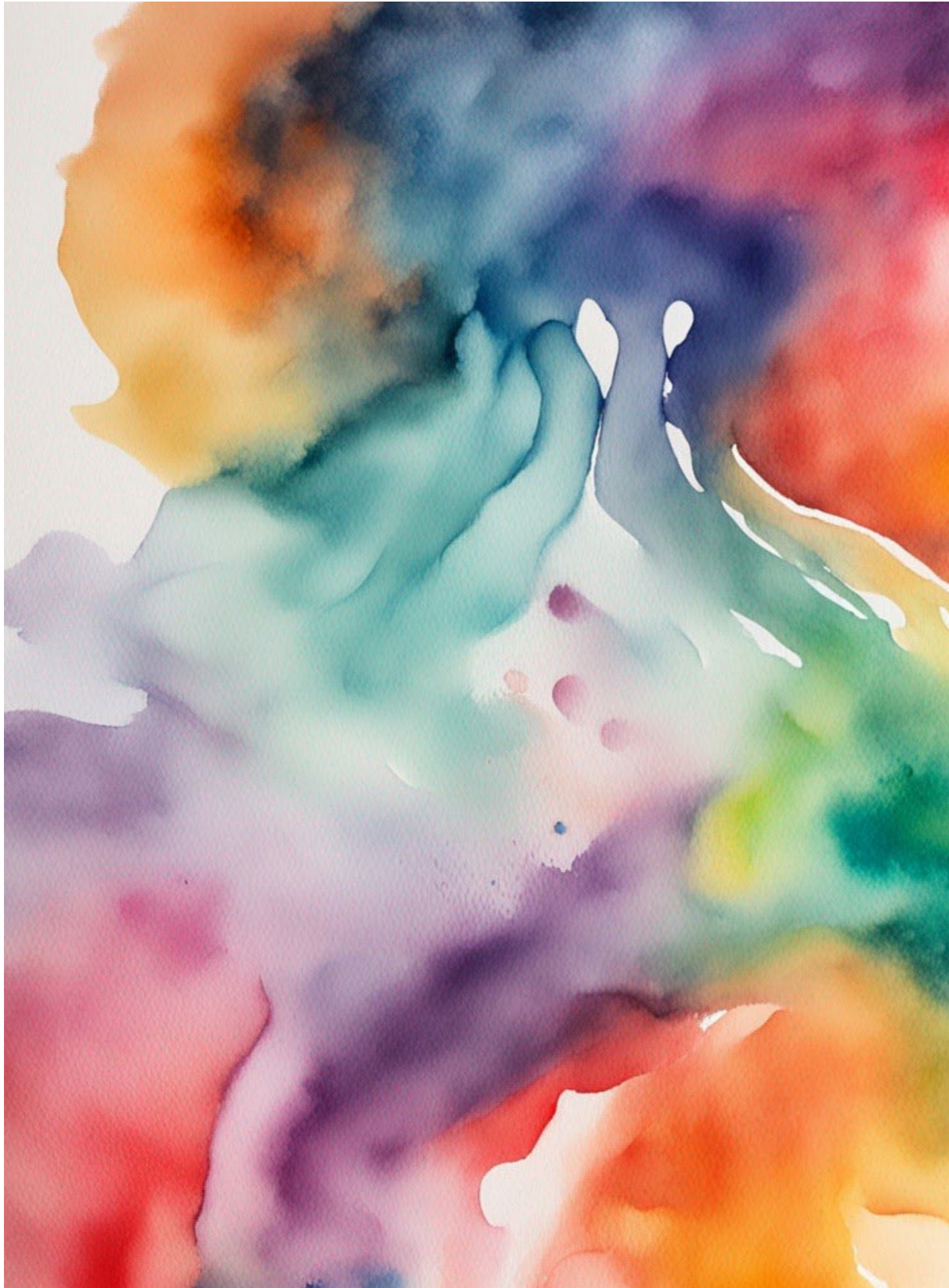
The main purpose this study is to initiate a discussion on the concept of border and to trace the effects of the spaces we live in on our individual/social border experiences. It is done by comparing and analyzing two housing projects selected within the scope of the Case Study, one in Lund (Sweden) and one in Istanbul (Türkiye), and summarizing the reflections of these analyses. Ultimately, the case study hopes to initiate an investigation and provide some clues as to the different social and cultural meanings that our definitions of boundaries can take in our homes, based on our past experiences of boundaries.

This thesis project investigates the impact of the borders we live in and the social, cultural, economic, geographical, etc. conditions within the borders on the design of the houses we live in and on the individual, through the definition of “border”. In addition to theoretical studies on issues such as boundary definitions and experiences, housing design, it is envisaged to compare and analyze the two selected projects based on the focused boundary definition.

Key words : border, culture, experience, housing

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1. Introduction

*You can be a citizen or you can be stateless,
but it is difficult to imagine being a border...*

André Green (Green, 1976)

Background

Throughout my life, I have had the opportunity to live in 5 different countries, 10 different cities, and dozens of different residences, sometimes for my family's work, sometimes for my education, and sometimes for my own business life. The different cultures, countries, cities, and homes I experienced led me to think about the definition of "border". At the beginning of this process, I had no idea how much it would affect me in the future. I realized that these different home, city, country and cultural experiences sometimes changed and sometimes expanded my thoughts in the long run. This awareness started when I realized that when starting a new experience, I was looking for traces of my previous experiences. Especially when I started the process of finding a new rental house, I realized that I had different desires each time. In some of them, I was looking for big windows like the house I lived in in Sweden, in some of them, I was looking for a building with a courtyard, like the house I lived in in Paris, and in some of them, I was looking for big balconies like the house I lived in in Türkiye. Sometimes I even expected to find them all in one house. So I realized that my new choices are now shaped in line with my previous experiences.

As I realized that the "borders" and "border definitions" we have and experience affect our daily lives more than we expected, I started to think more about the boundaries of the houses we live in. Because I realized that each house I experienced carries traces of the country, culture and lifestyle it is in and that these traces affect our daily life rituals. This awareness led me to do more research on the boundaries we have, our individual boundary experiences, our boundary definitions, and the homes we live in.

the cities I live in..



‘The reciprocal unity and functional relationship of every element to every other one gains its spatial expression in the enclosing boundary’

Simmel (1903), p. 141.

Purpose & Aim

The basis of this study is to investigate the impact of the borders and border conceptualisations we have or live with on the houses we live in and our life rituals in these houses. As individuals, we spend a significant part of our lives indoors or in residential areas. It is therefore necessary to analyze these spaces we live in, evaluate them critically, and investigate their effects on us and our effects on them. While understanding the role of our personal identities and cultural lifestyles in shaping the spaces we live in helps us better understand the spaces we live in as individuals, it is aimed to accompany and contribute to our design processes as architects.

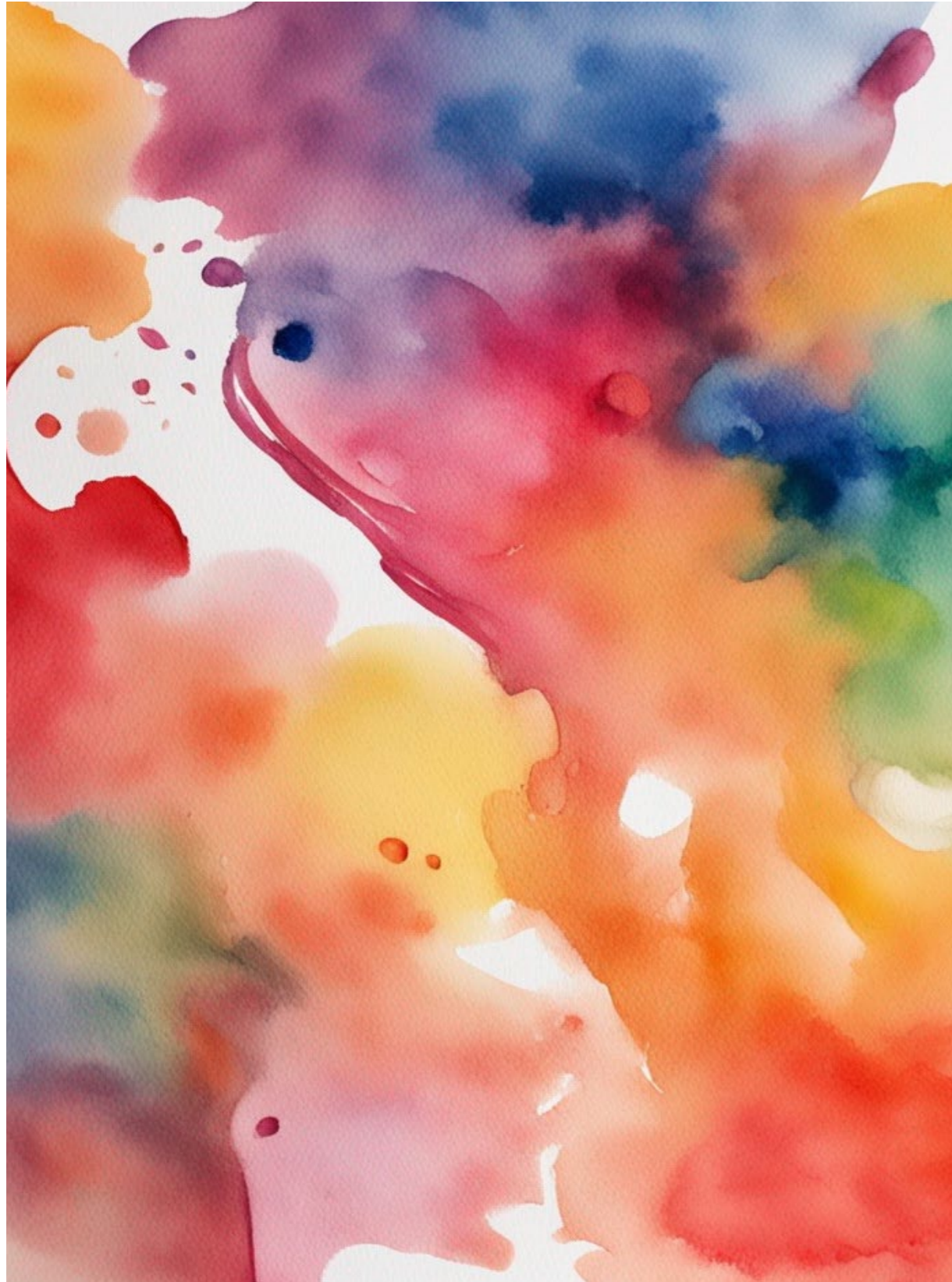
The main purpose of this study is to initiate a discussion and trace some of the effects that individual/social border conceptualisations have on the spaces we live in and vice versa. This is done through a comparison and an analysis of two housing projects, one in Lund (Sweden) and one in Istanbul (Türkiye). In the end, the case study hopes to initiate an inquiry and give some clues to the different social and cultural meanings that borders can take in our homes.

Approach

During the thesis process, firstly, theoretical research will be conducted on the definitions of the word “border”, including its dictionary meanings, philosophical approaches and examples of experiences selected from around the world under the title of “border”. After the analysis and inferences to be made based on these definitions and research, the word “border” will be defined to focus on and then guide the planned project analysis.

The defined concept of border will be questioned through two projects selected from Sweden and Türkiye. The reason why the projects selected for review are from Sweden and Türkiye is that the research areas in both countries are currently accessible and experienceable for the researcher. Within the scope of this research, it is envisaged that the analysis and comparison of two housing projects selected from Sweden and Türkiye will be made based on this definition. In order to deepen the analysis, it is envisaged to examine the country’s social housing history.

Finally, I will summarize the definition of “border” that I traced within the scope of my research and investigations and the points and moments I encountered in the houses I examined within the scope of the case study.



2. Research & Characterization Phase

2.1. Research Through The Word of Border

In this study, where we examine the border, border experiences and the effects of the border, it is important to conduct various source research in order to ground the concept of border as the first step of the research. In this regard, first of all, the meanings of the word “border” in various dictionaries were examined and listed. Afterwards, the research on the concept of border was deepened with space readings that included the philosophical approaches of philosophers. While these studies form the basis of the study, they also show that the concept of border has been a subject of debate throughout human history.

1. Definitions

The word “border” is a word we use frequently in daily life. This word is used in many different areas. In addition to using this word, it is a concept that we experience at every moment of life. The word “Border” is a word of Greek origin. In Britannica dictionary searches, the meaning of the word “border” is listed as follows:

1. noun / the line separating the lands of two neighboring states; border.
2. noun / the line separating the lands of neighboring provinces, districts, villages or individuals.
3. noun / the last line from which something can spread or expand; fly, had
4. noun / the lowest and highest place where something can go down or up in terms of quantity; limit.
5. noun, mathematics / a static quantity to which a variable quantity can approach as much as desired; limit.
6. noun / brink; verge.
7. noun / a decorative design along the edge of something
8. noun, horticulture / a narrow bed of plants along the edge of a garden or walk
9. noun, theater / a narrow curtain or strip of painted canvas hung above the stage, masking the flies and lighting units, and forming the top of the stage set
10. verb / to be next to (a country, state, or area)
11. verb / to define the edge of (something)
12. verb / to put a border on (something)

Although the concept of border is generally defined as the end of something, it also defines an area or line that every living thing needs. There are limits to everything a living thing experiences. The concept of “boundary” is experienced in every field, from the cells that make up a living thing to a baby in the womb, from the house we live in to the countries we travel to.

Each “border” contains a personality, character and culture within itself. In moments when we experience a boundary, it is inevitable to interact with it. Therefore, the areas we define as borders form an intersection, and the wealth arising from the intersection of the two areas we separate continues to nourish the individual.

2. Philosophical Approaches

The concept of boundary has been a subject of debate among philosophers. Each philosopher has defined this concept differently. Some philosophers’ definition is defined in terms of refuting another’s. Several philosophers have discussed borders in relation knowledge. For example, Spinoza says that to define is to border. He argues that to say what something is is to say what it is not, thus bordering that thing to what it is not.

Kant argues that there is a border to knowledge and that we do not know / cannot know beyond this border. According to Kant, the source and limits of knowledge must be determined and determining the boundaries of the mind, which will make it possible to determine these boundaries, is the most difficult but most necessary one. (Guyer, 2005) Hegel, on the other hand, opposed Kant and argued that to become aware of the border, we need to know what is beyond that border, and that knowing a border means knowing what is beyond that border. (Hegel, 1979)

Simmel (2013: p. 81) argues that the limit (border) is not a spatial fact with sociological effects, but a sociological fact that takes its shape spatially. Also he mentioned that within the limits of a city, there can only be that city; and if by chance, a second one emerges within these same limits, then they are not two cities on the same ground and the same land, but in two territories once in fact united, but now separated. (Simmel, 2013: p. 77)

‘There is a a wall between you and me. I see you, I talk to you, but you are on the other side.’

(Jean Paul Sartre, 1939).

2.2. Research Through The Experience

While the border experience can sometimes have only a personal impact, it can sometimes also turn into a social experience. These social experiences could bring the meaning of the concept of the border into a much broader framework. In this context, the “border” also has the power to create an environment of social discussion, development and awareness.

Although the border is seen as an area that separates two parties, it is also a concept that leaves the two parties in a position to interact with each other, to be aware of each other, and to feed on each other. This state of “intersection” creates an inevitable interaction area, and each interaction has a social reflection. Society sometimes sees the effects of these reflections instantly, sometimes years later. However, after this interaction, both “sides” are different from before.

2.2.1. Melilla Border Fence

The Melilla example is an important example of the inevitable interaction and awareness between the two sides of the border, while being completely different from each other.

