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SENSE OF BELONGING
THE CASE STUDIES OF MEDELLIN (CO) AND MILAN (IT)

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INDEX

ABSTRACT	3
SINTESI	4
ACKNOWLEDGEMENT	5
CHAPTER I – THE SOUL OF A PLACE	6
I.I INTRODUCTION	6
I.II RESEARCH QUESTIONS	16
I.III RESEARCH AIMS AND OBJECTIVES	16
I.IV SIGNIFICANCE OF RESEARCH THESIS	17
I.V RESEARCH SCOPE	18
I.VI RESEARCH METHODOLOGY	18
I.VII THESIS STRUCTURE	19
CHAPTER II – THE CONCEPT OF GENIUS LOCI	20
II.I THE ANCIENT ROME	20
II.II MODERN APPLICATION – ARCHITECTURAL PHENOMENOLOGY	25
II.III WHAT MAKES A SPACE A PLACE?	29
II.III.I PHYSICAL SPACE	31
II.III.I.I NATURAL ENVIRONMENT	32
II.III.I.II BUILT ENVIRONMENT	34
II.III.II PERCEIVED SPACE	35
II.III.II.I SENSORIAL SPACE	37
II.III.II.II CONCEPTUAL SPACE	38
II.III.II.III BEHAVIORAL SPACE	39
II.VI GENIUS LOCI IN CONTEMPORARY PLANNING	40
CHAPTER III – METHODOLOGY	44
III.I GENIUS LOCI IN THE CASE STUDIES	44
III.I.I INDICATORS FOR GENIUS LOCI	45
III.I.III CHI-SQUARE TEST OF INDEPENDENCE	54

III.IV INCLUDING GENIUS LOCI	55
III.V MEDELLIN, COLOMBIA	57
III.V.I SANTO DOMINGO SAVIO	62
III.VI MILAN, ITALY	67
III.VI.I GARIBALDI, PORTA NUOVA	71
III.VI.II PORTA TICINESE	73
CHAPTER IV – THROUGH THE EYES OF LOCALS	75
IV.I ASKING ABOUT GENIUS LOCI	75
IV.II MEDELLIN, COLOMBIA	78
IV.III MILAN, ITALY	87
IV.IV COMPARING MEDELLIN AND MILAN	96
CHAPTER V - DISCUSSION	106
V.I DEFINING THE SENSE OF BELONGING	106
V.II INTERPRETATION OF THE PARTICIPANT’S ANSWERS	108
V.II.I DETERMINANTS OF SENSE OF BELONGING	112
V.II.II RECOMMENDATIONS INSIDE THE CASE STUDIES	113
V.III BACK TO SENSE OF BELONGING	114
V.III LIMITATIONS IN THE RESEARCH	115
CHAPTER VI – CONCLUSIONS	117
VI.I CONCLUSIONS ABOUT THE SENSE OF BELONGING	117
VI.II RECOMMENDATIONS FOR URBAN PLANNERS	118
VI.III FUTURE RESEARCH	119
VI.IV FINAL NOTE	119
REFERENCES	120
LIST OF FIGURES	124
LIST OF CHARTS	128
LIST OF TABLES	133

ABSTRACT

‘Genius Loci’ is an ancient Roman concept referring to the protective spirit of a place, defined in contemporary architecture as *the distinctive atmosphere of a specific location*. The uniqueness of a place is an inherent characteristic, and the ‘Sense of Belonging’ is the result of the interaction between the inhabitant and the space. What makes a space a place? Space is something without substantial meaning, while place refers to how people feel about a location. A place can be seen as a space occupied by something with value. This meaning is given by the people and how they perceive the space. This thesis tried to define people’s perception and feel of belongingness of two cities: Medellin, in Colombia, and Milan, in Italy.

Comparing two cities with different locations, cultures, conditions, and backgrounds was a way to focus on what people perceived and not only on the place itself. The method was to collect citizens’ opinions through social media with surveys in google forms, to have a direct perception of both cities. These data were analyzed and compared using SPSS (Statistical Package for Social Science) attempting to find differences in both cities and concluding detecting the determinants of the sense of belonging. The importance of this idea is to define indicators that can improve the quality of life helping the inhabitants to relate to the environment and establish a deep connection to the location. Including Genius Loci can be a path for urban planners that can lead to successful plans that can generate a Sense of Belonging and identity among the people.

KEYWORDS: Genius Loci, Belongingness, Urban planning, Milan, Medellin, Identity of cities.

SINTESI

‘Genius Loci’ è un antico concetto romano riferito allo *spirito protettivo di un luogo*, definito nell'architettura contemporanea come l'atmosfera distintiva di un luogo specifico. L'unicità di un luogo è una caratteristica intrinseca e il ‘Senso di appartenenza’ è il risultato dell'interazione tra l'abitante e lo spazio. Cosa rende uno spazio un luogo? Lo spazio è qualcosa senza significato sostanziale, mentre il luogo si riferisce a come le persone si sentono riguardo a un luogo. Un luogo può essere visto come uno spazio occupato da qualcosa di valore. Questo significato è dato dalle persone e da come percepiscono lo spazio. Questa tesi ha cercato di definire la percezione e il sentimento di appartenenza delle persone di due città: Medellin, in Colombia, e Milano, in Italia.

Confrontare due città con luoghi, culture, condizioni e background diversi è stato un modo per concentrarsi su ciò che le persone percepivano e non solo sul luogo stesso. Il metodo è stato quello di raccogliere le opinioni dei cittadini attraverso i social media con sondaggi attraverso Google, per avere una percezione diretta di entrambe le città. Questi dati sono stati analizzati e confrontati utilizzando SPSS (Statistical Package for Social Science) cercando di trovare differenze in entrambe le città e concludendo rilevando le determinanti del senso di appartenenza. L'importanza di questa idea è definire indicatori che possano migliorare la qualità della vita aiutando gli abitanti a relazionarsi con l'ambiente e stabilire un legame profondo con il luogo. Includere Genius Loci può essere un percorso per gli urbanisti che può portare a progetti di successo che possono generare un senso di appartenenza e identità tra le persone.

PAROLE CHIAVE: Genius Loci, Appartenenza, Urbanistica, Milano, Medellin, Identità delle città.

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CHAPTER I – THE SOUL OF A PLACE

I.1 INTRODUCTION

Our lives are defined by the spaces where we live, the places where we work, the areas where we have leisure, and the environment surrounding them. They can be categorized into two spaces at once: the physical space and the perceived space. The physical space is composed of two elements: the natural environment and the built environment. This last one refers to establishments made by the human being, which includes roads, buildings, parks, and related infrastructure. The physical space provides the setting for human activity as it is living, working, playing, creating a day-to-day basis while the perceived space is what shapes the life of each citizen through experiences or sensations. Perception can be described as the view of things at a particular time and from a fixed position. The collection of all these distinct views is what we can call the ‘spirit of place’ and each site has this unique atmosphere that goes beyond the built environment.

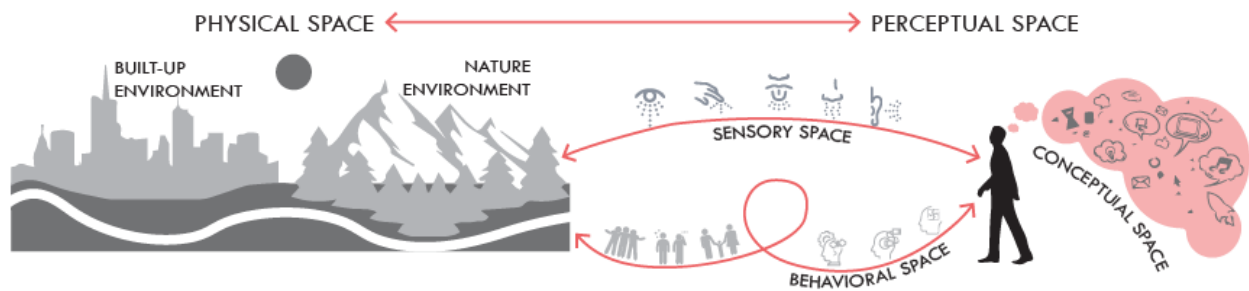


FIGURE 1: *Introducing the physical and perceived space.* The diagram is explaining what is the physical space and the perceived space that is how the person experience the physical world.

The way of how a city is perceived is the representation of the person's life through time and space. This complex urban context is known as ‘Genius Loci,’ an ancient Roman concept of the protective spirit of a place, defined as the "*distinctive character or atmosphere of a place regarding the impression that it makes on the mind*" [1]. The next part of this document will explore deeper the origin of this concept. In the meanwhile, we will try to understand this concept in contemporary terms, referring more to the atmosphere of the place instead of its guardian spirit. This means that the places are not merely physical things but emotional presences that bring different meanings formed by experience [2]. An experience can shape our identity, helping us to understand our culture, a vital part of our individuality. Every place has its own spirit

¹ Flexner, S. B. (1987). *The Random House Dictionary of the English Language*, 2nd Edition, Unabridged (2nd ed.). Random House.

² John J. (1989) *Costonis, Icons & Aliens: Law, Aesthetics, And Environmental Change 61*, University of Illinois Press: pp. 105

that enriches our present by reminding us of our past and anticipating our future [3], and this is the power that the structures around us have, by creating associations and making impressions of our relationship with the environment.

The concept of the ‘spirit of a place’ is linked to the divine idea of something that we cannot touch. Luis Barragan, a Mexican architect, defined it in his speech for the Pritzker in 1980: *“beauty, inspiration, magic, spellbound, enchantment, as well as the concepts of Serenity, Silence, Intimacy, and Amazement... Religion and Myth. It is impossible to understand Art and the glory of its history without avowing religious spirituality and the mythical roots that lead us to the very reason of being of the artistic phenomenon. Without one or the other, there would be no Egyptian pyramids or those of ancient Mexico. Would the Greek temples and Gothic cathedrals have*

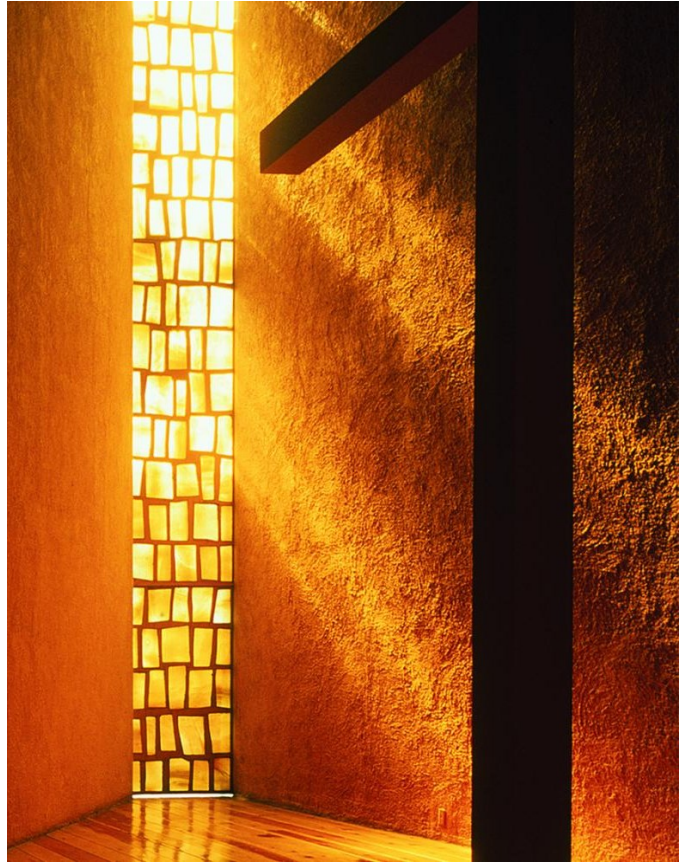


FIGURE 2: *Tlalpan Church Chapel in Mexico City.* Luis Barragan selected work for the Pritzker. (2021). [Photograph]. <https://www.pritzkerprize.com/laureates/1980>

existed? Would the amazing marvels of the Renaissance and the Baroque have come about?” [4]. Like him, different architects find a deep connection in the surroundings and spirituality that they merge into their designs. Having this sensibility to design is what creates a project in which people themselves could feel this connection, whether they have religious beliefs or not.

The physical concept of space is easier to explain because it is a matter of lights, shadows, materials, forms, shapes, and scales which are used in the design to become the structures in which we do our activities every day. The peculiarity occurs when we bring the perceived space into the equation since people could have different sensations and ideas that evoke different impressions of the same space. Here, the history of the site plays a big part in the environment because the person’s memories and knowledge directly affect the perception of the area. In the end, there is an atmosphere that all places have, which gives them peculiarity

³ Nivala, John. (1996). *Saving the Spirit of Our Places: A View on Our Built Environment.* UCLA Journal of Environmental Law and Policy, 15(1): pp. 2.

⁴ Barragan, L. (Ed.). (1980). *The Pritzker Architecture Prize:* pp. 1.

and defines those spaces as places. But the question is, how can we define them? What makes a space a place? How can we find their ‘spirit’?

To answer these questions, we can start saying that the built environment gives significance to our culture, preserving them, recognizing ideas, values and constructing our history. An example of Genius Loci on a bigger scale is Prague. The capital of the Czech Republic is in the heart of Central Europe and is characterized by its Gothic, Renaissance, and Baroque architecture which were not rebuilt like other European cities. Experiencing Prague as a visitor involves mystery, but at the same time, it is warm and inviting with colors that create a sensation of magic. Its unique use of architecture language with post-industrial heritage is a place where the real-estate developers had integrated the ‘Genius Loci’ in the facades and layers of buildings. This city is the largest urban historical center listed by UNESCO’s World Heritage List with a preserved area that covers 900 hectares including around 4,000 monuments. Prague is considered a ‘museum under the sky’, yet its soul is not only in the building heritage, but it is also in the culture and music which make it spellbind [5].



FIGURE 3: *Old Town Hall in the center of Prague in Czech Republic.* Virtual Tours Prague. (2020). [Photograph]. https://res.cloudinary.com/dsmafnqwi/image/upload/c_fill,f_auto,h_1280,q_auto/v1/virtualtrips/tours/hw6hv7f7wr2eez2rtolq

⁵ Garib, S. (2021, August 31). Shusha residents visit Jidir Plain. Report News Agency. <https://report.az/en/multimedia/shusha-residents-visit-jidir-plain/>

There are many different features that could help us to define a city and its spirit, one of the principal ways to find its uniqueness is the organization, based on the principles of proximity, continuity, and closure. The organization of a city normally started growing according to the shape of the natural landscape. For instance, many cities in Europe have the characteristic of having a main river crossing the city becoming the backbone like London, Rome, or Paris. There are other cities which present a natural division in districts, this is the case of New York [6]. This city has a hierarchical district structure consisting in superior and subordinate parts, the buildings are surfaces rather than masses making the streets “figural characters”. Each neighborhood is a functional unit that is a sample of the basic structure of existential space [7]. The patterns of the streets are different from one neighborhood to another, and you can see the distinction of it even in the urban fabric. Even though not all the limits are official, districts such as Manhattan have boundaries that as an individual you can experience the different aspects of each neighborhood, or even in the map where the same contrast in typology clearly shows the differentiation of neighborhoods (see figure 4). The built environment allows people to feel identified as a culture or group, even being exaggerated versions of it, such as the neighborhoods of “Little Italy” or “Chinatown”. The case of New York City is a good example of Genius Loci in a micro-scale, meaning that the identity of the citizens is defined not only as a “New Yorker”, but as someone that lives in a certain neighborhood.



FIGURE 4: Map of Manhattan's Neighborhoods. Civitatis Tours. (N.m.). [Map]. <https://www.introducingnewyork.com/manhattan-neighborhoods>

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As a culture, we transfer part of our identity to the built environment that surrounds us, moving us deeply in a spiritual way. Structure can also function as a symbol of what we value and losing them can create a sense of grief. Take for example the fire of Notre Dame in 2019. The whole world was in shock, but Parisians were mourning as they lost a family member. For them, it was painful to see burn something that embodies so much of French identity, history, and culture. The reason for this is that Notre Dame is considered a symbol of their culture; it's not only that the structure is aesthetically beautiful, but it has a spiritual connection with the people. In fact, it is not a demand that the built environment should be beautiful

⁶ Norberg-Schulz, C. (1971). *Existence, Space & Architecture*. New York: Praeger: pp. 75.

⁷ Ibid: pp.81.

to be considered relevant, beauty does not go far enough, it is above aesthetics engaging all our senses. Notre Dame illustrates how a physical building can have a deep connection to memories and emotions, strong enough to be a symbol of not just a city, but the whole world could feel something in respect of this loss. More than just a description is a representation of personal and cultural meanings that are established which are the significant structures for our society [8].



FIGURE 5: *People watch Notre-Dame in flames.* Camus, T. (2019, April 15). [Photograph]. <https://www.theglobeandmail.com/world/us-politics/article-notre-dame-fire-may-have-been-caused-by-computer-glitch-cathedral/#c-image-0>

Inside the built environment we have examples of characteristic buildings which the structures started because of climatic conditions but later it

even became a general idea of a culture or society for example, a ‘Minka’, when we think of Japan (see figure 6, number 1), which are vernacular houses characterized by its shape and sliding doors where almost every room opens to the outdoor garden. The houses are elevated because of the humid weather so the wood could be kept dry. Another type of house is the “Central Courtyard” used in Persia (see figure 6, number 2), this one has a central garden that allows the house to breathe even with the hot weather of the place. Then we also have the “Mediterranean house” (see figure 6, number 3) which is used mainly in Southern European countries. This one has an emphasis in the street, where all the social life is happening, even having the windows directly facing it [9]. These structures were designed because of climate or cultural conditions but right now we associate this idea with a country or an idea of a culture [10]. All our conceptions

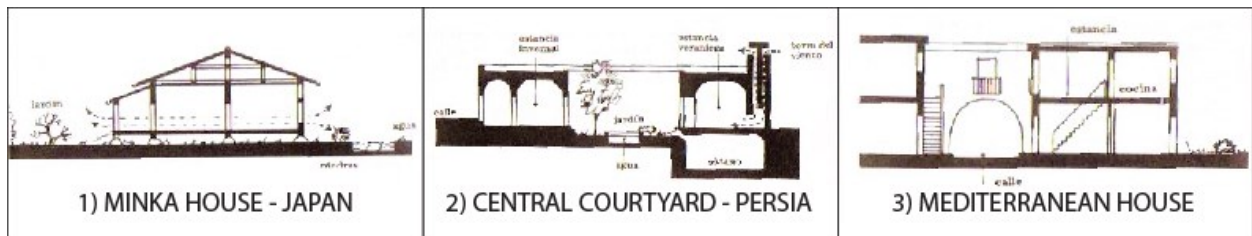


FIGURE 6: *Housing Typology.* Pignatelli, C. P. (2008). *Analysis and design of the spaces where we live* (Spanish Edition). Pax Mexico L.C.C.S.A. pp 134-5.

⁸ Nivala, John. (1996). *Saving the Spirit of Our Places: A View on Our Built Environment.* *UCLA Journal of Environmental Law and Policy*, 15(1): pp.2.

⁹ Pignatelli, C. P. (2008). *Análisis y diseño de los espacios que habitamos/ Analysis and design of the spaces where we live* (Spanish Edition). Pax Mexico L.C.C.S.A: pp. 134.

¹⁰ *Ibid.* pp. 135.

of the main essence of culture are for consequence, its spirit. However, one thing is the mental construction of a place, and another one is the sensation that you may have inside the place.

The identity of a place could be perceived through a single monument that defines its soul, the same way a logo does it for a brand. On one hand, it can be the main milestone of a city such as The Colosseum to Rome, The Puerta de Alcalá to Madrid, the Angel of the Independence to Mexico City, The Eiffel Tower to Paris, The Statue of Liberty to New York City, the Big Ben to London, and so on. On the other hand, these landmarks can be related to mobility, for example stations such as: Grand Central Terminal in New York City, Antwerp-Central in Belgium, Gare du Nord in Paris, Flinders Street Station in Melbourne, and so on. The people identify these places not only for mobility uses, but for gatherings or other types of interactions. The landmarks became part of the identity of the city and service for different purposes than the original intentions of the place. Many of them became a tool for telling the history of the city or important events that happened over time.



FIGURE 7: *Amsterdam Life, people cycling around.* Peoples, M. (2014). [Photograph]. <https://www.flickr.com/photos/leftymgp/15021653141/>

There is an importance to preserve the relationship between the observer and the

observed, as well as protect the physical space and the associational. Structures can be, in one level, points of reference but in another one, significant structures containing meanings and connections that turn into the sense of place [11].

In a large city The Public Transport Service has become indispensable in the lives of people due to the high demand of moving around the city. The better is the mobility inside a city, the better is the life quality of its inhabitants, so it should have different qualities that are a fast service to save travel times, comfort, secure, safe, reliable, and environmentally sustainable and socially inclusive [12]. At the same time different options for mobility could turn into a part of the identity of the city or community. Some examples are the metro of Moscow, Russia, which is the most precise in the world, the characteristic busses of London, England, the diversity of public transport that you can find in New York City, or the metro cable that is used in Colombia, which is part of the case studies of this thesis. Also, some cities are distinguished because of their success having slow mobility like the culture of biking in cities like Copenhagen or Amsterdam. The

¹¹ Nivala, John. (1996). *Saving the Spirit of Our Places: A View on Our Built Environment.* UCLA Journal of Environmental Law and Policy, 15(1): pp.14.

¹² Castro, L. (2011, May 1). *Bogotá and Medellín: Architecture and Politics.* Wiley Online Library. <https://onlinelibrary.wiley.com/doi/epdf/10.1002/ad.1246>: pp. 97.

public transport system, the stations and the options are opportunities for improving the sense of belonging and the same construction of identity in a community.

The metaphorical sense of the term 'Genius Loci' is responsible for the so-called 'places of significance', which concerns the protection and conservation of monuments and sites that have historical relevance, as we mentioned before [13]. Urban heritage evokes a memory of something that happened: they are sources of cultural, social, and industrial history which makes them a testimony of the past, tracing the generations that lived there, becoming 'objects of remembrance' with a spiritual message, but also related to architectural history. These objects can be single headstones, whole neighborhoods, or even an entire city depending on the historical importance that transcended to the present day. The loss of these structures even from destruction or defacement can dislocate and dispirit us [14].

Going deeper in the concept, there are cases where the monuments and cities had not been lucky to be preserved, nevertheless, 'Genius Loci' survived despite war and destruction. A war can be seen as a catalyst through which visions of the past, present, and future come into conflict with each other. The reconstruction during post-war can be an opportunity to create better communities and contribute to better lives, so it is important to consider the role of the past that will impact the future. The past cannot be ignored, and even if it is a difficult experience, the adaptation of 'what remains' is what creates familiarity in the living environment. In the specific case of war, regeneration is what brings comfort memories after a period of chaos [15]. It is a way of bringing the memory of the people who lost their lives by rebuilding and creating a patrimony in their honor.

All this shows us that the city is a living organism where the inhabitants feel like home; being the heart of their main historic center, and its roads the circulatory system, although its soul comes from the collection of feelings, sensations, and emotions that build up their entire identity. It is not the physical building that forms the soul but what it represents. The complexity of the concept lies in expressing sensations on a qualitative and quantitative scale. Taking into consideration the urban heritage and the history of a place should be important factors for the 'Genius Loci' but at the same time, should point to the future and be involved in the present. The aim of this work is to explore the concept and try to define a way to identify it and include it in urban planning. First, it is important to understand this philosophical concept and the way it can be linked to the physical world. Then, the tools and methodology will be explained and the case studies in two different cities with diverse locations and backgrounds will be set as examples to arrive at the identification of Genius Loci. Through online surveys citizens were asked about the sense of belonging to their neighborhoods which is a scale where people can feel directly connected. The answers were

¹³ Nivala, John. (1996). Saving the Spirit of Our Places: A View on Our Built Environment. *UCLA Journal of Environmental Law and Policy*, 15(1): pp. 2.

¹⁴ *Ibid.* pp.14.

¹⁵ *Ibid.* pp. 4.

analyzed in the discussion chapter to arrive to the conclusion of what is the difference of Genius Loci in the cities and if they are significant determinants.

The case studies in this thesis were selected as cities that have significant difference in backgrounds but with the similarity that in both cities the government implemented big urban interventions and the perspective of those places changed creating an identity for the neighborhoods. These two case studies are Medellin in Colombia and Milan in Italy. The projects in both cities were big and have a repercussion in microscale which makes it interesting having them as study cases. Also, the selection criteria were to have two different cities with different cultures, weather, geography, way of living, levels of security, etc., having the theory that it does not matter that to have a sense of belonging. In each city two neighborhoods will be introduced to explain how the micro-scale worked and how the perception of citizens changed in those places. Through online surveys the citizens of each city were asked some questions about how they feel and perceived the places they inhabit, having a focus on their own neighborhoods. In this study for referring to Genius Loci the indicators were divided into physical characteristics such as green spaces, infrastructure, services, accessibility, etc., and into perceived ones such as feeling of belonging, security, safety, sense of community, interaction with their neighbors, etc.

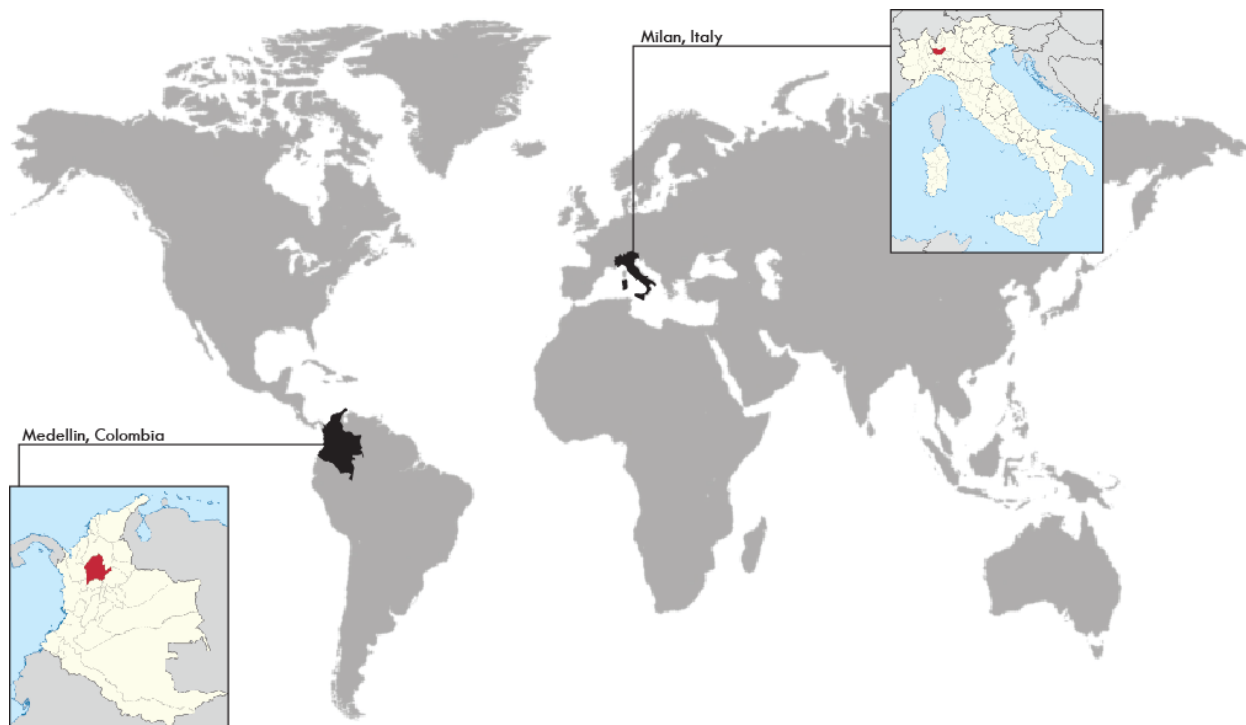


FIGURE 8: World map showing the selected case studies. The first close is inside the country of Colombia, showing in red the city of Medellin. The second one is the country of Italy, showing as case study the city of Milan.

In Medellin, Colombia, we have a clear example of how social inclusion and security are fundamental to improve the perception of a city. Around the 80's and 90's Medellin was considered one of the most violent cities in the world, people were afraid not just to live there, but even to visit it. Now Medellin has a lot to offer for tourists and residents, it has evolved to be an artistic and interesting city with unique qualities with a high quality of life for its residents. The instalment of different



FIGURE 9: *Commune 13 in Medellin, Colombia.* Medellin Travel. (n.d.). [Photograph]. Panoramic View. <https://www.medellin.travel/comuna-13/?lang=en>

and innovative ways of transportation of its citizens improves the quality of life and connectivity of areas that were used to be isolated. The goal was the implementation of “Social Urbanism”, aiming to connect marginalized areas of the city and using the systems like the metrocable or the mechanic stairs as catalysts for a physical and social transformation of Medellín and its communities [16]. The two neighborhoods presented in this research as examples of changes in micro-scale are Santo Domingo Savio and Las Independencias. Inside these two neighborhoods some urban projects were implemented, having big repercussions in the life of the inhabitants. The Colombian city was transformed to be a dangerous place related to violence and drugs, to be one of the most colorful, warm, and unique places in the world. For the questionnaire we asked the citizens in which district they live and how they perceive life there to understand if they feel they belong or not to their neighborhood and what is the relationship of people to the rest of the city. Also, with these questions it is easy to see in which neighborhood most of the citizens feel better, happier, and part of a place.

Then, we have the case of Milan in Italy, which passed from being an industrial city to having a big focus in the environmental part turning into a “city going-green”. The Italian city has been developing different projects that improve the ecological situation and for consequence, the life of its citizens. The two neighborhoods that this thesis presented as examples are Porta Nuova and Porta Garibaldi. The first neighborhood is Garibaldi, where the construction of a big park and a station with public services were built some years ago and now is one of the main attractions of the city. The second neighborhood is in the south

¹⁶ Gmbh, G. (2016, March 21). *Connective Cities: Good Practice Details.* Federal Ministry for Economic Cooperation and Development. <https://www.connective-cities.net/en/good-practice-details/gutepraktik/medellins-metrocable-1/>

part of the center, Navigli district, (see Figure 10) where the Grand Canal of the city was reopened and some modifications to the land and the area were included. Today this neighborhood is full of bars, cafes, restaurants, art galleries, and shops. These places went to being isolated spots with the only importance of having stations in the zone to become livable places where people can be in touch with green areas or water canals. This thesis is looking to explain not just the physical aspects of these interventions but how people feel about these neighborhoods and how life is through their eyes.



FIGURE 10: *Naviglio Grande in Milan, Italy.* Leonardi, G. (2021, February 8).

[Photograph]. <https://www.bbc.com/travel/article/20210208-milan-italys-lost-city-of-canal>

I.II RESEARCH QUESTIONS

In this thesis, the following main research questions will be approached.

1. Is there a difference between how people feel the sense of belonging in different cities or does the context does not matter? Is the sense of belonging different depending on the city?
2. What are the determinants for having a sense of belonging in a place?