Melilla and Ceuta are cities in Spain’s North African lands. According to the Spanish constitution, the cities of Melilla and Ceuta have autonomous province status. The area forms the Morocco-Spain border and is the only region connecting Europe and Africa by land. This border is protected by a wall financed by the European Union. According to information on wikipedia the wall is a 3-stage, 7-meter high and 10 km long steel wall.¹ Even though there are cutting and injurious fences on the wall, as well as radars and security cameras, thousands of people are still trying to cross this border.



Fig.1 : The Border

Photograph: José Palazón/Reuters

¹ Melilla Border Fence, accessed: 25.03.2024, URL : https://en.wikipedia.org/wiki/Melilla_border_fence

2.2.2 6 February 2023 - Türkiye Earthquake

Türkiye has been struck by several earthquakes with magnitudes of 7.7 and 7.6 on 04.17am 6 February 2023. 10 cities and countless people were affected. More than 50.000 people died and 107213 people were injured.²

For the people who survived, their lives did not continue where they left off. The lives they built with hard work have changed. For example, the house/boundary/private area that they have chosen, built, or perhaps even designed, changed within a day, and this was out of their own choice. The houses/borders they lived in turned into a tent in a tent city the next day. Now new boundaries are being redefined for them. The border continues its dynamism. After staying in tent cities for a long time, people started to turn those areas into their own homes, neighborhoods and playgrounds. This comes from the inevitable boundary-defining need that the living creatures have. The innate needs of the living being for protection, feeling safe, ownership and ownership bring with it the desire and power to transform the area in which it lives.



Fig2-3: Life in Tent City Photograph: Murat Şengül - AA



Fig4: Hatay, before and after the earthquake

² 6 Şubat'taki depremlerde can kaybı 50 bin 500'e yükseldi, accessed: 25.03.2024, URL : <https://www.bbc.com/turkce/articles/c51kdv8d15jo>

2.2.3 Transparent Facades in Architecture

”Border” is one of the most basic concepts in architecture. It is a definition that we sometimes underline, sometimes destroy, and sometimes make transparent. Making a border transparent actually means, in a sense, underlining it and highlighting it. Because the permeability we create on that border leads us to curiosity and inevitable knowledge about the other side of the border. The architect uses making the facade transparent, which is a widely used method in architecture, especially in public buildings, as one of the methods of increasing the invitingness of the space. This permeable border drawn between the viewer outside and what is experienced inside turns into an inevitable area of interaction for people on both sides of the border.

In the nursery project (see fig.5) in the first example, the facade serves as an interface between the outside world and the inside. While it enables children to interact with the sky, trees and surrounding buildings, it allows us to share in the dynamism inside from the outside.

In the second example (see fig.6), where we see a different interpretation of the concert area, the architect designed a permeable façade, allowing us to visually share with human movements in addition to the rhythm of the music and our auditory senses.

Pompidou (see fig.7), which contains a large public library and a modern art museum, highlights the dynamism inside with its permeable and dynamic façade. The facade, which is almost like a painting presented to the square in front of it, makes the viewer outside eager to experience the building.



Fig.5 : the Nová Ruda kindergarten in the Czech Republic.



Fig.6 : Assemble's 'newcastle' theater pavilion in Belgium

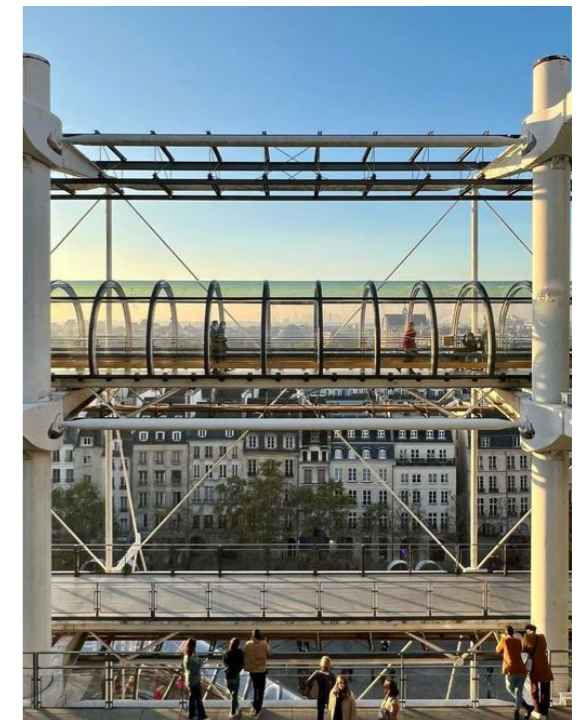


Fig.7 : the Pompidou Centre in Paris

2.3.Characterization of Border

In the reseaches it is noticed that the definitions, discussions and experiences of the concept of “border” generally focus on the meaning of the border “separating two areas”. However as seen in the examples the “border” it also carries strong meanings such as “*meeting*”, “*bringing together*” and “*interaction*” to an extent that is worth focusing on.

In this section, the concept of boundary is defined by the researcher as a result of the research conducted and the researcher’s individual experiences.

Defining “Border” as a space of “Interaction”

Boundaries define relationships, communication and interaction for us. The border of a house, a room, a country or a body... They are all in constant interaction with both sides of the “border”. This is where the power of borders comes from. This interaction may vary depending on each person/situation. However, no matter how much we resist, from the moment we experience that border, we are different from the previous moment, the border has affected us, and we have affected the border. Maybe we are affected by adding, maybe subtracting, maybe transforming. The colors we carry differ; sometimes we carry two colors at the same time, and sometimes we mix with the color on the border and the color on the other side of the border to create a new color. In any case, this interaction is inevitable. Therefore, as a result of this research, the researcher defines *the border as a space of interaction*. And to describe this interaction, colors are used with the watercolor method.



Interaction of Colors

It contains the power of “being one” and “coming together” within every border we define. Our interaction with each boundary we create, suggest, or created by others varies for each user. The user’s experience also varies depending on the defined limit. This is where the importance of drawing boundaries and definitions in architecture stems from. While the architect draws the boundaries, he plays a very important role, such as defining the individual’s home life with the street, darkness with light, a culture with value, and the individual with society. For example, the boundaries defined by the architect for the user might define/guide the user’s relationship with the sun or the street. Each definition affect the user’s experience of meeting the “border” and the other side of the “border”.

Housing Design

Defining a boundary is making a statement about an experience, a culture or geography. Our instinct to draw boundaries, the way we define those boundary, may change even within the moment we draw that boundary.

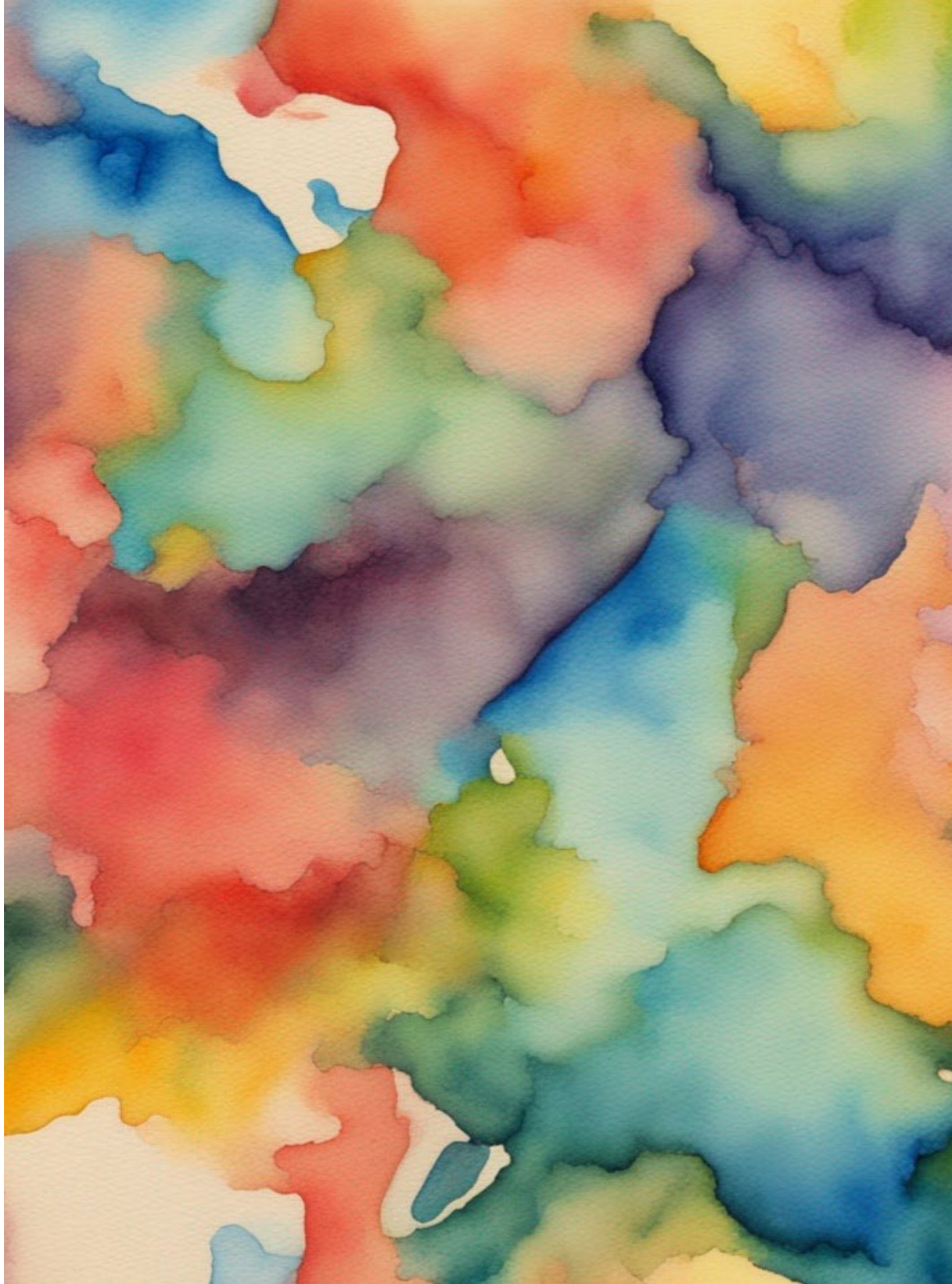
As an architect when we design a house, we define a boundary between the outside space and the life inside. However, we question that limit at every step of the design. We aim to carefully establish a balance between home life and the outside. This intersection is perhaps one of the most critical roles in the design phase.

The houses we live in contains much more data than numerical data such as the number of rooms/balconies and area sizes. It also contains information such as the culture, lifestyle, political perspective, geography and climate information of that country. In addition, we, who live in these houses, transform in line with this information and definitions, and sometimes we transform the space we live in in line with our own knowledge and experiences. The border is in constant change, and both sides of the border are involved in this change, as is the border itself. Considering this state of constant interaction, the situation of “proposing a border” perhaps represents both the most difficult and the most meaningful form of producing an architectural project. Therefore, every word an architect says in a design, every boundary he/she draws, bears traces of every “border” that was previously defined, presented, and given the opportunity to experience.

While defining a boundary, the architect blends factors such as his own experiences, boundary definitions, imagination, and project data with the client’s ideas, dreams, history and perspective, and reveals an enriched result of the perspective of many experiences. Therefore, the boundaries that are thought to be designed only through the architect’s opinion, contrary to what is thought, bear traces of the countries where the architect was born and lived, the houses, his/her experiences, the schools he/she attended, the people he/she worked with, and his/her customers. Therefore, every border the architect draws becomes enriched with every border he/she touches. This border may sometimes appear as a person, sometimes as a different project, and sometimes as a country.

In this respect, I believe that a project/apartment review contains many definitions, results, traces, memories and experiences in addition to numerical data. Therefore, analyzing the user’s experience within the structure is valuable to understand the project.

For this reason, it is valuable that the projects chosen from the two countries are up-to-date projects that were made in line with state or municipality control/need/demand, in order to follow these traces more clearly. Thus, during the comparison, we will also gain information about the administrators’ perspective on the needs of the people and how the architect reached a conclusion regarding the demands he presented to the architect. reached a conclusion regarding the demands he/she presented to the architect.



3. Case Study

The defined concept of border “as a space of interaction will be questioned through two projects selected from Sweden and Türkiye. At first, to deepen the analysis, it is envisaged to examine the country’s housing history. Then information about the projects will be given under certain headings. The selected headings (Idea, Site, Scale & Construction Process, Plan Types, Design Inputs) were chosen to support the defined border concept and the analyzes to be carried out at the end.

Consequently, the definition of “border” traced within the scope of research and investigations, the points and moments encountered in the houses examined within the scope of the case study will be summarized and analyzed.

A Research Through The Housing base on Sweden and Türkiye

The houses in which we spend most of our lives contain many traces of the country they are located in and the history of that country. Before evaluating a housing project, in order to make that evaluation correctly, the housing/urbanization history of the country to which the house to be evaluated belongs should be examined in parallel. In this regard, before examining two projects selected from Sweden and Türkiye within the scope of the case study, it was planned to examine the events that played an important role in the housing/urbanization history of the countries. For the project in Sweden, a research was conducted on Million Programme, while for the project in Türkiye, a research was conducted on Toki and the establishment of Toki.

1. Swedish Housing - Million Programme

After the 1930 Stockholm exhibition, the first Swedish modern architecture manifesto was published. This manifesto was created by the chief designers of the exhibition and important Swedish architects of the period.

In the manifesto, the authors argued that Sweden was unable to partake in the transformative social and technological advancements occurring in Europe in the early 20th century. They advocated for a functionalist approach in the production of housing and consumer goods. They emphasized the importance of meeting the needs of modern society and individuals. This perspective significantly influenced the country's housing planning, construction policies, and views in the subsequent years.³

The governing Swedish Social Democratic Party launched the massive public housing initiative known as the Million Programme in 1965 with the goal of providing all Swedish residents with access to high-quality, reasonably priced homes. The program ran from 1965 to 1974. Over a ten-year period, the program aimed to build one million new housing units, which it successfully completed. It also demolished numerous older structures deemed unhealthy, dilapidated, or obsolete by national and municipal governments as part of its goal to modernize Swedish housing.

When planning the Million program, it took suburban neighborhoods such as Vällingby and Årsta as examples. The main aim was to create suitable areas to raise “democratic citizens”. In this regard, it was aimed to design high-quality schools, libraries, meeting points and public spaces. It was aimed to integrate and integrate household groups with each other through the use of common areas.



Fig.8 : Acceptera, cover of the manifesto

Most of the flats are designed as 75 m² for a sample family with two adults and two children. In addition, “student blocks” were built in cities (Stockholm, Lund, Uppsala, Linköping, Umea etc.) where large universities were located to meet the housing need.

Today, municipal real estate companies are rapidly continuing their housing projects. LKF is one of these companies. LKF continues its projects as the real estate company of Lund municipality.