To answer these research questions the following sub-questions were explored:

1. Do the people in the case studies (Medellin and Milan) feel a sense of belonging in their neighborhoods?
2. What is the perception of the citizens in the places they live?
3. Having services and infrastructure makes a difference in the feeling part of a neighborhood?
4. Are feelings of security or happiness affect the sense of belonging?
5. Is the community and neighbors (society) a factor to have a sense of belonging?
6. Is the culture, background, or conditions affecting the sense of belonging of the inhabitants?
7. Are residents feeling part of the neighborhoods where there was an intervention?

I.III RESEARCH AIMS AND OBJECTIVES

This thesis aims to analyze and compare the Genius Loci and the sense of belonging in different cities, taking as study cases the cities of Medellin in Colombia and Milan in Italy. The criteria for the selection were picking different cities where the government implemented important projects for giving an identity to the neighborhoods. Having different contexts should be a tool to determine what is what determinates the sense of belonging to a place and have a contrast in between different ways of living.

The following research objectives have been adopted:

- To understand the concept of Genius Loci: its origins, essence, application through time, and their relationship with the quality of life in a neighborhood.
- To explore what are the differences between space and place and their characteristics.
- To analyze the role Genius Loci plays in the design of spaces and how they can be perceived by the citizens.
- To explore different tools to measure Genius Loci and how they can help to design better spaces.
- To investigate the perception of the citizens in the study cases that are Medellin and Milan.

- To prove if there are differences in terms of perception of citizens between the study cases and why.
- To measure the sense of belonging in the neighborhoods (or microscale) to evaluate what is the livability of a place in the perception of the participants.
- To examine how Genius Loci exists in the respective neighborhoods and how considering it can increase the quality of life of the citizens.
- To explore how people were involved in the past in the urban regeneration projects, how is the present urban participation in these neighborhoods, and how can it be taken into consideration for the future.
- To analyze the importance of Genius Loci and how it can be considered in future urban developments.

I.IV SIGNIFICANCE OF RESEARCH THESIS

The basic idea of Genius Loci can be a starting point in urban planning projects. Considering the past of the site is an important factor that could improve the quality of life of the citizens. The two cities were picked for being examples of successful urban interventions that improve different aspects of the cities. The first case is Medellin in Colombia, a city that decades ago was one of the most dangerous cities in the world but now it has become one of the most visited cities in the country. The drastic decrease in violence after the project proves the success of the urban projects implemented there. For explaining its sense of belonging we are using two examples of neighborhoods that are famous for being part of the focus points of the urban regeneration plan and this research aims to understand through the eyes of the locals how they feel about their city and neighborhoods. The second case study in Milan was picked because it evolved from being an industrial and gray city to a green, safer place for its inhabitants. The connectivity and urban requalification of the environment were the two main focuses in the neighborhoods selected. In this thesis more than looking for the preservation of Genius Loci, its objective is to understand how the Spirit of a Place can contribute to increasing the feeling of belonging.

What this investigation wants to highlight is the importance of considering the citizens and getting them involved in the process of urban planning, since in many cases they are often left out. The understanding of not just the physical space but also the perceived space can contribute to creating better spaces where the citizens can feel that they are part of it and in consequence, they get the feeling that is their space. For facilitating the implication of Genius Loci in Urban planning it was proposed to divide the concept of “place” into two different spaces: the physical and the perceived. In the physical space the tangible urban proposals are analyzed and inside the perceived one, the way of how the citizens feel about those spaces. Perceived space is divided into three concepts, the first one is how people see the space, then how they feel about it, and finally how they behave inside the place. Asking the people that live inside the cities of the case studies was a perfect opportunity for exploring different perspectives and differences of inhabitants. This research seeks to evaluate the Genius Loci of Medellin and Milan and understand how people feel

about the places they inhabit. Involving citizens' opinions, senses, feelings, and behaviors can become an opportunity to have this approach in future urban projects giving the city what it needs to increase the positive feelings of the individuals of a location. Urban planners should aim to produce positive effects in the perception of the environment and consider how to help to increase the sense of belonging which produces an effect on the quality of life of the citizens.

I.V RESEARCH SCOPE

The research scope was based on exploring the origins of the concept of Genius Loci, its use through time, and how it can be helpful in urban planning nowadays. The purpose of having case studies is to fully understand the concept applied in contemporary times and explore the practical use of Genius Loci. The aim for collecting data was to be able to involve the same citizens of the places of interest to have some examples of what the sense of belonging is for different individuals. This spirit is part of the identity of the citizens, and this is the reason why it was important to involve them directly. Something important to prove in this thesis was that no matter the background or cultural situation of a place, their Genius Loci exists. This is the reason for having two case studies in two different cities, to be able to compare in between them and having a bigger panorama. The limitations presented are concerning the distance for collecting direct information of Medellin, Colombia, so the use of social media was the way it was implemented, the surveys and involvement of the people's opinion.

I.VI RESEARCH METHODOLOGY

This thesis had a qualitative approach that was used in conducting surveys on multiple social media platforms to collect all the data needed and being able to analyze it. The questionnaires were collected through Google forms and the social media used for contact with the participants were WhatsApp, Facebook, Twitter, and LinkedIn. The questions in the survey were the same for all the cases, with the exception that for Medellin the Metrocable was included in public transport options and the language was in Spanish for Medellin, and Milan, it was Italian and English. There were three sections in the survey, the first one was personal information, so we can know how the participants are, then the section on mobility which is also including security perception, and finally, questions asking how the daily life of the persons is. The goal was to prove the existence of Genius Loci in these neighborhoods and the relationship with sensations and feelings of the people. The details of the methodology, research methods, and tools were analyzed in Chapter 3, the results were exposed in Chapter 4, and the discussion was placed in Chapter 5.

I.VII THESIS STRUCTURE

This thesis is structured in six chapters: The General Overview of the document, the concept of Genius Loci, the Tools for Measuring Genius Loci, the Findings, the Discussion, and the Conclusion. The first chapter provided a general overview of the thesis including the introduction of this chapter. It considered the approach of the issues and problems and the structure of the whole document presenting the theoretical frame and the topics that it included. The second chapter is the compilation of information about the concept of Genius Loci, from its origins to its use in contemporary architecture and urban planning. The division of the concept of place and the relationship with the participant also were concepts included in this chapter that serves as a basis for understanding the application of Genius Loci in urban planning. The third chapter is focused on Methodology, explaining deeply the aims and the way the compilation of information took place, the research strategy, and the instruments in the fieldwork. Also, the ways of how involved citizens in urban planning were included, as it was the research of the case studies to introduce the cities and the neighborhoods where the surveys took place. The four chapters expose the results of the surveys and the data collected from the citizens of the case studies. The fifth chapter discusses the analysis of genius loci and the perception of the people living in these cities and more specifically, the neighborhoods picked. It also examines the potential implementation of the concept of Genius Loci for future developments in these cities. Finally, chapter six summarizes the whole research context, processes, and results as well as suggesting areas for future research.

CHAPTER II – THE CONCEPT OF GENIUS LOCI

II.1 THE ANCIENT ROME

The term ‘Genius Loci’ came from ancient Rome. It was a belief that not only humans but also places had a soul that determined their fate. Villages, towns, communities had their own ‘Genius Loci’, as well as the natural landscape: the valley, the spring, the river, the mountain, or certain parts of it [17]. They held the conviction that this spirit was responsible for the success or failure of the place in particular. Probably the idea came from ancient Greece that called these spirits daemons. The term in the ancient Greek was applied to unexpected

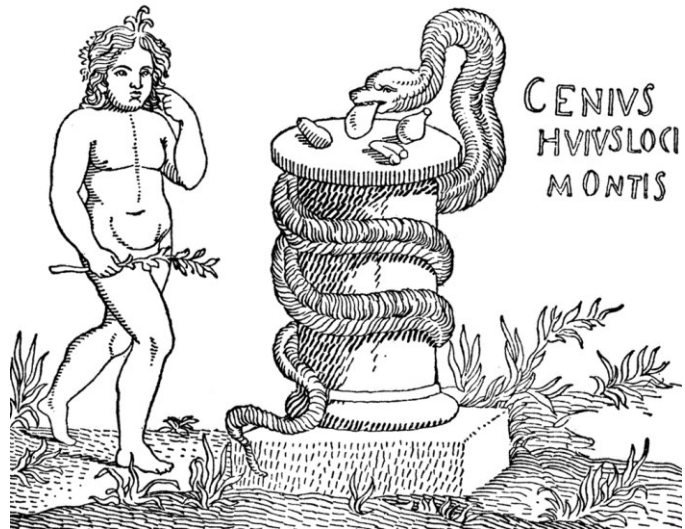


FIGURE 11: A wall painting from Herculaneum. (N.d.). [Photograph].
Ancient Roman Arts. <https://www.bible-history.com/ibh/Roman+Arts/Wall+Painting/Genius+Loci>

supernatural interventions without giving the power to any specific deity. They held the conviction that this power will determine a person’s fate, and everyone had a personal daemon [18]. In ancient Roman times this term was often related to religious iconography represented as a sacrificing man or a snake (see figure 11). In Roman dwellings, the snakes were kept alive, and their death was considered a bad omen. This concept was a crucial element in Roman religion and can be found in different paintings and scripts being represented as a snake.

For centuries, in the study of cities, there was a tendency of neglecting the obscure, magical, and religious rituals that were involved in the selection of a place. In the book *The idea of town* by Joseph Rykwert, he explained how space used to be studied in physical terms of occupation and amenity but taking out of the equation the psychological sphere, which is composed of cultural, juridical, and religious matters [19]. In Roman culture, the creation of the concept of the city is stated in the mythology of Plutarch’s ‘Life of Romulus’. The story is about two brothers, Romulus, and Remus, who agreed to find their city closer to the place where the she-wolf picked them when they were young. As they were Latins, they asked the Gods to reveal their will through the flight of birds. Romulus won when he saw twelve vultures while his brother

¹⁷ Petzet, M. (2008, September 30). *GENIUS LOCI – The Spirit of Monuments and Sites* [Scientific Symposium]. 16th General Assembly of ICOMOS, Quebec, Canada.

¹⁸ Britannica, T. Editors of Encyclopaedia (2007, October 31). Demon. *Encyclopedia Britannica*. <https://www.britannica.com/topic/demon-Greek-religion>

¹⁹ Rykwert, J. (1976). *The idea of a town: The anthropology of urban form in Rome, Italy, and the ancient world* (1st Edition). Faber and Faber: pp. 35.

just saw six, after that, the city was named after him, Rome. When Romulus built a city wall, Remus jumped over it, so his brother killed him. This tale represents the foundation of the city, calendar, religion, and history [20].

It is common for modern writers to think about urban planning in terms of pedestrian motives to avoid overpopulation or economic expansion. This last one is how contemporary economists explain the importance of a site: by the rate of population growth that equals the Gross National Product. Of course, hygiene and economy were important to consider but also,



FIGURE 12: *Sculpture of the Capitoline Wolf in the museum of Capitolium in Rome, Italy.* Cartwright, M. (2013, October 03). [Photograph]. Romulus & Remus. World History Encyclopedia. <https://www.worldhistory.org/image/1456/romulus--remus/>

they were seen by the ancient ones in mythical and ritual terms [21]. If we take Rome's foundational myth as an example, we can see how Romulus considered the location, economics, and hygienic reasons. However, it was the fact that Remus saw the sign of six vultures and Romulus saw twelve of them, which defined the actual location of Rome. This tale helps us to understand the mentality of the ancient Romans, who adjudged to divinity the success of the city.

The legend of Romulus and Remus was written probably around the 4th or 3rd century BCE, containing elements of both Greek and Roman cultures. For example, the Greeks usually created mythical eponymous heroes to explain the origins of place names. The person who founded the town was given semi-heroic status and was honored as a hero after his death. The hero-founder had to be buried at the heart of the city because that would guarantee that the site lived [22]. Different rites were involved in the foundation of a site, as it was a serious matter on which the fate of the people was left in the gods' hands. There are innumerable myths about the intervention of divinity in town foundations, from rituals that involved prayers to animal sacrifice, all these practices were integrated into the citizens' everyday lives with various ceremonies where the aim was to please the gods.

The Roman ritual of founding has its root in the Etruscan rituals, in the books 'Libri Rituales' and, as it was mentioned before, in some of the Greeks' beliefs and knowledge. Plato and Aristotle are good examples of a logical sense of ancient planning [23]. For instance, Plato's recommendation for a site took into

²⁰ Rykwert, J. (1976). *The idea of a town: The anthropology of urban form in Rome, Italy, and the ancient world* (1st Edition). Faber and Faber: pp. 28.

²¹ Ibid. pp. 31.

²² Ibid. pp. 35.

²³ Ibid. pp. 41.

consideration the type of land, the health conditions, orientation, and weather. Plato considered the psychological influence of the physical environment and the involvement of divine inspiration related to God's will that favor conditions for a place. He was seeking to establish a harmony between the city and the structure of the created universe. The founder of town would therefore trust himself blindly to the unpredictable divine forces that would affect the future city. The point of this could be summarized in Plutarch's position: "*Natural science is not blasphemous, while divination is not irrational*" [24]. Other cultures all over the world applied similar concepts regarding the involvement of divinity in the construction of buildings or cities.

In Asian architecture, we can find a similar concept of 'Genius Loci' related to Animism, or spirit worship which could be the oldest religion in the world. After the creation of Buddhism, these beliefs were spread to South-East Asia, like the case of Thailand. 'San Phra Phum' (in Thai) or spirit houses, consists of providing small shrines for the spirits who inhabit the area where the house is built. The reason behind this is that the permission of spirits should be granted before building new construction. First, is the construction of the shrines to entice the spirits to rather dwell in their own home and not in the house or shop [25]. The guardian spirits are not exclusively protecting residences but also gardens, lands, rice paddy, water bodies, military forts, etc. The spirit houses represent the mediators in between the physical and phenomenological world and their significant meaning is a way to understand the social character of places. They illustrate the



FIGURE 13: Maria Jose, C. A. (n.d.). *México-Tenochtitlán* [Photograph]. <https://mxcity.mx/2015/09/conoces-la-verdad-detras-la-leyenda-del-aguila-sobre-un-nopal-devorando-una-serpiente/>

²⁴ Rykwert, J. (1976). *The idea of a town: The anthropology of urban form in Rome, Italy, and the ancient world* (1st Edition). Faber and Faber: pp. 33.

²⁵ Pearce, M. (2011). Accommodating the discarnate: Thai spirit houses and the phenomenology of place, *Material Religion*, 7:3, pp. 344.

interactions and engagements between the residents and the spirits associated with certain sites influencing how places are constructed, experienced, and perceived.

Another example of an ancient culture using this concept is the Aztec culture in Mexico, where the foundation of Tenochtitlan relies upon the legendary origin of the City of Mexico. The gods told the Aztecs to find a site where an eagle, which was the bird-symbol of the god Huitzilopochtli, perched on a cactus, eating a snake. The Aztecs saw this scene on an island, formally the Lake Texcoco and they interpreted it as a sign from their god and founded Tenochtitlan on that place (see figure 13). Its edification was divided into two islands, the laid out was orthogonal and orientated, following a gridiron plan in general [26]. There were four separated sectors with four canals surrounding the central area where they used chinampas to cross through the sectors, as each one of them had its services and a religious precinct. According to the book 'Handbook to Life in the Aztec World' Chinampas, also called floating gardens, were artificial islands on freshwater lakes used for agricultural purposes. They varied in size but regularly they were rectangular with a size of around 100 square meters, they were driven into the shallow lake bottom. The structure was secured by roots of water willow trees planted at the corners along the perimeter of the chinampa (see figure 14). The irrigation of the plants inside the structure was provided by the surrounded canals where they were built [27]. This was a way how the Aztec civilization managed to build an entire city benefiting by the characteristics of the location and living in harmony with their natural environment. When it was conquered



FIGURE 14: Mursell, I. (2009). Model of chinampas in the National Museum of Anthropology, Mexico City [Photograph].