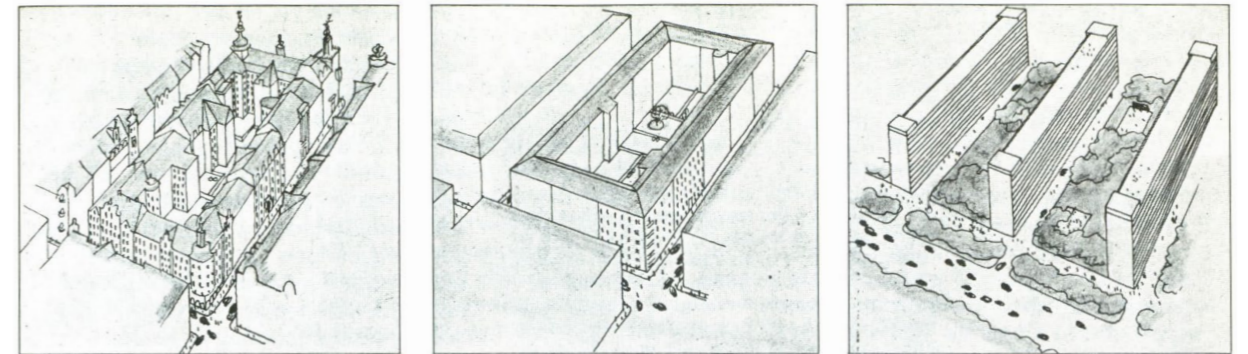


Fig.9 : The evolution of the housing block



Fig.10 : Västra Orminge, 1964



Fig.11 : Daily Life



Fig.12 : The standard kitchen in an apartment with 2 rooms&a kitchen.

³Wikipedia, Miljonprogrammet, accessed: 03.04.2024, URL : <https://sv.wikipedia.org/wiki/Miljonprogrammet>

2. Turkish Housing - Social Housing and TOKİ (housing development administration of türkiye)

The rate of urbanization in Türkiye was quite slow from the declaration of the Republic in 1923 until the 1950s. However, the pace of urbanization increased with the investments made in this process. The population, which tended to increase during this period, played an important role in increasing the urbanization rate and the housing need in direct proportion to it, especially after 1950.

However, in the face of rapidly increasing population and increased migration from rural to urban areas, sufficient housing could not be provided to citizens. One of the main reasons for this is that although Türkiye did not participate in World War II, it could not allocate sufficient resources to housing construction during the war due to the resources allocated to defense.

Article 57, under the title of Right to Housing in the 1982 Constitution, states: “The State takes measures to meet the housing need within the framework of a planning that takes into account the characteristics of cities and environmental conditions, and also supports mass housing initiatives.”⁴ The law, a concrete step has been taken to meet the housing need.

According to the Mass Housing Law, it was aimed to meet both housing and financing needs, and TOKİ (Mass Housing Development Administration) was established in 1984. TOKİ’s aim is to meet the need for social housing in the needed regions of the country. The main purpose of the institution is to meet the qualified housing needs of low, low and middle income citizens³. In addition, it has included projects such as disaster housing applications, slum transformation, and agricultural village applications in its activities. TOKİ aims to create healthy living spaces at low cost in social housing applications. The majority of the projects are built in areas far from the city center, where suitable land is available.

TOKİ completed its initial target of 500,000 houses as of 2011. It will reach its target of 700,000 new houses by 2023, and has built 1,200,000 houses since its establishment.⁵

The typologies of many of the housing projects produced by TOKİ are similar to each other. TOKİ, which has included the “Neighbourhood Concept”⁶ among its basic production approaches in recent years, is based on the sustainability of social solidarity with this style of production and aims to realize housing production in a way that meets social needs in this direction.

Social housing projects under state control in Türkiye are built by TOKİ. In addition, the construction of social housing projects continues rapidly through construction companies affiliated with metropolitan municipalities. KİPTAŞ is one of these companies, it was established as a subsidiary of the Istanbul Metropolitan Municipality, which was established in 1995, and has produced over 80,000 houses as of 2024.⁷

⁴ Constitutional Court of the Republic of Türkiye, accessed: 24.04.2024 URL : <https://www.anayasa.gov.tr/tr/mevzuat/anayasa/>

⁵ TOKİ, accessed: 03.04.2024 URL : <https://www.toki.gov.tr/sosyal-konutlar>

⁶ Neighbourhood Concept, accessed: 24.04.2024 URL : <https://www.toki.gov.tr/sosyal-konutlar>

⁷ KİPTAŞ, accessed: 03.04.2024 URL : <https://www.kiptas.istanbul/hakkmzda>

Gränden

Gränden is a densification project located north of the city center in Lund, Sweden. The project, built on behalf of Lund's municipal real estate company LKF, developed the Offerkällan neighborhood where it is located with 8 new buildings. The project includes sheltered housing units and community facilities in addition to the apartments. While the project met the existing housing need, it also enabled the area to be organized in a more useful way for all residents of the neighborhood.⁸



Fig.13 : Gränden Project

Project name : Gränden

Location : Lund, Sweden

District : Norra Fäladen

Status : Completed / 2018-2022

Client : LKF

Architect : In design stage - FOJAB arkitekter, In detailed design stage: Hultin & Lundquist AB (buildings 1-6) NP Arkitekter KB (buildings 7-8)

Number of apartments: A total of 153 apartments and 10 serviced apartments.

Scope : 11.300 m², approx. 150 apartments, 16 sheltered housing units and community facilities.

Award : Named the best new construction project in the public sector in 2023.

Finalist for the CBA Housing Award 2023

Silivri 4th Stage Social Housing

Silivri 4th Stage Social Housing Project is based on the idea that everyone has the right to live well and live in quality housing. Located on an area of 95,318 square meters in the Silivri district of Istanbul, 67 km west of the city center, on the coast of the Marmara Sea, KIPTAŞ Silivri 4th Stage Social Housing Project consists of 1396 residences, as well as social facilities and a large landscaping area.⁹



Fig.14 : A view of the project from the landscape, Silivri 4th Stage Social Housing Project

Project name : Silivri 4th Stage Social Housing

Location : Istanbul, Turkiye

District : Silivri

Status : Completed / 2020-2022

Client : Istanbul Metropolitan Municipality

Architect : PDG Architects

Number of apartments: A total of 32 blocks and 1396 apartments

Scope : 95.318,53 m² m², approx.

50 commercial units - 1 nursery and community facilities.

Award : IDA – International Design Awards 2020

Bronze Award in the Low Cost Housing Category

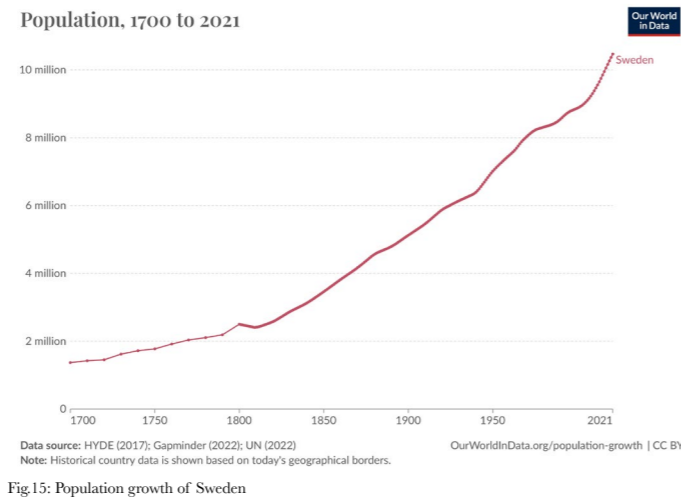
⁸ Gränden, accessed: 14.03.2024 URL : <https://www.anayasa.gov.tr/tr/mevzuat/anayasa/>

⁹ Silivri 4th Stage Social Housing, accessed: 14.03.2024 URL : <https://www.pdgimimarlar.com/silivrifourthstage>

Idea

Gränden

With increasing population and immigration, the need for housing has increased in Sweden, as in many countries. Lund is one of Sweden's cities with a steadily rising population. A significant portion of the population of the city, which includes Lund University, one of the top 100 universities in the world, is made up of students.



The Gränden project is one of the initiatives undertaken by the municipal real estate company LKF to address the housing needs in Lund. What makes the project valuable and also one of its most important inputs is that environmental planning and landscape design decisions are taken by taking into consideration not only the users who will live in the new buildings, but also the users who already live in the neighborhood where the project is located.¹⁰



Fig.16: Worksite visits Photo : Sara Johari

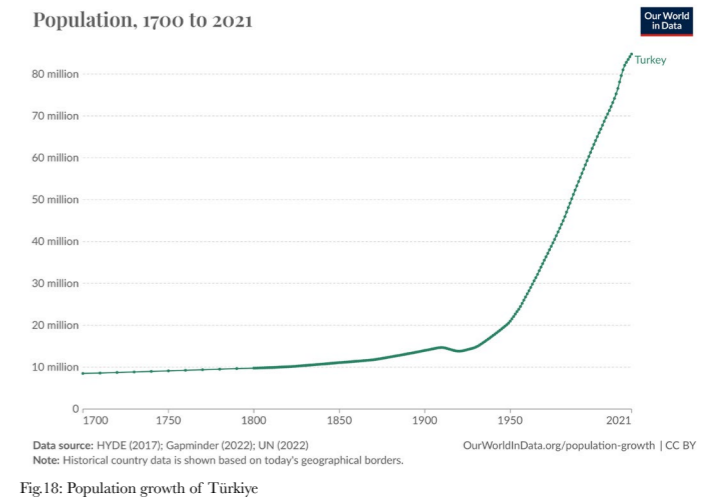


Fig.17: Marches of the worksite

The aim of the Gränden project is to add value to this region while meeting the housing need and to create more useful and safe public spaces by taking into account the wishes of the existing users living in the region. The opinions of the surrounding residents were taken before and during the construction process. The area, which was previously just a deserted parking area, has been transformed into a qualified urban space. In order to achieve these goals, priority has been given to benefiting from the qualified features of the region and improving unusable areas. As a result, in order to meet the need for both housing and quality public space in the neighborhood, qualified public space developments were made in Offerkallen and 8 new buildings compatible with these public spaces were built with the same care. Importance was given to making these structures from long-lasting, durable materials.

Silivri 4th Stage Social Housing

Istanbul is the most populous and immigrant-receiving city in Türkiye. Istanbul, constituting 18.34% of Türkiye's population.¹¹ According to the latest data, Istanbul is a city with an average population of 15.6 million and is also located in the 1. degree earthquake zone. The population and, in parallel with it, the need for housing continues to increase day by day.



Silivri 4th Stage Social Housing is one of the social housing projects built on behalf of KİPTAŞ, an organization of the municipality, in order to meet this need and produce earthquake-resistant residences. Project idea: "Everyone has the right to live well and live in quality housing." emerged with the idea. The main purpose of the project is to produce aesthetic and livable residences that can appeal to all income groups.



Fig.19: The view of the Project



Fig.20: The landscape connection between water and the buildings.

The design process of the project was shaped in line with surveys with the participation of the people of Istanbul from the very beginning. In line with the surveys, user requests were analyzed and integrated into the design. The participants' ideas, dreams and wishes guided the project throughout the project process. In order to ensure the integration of the project, which is 67 km away from the city center, to its location, a neighborhood culture fiction was aimed in the design and the landscape design was evaluated as a public space to be added to Silivri. The project aims to enrich the neighborhood culture with the commercial units and nursery program located.

As a result, 32 buildings with landscape areas aimed to integrate with the rest of the city were built in Silivri in order to meet both the housing and public space needs of the city.

¹⁰ Gränden, Norra Fåladén, accessed : 23.04.2024 URL: <https://www.lkf.se/vara-omraden/lunds-stad/norra-faladen/granden/>

¹¹ Population growth of Türkiye, accessed : 23.04.2024 URL: <https://data.tuik.gov.tr/Bulten/Index?p=The-Results-of-Address-Based-Population-Registration-System-2023-49684&dil=2>

Site, Construction Size & Process

Gränden

Offerkallen is an area in Lund where housing built under the Million program is located. The area where two-storey buildings (see Fig.21) are generally found is in the north of the city of Lund. The area is also only 4 km from the city center and within walking distance of Lund university campuses. Gränden is a densification project in the Offerkällan area in Lund.



Fig.21 : Two-storey Offerkällan houses



Fig.22: A photo from daily life, Gränden

The aim of meeting the housing needs and public space improvements of the region was effective in determining the location of the project.

The opinions of the surrounding residents were taken before and during the construction process. Before the construction process of the project, marches were organized with the participation of neighborhood residents, LKF personnel, security guards, police and municipality personnel. In addition, visits to the construction site were organized with tenants from the surrounding area during the construction period. All these processes supported the project's establishment of belonging with the neighborhood and the adaptation of the neighborhood residents to the project. The aim was to organize/design the streets and common areas in the region in a way that will provide a safer environment and increase their use.¹²

The Project includes 8 buildings, 153 apartments and 16 sheltered housing units and community facilities. The project is approximately 11,300 m². The fact that the project is an densification project has effects on the construction process. Buildings to be added to the neighborhood, where there is already an active daily life, need to be more careful during the construction process. The construction process took approximately 4 years, and the construction started in 2018 and was completed in 2022.

Silivri 4th Stage Social Housing

The majority of social housing projects in Türkiye are built on state lands, far from city centres. One of the important reasons for this situation is the need to find an area of suitable size and condition to carry out a project at a scale that can meet the excess housing need within dense urban textures. Another is to prefer more affordable land to finance large-scale projects.



Fig.23: A photo from daily life, Silivri 4. Stage Social Housing



Fig.24: A site photo of the project

Again, one of the aims of this choice is the healthy growth of the city and the implementation of urbanization policies. The place of such large-scale projects in the urban fabric is important. And it is aimed to bring the planned city vision to the location of the new projects. Due to its geopolitical location, Türkiye is located in active earthquake zones. In this case, it becomes a very important factor in the site selection of new projects.

Istanbul is Türkiye's most populous and most immigrant city with a population of 15.6 million. The scale of social housing projects carried out to meet such a housing need is accordingly large. And again, with the instinct of meeting this need as soon as possible, it is aimed to shorten the construction processes as much as possible. In addition, mayoral elections in Türkiye are held every 5 years. It is important for construction companies that are affiliates of the municipality to complete the projects initiated by the current administration within this 5-year period in order to avoid disruption of the project processes.

Silivri 4th Stage Social Housing project is 67 km away from Istanbul city center. The project includes 32 buildings, 1396 apartments, an additional 50 commercial units and a nursery. The construction area is 95,318m² and the construction of the building started in 2020 and was completed in 2022.¹³

¹²Gränden, Norra Fåladén, accessed : 23.04.2024 URL: <https://www.lkf.se/om-oss/nyheter/2023/lkf-projekt-granden-utsedd-till-arets-basta-nyproduktion-inom-allmannyttan/>

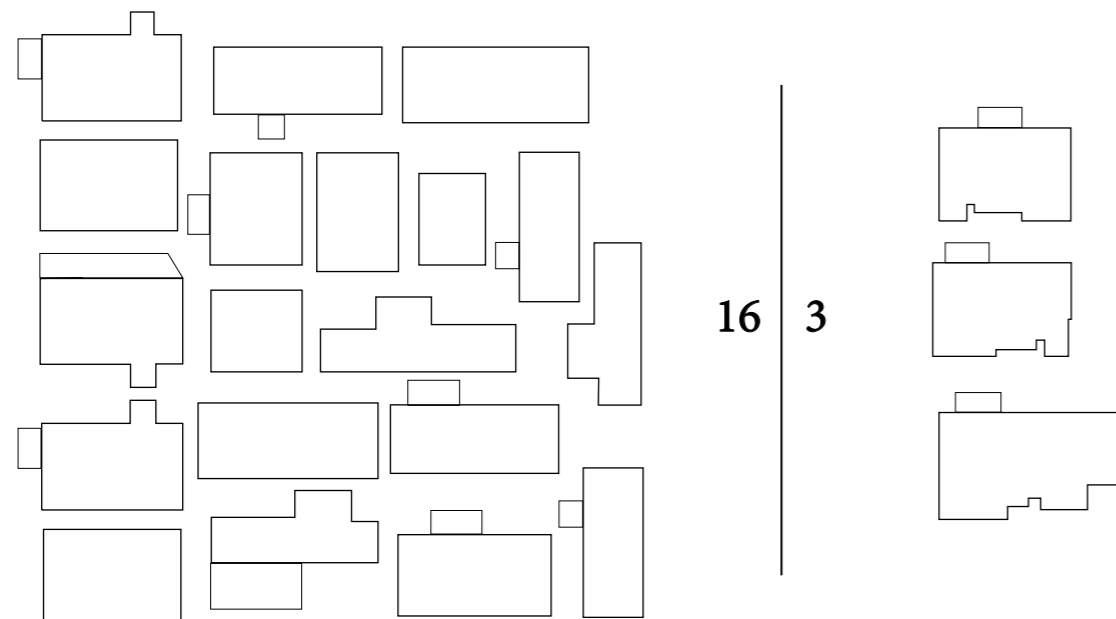
¹³KİPTAŞ Silivri 4. Etap Konutları, accessed : 24.04.2024 URL: <https://www.arkitera.com/proje/kiptas-silivri-4-etap-konutlari/>

Plan Types

Instead of following the same type, same square meter, same footprint in projects, following the equality of quality of life such as the same concept, target and social opportunities will create a more productive and efficient housing planning process.

It would not be right to consider the process of an architectural project, especially one carried out with state support/request, as independent from economics and politics. Generally, in cities or countries with high population density, a shortening of the construction period of the project can be expected in direct proportion to the increasing housing need. With these expectations, the teams that will carry out the project may develop a reflex to reduce the details.

When making this decision, it will be valuable to analyze the needs of the determined user profile, which may change throughout the life cycle, and use these data as input in the decision stage of plan types.



While there are 16 different plan types in 153 flats in the Gränden project, there are only 3 different types of 1396 flats in the Silivri 4th Stage Social Housing.

In architectural projects, it is important to create a basis for the user to feel belonging to the region, neighborhood and city. Including various plan types in projects allows the user to change the boundaries of the house he lives in more easily, according to his changing needs throughout his life. Thus, unless the user chooses to do so, he does not have to leave the building, project or neighborhood where he feels a sense of belonging and where memories and experiences have been accumulated.

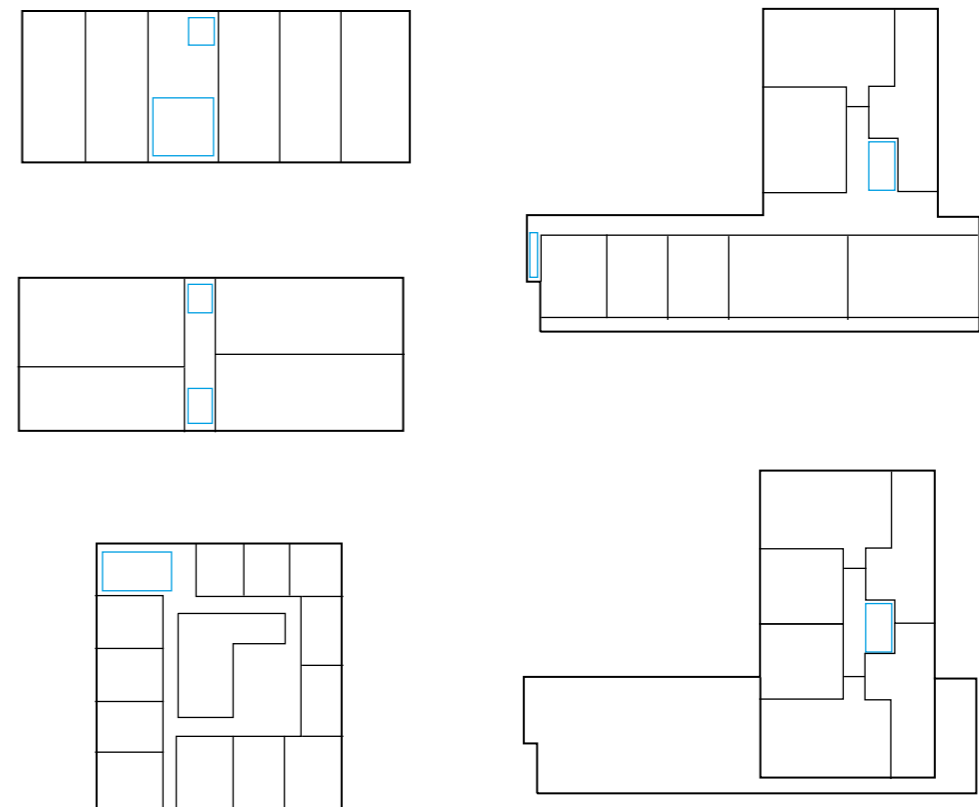
Offering different types gives the user a longer-term opportunity to choose the apartment and neighborhood he wants to live in.

Especially in social housing projects, it is important to plan the designs to meet the needs throughout life in order to create this sense of belonging and neighborhood culture.

In order to trace the interaction areas more easily in the plan diagrams, the building plan diagrams of both projects were examined first. Afterwards, in order to deepen this analysis, two apartment types with similar square meters were selected from each project and examined.

Additionally reading Mattias Kärholm's article was enlightening for me in understanding room types in Swedish residences and their changes over time. (Kärholm, 2019)

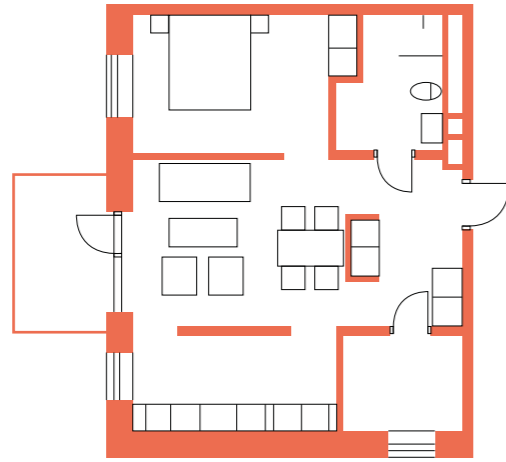
Gränden



The buildings are positioned to be compatible with the area where the project is built, to preserve the qualified characteristics of the region and to allow the development of the environment. It is aimed to improve the public space and route experiences of current residents. In this regard, public staircases located at the ground level of the buildings pass through the building and connect Sankt Hans Street with the existing farms on the upper level. This interconnection also contributes to the quality of the public space of the region.

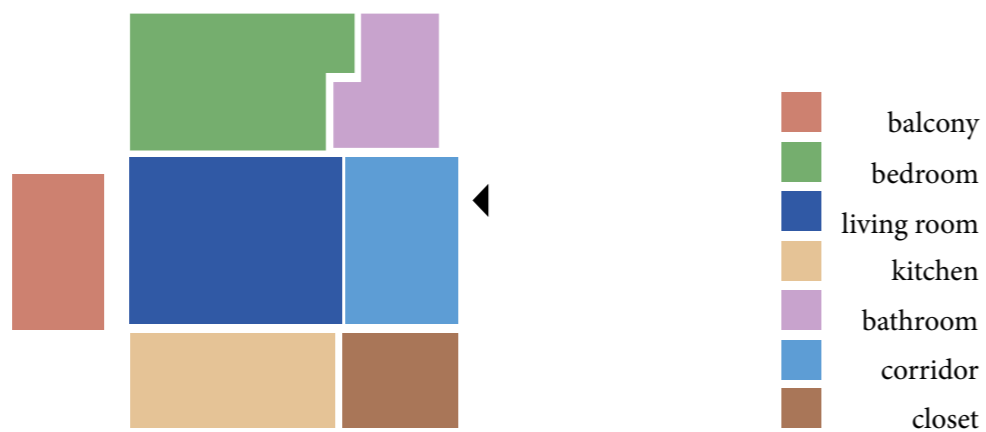
The project consists of a total of 153 flats in 8 separate buildings. The flats consist of 16 different types of flat plans. Buildings range from 2 to 8 floors. Floor plan schemes in buildings do not repeat each other on each floor and allow for different user scenarios. Although the internal circulation setup varies in buildings, the circulations are generally located in the center of the building.

Type1 - 63m² / Gränden



2 room and kitchen 63m²
ceiling height is 2.9m

The flat is planned as 2 bedrooms and 1 living room and is 63 m². When the flat plan is examined, it is seen that the living room functions as a central space. One bedroom and kitchen in the plan open to the living room. When looking at the space hierarchy in the plans, the hall is easily read as the largest and common space however the bedroom which is open to the living room is also large space. It is important to position the bathroom close to the entrance and bedroom. However, the fact that the bedroom opens to the living room can be re-evaluated in terms of user privacy. The one wall planned for the kitchen. All spaces have a rectangular plan type.



Type2 - 78m² / Gränden

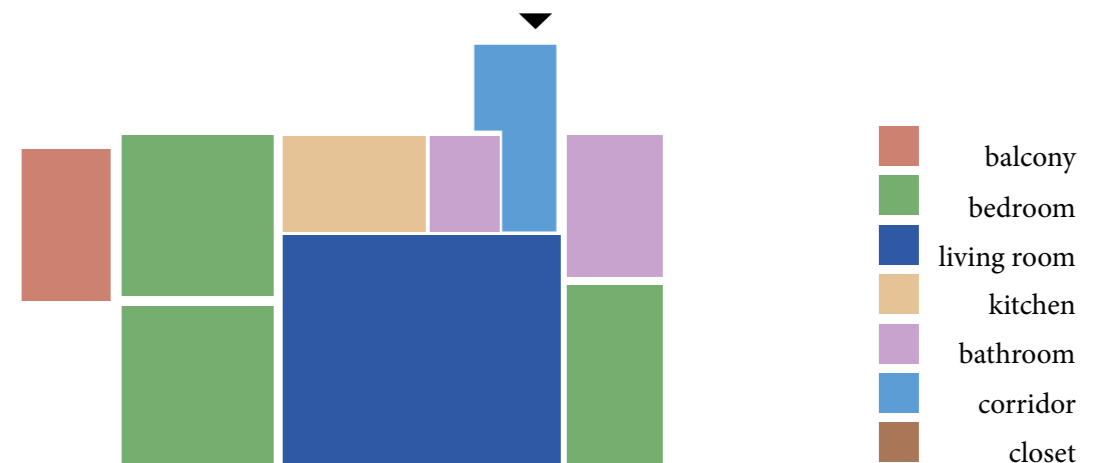


4 room and kitchen 78m²
ceiling height is 2.9m

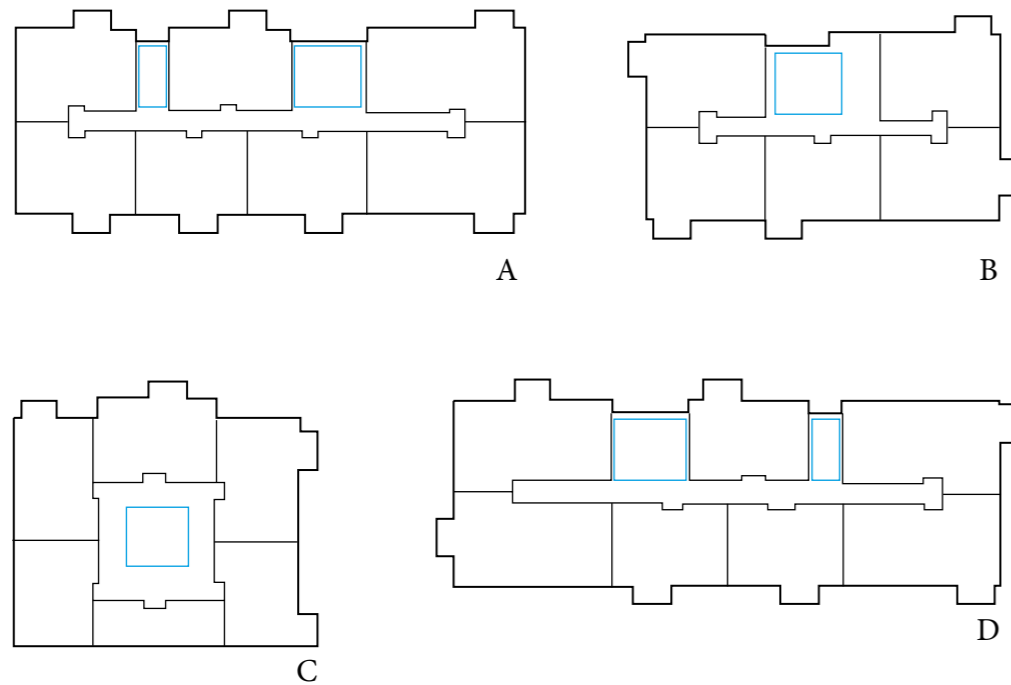
The flat is planned as 3 bedrooms and 1 living room and is 78 m². When the flat plan is examined, it is seen that the living room functions as a central space. Other programs in the plans open to the living room and access to the spaces is provided from here. When looking at the space hierarchy in the plans, the hall is easily read as the largest and common space. However, access to the balcony is provided from the bedroom. This choice limits the common area usage scenarios of the balcony. Due to its location, the kitchen is positioned in such a way that it can be separated from the living area and defined as a separate space, which is a choice often seen in Swedish house plans. The U-type planned kitchen allows for many alternatives when usage scenarios are evaluated.

The rooms are positioned around the central seating area. However, both the bathroom and toilet are located close to the entrance and far from the rooms. It is important to provide sufficient storage space in each room.

All spaces have a rectangular plan type. In line with the design decisions, it seems that a dynamic plan has been proposed that will allow for many scenarios, considering the location of the spaces.



Silivri 4th Stage Social Housing

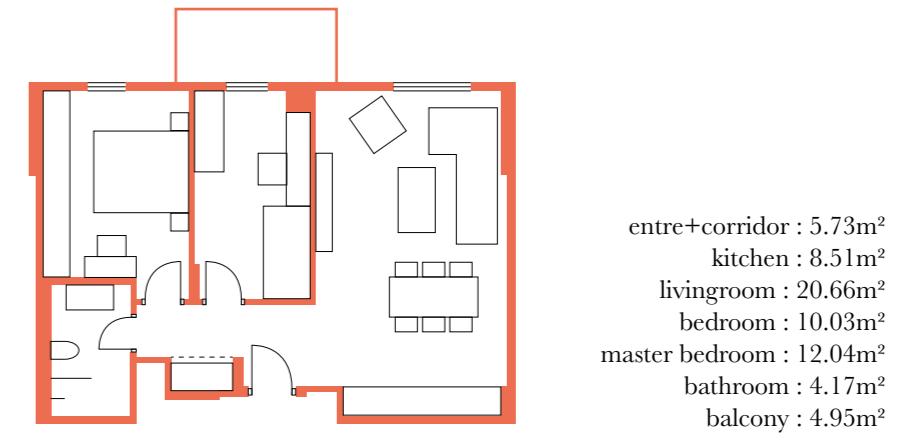


Examining the general plan diagrams of the blocks is valuable in terms of understanding and interpreting the user's journey within the apartment and the neighbor relations of the project.

The circulation inside the apartments of Silivri 4th Social Housing project is generally on a linear axis. Circulation is designed to provide easy access for the user to service axes, circulation vehicles and fire escapes. In the project, which aims to create a "neighborhood culture" in the environment and in the users of the project, the circulation and entrances of the apartments support the building users to come into contact with each other. These encounters will increase users' sense of belonging to their homes, buildings and even neighborhoods, and will enable mutual interaction.

The project consists of the repetition of buildings of types A, B, C and D (see in figure). There are 4 buildings of type A, 11 of type B, 11 of type C, and 6 of type D. While there are 7 flats on each floor in blocks A and D, there are 5 flats on each floor in block B and 6 flats on each floor in block C and the floor plans repeat each other. There are a total of 1396 flats in the project and these flats consist of 3 different apartments plan types.