²⁶ Aguilar-Moreno, M. (2007). *Handbook to Life in the Aztec World*. Oxford University Press: pp. 54.

²⁷ *Ibid.* pp. 55.

by Cortes in 1521 the new city of Mexico was erected over the ruins of Tenochtitlan, following the original parallel streets covering big parts of the lakes [28].

In Robert Josef Kozljanic's book 'Genius loci and the numen of a place: A myth-phenomenological approach to the archaic', he relates genius loci with the concept archaic. The Greek meanings are referring to 'beginning', 'origin', 'principle', 'main', 'command', 'reign', and 'regime'. This can be translated to the beginning that holds the particular magic, encouraging and helping us to live and to grow. It is characterized by an inner power to change, configure, and create. Kozljanic's interpretation of the ancient Roman



FIGURE 15: *The Roman Forum The spring of Juturna*. (2012, January 1). [Photograph]. <https://www.imago-images.de/st/0067663769>

idea of genius is this guard that is constantly following and protecting the object of interest [29]. The genius is a spirit of fate, responsible for the development of a human being or a place, be it in positive and negative terms. When it dies or evolves, it can be named the 'spirit of becoming'.

For instance, Kozljanic exemplifies this with the myth of 'The Spring of the Nymph Juturna', located in the Roman Forum, which was the main square of ancient Rome. The tale explains that Juturna, daughter of the river god Vulturous, used to be referred to as the spirit of a water body. The Spring of Juturna used to supply the city with drinking water, with time, its shape changed to a small chapel with an altar nearby as it can be seen in figure 15. The fountain used to be around a square of basin, covered in marble, where statues of Dioscuri were placed in the middle. The fragments of the Spring of Juturna are now in the Antiquarium, where this altar is perceiving the memory and the tale of it. This illustrates the 'spirit of becoming' and from a practical point of view can be seen as the development of the city life from a social-historical perspective. Genius Loci is not only a protecting spirit but also, the 'spirit of becoming' and even the 'spirit of fate'. It is the place's potential that contributes to the development and shaping of the future location [30].

²⁸ Rykwert, J. (1976). *The idea of a town: The anthropology of urban form in Rome, Italy, and the ancient world* (1st Edition). Faber and Faber: pp. 98.

²⁹ Kozljanic, R.J. (2011). *Genius loci and the numen of a place. A myth-phenomenological approach to the archaic, in: Archaic: the past in the present*, Edited by Paul Bishop. New York: Routledge: pp. 69.

³⁰ *Ibid.* pp. 79.

The history of a place can become an important point of building a community identity and it can be transformed during time but having their original essence.

The myths are not only stories, but they are the way a culture expresses their identity. It is a conceptual construct that is attached to the location and the distinction as a society. Genius Loci is about the heritage of a place, the values of its citizens, and the perception as a culture. It can be seen as the one developing identity and preserving memory in the social dimension. The evolution of the place transforms its spirit that is implanted into the city's material fabric becoming the way to experience and feel the genius. It is not only a single spirit but a collection of them at different scales, buildings, yards, neighborhoods, cities, even entire regions. The structures that represent it are often recognized more for their symbolic meanings than their functionality. This perception and recognition are based on the data of cultural context that suggest its value and sense of uniqueness that "do not belong anywhere". In the next chapter the contemporary use of Genius Loci will be explained and how it can help in the improvement of urban planning and architecture.

II.II MODERN APPLICATION – ARCHITECTURAL PHENOMENOLOGY

The feeling of Genius Loci or sense of place is the way a society approaches its emotional links to the environment where they do their daily life. The first time the concept of 'Genius Loci' was adopted in modern times was during the eighteen-century by Alexander Pope, an English poet who established 'Genius Loci' as a principal indicator for landscaping design explaining that the context should be always considered [31]. Pope set up that every place has its own unique qualities including both physical and perceptive terms. This creates responsibilities for the architect or landscape designer, as it demands a special sensitivity to those unique qualities in a way that enhances them rather than destroys them. He stated in his "Moral Essays" addressed to Lord Burlington the argument of 'Genius Loci' and how it must be adapted to all places. The verse in his letter about Genius Loci was the foundation of one of the most important principles in landscape design that is to adapt the project to the context according to the location and the existing environment. What Pope and authors that have quoted him are referring to with Genius Loci, is the importance of paying attention to the distinctiveness of landscapes, landforms, local natural systems, and environmental processes.

Around the 1950's the start of an intellectual movement focused on the study of architecture as it appears in the human experience brought the concept of 'Genius Loci' from the philosophical branch to the application one called 'Architectural Phenomenology' [32]. This ideology was in contradistinction to the anti-historicism of postwar modernism that later influenced postmodernism and the study of contemporary

³¹ Walczak, Bartosz Marek. (2015). Built heritage perception through representation of its atmosphere, *Ambiances* [Online]. DOI: <https://doi.org/10.4000/ambiances.640>: pp. 2.

³² Ibid. pp. 2.

design having repercussions in the perception of heritage [33]. This branch has an emphasis on human experience appealing not just to the aesthetic character of a place, but also to how a person perceives a space. It advocates for the responsibility of an architect or designer for implementing the sensory design to establish experiential, architectural space. One of the principles established that each space is a resultant of the concrete realism that define and affect the place, as well as the characteristics and phenomena that each space possessed that are the sum of all the aspects of the environment in which the space is located [34].

Christian Norberg-Schulz was the first one to use the concept of Architecture Phenomenology, taking Genius Loci as a base for his studies. He believed that modern architecture was not responding to architectural needs because of its abstraction, and he provided an initial step toward an existential phenomenology of landscape and architecture. In 1963 he published his book “Intentions in Architecture” where he explained the theory of the organization of space and built form with an emphasis on visual perception influenced by Gestalt psychology. Then he wrote a trilogy of books attempting to lay the foundation of architectural phenomenology named: “Existence, Space and Architecture” (1971), “Genius Loci” (1980), and “The Concept of Dwelling” (1985). In this last book he interpreted “space and place” and their characteristics and what he named "environmental image" which is the one that provides people orientation and a sense of security. He established that "*all cultures have developed systems of orientation, which facilitate the development of a good environmental image*" [35]. The relationship of the people and the space they inhabit came from the identification and orientation of it.

Phenomenology is the study of how an individual experience the world, and its main purpose is to define layers such as emotions. In design and architecture, phenomenology deals with human perception and how the form and function produce a sensory feeling according to the personal experience. Architecture and urban planning should serve the needs of human activity, therefore, the most important function inside architecture phenomenology is to have a focus on quality, taking into consideration non-measurable characteristics to create a sensory experience such as emotion-evoking through space, materials, lights, shadows, and intimate human perception. This approach has a focus on the individual and his subjective understanding and perception of any place [36]. Kevin Lynch exposed this problem in his book “*The Image of the City*” using three cities as examples: Los Angeles, Boston, and Jersey City. In his findings, he reported that the citizens form mental maps with five main components that help them to understand their

³³ Bognar B. (1985) *A phenomenological approach to architecture and its teaching in the design studio*. In: Seamon D., Mugerauer R. (eds) *Dwelling, Place and Environment*. Springer, Dordrecht. https://doi.org/10.1007/978-94-010-9251-7_11

³⁴ 34. Norberg-Schulz, C. (1980). *Genius Loci: Towards a Phenomenology of Architecture*, New York: 1980. 5. Print: pp. 12.

³⁵ Ibid. pp. 19.

³⁶ Walczak, Bartosz Marek. (2015). *Built heritage perception through representation of its atmosphere*, *Ambiances* [Online]. DOI: <https://doi.org/10.4000/ambiances.640>: pp.3.

surroundings and environment, the elements are: paths, edges, districts, nodes, and landmarks [37]. In the UNESCO General Conference in 2011, it established recommendations to protect the historic urban landscape (HUL) which had similar foundations in the way a city is divided. The importance of protecting the urban areas is because they are the most common, abundant, and diverse manifestations of our common cultural heritage that was shaped by many generations showing our history as a society [38].

Phenomenology aims to understand how people and their environment can be included and defined by each other. It focuses on the interaction between humans and their surroundings, resulting in different types of relationships between them. Norberg-Schulz established that “the environment influences human beings, and this implies that the purpose of architecture transcends the definition given by early functionalism” [39]. [The failure in understanding this link between people and space results in confusing urban environments that affect their lives. The importance of this branch relies upon the need of architects and urban planners to be conscient about the connection between physical and perceptive space. The human significance of the environment is what phenomenology investigates, describes, promotes, and seeks to understand the value of the architectural experience.

Space can be manipulated using materials, lights, shadows, shapes, forms, scales, etc. It is perceived by the people with their senses creating a different impact on each person. Holl suggests that “*the perceptual spirit and metaphysical strength of architecture are driven by the quality of light and shadow shaped by solids and voids, by opacities, transparencies, and translucencies*” [40]. The role that architecture plays in human lives cannot be sub-estimated, it influences behaviors and has an impact on the quality of life. Architecture should be adapted to the site context and being aware of the role in a community [41]. Phenomenology explores the idea of how physical characteristics are perceived by senses, creating a certain type of emotions in the individuals that results in the perceived space. Each space evolves through time and these feelings are evoked when this space is recalled, contributing to creating an identity that distinguishes between one place to another establishing a sense of identity and belonging [42].

³⁷ Lynch, K. (1960). *The Image of the City*. Cambridge, MA: MIT Press: pp. 34.

³⁸ UNESCO (2011). *Records of the General Conference 36th session Paris, 25 October – 10 November 2011*. Volume 1: Resolutions (50-55). Paris: pp. 2.

³⁹ Norberg-Schulz, C. (1980). *Genius Loci: Towards a Phenomenology of Architecture*, New York. Print: pp. 21.

⁴⁰ Holl, S., Pallasmaa, J., & Perez-Gomez, A. (2007). *Questions of Perception: Phenomenology of Architecture* (2nd ed.). William K Stout Pub: pp. 54.

⁴¹ Blake, Edward. (2017). *Theory of Phenomenology: Analyzing Substance, Application, and Influence*. Arch 630: Theory and Context: pp. 4.

⁴² Walczak, Bartosz Marek. (2015). *Built heritage perception through representation of its atmosphere*, Ambiances [Online]. DOI: <https://doi.org/10.4000/ambiances.640>: pp.3.

According to Norberg-Schulz there is a difference between spaces and places: “*the spaces where life occurs are places...A place is a space which has a distinct character*” [43]. For him, Genius Loci is a concrete reality that a person must face in his daily life. The purpose of architecture is to visualize Genius Loci and the task of architects is to be able to design meaningful places using this reality and transform it in a place for the individuals. The study of Norberg-Schulz covered different aspects of Genius Loci using pre-modern buildings, towns, or natural landscapes from Europe and North Africa. He established the idea of “*stabilitas loci*” recognizing that the structure of a place is not fixed or having an eternal state, but without meaning that Genius Loci changes or gets lost because identity can be conserved [44]. As the title of his book says, his interest is in what are the intentions in the architecture, because it's not enough to have practical towns or buildings, but to follow the Genius Loci of the place.



FIGURE 16: Diagram showing the relationship between the Physical Space and the Perceived Space. The quality of space is perceived by the senses that produce emotions.

As many authors explain, the space is not just what we can see but also the perception that we get about the space. In the next chapter the concept of place was divided to make it easier to comprehend and to study deeply what makes a space a place. It is important to make an emphasis that the perceived space will be determined by each individual and by consequence, the collection of these perceptions are the ones that bring the Genius Loci of a place.

⁴³ Norberg-Schulz, C. (1980). *Genius Loci: Towards a Phenomenology of Architecture*, New York. Print: pp. 5.

⁴⁴ *Ibid.* pp. 18.

II.III WHAT MAKES A SPACE A PLACE?

The “Spirit of a Place” or “Genius Loci” is the distinctive atmosphere of a place, while “Sense of belonging” is the result of the interaction between the individual and space, defined in the previous part of this chapter. This occurs when space is transformed into a place but, what is the difference between space and place? Space is something open and abstract, it does not have a substantial meaning while place refers to how people feel about a certain location. So, a place can be seen as a space that is occupied by a person or something and has meaning or value [45]. For the purpose of this thesis, the concept of place was divided into two types of spaces: the physical space and the perceived space. The next scheme summarizes the division between each type of space that constitutes a place.

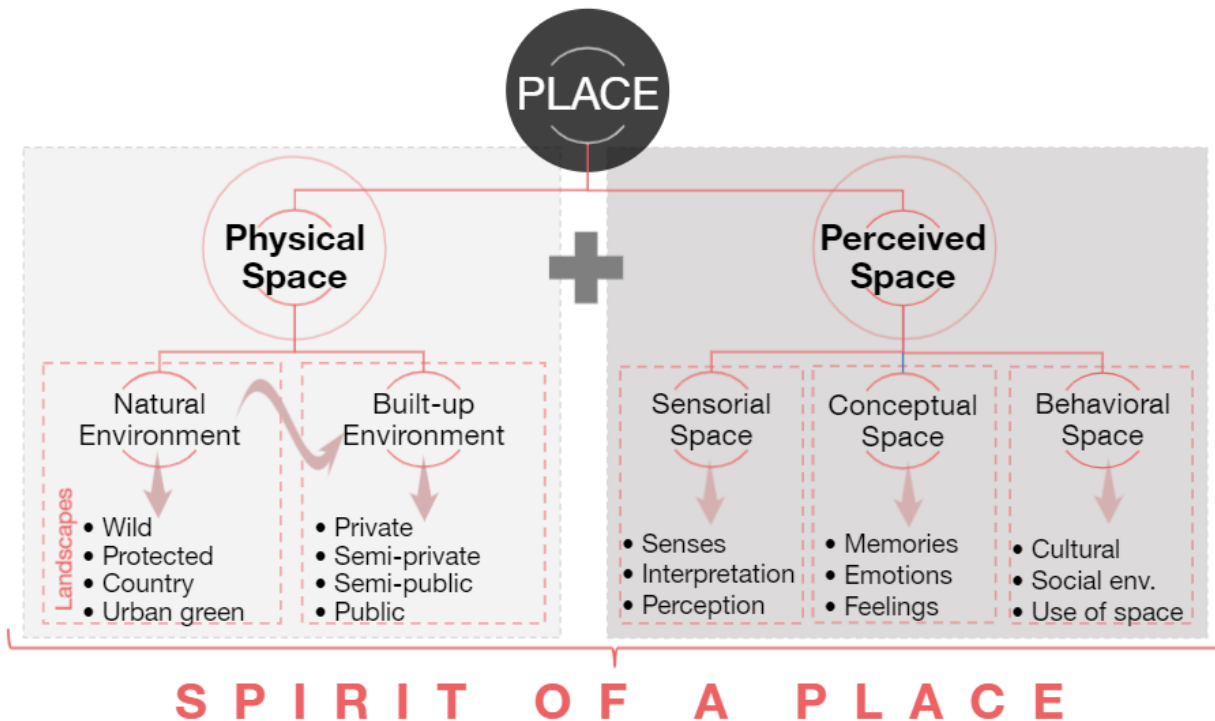


FIGURE 17: Diagram explaining how spaces create a place. The sum creates the Spirit of a Place or Genius Loci.

From Merleau-Ponty's point of view, space is a structure, a network of communications that expresses specific aspects of human consciousness and experience [46]. Space is something that can be just an idea of a place, for example, a house: we can picture a detached structure or an apartment in a building, the abstract thought about a house will depend on our background and knowledge. But the moment we think about a

⁴⁵ 45. Madani-Pour, A. (1996). *Design of Urban Space: An Inquiry into a Socio-Spatial Process* (1st ed.). Wiley: pp. 12.