Type1 - 62.93m² | Silivri 4th Stage



The flat is planned as 2+1 and its net area is 62.93m². When looking at the space hierarchy in the plans, the living room is easily read as the largest space. Access to the balcony is recommended from the bedroom. This choice limits the common area usage scenarios of the balcony.

Single wall type kitchen layout is available. The rooms are located at along the corridor, and the bathroom is positioned next to the rooms, allowing easy access from the rooms. The fact that the bathrooms and rooms do not directly see the living room and entrance contributes to the privacy of the home when preferred. All spaces have a rectangular plan.



Type2 - 83.63m² / Silivri 4th Stage Housing



- entre+corridor : 9.62m²
- kitchen : 8.47m²
- livingroom : 24.13m²
- bedroom : 9.84m²
- bedroom : 9.01m²
- master bedroom : 12.74m²
- bathroom : 4.87m²
- balcony : 4.95m²

The flat is planned as 3+1 and its net area is 83.63m². When the flat plan is examined, it is seen that the corridor serves as a central space. Other programs included in the plans (such as kitchen, bedrooms, bathroom) open to the corridor, and transportation between spaces is provided through the corridor. The corridor in the apartment covers an area of 9.61m². When looking at the space hierarchy in the plans, the hall is easily read as the largest space (24.13m²). Access to the balcony is recommended from the living room, the common area where most of the time is spent during the day. Single wall type kitchen layout is available.

The rooms are located at the other end of the corridor, and the bathroom is positioned directly opposite the rooms, allowing easy access from the rooms. The fact that the bathrooms and rooms do not directly see the living room and entrance contributes to the privacy of the home when preferred. According to the current zoning regulations in Türkiye, the minimum room meter size to be included in the project is 8m². The sizes of the rooms in the project vary between 9 and 12.74m². All spaces have a rectangular plan.

In line with the design decisions, considering the location and size of the spaces, it can be seen that a function-oriented plan was made.



Design Inputs

Gränden

Located in the north of Lund, within walking distance of the city center, the project covers an average area of 11,300 square meters. The project was built as a densification project in the Of-ferkallan area, where there are already two-storey buildings. The project includes sheltered housing units and community facilities in addition to the apartments. One of the main goals of the project was to meet the current housing need, while also allowing the area to be organized in a more useful way for all residents of the neighborhood.

In every design decision, attention was paid to the harmony of the project with the existing neighborhood texture. While benefiting from the good qualities of the neighborhood, the problems of the region were identified and improvements were made. It is aimed to develop the neighborhood with high-quality public spaces.



Fig.25 : Site Plan of Gränden

The communication between Sankt Hans Street and the yards located at the upper level is strengthened by the buildings located along the road. At the same time, this communication has been enriched with the stairs passing through the buildings and the pedestrian bridges in the landscape. A safe urban street was created by creating alternative routes for vehicles, pedestrians and cyclists.

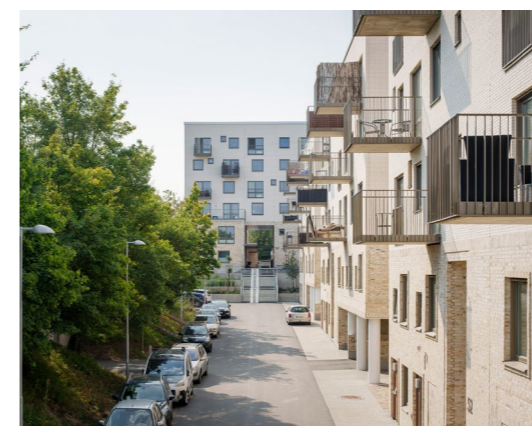


Fig.26 : The street view

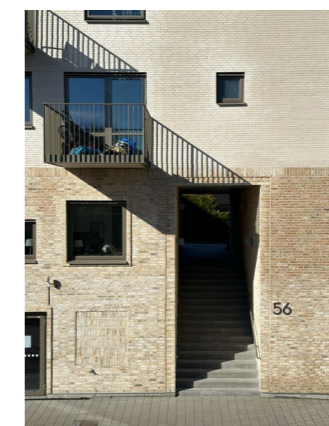


Fig.27 : Connection corrior between two level



Fig.28 : The bridges in the landscape



Fig.29 : The street view



The playground & bicycle parking



Fig.30 : One of public sitting area

While landscape decisions were being made, the existing pavement was widened and ground surfaces and lighting were rearranged in order to improve the public space experience of the users living in the area. All these arrangements, children's playgrounds, sitting and resting areas, and landscaping arrangements have been completed to appeal to the entire neighborhood.

Existing underground car parks continue to be used, and additional open car park areas have been proposed. There are no bicycle rooms in the project, but bicycle parking areas are defined in semi-enclosed areas. Laundry rooms that flat users can use are arranged in each building.¹⁴



Fig.31 : Parking places on the ground floor



The entrance of underground car park



Parking area

¹⁴Gränden, Norra Filaden, accessed : 15.04.2024 URL: <https://www.lkf.se/om-oss/nyheter/2023/lkf-projekt-granden-utsedd-till-arets-basta-nyproduktion-inom-allmannytan/>



Fig.32 : The interaction between the building and the street



Fig.33 : The ground floor flats

In the material selection of the buildings, care was taken to ensure that they were long-lasting and would wear well. At the same time, a harmony was achieved between the light bricks used on the facades of the buildings and the existing buildings in Offerkallen.

The flats located on the ground floor have a direct interaction with the neighborhood with their balconies opening to the street. The apartments defined at this elevation allow the plan types to be enriched with the alternative atmosphere they offer.

Balconies on the facades of the buildings are positioned asymmetrically, far from uniformity. In this way, it is aimed to provide maximum sunlight and visual communication.¹⁵ All apartments, except 3, have a balcony, French balcony or terrace. Some apartments have more than one balcony. However, balcony sizes are not the same in all apartments. Balcony sizes vary.



Fig.34 : A view from the facade



Fig.35 : A view from the facade

¹⁵Gränden, accessed : 15.04.2024 URL: <https://fojab.se/projekt/granden/>

Silivri 4th Stage Social Housing

Located 67 km west of the city center, the project covers an area of 95,318 square meters. It contains additional commercial units, a nursery and a large landscaping area. One of the main goals of the project was to design an organism that integrates with the city rather than a residential community with sharp boundaries. In this regard, care has been taken to preserve the existing neighborhood texture. The design is enriched with spatial suggestions that will provide an environment to increase the user's belonging to the neighborhood/project.



Fig.36 : Site plan of Silivri 4th Stage Social Housing

Design decisions such as the positioning of existing buildings, circulation routes in the landscape, commercial units and nurseries in the project have all been taken to support this goal. The vehicle and pedestrian routes proposed in the design were connected to the existing routes in the neighborhood, thus providing uninterrupted routes.

In the project, which is located on a sloping area, buildings are located in areas with a high slope, and areas with less slope are reserved for landscaping. Almost half of the parcel area was reserved for landscaping and social facilities, aiming to provide the city with a new, contemporary and accessible public space.



Fig.37 : A perspective from the landscape



Fig.38 : The walking paths in the landscape



Fig.39 : A playground & Resting areas



Fig.40 : The pool area

With alternative programs such as children's playgrounds, walking / cycling routes, pool areas and surrounding seating / rest areas located in the landscape, the landscape is intended to appeal to all age groups and serve as a meeting point.

Alternative circulation routes such as pedestrian, vehicle and bicycle paths supported by stairs and ramps have been defined in the landscape. In this way, the proposed landscape areas are ensured to be an urban area accessible to every user and every neighborhood resident. Open parking areas have been proposed at points in the landscape that will facilitate vehicle access to buildings.

The ground floors of the buildings located in the areas where the parcel meets the neighborhood are reserved for commercial units and social facilities. This again supports the adoption of the project by the neighborhood.



Fig.41 : One of the meeting points



Fig.42 : The pool area-2



Fig.43 : One of the common us terrace areas



Fig.44 : Common use terrace areas identified in different colors

In the project, terraces are defined at different elevations of the residential blocks. While this design decision defines a dynamic pattern for the building community within the neighborhood, it also defines a meeting and activity point for the users of the buildings. Terrace areas in each building were defined with a different color, ensuring visibility from the street level, and unity was achieved on the facade by using the same color on the balconies.

The designer supported the dynamic facade idea he aimed with the terraces with the balconies positioned asymmetrically on the facades and the different colors of the facades. The positioning method of the balconies provides dynamism on the facade, while at the same time providing an environment for the residences to obtain maximum sunbathing area and providing privacy with neighbors, while also supporting visual communication. Each flat has a balcony of approximately 5 square metres. And balconies are located in positions overlooking the defined landscape.

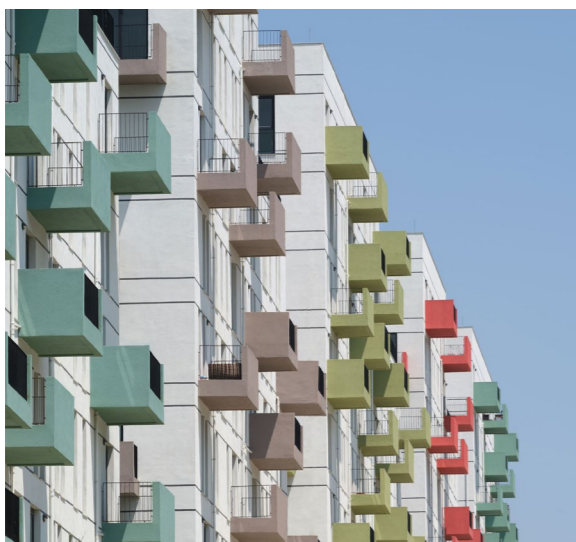


Fig.45 : The color differences between balconies

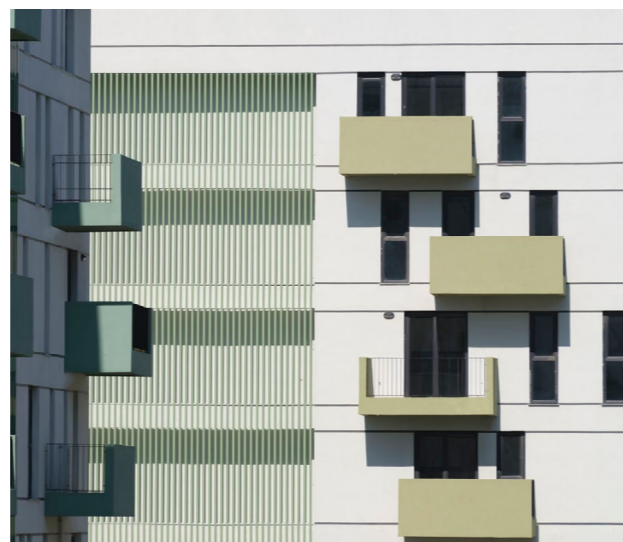


Fig.46 : The balconies

Analysis

*As an individual, the concept that has made me think the most in my experiences so far is “border”. While applying for a residence permit in the different countries I live in, going through passport control, walking in a park, moving to a new house or drawing up a new project... Why? How? When? In each experience, I could not stop myself from questioning the boundaries within or outside, or perhaps right on, the boundaries I was in, touched, saw, felt and heard. While each new experience I gained improved me, it also continued to increase my curiosity. **This thesis project, and therefore all these researches and analyses, gave me the opportunity to pursue that curiosity, examine it, think about it, and at the end of the day, get to know myself better.***

We carry traces from every border we have been in, passed by, drawn by ourselves, and experienced on a large or small scale. Sometimes we leave traces on those borders. The border and both sides of the border are constantly interacting with each other, and this interaction is inevitable.

Most of our lives are spent in closed spaces, mostly in our homes. Therefore, it would be valuable to question the concept of border, which we initially defined as **“interaction space”**, through the houses we live in.

In this regard, two separate projects from **Sweden** and **Türkiye** were selected within the scope of the Case Study. Examination and comparison of these two projects will be made through the defined boundary concept **“interface, interaction”**. ***Rather than seeking a conclusion, these investigations and research aim to initiate a discussion about the concept of border and the houses we live in.***

In line with this goal, the Gränden project in Lund, Sweden, and the Silivri 4th Stage Housing project in Istanbul, Türkiye, were selected for the research. It is important to question the impact of the meaning of the selected houses (borders) on the individual by investigating the traces and effects of the interaction power of the concept of border. In this way, we can better analyze the houses we live in and understand their impact on our border experiences and perspective.

As a densification project in the city center of Gränden, its location and relationship with the neighborhood are of great importance. Although the project is a response to the existing housing need in the region, every decision made in the project that integrates into the existing neighborhood culture and user lifestyle is important in terms of both preserving this culture and offering a better public experience to the neighborhood residents.

Silivri 4th Stage Social Housing project is located in a developing district far from the city center. Although the project is seen as a response to the need for earthquake-resistant, qualified housing in Istanbul, it is an addition to the existing neighborhood it is located next to, and due to the scale of the project, it plays an important role in the development and urbanization process of the city. Therefore, the effort to integrate with the area and maintain the neighborhood fabric is valuable.

With the construction of a new project, an additional color is added to the neighborhood and the city, and we, as users, become partners in the harmony of the new color with other surrounding colors over time. Over time, the colors of both the neighborhood and the project change, increase and become more colorful. There is no end to this process, because even a tree planted in the landscape adds a new color to this color blend. For example, the experience of an elderly person resting under the shade of that tree, a child or a bird landing on the branch of that tree, with that project and the neighborhood changes.

All this chain of experiences leads to the change of the project and therefore of the neighborhood. And the neighborhood offers a different color to each new user every day, and of course, the user to the neighborhood. At the end of the day, every experience, positive or negative, in the environment in which the user lives, in the house or in any house, affects and changes the definition of the next new boundary of that user.

Thus, inevitable interaction chains begin. Therefore, the user's daily routines, ideas, and future dreams sometimes change, sometimes develop, sometimes decrease or increase, in line with the limits they experience. Sometimes the user changes and develops the boundaries she/he experiences in line with his/her previous experiences. In all likelihood, each factor contributes to this interaction network.



Fig.62: Mixing colors to create new colors

An architectural structure cannot be considered independently of its environment. The building welcomes the user with a landscape and sends him off with a landscape. The user's first and last experience with the project is with the defined landscape. In addition, landscaping is one of the most important partners in the project. The functionality and sustainability of the common areas proposed in the design describe the communication and interaction that users will establish or are likely to establish. And the architect can create the basis for the interaction expected to be established in this process, in line with the decisions she/he will make from the first stage of the design.

*When I compare the landscape design and surrounding spaces of the houses I experienced as an individual in Sweden and Türkiye, within describing the border as an “interaction area”, I can easily say that my experience in Sweden was much more satisfactory. While my route from the street to the building and the surroundings of the building offer pleasant resting, walking and meeting with nature environments for the individual, it also supports my interaction with both the nature and neighbors with alternative programs. For instance, although my house in Klostergården, Lund does not have its own garden, I can sometimes make my coffee and relax in the park within walking distance of my apartment, and sometimes socialize by meeting people who are doing sports or walking their dogs in that park. **All these experiences expand the boundaries of the “feeling of being at home”.***



Fig.64: New colors are added to existing colors and new colors emerge/describing Gränden



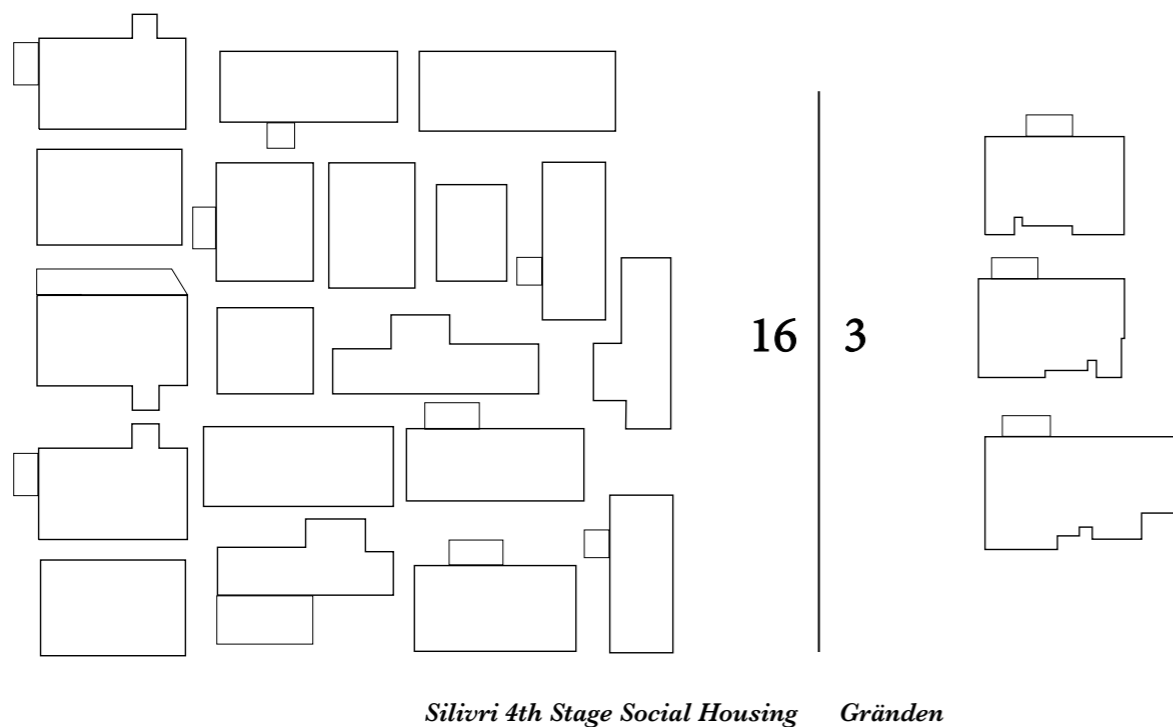
Fig.63: Adding new colors to a white page / describing Silivri 4th Stage House

Since the Gränden project is a densification project, the landscape design has progressed in the direction of preserving and improving the good aspects of the existing one in the neighborhood, and adding the missing functions and programs, rather than a design from scratch. It is aimed to provide a better public space experience for both new users and existing neighborhood residents. Each new touch in the design offers an additional experience to new users, while allowing the experience of the existing neighborhood residents to improve and develop. It is inevitable that the existing residents' habits of using the area intersect with the new users' desire to explore the neighborhood and create a new interaction.

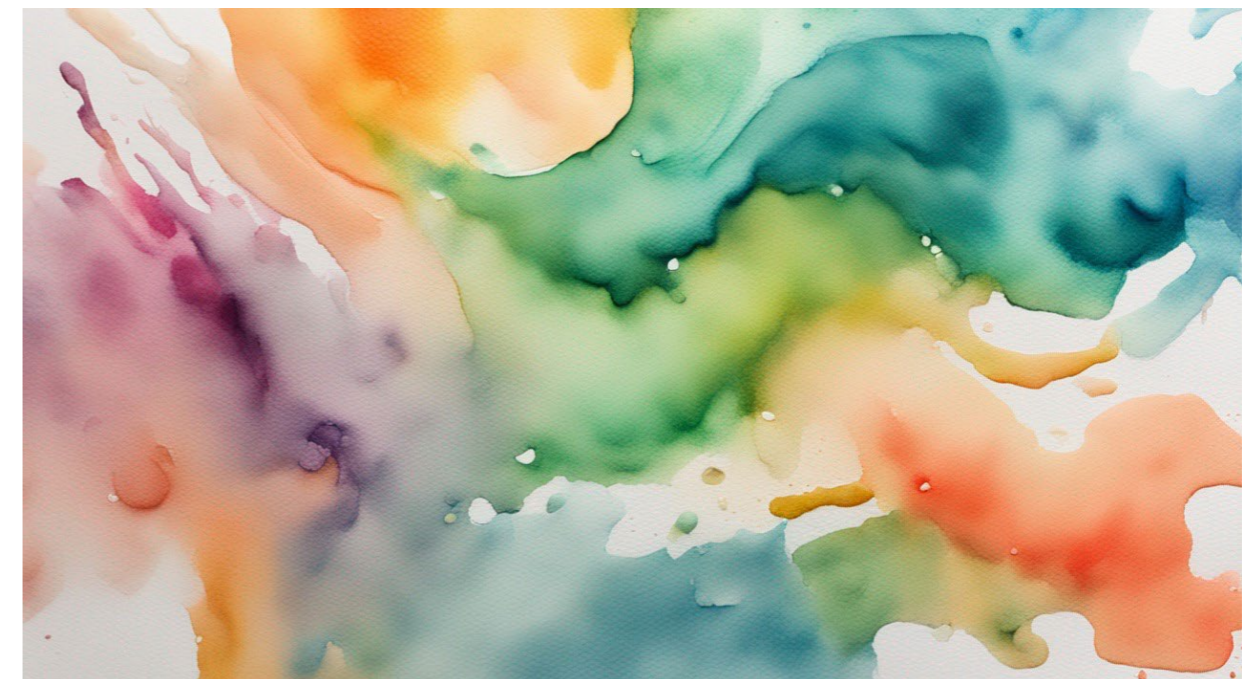
In the Silivri 4th Stage Social Housing project, a significant area has been reserved for landscaping. In the project, landscape was seen as a new public space integrated into the city. Accordingly, in the design, care was taken to continue the existing routes of the neighborhood. This will encourage the neighborhood residents to use the landscape. Program suggestions have been developed so that users of all age groups can have an enjoyable time. Alternative programs such as children's playgrounds, pool areas, and recreational areas will create an inevitable environment of communication and interaction. Due to the scale of the project, it will cause many new users to be added to the neighborhood. Instead of a landscape proposal with sharp borders, a landscape design integrated with the neighborhood supports the sense of belonging that new people will feel to the neighborhood and the neighborhood to its new neighbors. In this way, users' interaction can continue uninterrupted and unlimited.

Both the plan types and the number of apartments they have differ in the two projects. However, there is no directly proportional relationship between the scales of the projects and the number of plan types. The construction area of the Silivri 4th Stage Housing project is 95,318 m² and has 1396 flats, while the Gränden project has 11300 m² and 153 flats. Although there is almost a 9-fold difference in scale between them, there are 16 different plan types in the Gränden project, while there are only 3 different plan types in the Silivri 4th Stage Residences project. The decision to determine plan type differences is a much more layered process than a simple design decision. Each detail added to the project has an impact on the project process and cost. And it is impossible to consider the design process separately from these factors. The planned process and budget have a significant impact on design decisions.

However, offering different plan types within the project can be shown as one of the methods of offering the user a more sustainable housing experience in their own neighborhood. In housing projects, it is important to provide an environment for the user to feel a sense of belonging to the project and the neighborhood where the project is located. The diversity of plan types in projects supports the continuity of this sense of belonging. The ability of the user to find alternative housing suitable for the changing living conditions and needs of the project in the neighborhood where he lives positively affects his sense of belonging. Therefore, the user profile analysis that the architect will make during the design process and the proposal of plan types that will respond to the results of this analysis are valuable. In this way, the designer creates an environment for the user to have the chance to live in the neighborhood to which he/she is accustomed and feels a sense of belonging in the longer term.



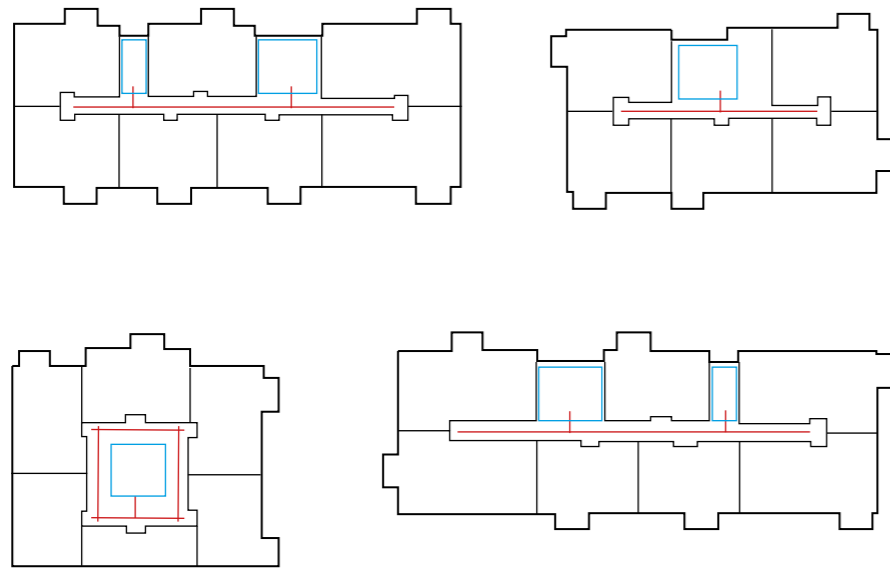
The user is in constant interaction with the location and the project. Over time, the colors carried by the user mix with the project, its neighbors, and its environment, and their colors in turn with the user. For example, social facilities, activity areas and common use areas defined in the project are among the areas where this interaction is high. The use of defined activity areas may become a ritual of the neighbors over time. A barbecue area in the landscape can set the stage for neighbors to meet and create a Sunday activity ritual. Again, cycling or walking routes positioned in the project can take part in the daily life of the user. Or a new area of communication and interaction can be created with neighbors met in common areas. Repetition of all these can turn into a daily ritual and become a need of the user. In a way, these colors can be added to the colors carried by the user and the colors can be enriched.



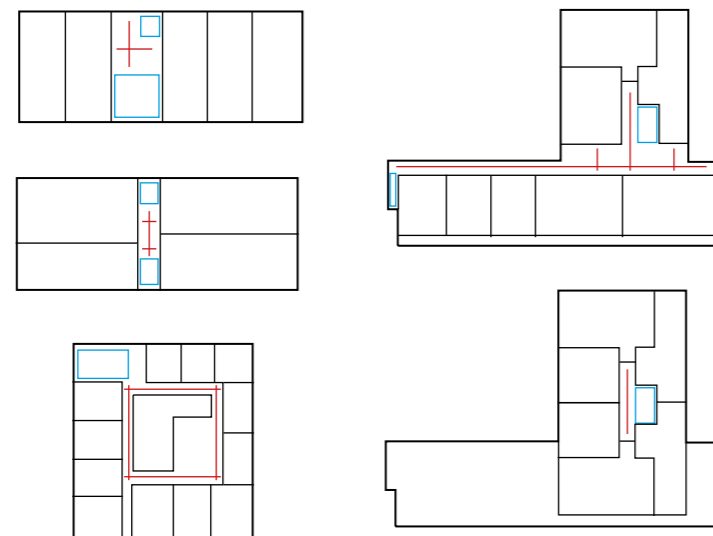
*Located near my house in Lund, Stadsparken plays the role of a room in my house that I sometimes use to relax myself, and sometimes it plays the role of a living room where I host my guests. Demircili beach, near my house in Izmir, sometimes turns into the balcony of my house where I go to relax after busy working days, and sometimes turns into the garden of my house where I have a pleasant time with my friends. **Herewith the house I live in becomes more meaningful with the borders it contains.** The colors carried by all these experiences/borders, on the one hand, represent their best states, and on the other hand, they mix and enrich.*

Circulation routes of buildings are one of the important interaction areas for users. Creating alternative circulation areas increases the likelihood of users coming across each other and making acquaintances, thus increasing their belonging to the project.

In the Gränden project, floor plans and therefore circulation routes vary. However, in most buildings, circulation lines are centrally located. In floor plans where apartment entrances visually dominate each other, it increases the interaction area and the user's command of the area. In Silivri 4th Stage Housing, floor plans in the buildings follow each other. Circulation lines are centrally located. And due to their location, they support the communication scenarios that users will establish.



Silivri 4th Stage Social Housing
Gränden



Circulation routes are of paramount importance in enhancing the interaction between the project, its surrounding environment, and neighboring structures. These routes consistently maintain their dynamism, facilitating continuous movement and engagement. A strategically positioned window within the building introduces the user to varying light conditions each day, while the circulation pathways accommodate a diverse array of individuals throughout the day. This constant flux underscores the essential role of circulation in creating a dynamic and interactive architectural experience.

*My home in Lund was at Klostergården Student House for about 2 years. There were approximately 84 apartments in the building. Unlike other student houses in Lund, circulation routes repeat each other in Klostergården Student House and direct the user to the exit of the building, offering almost no possibility of encounter. Additionally, the apartments in the building do not have balconies and no common areas where students can meet. I encounter at most 1-2 people in the apartment during the day, and considering that there are a minimum of 84 people living in the building, this number is quite low. I could only meet 2 people in the building where I lived for 2 years. The experience of my friends living in student housing with common areas and alternative circulation routes was the opposite. Before this experience, I was aware of how important circulation routes were for the building experience, however **this student house was the building that made me understand the importance of circulation routes in terms of socializing and interacting with individuals.** As an architect, my awareness of circulation routes increased after this experience, and this affected my own projects.*

The following analysis investigates four distinct plan types chosen from the Gränden and Silivri projects through the use of three distinct diagrams. These diagrams serve to elucidate the user's experience within the buildings, offering deeper insights into the architectural structures. By examining the concept of the border—defined herein as an interaction area—within these selected projects, this analysis aims to comprehensively evaluate the user experience within the apartments. This exploration is integral to understanding the spatial dynamics and interaction patterns that shape residential living environments.

1 / Isovist Diagram

In architecture, the isovist diagram is a graphical representation depicting all areas within a spatial environment that are visible from a designated central point. This concept was introduced by architect and theorist Michael Benedikt in 1979. Its primary purpose is to analyze spatial visibility and perception in both architectural and urban contexts.

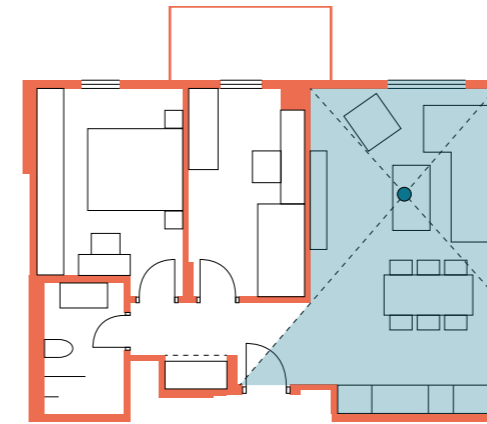
The isovist diagram serves as a crucial visual information source for researchers investigating the social and cognitive features of architectural plans. By providing insights into how space is perceived and navigated, isovist diagrams contribute to a more nuanced understanding of spatial dynamics and user interactions within built environments. (Dawes and Ostwald, 2013)

On a smaller scale, an analysis of residential floor plans is invaluable for understanding the influence of the spatial boundaries of the apartments we inhabit on the flow of our daily lives. This investigation provides critical insights into how the configuration and delineation of space within our living environments affect our routines and interactions, thereby informing broader architectural and urban planning considerations.