⁴⁶ Asadpour, A. (2020). *Phenomenology of Place: A Framework for the Architectural Interpretation in Visual Arts*. International Journal of Architecture and Urban Development, 11. <https://doi.org/10.30495/ijaud.2020.54620.1441>: pp. 48.

home, the idea of a house transforms in a way of feeling, in a certain appropriation of the space. Here the conceptual part of space gets involved, making a link with our emotions, memories, and feelings that are connected to the concept of what is a home for each one of us. Place and objects are what define space and give it personality. People distinguish themselves in the environment and abstractly create these spaces in their mind [47].

Different authors distinguished space from a place. In *The Phenomenology of Place*, Merleau-Ponty introduced the concept of “lived space” in which there is a relationship between physical space, motion, and space perception. According to him, space perception depends on the individual and the absolute reference or "here," the body of the person is the point-horizon in space [48]. This means that all spatial determinations, including top, bottom, left, right, etc., are going to be defined in function of the individual. Parvin Partovi also presented a model for analyzing the structure of a place. This spatial organization is influenced by concepts such as "Insideness-outsideness", "border- threshold" and "enclosure-concentration", and the character shows itself in "orientation" and "identification", all of which result in a sense of place [49].

This distinction also helps us to understand the differences between sense of place and spirit of place which are closely connected. The “spirit of place” refers to the unique ambience and character of a landscape or place while sense of place is the faculty of people to grasp the spirit of place allowing them to appreciate differences and similarities among places. The Spirit of Place exists primarily outside a person, but it can only be experienced through the mind of the individual becoming the Sense of Place [50]. With this we can establish that the spirit can be in the physical space, but it can only have a significance through the perceived space. “Insideness” may provide a deeper experience of the place, it will always be hybrid because it is not only the personal experience of that place but also the physical existing space [51]. This is the reason for the importance of considering history and memories of the people that inhabit a place when it comes to planning.

The relation between the Genius Loci and the division of how a space is conformed is evidence that the Spirit of place can exist but for it to be relevant the person should transform the information of its surroundings, so it could become a Sense of Place. This is where to have Genius Loci in a place we must take into consideration the perception and interpretation of each individual. This association is what creates the feeling of “being home” or feeling part of something, where people know, and which is known by

⁴⁷ Wuisang, C. (2014). *Defining Genius Loci and Qualifying Cultural Landscape*. University of Adelaide: pp. 15.

⁴⁸ Merleau-Ponty, M.: *Parcours: 1935–1951*, Paris: Verdier, 1997, p. 66.

⁴⁹ Asadpour, A. (2020). *Phenomenology of Place: A Framework for the Architectural Interpretation in Visual Arts*. International Journal of Architecture and Urban Development, 11. <https://doi.org/10.30495/ijaud.2020.54620.1441>: pp. 48.

⁵⁰ Wuisang, C. (2014). *Defining Genius Loci and Qualifying Cultural Landscape*. University of Adelaide: pp. 16.

⁵¹ Ibid. Asadpour, 2020, pp. 50.

others, where they feel familiar with the environment and daily routines and feel responsible for the functioning of the place where they do their daily activities [52]. To be able to design and plan considering the Genius Loci of a place is important to also understand how it is perceived for different people. This is the reason why this thesis is dividing space into its physical characteristics and the way the human being is perceiving them, since a part of the space is abstract, inside the mind of each individual.

II.III.I PHYSICAL SPACE

Physical space is composed of everything that can be touched, which is divided in two: the natural environment and the built environment. In Norberg-Schultz's *Phenomenon of Space*, he considered not only the abstract part of the definition of space, but what in this chapter is considered as the physical space, which is a whole made up of real objects and things and has materials, matter, shape, texture, and color [53]. The sum of the urban space and natural landscape between and around buildings, including the infrastructure is what constitutes the physical space. He called them natural phenomena and built phenomena or, in a tangible sense, of between landscape and settlement. He argued that Genius Loci can only be embraced through the "space character". Norberg-Schulz proposed an interesting division for the built environment using the Gestalt theory. Although this way for classifying spaces might also be useful to categorize the physical space in general this research is introducing the three general ways of grouping both types of spaces as it can be seen in figure 18:

- Morphology: It is related to the shape of the space; it can be the form of the landscape, or it can examine the materiality of construction and the spatial boundaries. It also includes the urban patterns and its change through time. Morphology is often used on an urban and regional scale, being the analysis of the shape of the city and the factors that influence it, also studying the relationship between building mass and open space [54].
- Topology: it is related to the spatial system and its integration into a spatial arrangement. The etymology of the word came from the Greek word “*topos*”, meaning position and place. This makes a reference to the position of where space is,

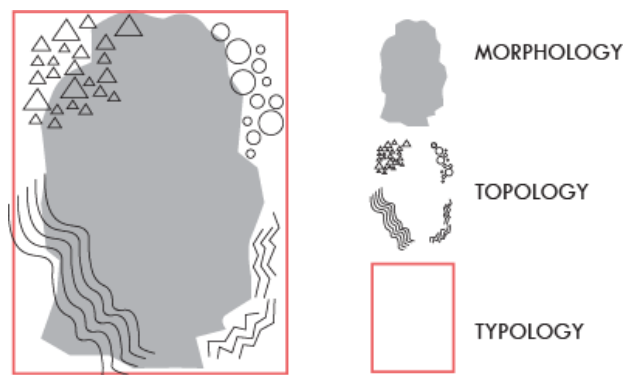


FIGURE 18: Diagram explaining how physical space is classified using morphology, topology, and typology.

⁵² Wuisang, C. (2014). *Defining Genius Loci and Qualifying Cultural Landscape*. University of Adelaide: pp. 16

⁵³ Partovi, P. (2008). *Phenomenology of Place*. Tehran: Iranian Academy of the Arts.

⁵⁴ Wardhani, F. (2019). *Patterns And Characteristics of Urban Morphology in The Old City of Bengkulu*. *Architecture & ENVIRONMENT*, 18 (1): pp. 55.

considering proximity, coherence, and dependence⁵⁵. Examples of this can be how a tree is placed in the ground, how a house is positioned in space and how it meets the ground, or how water is running over a stone. In urban planning and architecture, it should respond to the existing environment creating a physical continuity in the landscape.

- Typology: It is the physical classification of characteristics commonly found in the same environment. This suggests that the fundamental differences and similarities between spaces are what give them a meaningful identity [⁵⁶].

II.III.I.I NATURAL ENVIRONMENT

The Natural Environment refers to all living and non-living things occurring naturally, meaning not artificial. It includes everything that is made without human intervention such as vegetation, microorganisms, soil, rocks, atmosphere, natural phenomena, etc. Also, natural resources like air, water, climate, energy, radiation, electric charge, magnetism, etc., ones that do not originate from human activity. Norberg-Schultz considered that natural places are influenced by five factors: thing, order, character, light, and time. Based on this, Parvin Partovi identified four species of natural places, according to their principal characteristics and differences in between each other which are:

- 1) Romantic landscapes: referring to an environment full of change, diversity, and details, for example, the Scandinavian forests (see figure 19).
- 2) Cosmic landscape: the ones that are a continuous and uniform environment, such as a desert.
- 3) Classical landscape: environments that have a balance in terms of diversity and continuity like the Greek landscapes.
- 4) Complex landscape: This one refers to a combination of the previous three examples.

Landscape, as a part of the natural place, is composed by ‘structure’ and ‘meaning’ which engenders mythology both as cosmology and cosmogony [⁵⁷]. The natural environment and the built environment, in some cases, exist in harmony but in others, it seems that one absorbs the other. Nowadays, it is difficult to find natural environments that are not influenced by humans, but the important characteristic is their integration. For this thesis, the way of classifying the natural environments was in function of the human being and the harmony that it has with the built environment.

⁵⁵ Asadpour, A. (2020). *Phenomenology of Place: A Framework for the Architectural Interpretation in Visual Arts*. International Journal of Architecture and Urban Development, 11. <https://doi.org/10.30495/ijaud.2020.54620.1441>: pp. 49.

⁵⁶ Ibid. pp. 48.

⁵⁷ Wuisang, C. (2014). *Defining Genius Loci and Qualifying Cultural Landscape*. University of Adelaide: pp. 16.

- Wild landscapes: These ones include ecosystems where animals or plants live or grow in natural surroundings without being looked after by people. Normally, they are far away from urban areas that allow wildlife to grow without being affected by constructions. They can be jungles, forests, water bodies as seas, lakes, rivers, etc.
- Protected landscapes: These refer to those natural landscapes that have a defined periphery and are protected by humans. The purpose of these spaces is to keep them intact, free from harm, and safe from deterioration. Examples can be historic sites, cultural landscapes, botanical parks, rural villages, etc.
- Country landscapes: These ones cover natural ecosystems where there is a high intervention of humans, for example, agricultural fields. Even though most things grow naturally, there is the human manipulation of shaping the landscape. Here we can also think about recreational and tourist areas such as beaches, gardens, farms, etc.
- Urban green landscapes: These refer to the green areas that grow inside a city but are surrounded and highly affected by the built environment and by humans, in consequence. Having urban green spaces potentially affects the health, happiness, comfort, safety, and security of the citizens and why is highly recommended to include them in urban planning.

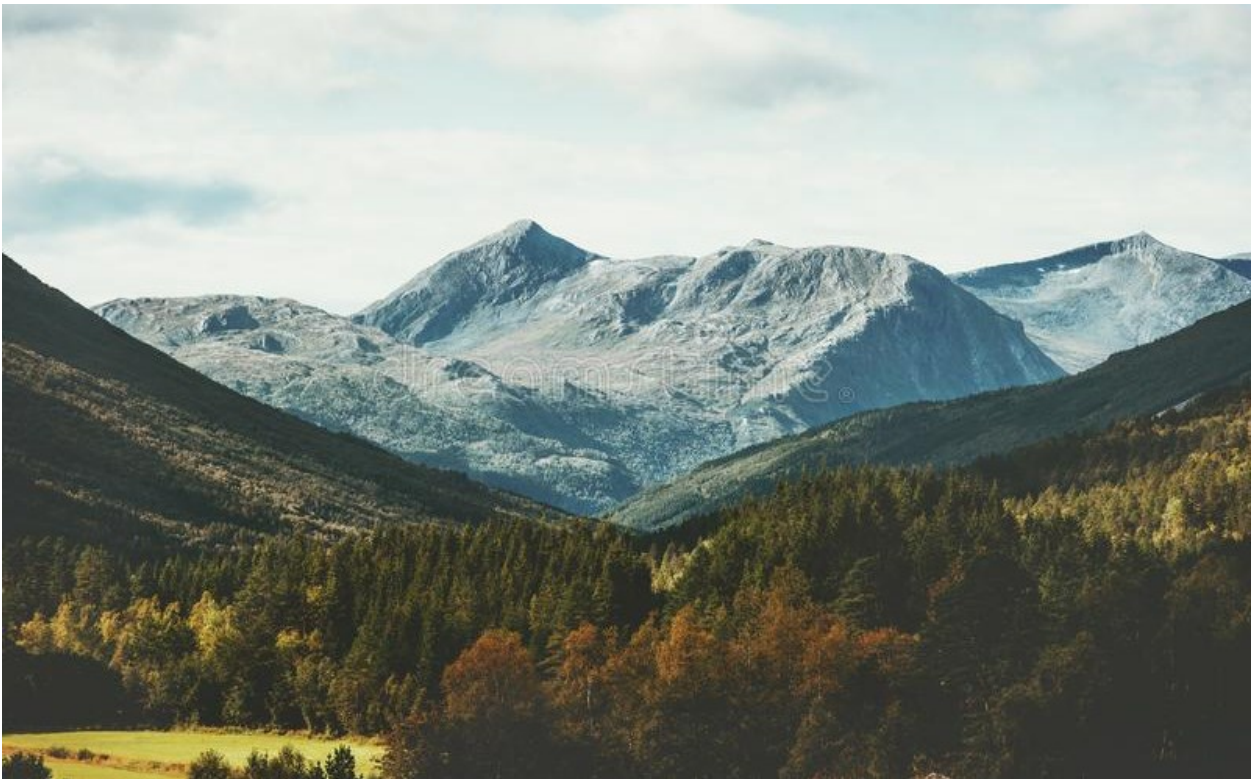


FIGURE 19: Dreamstime. (2020). Mountains and forest Landscape in Norway [Photograph]. <https://www.dreamstime.com/mountains-forest-landscape-norway-aerial-view-scandinavian-nature-travel-wilderness-image102689481>

Since this thesis is covering case studies that are inside of big cities, the relationship of the natural space was focused on what the area did to maintain and protect these urban green landscapes. Preservation of green spaces and water bodies are crucial to have a more sustainable future and by consequence, increase the life quality of its citizens. As urban planners and architects it is mandatory to respect and include in the plans, projects, and policies the natural environment and find a way to respond to its conservation.

II.III.I.II BUILT ENVIRONMENT

The built environment refers to those surroundings that are made by humans and are used for human activity. It includes all forms of buildings that can be residential, industrial, commercial, hospitals, schools, etc. It also considers all the infrastructure that can be above or below ground like highways, transit, airports, water supply, wastewater treatment, and solid waste facilities. According to Norberg-Schulz, there is a meaningful connection between man and the built environment and may be categorized into four categories: village, urban space, institution, and home. Together, these four categories represent the physical space, that is, where the natural, complex, public, and private forms of residence occur [58].

The main function of architecture is to shape the space according to its function for the human being. Since the purpose of this thesis is to define the “sense of belonging” the classification of the built environment was based in the categorization used by Paola Coppola Pignatelli in her book *Analysis and design of the spaces where we live* [59]:

- Private space: is the area surrounding individuals which they regard as psychologically theirs, for example, *their* homes. These spaces normally gave the individual a sense of security and ownership.
- Semi-private space is a part of the urban environment that tends to be private and in which a member of the public will only enter if they have a reason to do it. The access is controlled and accessible to residents and associated people only. An example of a semi-private space is a front garden or yard, also, it can be common areas in a building complex that can be shared by a group of people or families with restrictions from outsiders.
- Semi-public space: This category includes facilities that benefit the public but are not publicly owned. Normally, they are service-oriented for example places of worship, private educational institutions, nursing homes, and private recreation. It serves to provide a sense of community that constitutes the identity of an individual: Attending a specific school, working in a place, or going to a certain type of activity.

⁵⁸ Norberg-Schulz, C. (1971). *Existence, Space & Architecture*. Studio Vista Limited. Print: pp. 45.

⁵⁹ Pignatelli, C. P. (2008). *Analysis and design of the spaces where we live* (Spanish Edition). Pax Mexico L.C.C.S.A: pp 134-5

- Public space: These spaces are accessible to all citizens, for their use and enjoyment, for example, parks, libraries, museums, or spiritual and religious sites. They serve as a setting for community activities or public life, such as parades, meetings, and informal gatherings. One of the most important characteristics of these spaces is that they should provide a sense of security among the people. If the inhabitants do not feel safe, it can produce anti-social behavior and attitudes that could have a negative repercussion on the citizens' quality of life.

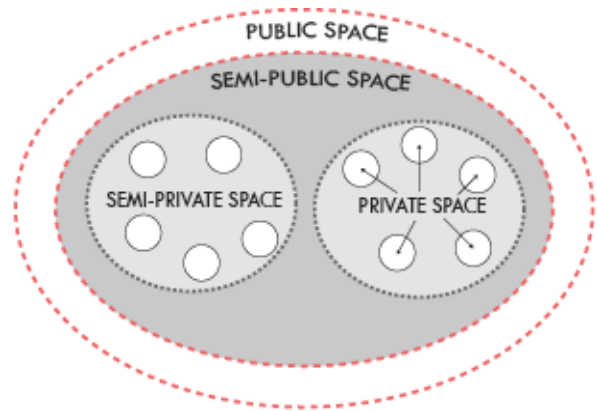


FIGURE 20: Diagram inspired in Pignatelli explanation of public, semi-public, semi-private and private space.