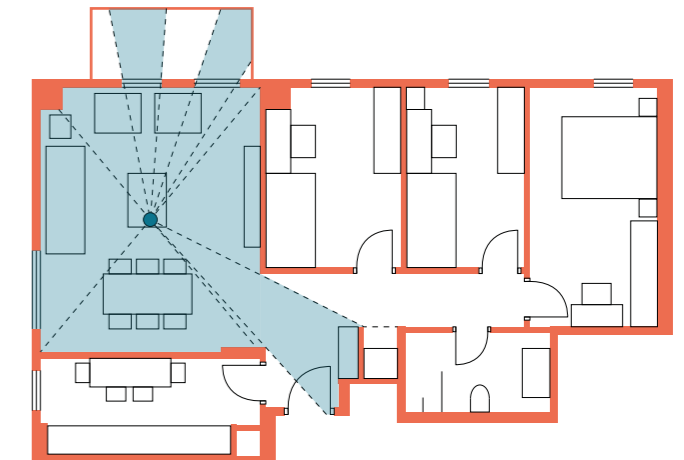
In the diagrams, two plan types with the same square meters from two projects are selected and examined. In the diagrams, the middle point of the living room, which is the most commonly used common area in residences, was determined, and then the maximum viewing angle of the user at these points was checked. This diagram is valuable in terms of understanding the common / private area distinction for the apartment and testing the interaction area of a fixed point in the common area.

The spatial organization in the plan types of Silivri 4th Stage Housing does not allow the perspective to reach other programs other than the entrance hall in the residence. It is possible to encounter this situation in many different plans in Türkiye. The main purpose is to ensure privacy in housing organization.

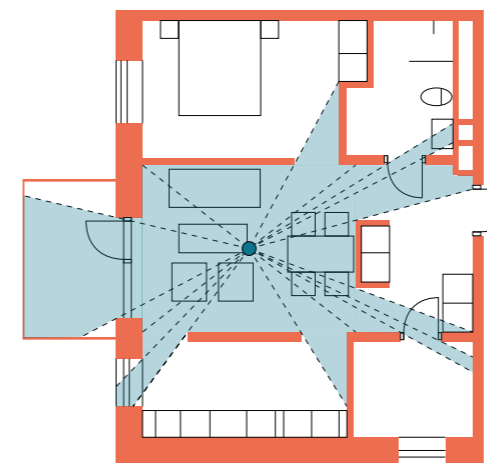
In the Gränden project example, while the user is in the center of the common area, he has a view of almost all programs in the house. While this provides maximum interaction between users within the home, it makes it difficult to ensure privacy when preferred.



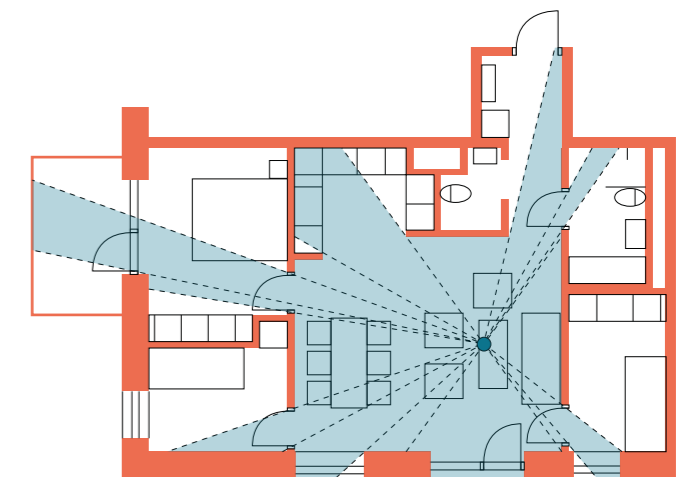
*Silivri 4th Stage Social Housing
Type1 - 62.93m²*



*Silivri 4th Social Stage Housing
Type2 - 83.63m²*



*Gränden
Type1 - 63m²*



*Gränden
Type2 - 78m²*

*All the houses I've lived in in Türkiye so far had large balconies. I could easily meet the sky. I thought that living in a house without a balcony would be very difficult for me. Neither of the houses I experienced in Paris or Sweden had "big" balconies as I define them. However, in my home in Paris, floor-length windows greeted me with the facades of impressive buildings every day. Which was one of my favorites! The windows that covered almost the entire wall in my house in Sweden were already bringing the sky into my house. Wasn't this what I expected from a balcony in the first place? After all these experiences, I can see that it is not possible to define "balcony" or any other concept in the house with a single word. After all these experiences, understanding that the spaces we positioned in **the house carry a spirit, a feeling and an experience, rather than just being a "space"**, guided me as an architect while drawing my projects, while also broadening my perspective on evaluating other projects and houses.*

2 / Alexander Klein Methodology

The need for large-scale housing after the First World War created questions about the functionality of houses to be produced quickly and in minimum sizes. Alexander Klein has carried out a comprehensive study to ensure that each program in the residence and the flow of life within it operate more efficiently. The main goal is to provide maximum functionality within the residence. In line with his methodology, Klein produced various graphs, diagrams and methods to examine the relationships within the house. (Bevilacqua, 2011)

His methodology focused on these aspects : Functionalism, Standardization, Circulation Efficiency, Room Relationships, Privacy and Social Interaction, Scientific Analysis.

Alexander Klein emphasized functionality in residential design, advocating for plan drawings that prioritize practical use and minimize wasted space. He asserted that standardizing housing designs could ensure faster and more cost-effective construction, addressing the demands of his time. Klein argued that optimizing circulation within living spaces reduces unnecessary movement for the occupants. To support this, he conducted analyses of user behavior and produced circulation diagrams.

Klein highlighted the importance of the organization and spatial arrangement of residential programs, maintaining that related functions should be located in proximity to one another. In his methodology, he distinguished between private/night areas and social/day areas, emphasizing the need for their distinct spatial organization. By doing so, Klein's approach aimed to enhance the functionality and livability of residential environments.

To examine the flats, Alexander Klein first divided the flats into two according to their programs: public/day zone and private/night zone. Day zones represent the living room, dining room and kitchen, while night zones represent the bedrooms and bathroom. Klein argued that the functions in these regions should be together with the functions in his own region. It then examines the routes between these functions and the intersections of these routes. Klein stated that too many route intersections could cause functional problems.

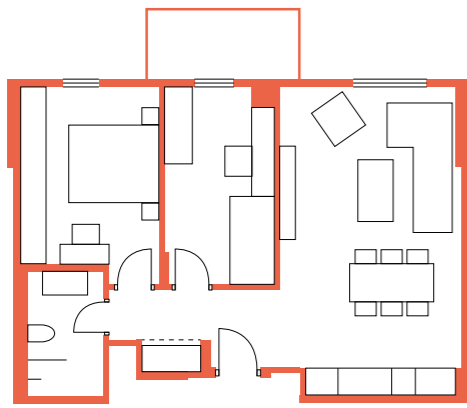
Two plan types with the same square meters selected from Gränden and Silivri 4th Stage Housing are examined in line with Klein's methodology.

//In the diagrams, blue color represents night areas (bedrooms and bathrooms) and gray color represents daytime areas.

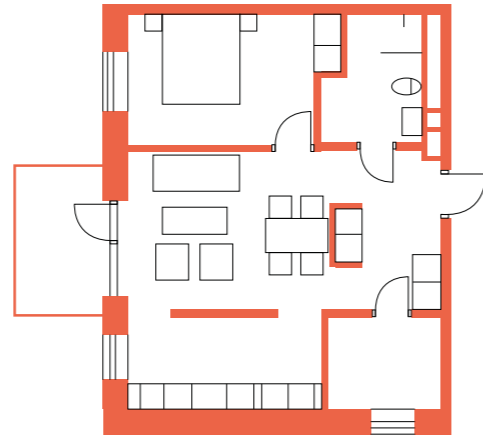
//In the diagram examining the routes, the blue route represents the night route and the red route represents the day route.

In the plans of the Silivri 4th Stage Housing project, spaces are divided according to their functions. The programs that make up the day and night zones are located side by side. Klein argued that uninterrupted routes that can be passed directly from the entrance to the bedroom and bathroom will support the functioning of the plan. Positioning the bathroom in an area close to the bedrooms allows night routes to be established without interruption. Day and night routes do not intersect. The plan diagrams in the example work correctly at the organizational / functional level according to Klein's methodology.

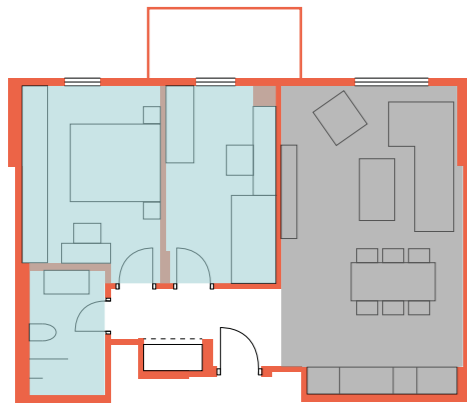
In the Gränden project, the functions of the day and night zones are not located separately from each other. It is generally located in the middle of the day zone and night zone functions. This leads to the intersection of day and night routes. The plan diagrams in the example contain organizational/functional errors according to Klein's methodology.



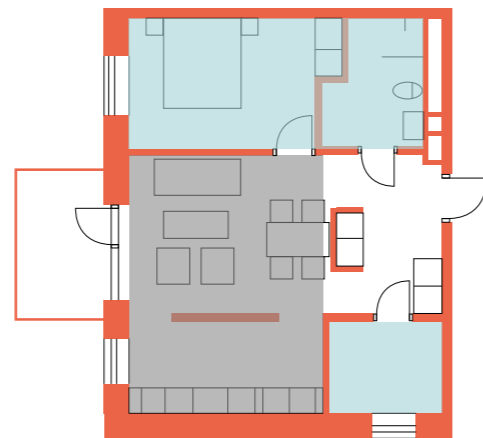
1.Plans



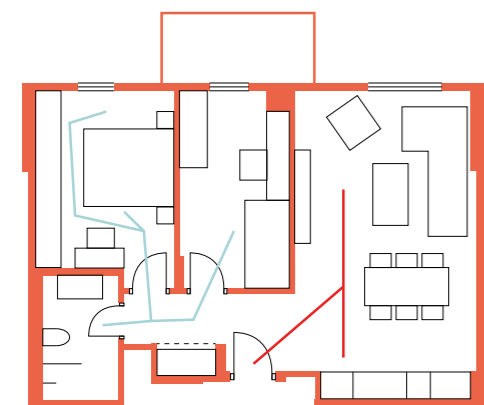
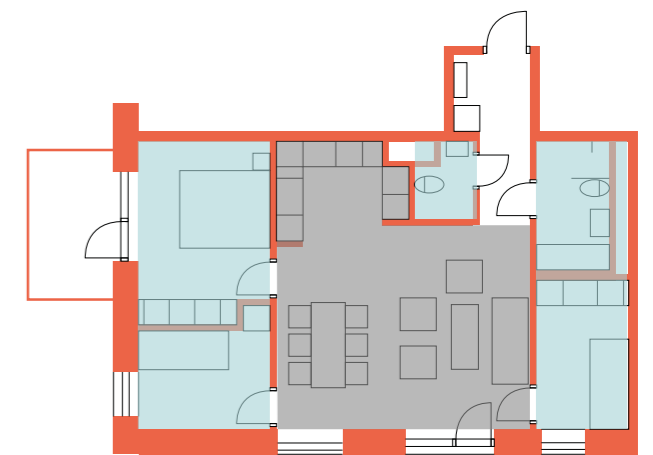
1.Plans



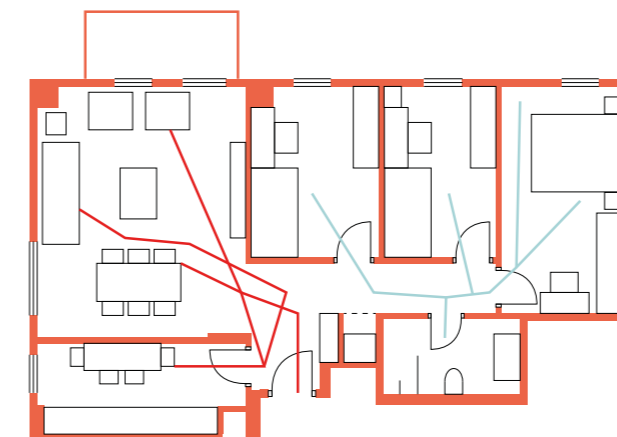
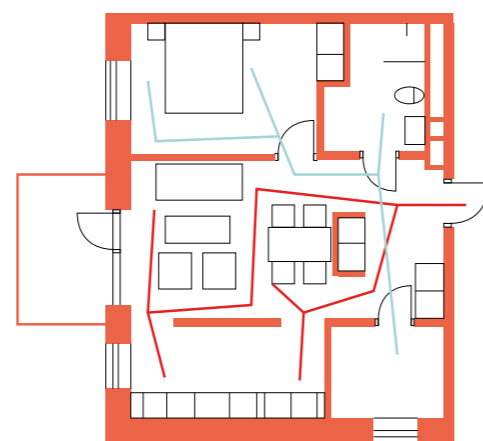
2.Alexander Klein – division of the house into two zones – daytime (grey) and night-time (blue)



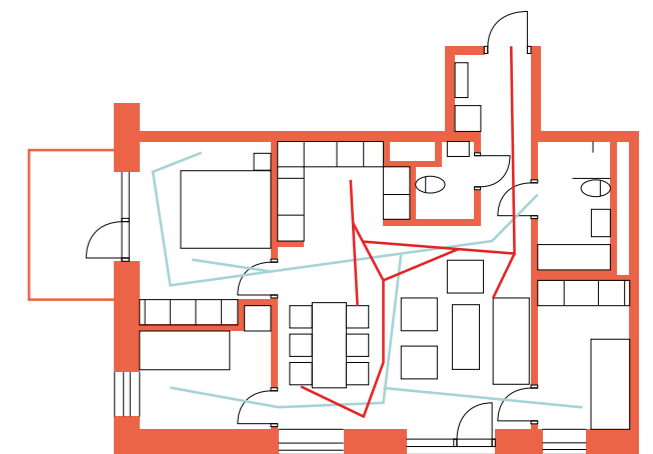
2.Alexander Klein – division of the house into two zones – daytime (grey) and night-time (blue)



3.Alexander Klein – analysis of routes and intersections within the housing unit according to the graph method (red = daytime routes / blue = night-time routes)



3.Alexander Klein – analysis of routes and intersections within the housing unit according to the graph method (red = daytime routes / blue = night-time routes)



*Silivri 4th Stage Social Housing
Type1 - 62.93m²*

*Gränden
Type1 - 63m²*

*Silivri 4th Social Housing
Type2 - 83.63m²*

*Gränden
Type2 - 78m²*

The concept of privacy also represents the ability of the individual to set a boundary between himself and other individuals physically, visually, mentally and emotionally, within the scope of his choice at the residential scale. In Turkish residences, privacy is generally at the forefront when organizing spaces. As someone who spent his entire childhood in various residences in Türkiye, the concept of privacy was interpreted differently in the residences I later experienced in Paris and Sweden, which pushed me to think about housing planning and privacy. In my house in Paris, the bathroom was only accessible from my bedroom, so my guests had to pass through my bedroom when they wanted to use the bathroom. Similarly, in Sweden, my bedroom opened directly to the living room. Of course, there are very different alternative plan types in every country and city. However, in both residences I experienced, I felt that I could not find enough the sense of privacy I needed in some alternative situations. This feeling may vary depending on the user's wishes and lifestyle. Nevertheless, this experience led me, as an architect, to conduct detailed user analyzes before creating the plan schemes in my projects

3 / Justified Access Graph

Space syntax, originated in 1970's by Bill Hillier and his friend. It is a theory and method for analysing spatial relationships. This technique analyzes the architectural space, based on the configurational features that are directly related to the social function suggested by and cultural meanings conveyed by the plan scheme. (van Nes & Yamu, 2021)

Justified access graph elucidates the spatial interconnections among various areas within the house and the circulation pathways that link these spaces. Each distinct space is denoted by a circular node, while the circulation routes are represented by lines. The primary entrance is designated by a circumscribed circle, serving as the root node. (Julienne Hanson, 1999)

Through examination of justified access graph, one can readily discern the sequential experience of the house, commencing from the entrance and extending to encompass all programmatic elements, while also discerning the relational associations between different spaces. As the focus of this diagram is primarily on spatial relationships, detailed depictions of individual space shapes and sizes are omitted, and all locations are uniformly represented.