Pignatelli presented this classification to talk about a problem that is the difficulty of integrating these spaces in urban planning providing privacy and security for the inhabitants. There is a relationship between the equilibrium of these types of spaces and the behavior of the individuals, it can be positive or negative according to the comfort they feel in a certain place. This also has an impact on how a person feels about the environment and helps or affects how they perceive the same space [60]. In this thesis we will focus on public and semi-public spaces since we are talking about urban planning first, in the scale of a city as it is the public infrastructure and spaces open to all the citizens and then, in specific projects in a micro-scale that are inside the neighborhoods. The impact of these two scales affects the other two, making a neighborhood a place to feel a sense of belonging or not.

II.III.II PERCEIVED SPACE

After understanding what a physical space is we can explain what the perceived space is. This one is subjective; it can be different from one individual to another according to his unique basis. It will vary according to the background of every person and how interested they are in their surroundings and the attraction they feel to it [61]. Henri Lefebvre was one of the firsts

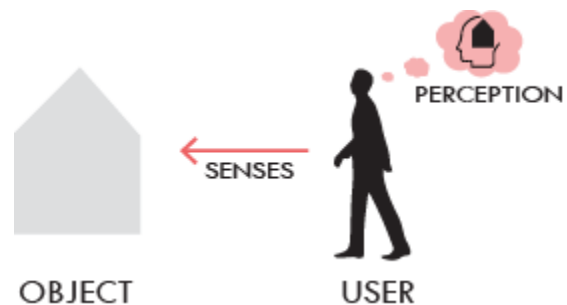


FIGURE 21: Diagram of perception of an object by the individual through the senses.

⁶⁰ Pignatelli, C. P. (2008). Analysis and design of the spaces where we live (Spanish Edition). Pax Mexico L.C.C.S.A: pp 115.

⁶¹ Wuisang, C. (2014). Defining Genius Loci and Qualifying Cultural Landscape. University of Adelaide: pp. 17.

authors to go deeply in this concept, he established that the perceived space is the first dimension in the production of space. After this image then comes the conceived space and lived space, creating a mental construction of the space, “a given space”. Lefebvre also explained that space is inherently social, and you cannot separate the space from social interactions. The perceived space is a representation of the practical perception or conception of the outside world and how we process that information [62].



FIGURE 22: Diagram the five senses that creates the perceived space.

The perceived space can be like the abstract space, what is in our minds and how we interpret the external information of the physical space.

Another term that Lefebvre wrote about in his book was the “Spatial Practice”, which is the sum of characteristics that are to the location and society. Movement is fundamental to talk about space, and the experience that it causes. This creates a different experience for each person in his or her lived space [63]. The perception of a space will depend on our daily experience in the world and the view of things at a time and from a fixed position. In this thesis the perceived space will be divided into three categories: first, the sensorial space, which is focused on how we perceive the spaces through the senses such as vision, smell, touch, etc. The second one is the conceptual space, which is the one that deals with the memories and processing the information evoking emotions and feelings. Finally, the behavioral space, which is the way of how people conduct themselves in the space. This behavior can be related to the same use of the space or to the cultural background of the individual, as well as the social environment that the person is dealing with.

The sense of space came to the mind of the people through a combination of sight, hearing, smell, movement, touch, imagination, purpose, and anticipation of an individual, as well as the connection to the community and to the memories each one has. The more profound is the association of the components of a space such as the other citizens, the houses, fields, roads, etc., with a familiar memory or a direct link with their emotions and feelings the stronger will be the Sense of Place. In these three main divisions this thesis proposes how we process the information. First, how we sense the aspects of the physical world through the senses, then, the sensation these aspects produce or evoke in us and finally, what is the behavior in that same space. The perceived space is how individuals approach their emotional links with the environment and the feeling of *genius loci*, or sense of place [64].

⁶² Lefebvre, H. (1991). *The production of space*. Blackwell: pp. 68-75.

⁶³ Ibid.

⁶⁴ 31. Walczak, Bartosz Marek. (2015). *Built heritage perception through representation of its atmosphere, Ambiances* [Online]: pp. 2.

II.III.II.I SENSORIAL SPACE

The first thing to explain the perceived space is to introduce the ways of how we experience a place. The five basic senses are: touch, sight, hearing, smell, and taste (see figure 24). Then we have other senses which are: the sense of balance, movement, time, temperature, etc. Space provokes affective engagement and sensory response from the individual producing an interpretation of the environment that can be positive or negative.

The starting point is the vision, which often is the first way for humans to get information about the environment. Depending on the position of the individual the perception can change or vary according to a sense of orientation. This can be elucidated with the Gestalt theory, which explains that to be able to understand something, it is necessary to consider the whole has a meaning apart from its individual elements. The word Gestalt means shape, form, pattern or configuration in German, there is no correct translation in English. The theory describes that the human brain interprets the information about relationships and hierarchy in a design or image based on visual cues like proximity, similarity, and closure. Concerning design, it has two major contributions: on one hand it tried to enlist rules of visual perception through an analysis of object patterns and groupings and on the other hand, it has formulated principles of problem solving and creativity [65].

The concept of abstraction is taught using the Gestalt theory, how visual representations work and what they provoke through perception. Scale, proportion, order, balance, all of them concern the visual world and are concepts that are used when it comes to a physical design to produce an environment [66]. Wertheimer formulated three rules that are essential to project a unity of elements which are: similarity (elements that look alike), proximity (elements that are close together) and continuity (elements that show good continuance though interrupted) [67]. After its popularization, other elements were taken into consideration such as: symmetry, alignment, simplicity, closure, rhythm, and proportion. The Gestalt principles might succeed in evaluating the environment but cannot always explain it, because of what each person is conditioned to see according to his own experience [68].

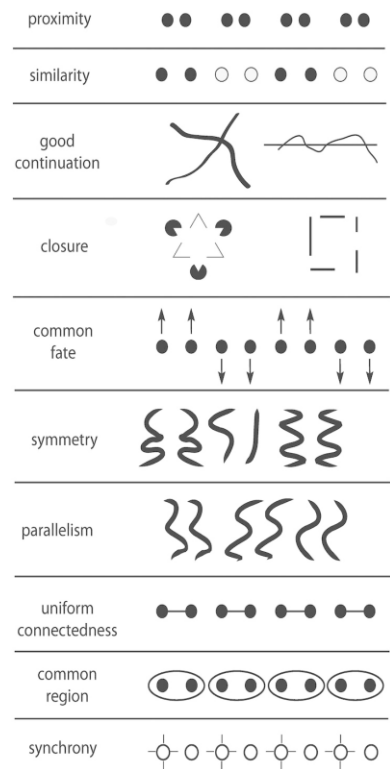


FIGURE 23: Hubbard, T. L. (2018). Aesthetics and Preferences in Spatial and Scene Composition. *Spatial Biases in Perception and Cognition*, 222–240. <https://doi.org/10.1017/9781316651247>.

⁶⁵ Dovey, K., & Pafka, E. (2016). *The science of urban design?* Urban Design International, 21(1): pp. 3.

⁶⁶ Ibid. pp. 4.

⁶⁷ Behrens, R. R. (1998) *Art, Design and Gestalt Theory*. Print: pp. 301.

⁶⁸ Ibid. Dovey, K., & Pafka, E. (2016). pp. 4.

Composition and the Gestalt Rules could sum up what is basic design including: “*harmony, order, proportion, number, measure, rhythm, symmetry, contrast, color, texture, space... learning how to conceptualize, to associate, to make analogies*” [69]. Having this concept in mind helps us to understand how ‘Genius Loci’ should be included, as it is not about the structure or beauty of an historical building but all that represents and how people feel about it. The same occurs with a neighborhood or even an entire city: how our brain processes a specific space is what creates the atmosphere and its soul. The Gestalt rules are useful to have a starting point with connections of spaces, elements and how to read them, adding the experience or what we are conditioned to see.

II.III.II.II CONCEPTUAL SPACE

Perception of space deals with how we translate the information that we are getting from the environment. This classification is dealing with the reaction that the brain has after perceiving the space with the senses, so we get emotions and feelings. Another factor that is involved in this perception is the intimate memories of the people. The visual stimulus for example, facilitates the memories that we have about spaces. Other senses such as smell, also appeals to our memories and we relate a space with another, for example the aroma of popcorn usually is related to the cinema and probably is linked to a positive emotion or memory of an activity that people can enjoy.

Emotional links can also be produced to specific places, for example with urban heritage which often represent a collective attachment of a society that represents part of its identity and is protected and preserved. In the book “Can Spirit of Place be a guide to Ethical Building?” by Isis Brook she stressed that regarding ‘Genius Loci’ it should be accepted as part of the design and integrate the spirit of a place that reflects the human feelings about a location. A monument or a protected urban heritage, like a city, is valued according to the public opinion. This is called the social significance of a monument, usually because of the importance of the historic personalities and events which had an immediate relationship with the monument. An objective evaluation of the significance may not be as important as it should to be considered a priority for protection but the social significance of it could give a different value according to the public opinion within the area [70].

The conceptual space is what allows the individual to define how comfortable he or she feels in a place. No one can ‘settle-in’ if they do not feel like home, this is related to the establishment of emotional ties or

⁶⁹ Rand, P. (1965) *Design and the Play Instinct, Education of Vision*, ed. G. Kepes, George Braziller Inc., USA.

⁷⁰ 31. Walczak, Bartosz Marek. (2015). Built heritage perception through representation of its atmosphere, *Ambiances* [Online]. DOI: <https://doi.org/10.4000/ambiances.640>: pp, 2.

psychological bond to a place. The feelings and memories of a space is what establishes an intimate relationship with a location [71].

With the improvement of new technologies, a tendency started to rise about photorealistic or even hyper-realistic representations to recreate an image or represent a past or future construction. However, even the most accurate virtual reconstruction of no-longer existing heritage may not recall the unique atmosphere of the place because it is based on the author’s imagination rather than of a real building. Precision of modelling and accuracy is not attached to the spirit of the place, so it is possible to appeal to the imagination but not necessary to the feelings. For it, it is important to consider the atmosphere of the place and preserve its intangible cultural values while maintaining a balance of objectivity of forms and subjectivity of experiences related to the place. To achieve this a research and apprenticeship of the place is mandatory also to stimulate the senses and imagination of the people. The outcome should be a sentimental journey through time and a recreation of the ‘Genius Loci’ not only to the physical urban heritage. The influence of new technologies is changing cultural constructions of space and communication: people are always and never at home.

II.III.II.III BEHAVIORAL SPACE

The behavioral space deals with how a person behave in the place. How people move, and act will be affected basically by three things: its own background, the other individuals that are surrounding him now and the usage of the space he is in. Some authors, such as Lefebvre, talked about how the social environment influences the individual in many ways, for instance the space is presented before the individual is inside it. This Lefebvre, called ‘propounding’ and ‘presupposition’, is the previous knowledge of the person of symbolism and stimuli, creating an image determined by the social reality from which it exists [72].

First, it will depend on the cultural background of the individual, how he was raised and educated. The environment where the individual grows will mark a difference in how someone can move and perceive space. Then, it also will affect the social environment where the individual is at that moment, the behavior of the individual might change according to the company that is having now or the social circumstances that are involved. Finally, the main use and utility of the space will affect the interaction between the location and the person.



FIGURE 24: Diagram for the constitution of behavioral space.

⁷¹ Hubbard, T. L. (2018). Aesthetics and Preferences in Spatial and Scene Composition. *Spatial Biases in Perception and Cognition*: pp. 75.

⁷² Lefebvre, H. (1991). *The production of space*. Blackwell: pp. 68-75.

II.VI GENIUS LOCI IN CONTEMPORARY PLANNING

Before introducing both case studies picked for this thesis, it is relevant to briefly explain the participation tools and the collaboration between stakeholders to create good projects, planning, and policies for a specific location. Urban planning and architecture deal with human needs but often, citizens play a minor role or are left out of the planning process [73]. Considering that the main value for having a place is the same perception of the people and the way they feel about the space, these aspects should be included to improve the sense of belonging in a location. Place-making is a way to strengthen the connection between people and the places they share. For improving a place, it is necessary to consider all the stakeholders and get them involved in the process of planning and design, from the early stages of urban design to the final development and even, the maintenance or future interventions regarding the project. Another way to consider the citizens is Human Oriented Urban Planning, the approach is simple: to design for humans. Integrating perceptions into the disciplines of urban planning and architecture can improve the impact of the belonging of the inhabitants.

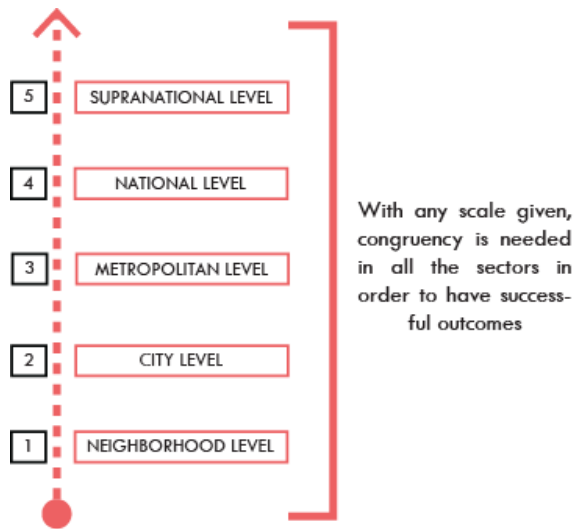


FIGURE 25: scheme of the levels in urban planning, showing the starting point from the micro-scale to the supra-scale.

different levels in urban planning that are: the neighborhood level, the city level, the metropolitan level, the national level, and the supranational level. For this thesis, we will focus from the city level to the neighborhood level which can be seen as the micro-scale in urban planning. The reason is that sometimes

This is what participatory tools are about: to ensure that the plan for the location is based on the inhabitants' practices and needs, allowing sustainability with actions and policies that can lead to success [74]. Participatory planning can only occur when different stakeholders are included in the process of urban design. It is proven that citizens' participation improves the projects and raises the acceptance of policies and projects related to them. In this way, a space can be transformed into a place, where all the people have a sense of belonging because they contribute to creating it [75]. Considering the needs of the location is as important as understanding the scales and integrate them knowing what each level will need. In the chart (see figure 25) we can notice the

⁷³ Hasler, S., & Chenal, J. (2017). *Digital tools and citizen participation: Towards sustainable and responsive urban planning*. 3rd Annual International Conference on Urban Planning and Property Development: pp. 2.

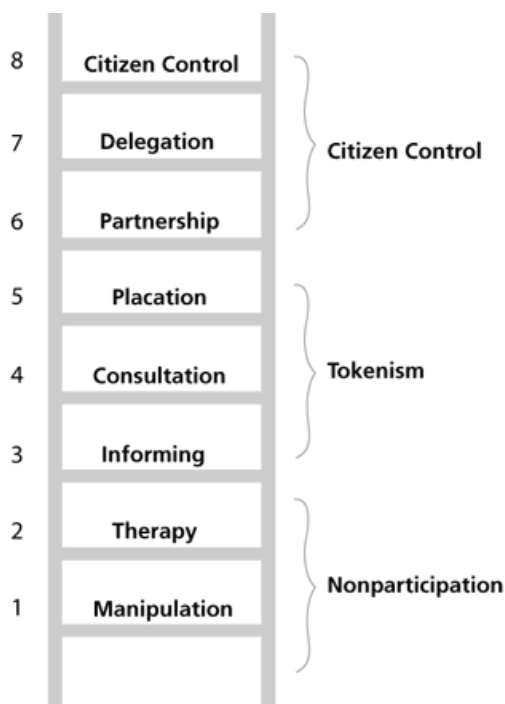
⁷⁴ Ibid.

⁷⁵ Asadpour, A. (2020). Phenomenology of Place: A Framework for the Architectural Interpretation in Visual Arts. *International Journal of Architecture and Urban Development*: pp. 11.

urban planning fails if the importance of this part is not given. In the end, the neighborhood approach is the first way of how people feel they belong or not to a city.

Confusing urban environments are the consequence of failing to understand the basics of place-making in architecture, public space, landscape, or urban planning. Maybe this was the failure or success of cities that the ancient Romans talked about, excluding the citizens in the design process of their city leading into chaos and lack, misplaced, or unnecessary services culminating in the abandonment of these places. Urban sprawl is one of the main problematic consequences of not including the citizens in the process conducting into segregation. Having the local input in urban planning cannot be underestimated, it does not matter the scale, plans should be made to embrace the views of the citizens at all levels, from a neighborhood to district or a city. Planning should also integrate the infrastructure, natural resources, housing, employment, education, culture, economic development, and land use across geographic and political boundaries [76].

The widespread use of the Internet and mobile phones make the connection of all the population in different ways, and it can be a solution to help cities to manage the challenges they are facing. Social media, apps,



Arnstein's Ladder (1969)

Degrees of Citizen Participation

FIGURE 26: Hasler, S., & Chenal, J. (2017). Digital tools and citizen participation: Towards sustainable and responsive urban planning. 3rd Annual International Conference on Urban Planning and Property Development: pp. 2.

surveys, and different tools smooth the distance between the citizens and urban planners allowing using data produced by participants to include their opinion in plans. Inhabitants can be stimulated to share their points of view to produce different ideas that could help planning for a better future. This is the key for having responsive planning and being able to include the Genius Loci in the process.

The challenges in planning are different, one of them is the given time that runs with a determinate budget, sometimes being insufficient the duration and costs of the operations. Historically, it has been more common in urban planning to have a top-down approach which means that the decisions are taken without the public opinion getting involved which increases the difficulty of understanding the real issues in the location of the plan. Also, not all the time stakeholders are willing to participate we can have an absence of representativeness or even insufficient motivation among citizens [77]. The biggest challenge that participation

⁷⁶ UNHABITAT. (2016). *World Cities Report 2016*. United Nations Human Settlements Program: p. 123.

⁷⁷ Hasler, S., & Chenal, J. (2017). Digital tools and citizen participation: Towards sustainable and responsive urban planning. 3rd Annual International Conference on Urban Planning and Property Development: pp. 2.

planning faces is that not all opportunities for collaboration are equal, according to Arnstein there are eight levels of participation. The chart (see figure 26) shows the Arnstein's ladder, which is a graphic of who has the power when important decisions are being made.

Arnstein classified the eight levels into three categories in which the bottom ones are labeled as 'nonparticipation', which are Manipulation and Therapy. The objective is not to let people participate in the process of plans or conducting programs, but to have power holders to make the decisions for the general population. The next label is 'tokenism' where the next three types of planning allow citizens to hear and to have a voice. Informing and Consultation are levels where people are informed but still the power holders are the ones that decide for the rest. In 'Placation' the ground rules allow citizens to give advice but still the powerholders the continued right to decide. Finally, the last three levels are the ones where citizens have the power of decision-making clout. In Partnership, people can negotiate and engage in trade-offs with traditional power holders. The top of the ladder is 'Delegated Power' and 'Citizen Control', where the citizens obtain most of all decision-making seats [⁷⁸].

Arnstein's ladder is a good way to understand how participation works and the different levels of it. There are other types of classification, for example, the top-down approach which aims to gradually move from the top to the bottom level of a hierarchy. There is also bottom-up planning which creates a plan at a lower, meaningful classification level and then develops it to the higher level. As it was explained before, the internet is transforming the collaboration between citizens and is making communication with the different stakeholders. For example, online surveys, which is the method picked in this thesis, allows one to have a public opinion about a topic, but there is no certainty that the contributions will be considered or that the participants will respond to them. Some platforms allow everyone to share propositions and ideas, and that allows interaction between all participants, and this one can result in collaboration and by consequence, in place-making [⁷⁹].

Placemaking has a direct connection with 'Genius Loci', being categorized inside the philosophical branch of phenomenology too. Christian Norberg-Schulz indicated that each space is a resultant of the concrete realism defining and affecting the place, as well as the certain phenomena that each space has, established by countless aspects of the environment of which the space is located [⁸⁰]. This is one of the foundations of placemaking, aiming to contribute to the identity of a place that can differentiate a place from another. It seeks to understand the perception of the people and its main key is the social participation in urban and architectural design to arrive at a quality solution.

⁷⁸ Arnstein, Sherry R. "A Ladder of Citizen Participation," JAIP, Vol. 35, No. 4, July 1969, pp. 216-224

⁷⁹ Hasler, S., & Chenal, J. (2017). Digital tools and citizen participation: Towards sustainable and responsive urban planning. 3rd Annual International Conference on Urban Planning and Property Development: pp. 4.

⁸⁰ Norberg-Schulz, C. (1980). *Genius Loci: Towards a Phenomenology of Architecture*, New York: 1980. 5. Print: pp. 32.

The importance of the projects that were implemented in the case studies of this thesis was the number of different actors and stakeholders that were involved. Even though that is not an example of Placemaking, they are clear examples of how a deep analysis of a location can help radically to identify and propose solutions for social, environmental, and mobility problems that a city can face. The introduction for the case studies started from a general picture of the city and the problems that some years ago presented. Then the plan of the municipality or city helped to change the structure of the areas, after that there is a focus in each neighborhood to understand the reality of the place and the people. Involving citizens in research shows us the perspective that urban planning should take into consideration for plan and design since each place has unique characteristics and by consequence, different needs.

Urban participation is important and more if we are going to include the concept of Genius Loci on it. The citizens are the ones that are experiencing the outcome of the projects and their opinions can transform into livable places. In this thesis, the focus is to study what is the perception of the population in specific cities and having differences can help urban planners to go in deep with the concept and find what to do to propose projects where the sense of belonging is improved.

CHAPTER III – METHODOLOGY

III.I GENIUS LOCI IN THE CASE STUDIES

The concept of ‘Genius Loci’ can be seen as the sense of continuity and authenticity of a location, it can be called ‘Spirit of a place’ referring to the atmosphere. When it comes to urban planning, the problem lies in the metaphysical characteristics of Genius Loci that elude scientific analysis by generating problems on defining qualitative measures and indicators. The importance of this idea cannot be set aside as it leads to a better quality of life due to the people being able to relate to the environment and establish a deep connection to the location. But how can it be measured and used by urban planners? In the previous chapter, it was defined what constitutes a place, which is the sum of different aspects of space. The physical space is tangible, but the perceived one varies according to each person. For this reason, the emphasis in this research is on ontological phenomenology which means that the investigation focuses on the ‘sense of belonging’ through the eyes of locals and their experience from the first-person point of view.

This analysis aims to quantify qualitative aspects and explore what is the sense of belonging for the citizens of the selected places. The method selected in this thesis consisted of questionnaires about the case studies in two different cities: Milan in Italy and Medellin in Colombia. The places were picked because of important projects of urban regeneration and requalification that, even though the problems and approaches were different, in both cases the implementation made a big change inside the specific zone. The purpose of having cities with different cultures and backgrounds is to highlight that each place has its own spirit, and with the right urban proposal can improve the quality of life and the sense of belonging. Involving the citizens with questionnaires helps us to have a close opinion of how the participants of the location feel about it and this could bring a better way of proposing projects for urban planners.

This research was based on a qualitative method translated into graphics trying to arrive at a quantitative result. First, for the descriptive part, the concept of ‘Genius Loci’ and ‘place’ was introduced and briefly explained in the previous chapters. Also, different participation tools were explored to pick the best option for the investigation. Then, the case studies were analyzed to understand the problematics and the urban proposals. For the qualitative part, the next chapter is about the findings and the data collection that was gathered through surveys asking respondents to complete the questions on social media. Finally, the discussion and comparison of the outcomes in these specific neighborhoods can help us to understand if ‘Genius Loci’ can be different depending on the city or not and try to find out the reasons. This can be a basis for other case studies and can develop according to the circumstances and the comprehension of them.

III.I.I INDICATORS FOR GENIUS LOCI

The main question that we used to define Genius Loci was: “*Do you feel you belong to your neighborhood?*”

The aim was to compare how people feel about their neighborhoods according to the city and to define indicators for the Sense of Belonging. Previously, this thesis divided ‘place’ into five types of spaces: built environment, natural environment, sensorial space, conceptual space, and behavioral space. Thinking about these different categories the questions try to cover the five spaces and having a better analysis.

For the built environment the relevant information asked from participants were Infrastructure and mobility, like what type of mobility is around their neighborhoods, the accessibility of them, and the options they can have. The services around their districts and the types of activities they have around. This was to find out if the people perceive that they can do all their activities inside their neighborhoods or they preferred to go to other places. Also, in case they need to go outside, how easy is it for them? Mobility and services are crucial points to determine that people are comfortable or not inside the places they live.

- For the natural environment, there were questions about the open spaces and green areas that surrounded their neighborhoods. Some of the original questions proposed for this division were taken out since the cities have different typography and landscapes. So, for comparing directly both cities it would be needed to have the same type of questions.
- For the sensorial space, we focused on the senses, in how much trash they see, how much noise they hear, how much vandalism they perceived. Also, if they see many people walking thinking what Jane Jacobs said, “*there must be eyes upon the street, eyes belonging to those we might call the natural proprietors of the street*” [81]. This can be translated as seeing more people on the streets would make participants feel safer and more welcome to their quarters. This has to do with questions that can be answered with the first glance of the participants about their neighborhoods, principally what they see and hear since are the easier senses to compare.
- For the conceptual space, the questions related to it were the feelings their neighborhood produced on them, if they feel happy in their neighborhood if they feel safe in the public transport if they feel free to have a walk. This section was an attempt to pick questions that can provide us information about how the participants feel about their neighborhoods and what type of emotions are produced living in certain places. Out of curiosity, it was asked about the urban regeneration projects to have an idea if the participants are aware of the background of the places they are living and what opinions they have about it.
- For the behavioral space, the aim was to focus more on the society that surrounds everyone, having questions about their community, their neighborhoods, and the values of the people that also live

⁸¹ Jacobs, J. (2002). *The Death and Life of Great American Cities*. Random House: pp. 35.

in the same neighborhood. Also, here we considered if they take part in daily activities as shopping or social activities. The way people tend to behave was included: why they do not use (if they do not) public transport or if they walk or not inside their neighborhood. In general, the surveys included questions about their social environment and the use of space, as well as if they are using or not these public places.

The questions were placed in an order that could feel organic for the participants so they could reply according to the topic. In the next sub-chapter, the questionnaires are shown as they were displayed in google forms and shared in social media.

RESEARCH TIMELINE: The timeframe for collecting the data started from June 14th, 2021, for both surveys, having a second wave in the week of the 26th of July 2021 closing responses by the 31st of August 2021.

III.I.II QUESTIONNAIRES

The questionnaires were made with Google Forms, distributed through social media in English and Italian for the case of Italy and in Spanish for Colombia. The general form is the next one:

* *Mandatory question.*

* * *Question with a different response according to the city.*

This questionnaire aims to determine your opinion about the livability of your neighborhood and collect information on how citizens feel about it. Your responses will be confidential, and we do not collect identifying information such as your name, email address, or IP address. All the data collected is anonymous and will be used for a master's Thesis. Remember that your response could help for future studies and will raise awareness of the problems of the neighborhood.

1. Age: *

Open reply

2. Gender *

- Male
- Female
- Other:

3. Where do you live? * *

For Milan:

- Municipio 1
- Municipio 2
- Municipio 3
- Municipio 4
- Municipio 5
- Municipio 6
- Municipio 7
- Municipio 8
- Municipio 9
- Outside the metropolitan area

For Medellin:

- Commune 1
- Commune 2
- Commune 3
- Commune 4
- Commune 5
- Commune 6
- Commune 7
- Commune 8
- Commune 9
- Commune 10
- Commune 11
- Commune 12
- Commune 13
- Commune 14
- Commune 15
- Commune 16
- Outside the metropolitan area

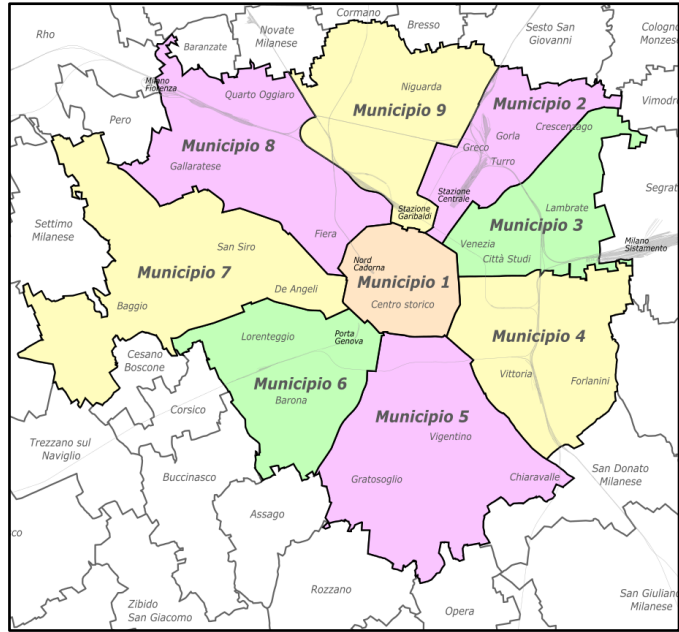


FIGURE 27: Mappa del territorio comunale di Milano suddiviso in zone. (2016, July 9). [Map]. <https://www.openstreetmap.org/#map=6/51.330/10.453>



FIGURE 28: SajoR. (2007, June 15). Mapa de las Comunas de Medellín, Colombia. [Map]. https://es.wikipedia.org/wiki/Comunas_de_Medell%C3%ADn#/media/Archivo:Comunas_de_Medellin.svg

4. For how long have you been living here? *

- Less than 2 years
- 2 – 5 years
- 5 – 10 years
- More than 11 years

5. Do you live in these neighborhoods...? * *

For Milan:

- Porta Nuova
- Porta Genova
- None of those

For Medellin:

- Santo Domingo
- Las Independencias
- None of those

6. Where is the location of your school / office? *

- Close to my house, in the same neighborhood
- Outside my neighborhood
- I work/study from home
- Mixed: smart working / half presence
- No work / no study

7. You live... (select all that is applicable) *

- Alone
- with parents
- with flatmates
- with children
- with my partner

8. Which type of living arrangement do you have right now? *

- I own the house
- Renting for long-term period (more than 1 year)
- Renting for short-term period (1 year or less)
- The house is owned by a relative/friend
- I live in a foster or sponsor home
- I am homeless

9. Which type of transport do you normally use? * *

For Milan:

- By foot
- By bicycle
- By scooter
- By motorbike
- By metro
- By Train
- By tram
- By bus
- By taxi / Uber
- Share car service
- By personal/household car

For Medellin:

- By foot
- By bicycle
- By scooter
- By motorbike
- By metro
- By metro cable
- By tram
- By bus
- By metro plus
- By taxi / Uber
- Share car service
- By personal/household ca

10. How often do you use public transit? *

- Every day
- Around 5 days per week
- Around 3 days per week
- Rarely
- Almost never