When the Granden project diagrams are examined, it is seen that it is in the form of a branched tree with a depth of 3 steps in figure-C and 4 steps in figure-D.

When the Silivri 4th Stage Residences project diagrams are examined, it is seen that figure-A and figure-B are in the form of a 3-step shallow bush.

In both projects, the central space is positioned as the living room. While in the Granden project there are other spaces connected to the central space, in the Silivri project the central space is kept separate from other programs.

In the Granden project, the central space is located between the bedrooms, while in the Silivri project, these two programs are positioned separately from each other. This shows that importance is given to ensuring user privacy in the Silivri 4th Stage project. In the Granden example, the central space was also used as a transition space.

In the Granden project, the rooms and the balcony are topologically deeper. In Figures B and C, all rooms are dead-end areas. You cannot go to other places by passing through these places. With these features, it can be said that the privacy of these places is higher than others. Bathrooms in all plans are positioned as dead-end areas, with privacy at the forefront.

In both projects, the central space is 2 steps away from the root space. However, as can be seen from the diagrams, while day and night programs are clearly separated in the Silivri 4th Stage project, these programs are not clearly separated in the Granden project.



*Silivri 4th Stage Social Housing
Type1 - 62.93m2*

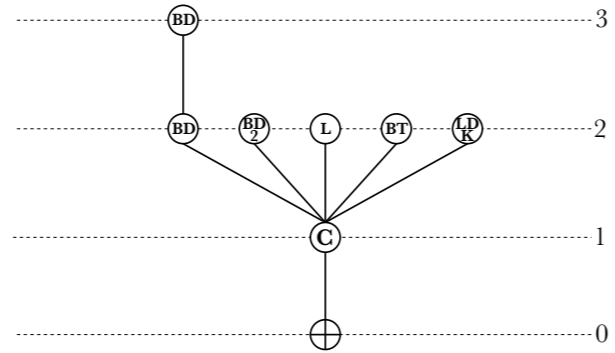


Figure-A

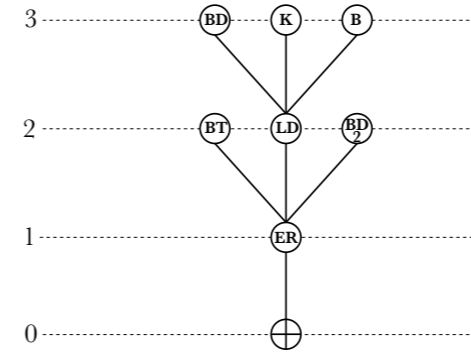
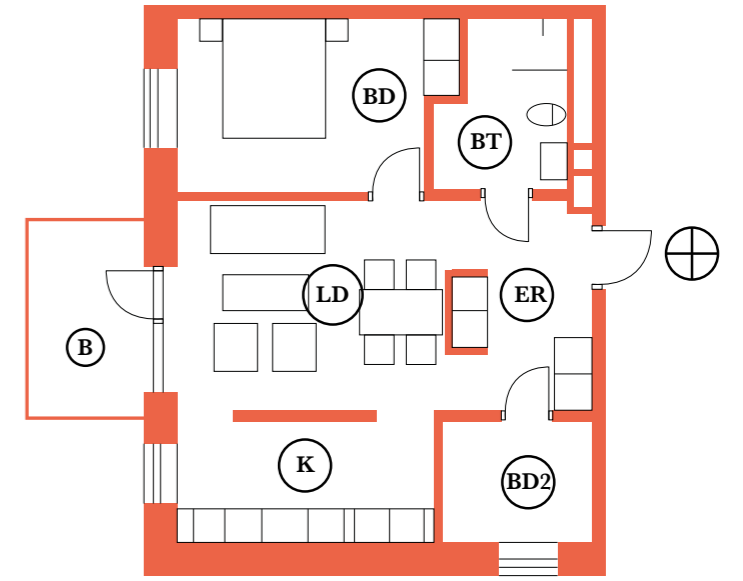
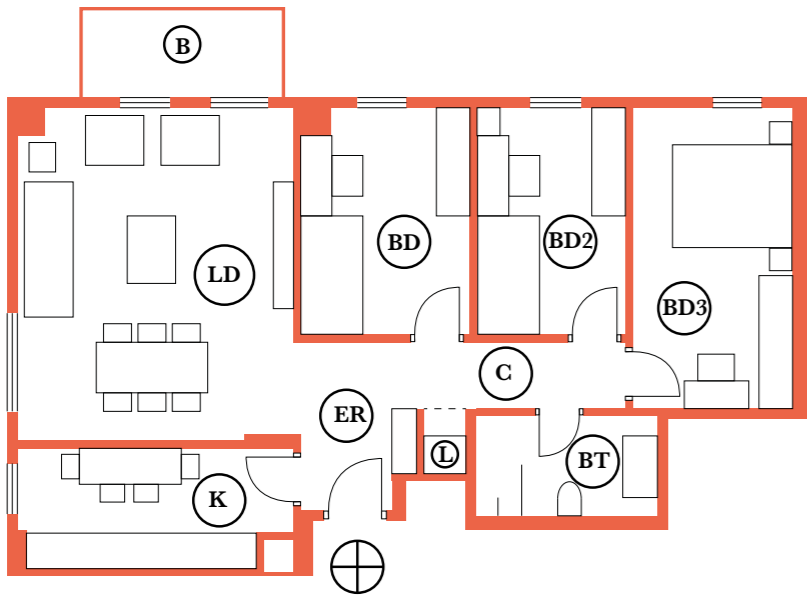


Figure-C



*Gränden
Type1 - 63m2*



*Silivri 4th Social Housing
Type2 - 83.63m2*

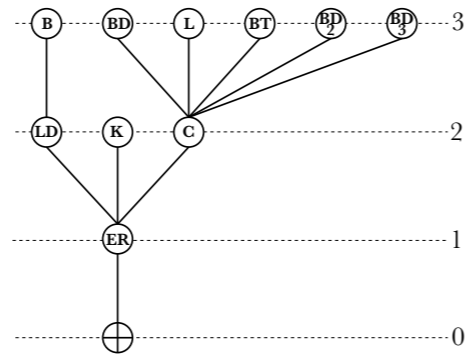


Figure-B

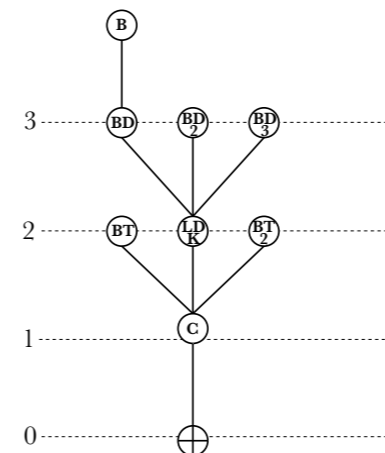
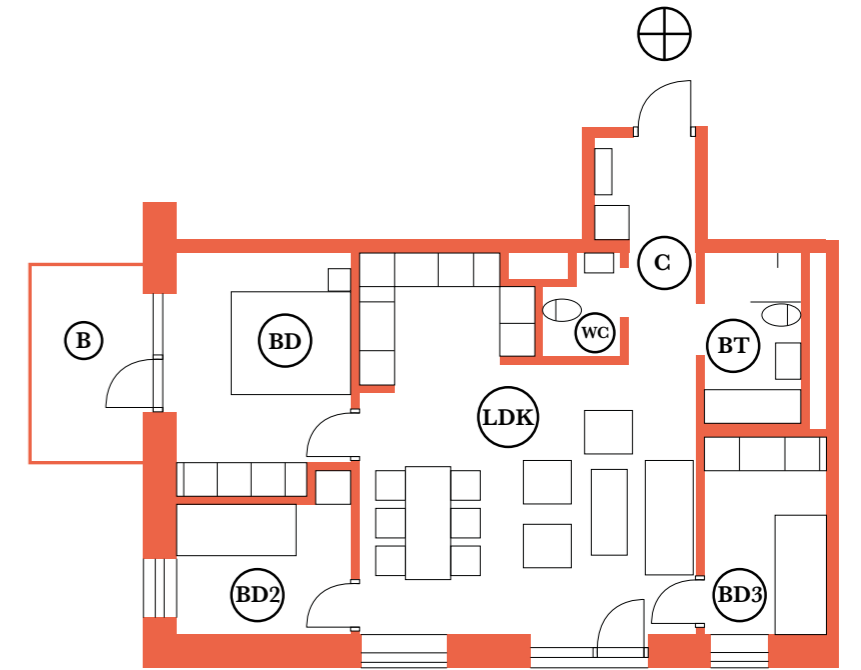
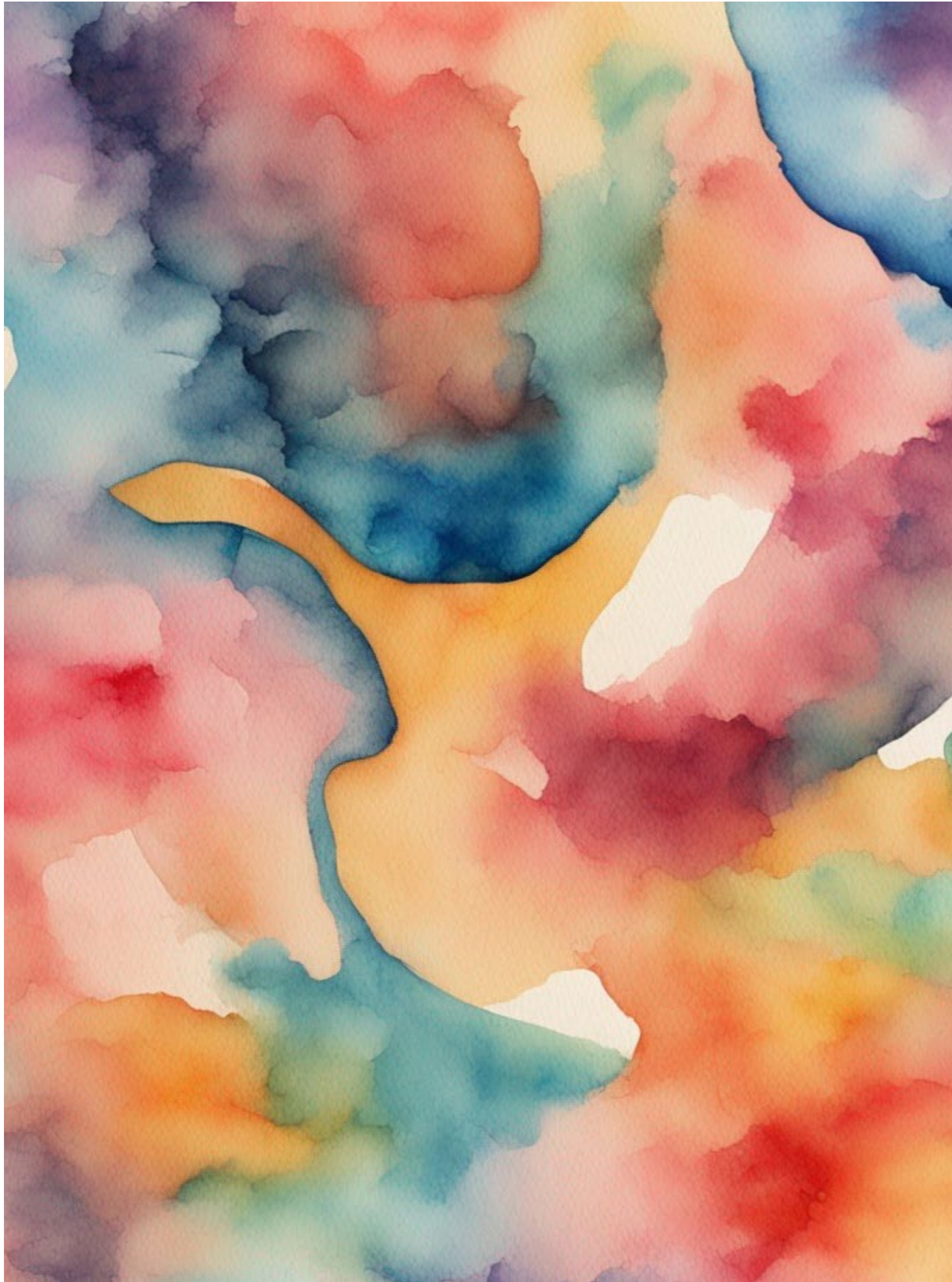


Figure-D



*Gränden
Type2 - 78m2*



4. Conclusion

This study seeks to explore and trace the reciprocal effects of individual and social border conceptualizations on residential spaces through a comparative analysis of two housing projects: one located in Lund, Sweden, and the other in Istanbul, Türkiye. By investigating these case studies, the research aims to initiate a dialogue and provide insights into the diverse social and cultural meanings that borders can embody within our homes. Afterwards, the research is deepened by defining the concept of border as a field of interaction.

To summarize, the primary objective of this study is to examine the impact of borders and border conceptualizations on residential environments and the life rituals performed within these spaces. Individuals spend a substantial portion of their lives indoors or within residential areas. Therefore, it is essential to critically analyze these living spaces, evaluate their influence on us, and understand our impact on them. Understanding the role of personal identities and cultural lifestyles in shaping our living environments enhances our comprehension of these spaces and aims to inform and enrich architectural design processes.

In conclusion of the analysis, we discovered that both projects interact with users, sometimes with similar and sometimes completely different concerns.

It is clearly observed that the main aim of both projects is to protect and improve the experiences of existing users, while creating and increasing the belonging of new users to the neighborhood and the project. Again, in both projects, we can see that the socialization of neighbors with each other and with the neighborhood and the constant interaction are important.

On the contrary, both projects, carried out for similar purposes, offer completely different experiences to the individual and the family with the planning schemes they propose. The defined circulation routes shape the life in the house, and therefore the daily rituals of the users vary. When we consider the daily behaviors of societies, we can clearly see that their societies shape daily life rituals and projects. In both projects, the traces of the society to which they belong can be followed. It seems that architecture shapes and defines us, and we shape and define architecture.

Taking everything into consideration, it is clearly understood that examining the housing plans of a country or city is of great importance in tracing the traces of a border, culture, geography and society.



This thesis embodies a synthesis of artistic and structural analytical frameworks. In contemplating the phenomenon of coloration and delineation, it becomes evident that hues inexorably blend over time. Whether this amalgamation occurs swiftly within the span of an hour or unfolds gradually across a decade, the interplay of colors remains an inevitable occurrence. Endeavoring to discern each individual color, or border, to the fullest extent feasible, facilitates a deeper understanding of ourselves, encompassing the hues we shall embody in the future. The main purpose of this study is to initiate a discussion on the concept of border, to trace the effects of the spaces we live in on our individual border experiences and thereby furnish an avenue for enhanced self-awareness.

Thank you, Tack, Teşekkürler.

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Melike KAVALALI