11. If you do not use public transit, what is the reason? (If you use it do not answer)
- It is not comfortable
 - It is expensive
 - No accessibility
 - It is slow
 - It is insecure
12. How far is the public transit station/stop from your place? *
- less than 5 minutes walking
 - 5-10 minutes walking
 - 10-15 minutes walking
 - more than 15 minutes walking
13. How do you find the security of public transport in the area? *
- Very safe
 - Safe
 - Normal
 - Insecure
 - Very Insecure
14. If you use a personal car as daily transport mode, what is the main reason?
- It is cheaper
 - It is more secure
 - It takes less time
 - There is no public transportation
 - The destinations are not near my living place
 - I do not like walking
 - It is too hot/cold (weather conditions)
 - I do not have a car
15. Do you cycle to your near destinations inside your neighborhood? *
- Yes
 - No

16. If you do not cycle to your near destinations, what is the reason?
- I do not like it
 - Lack of biking facilities
 - Is dangerous to ride around here
 - It is slow/takes too much time
 - I do not have a bike
17. Where do you perform most of your daily/weekly shopping? *
- Inside the neighborhood
 - Outside the neighborhood
18. How far is your closest grocery store? *
- less than 5 minutes walking
 - 5-10 minutes walking
 - 10-15 minutes walking
 - more than 15 minutes walking
19. For recreational activities do you prefer to stay in your neighborhood or go further? *
- Inside the neighborhood
 - Go further
20. If you do not join social activities (like shopping/entertainment) in your neighborhood, what is the reason? Do not answer if you shop in your neighborhood.
- Lack of shops or activities
 - There is not a good social atmosphere
 - There is a little insecurity in the neighborhood
 - The shops or facilities are expensive
 - I prefer to visit new places
21. What are the most common types of activities that you can find in your neighborhood? *
- Cultural activities (museums, theaters, etc.)
 - Outdoor activities (parks and sports)
 - Shopping and restaurants
 - Nightlife (bars, clubs)

- Residential (Houses and basic need stores)
- Offices
- Industrial activities (fabrics and big companies)
- Tourist attractions

22. Do you feel you belong in your neighborhood? *

- Yes
- No

23. Why did you choose this neighborhood to live? (One option) *

- The house was affordable to buy or rent
- The house was near to my working place/school
- The house was near to my children's school
- The surrounding environment is attractive
- The house will have higher price in the future
- To be near to our relatives and/or friends
- I live here since I was born/my childhood
- Public transportation is available around the neighborhood

24. What is your opinion about the urban regeneration of your neighborhood? *

- I think it helped the neighborhood
- I think it was better before
- I do not know anything about it

25. Please select the most appropriate answer options:

	Strongly Agree	Agree	Neutral	Strongly disagree	Disagree
I am happy where I live now					
I like to tell others that I live in my neighborhood					
My neighbors are good					

Most people in my neighborhood are friendly					
People in my neighborhood share the same values					
I have a strong sense of community here					
I like to have a walk around my neighborhood					
There are interesting activities to do in my neighborhood					
I often see people walking in my neighborhood					
My neighborhood is well maintained					
The buildings in my neighborhood are interesting					
There is a lot of noise in my neighborhood					
There is vandalism in my neighborhood					
There is too much trash on the streets					
I feel safe in this neighborhood					

Thank you for your time!

III.I.III CHI-SQUARE TEST OF INDEPENDENCE

For this analysis the method used was the Chi-Square Test of Independence, which determines whether there is an association between categorical variables, meaning that the answers of the surveys were analyzed to prove if they were independent or related variables. The program that was used was SPSS with the data collected from the surveys of each city. This type of test uses a contingency table (or cross-tabulation) to classify the data according to two categorical variables, they can be statistical independent or dependent:

- Statistically independent refers when the population conditional distributions on one of them are identical for each of the levels of the other.
- Statistically dependent is when the conditional distributions are not identical.

Value	Interpretation of PRE-Measures
-1.0	Perfect Negative Association
-.80	Very Strong Negative Association
-.60	Strong Negative Association
-.40	Moderate Negative Association
-.20	Weak Negative Association
0	No Association
+.20	Weak Positive Association
+.40	Moderate Positive Association
+.60	Strong Positive Association
+.80	Very Strong Positive Association
+1.0	Perfect Positive Association

TABLE 1: interpretation of values for measure the coefficient of association between the variables in Chi-square tests.

Having a cross-classification table within the variables can show what is the conditional distribution in between variables or in this case, between one answer to the other. Having the percentage of people having the same or different opinion we can look for the significant relationship. The chi-square test is designed to test for independence between two nominal variables. An important factor to consider is the size of the sample, the larger the better, because “*this test is based on a comparison between the frequencies that are observed in the cells of the cross-classification table and those that we would expect to observe if the null hypothesis of independence were true*” [82]. The test for independence helps to summarize how close are the frequencies in a cross-classification. In this thesis it was used the Lambda for nominal-by-nominal values and the Cramer's V for nominal by ordinal. In the table 1 we can see the interpretation for the values

we obtained to determinate how strong the association of the values are. Having the replies of the surveys this thesis took the answers and used them as categorical variables to determine what is the relationship with the city and the sense of belonging and, what relationship has the sense of belonging to services, public transport, physical conditions, etc.

⁸² Agresti, A., & Finlay. (1986). *Statistical Methods for the Social Sciences* (2nd ed.). Macmillan Coll Div: pp. 203.

III.IV INCLUDING GENIUS LOCI

The purpose of this comparison and analysis is to understand how neighborhood-level interventions provide an opportunity to not just increase the level of life of the citizens but to include the sense of belonging. The case studies that were taken into consideration are two cities which are Medellin in Colombia and Milan in Italy. As examples of neighborhoods, we are taking Santo Domingo and Las Independencias for the first city and the second one, Garibaldi and Navigli. These neighborhoods were picked because they are examples of big urban regeneration projects that solve different problems and improve the citizens' lives. For these urban interventions, many stakeholders were involved including the main participants which helped the government to develop better projects in all the cases. Since urban participation was high in all the case studies, in theory, the quality of life and sense of belonging of the population should be strong.

The aim is to define the link between people, place, and their worldview having different examples to be able to analyze different contexts. By examining the perceptions of the citizens' elements of their environment we can define what value they give to the place they live and if they have a sense of belonging to the community. Through surveys, it was asked the individuals what their emotional bond to the neighborhoods and what type of relationship they have to the place, their psychological bond that goes from the security they feel, to how they perceive mobility, or how is their daily life and the use of the services the city provides.

The spirit of a place is a quality that is not static, it is something that evolves and changes. When a place has a lack of attention or is abandoned, this spirit of place fades. Also, when different types of urban regeneration or new projects are built up, it can help the Genius Loci to grow. The place acquires its own identity through the changes and the past of time, as it does with the perception and sense of belonging for the people who live there ^[83]. Although we cannot compare how citizens felt about their neighborhoods or cities years ago, the surveys played an important role in understanding how people feel about them right now. In the next sections of this chapter, the cities and some neighborhoods are going to be introduced to explain the historical context and the urban intervention in the case studies to have a general picture of the places.

The first case study that is going to be introduced is Medellin, Colombia, where public insecurity became a big problem some decades ago. The proposal of the municipal authorities in Medellin was implemented in 2004, consisting of a public transit system to connect isolated low-income neighborhoods to the urban center of the city. Also, the municipal government invested in neighborhood infrastructure providing public spaces for the communities ^[84]. Two examples of those projects were the metro cable and the mechanical

⁸³ Wuisang, C. (2014). *Defining Genius Loci and Qualifying Cultural Landscape*. University of Adelaide: pp. 16.

⁸⁴ Cerda, M., Morenoff, J. D., Hansen, B. B., Tessari Hicks, K. J., Duque, L. F., Restrepo, A., & Diez-Roux, A. V. (2012). *Reducing Violence by Transforming Neighborhoods: A Natural Experiment in Medellin, Colombia*. *American Journal of Epidemiology*, 175(10): pp. 1045.

stairs, which had a big repercussion in the two examples that are Santo Domingo in commune 1 and Las Independencias in commune 13. Other urban acupuncture actions implemented were created under a new comprehensive urban planning tool (PUI), reinforcing the resilience and social capital of the neighborhoods [⁸⁵].

The next case study is in Milan, Italy, where the problem some decades ago was the rapid industrialization that the city suffered. The two neighborhoods that were taken as examples used to be abandoned infrastructure and transformed into useful public spaces. The natural environment was a highlight in these cases, with the park in Porta Garibaldi and the re-opening of the Navigli canal. There is a big contrast between the two case studies which is important to highlight since the backgrounds are completely different and this research aims to understand what makes participants feel they belong to their neighborhoods. Exposing both cases is a way to keep in the mind of the lecture what are the main differences of each place and how different the responses can be depending on the city.

⁸⁵ Ramírez, M., & Kapstein, P. (2016). Regeneración urbana integrada: proyectos de acupuntura en Medellín. *REVISTARQUIS*, 5(1). <https://doi.org/10.15517/ra.v5i1.25404>: pp. 86

III.V MEDELLIN, COLOMBIA

Medellín is the second-largest city in Colombia with a population of over 3 million in the metropolitan area and a surface of 382 square kilometers. It has the nickname of the ‘City of Eternal Spring’ because of its warm and constant weather. The urban zone of Medellín consists of sixteen communes which are divided into 249 statistical barrios or neighborhoods. According to the 2018 DANE (National Administrative Department of Statistics), the population consists of 53% females and 47% males, with an average age of 31.3 years: 71.2% of the residents are aged between 15-64, being a city full of young people. 61.3% were born in Medellín, 38% in other parts of Colombia and 0.3% in another country [86]. The topography of Medellín stretches from a narrow valley to vast hilly areas. Some under-developed neighborhoods were built on the top of the hills and some years ago, it was impossible to reach these zones using public transport. These areas suffer from unemployment, poverty of their inhabitants, physical and social marginalization, limited access to public services and often have high rates of crime and violence. The north and the highlands of the eastern and western slopes are the areas where half of the population inhabit in conditions



FIGURE 29: Medellín Travel. (n.d.). Aerial view [Photograph]. *Mechanic Stairs*. <https://www.medellin.travel/comuna-13/?lang=en>

⁸⁶ Gmbh, G. (2016). *Connective Cities: Good Practice Details*. Federal Ministry for Economic Cooperation and Development. <https://www.connective-cities.net/en/good-practice-details/gutepraktik/medellins-metrocable-1/>

of extreme poverty. This was contrasted by the center and south of the valley, where the middle and upper classes live, being an example of A Tale of Two Cities with two opposite realities [87].

During the 1980s and 1990s it became one of the most violent cities in the world, the drug-related conflict involving different paramilitary gangs increased insecurity and vulnerability of the neighborhoods which were isolated from the center. By the 1990s, civil society began to organize itself proposing social and cultural projects as a reaction to the violence in the city. By 1999 the municipal government of Medellín approved a territorial plan to promote urban and rural development, including the Metrocable which is a gondola lift system with the purpose of providing transportation services [88]. It was designed to reach some of the city's informal settlements on the steep hills that were isolated. The government started implementing the integrated urban projects (PUI) in 2003, for the planning and implementation of the projects where the citizens affected were continuously involved: The goal was the implementation of “Social Urbanism”, aiming to connect marginalized areas of the city and using the systems like the Metrocable as catalyst for a physical and social transformation of Medellín and its communities [89].

During the governance of the Mayor Sergio Fajardo in 2004, the city implemented structural changes linked with educational, cultural, and entrepreneurial programmed designed to ‘change the skin’ of various neighborhoods located in the most critical areas of the city [90]. In 2004, the first cable propelled transit (CPT) line was opened as part of the integrated urban development programmed. This connects the city center to Santo Domingo’s neighborhood in the mountainous periphery with an elevated train system which includes 4 stops and covers 2,072 meters with an elevation of 399 meters. Other improvements to the neighborhoods serviced by the Metrocable were new pedestrian bridges and street paths, more lighting for public spaces, recreational centers like library parks and buildings for schools, more police patrols, and a police station next to each Metrocable station. This reduced the marginalization of these communities that were used to be isolated, providing infrastructure and services that helped to decrease the violence in these neighborhoods [91]. The integrated urban projects (IUPs) were implemented in areas of high marginalization and violence, identifying, and prioritizing a set of neighborhoods as early intervention models in a timeframe of six years [92].

⁸⁷ Cerda, M., Morenoff, J. D., Hansen, B. B., Tessari Hicks, K. J., Duque, L. F., Restrepo, A., & Diez-Roux, A. V. (2012). *Reducing Violence by Transforming Neighborhoods: A Natural Experiment in Medellín, Colombia*. *American Journal of Epidemiology*, 175(10): pp. 1045.

⁸⁸ Ibid. pp. 1046.

⁸⁹ Gmbh, G. (2016). *Connective Cities: Good Practice Details*. Federal Ministry for Economic Cooperation and Development. <https://www.connective-cities.net/en/good-practice-details/gutepraktik/medellins-metrocable-1/>

⁹⁰ Castro, L. (2011). *Bogota and Medellín: Architecture and Politics*. Wiley Online Library. <https://onlinelibrary.wiley.com/doi/epdf/10.1002/ad.1246>: pp. 100.

⁹¹ Ibid. Cerda, M. (2012) pp. 1046.

⁹² Ibid. Castro, L. (2011) pp. 100.

Medellin went from a dangerous city to a positive example of urban innovation. The positive result was because of the focus on accessibility and regeneration of the most vulnerable areas located in the periphery of the city. The integral urban regeneration process was focused on the integration of the isolated neighborhoods to make possible the reinforcement of social cohesion improving the identity of the city [93]. Before urban intervention, 28%



FIGURE 30 : Medellin Travel. (N.d.). *Comune 13*. [Photograph]. *Mechanic Stairs*. <https://www.medellin.travel/comuna-13/?lang=en>

of deaths in this city were caused by homicide. After the urban project, the resident's reports of violence decreased 75% in the neighborhoods that were intervened, which shows that physical infrastructure can reduce violence [94]. The formerly excluded population of the informal neighborhoods got more involved with Medellin's social, economic, and political life; people started to participate in the decision-making of future urban development projects. The relationship of mutual respect between the citizens and the government grew and this contributed to a greater sense of belonging [95].

Medellin growth towards creating a more accessible and democratic urban environment. The focus on strategies that mitigate the strong social, economic, and physical segregation was accurate to create a better quality of life for all their citizens. Mobility and public spaces played an important role in the change of perception of the city: the accessibility to public services through the formation of new parks, libraries and other public amenities spread across the entire city (and not concentrate them in the formal middle and upper-class neighborhoods) was the way of how the city evolved from a dangerous place to a vibrant and tourist destination [96]. The primary tools for working with the community in this process for the recovery of the city's neighborhoods were architecture and urbanism. Multidisciplinary teams accomplished to propose quality projects designed to improve the relationship between the citizens and the physical space.

⁹³ Ramírez, M., & Kapstein, P. (2016). *Regeneración urbana integrada: proyectos de acupuntura en Medellín*. REVISTARQUIS, 5(1). <https://doi.org/10.15517/ra.v5i1.25404>: pp. 86.

⁹⁴ Cerda, M., Morenoff, J. D., Hansen, B. B., Tessari Hicks, K. J., Duque, L. F., Restrepo, A., & Diez-Roux, A. V. (2012). Reducing Violence by Transforming Neighborhoods: A Natural Experiment in Medellín, Colombia. *American Journal of Epidemiology*, 175(10): pp. 1045.

⁹⁵ Gmbh, G. (2016). *Connective Cities: Good Practice Details*. Federal Ministry for Economic Cooperation and Development. <https://www.connective-cities.net/en/good-practice-details/gutepraktik/medellins-metrocable-1/>

⁹⁶ Castro, L. (2011). *Bogota and Medellin: Architecture and Politics*. Wiley Online Library. <https://onlinelibrary.wiley.com/doi/epdf/10.1002/ad.1246>: pp. 97.

The success relied in combining actions in a large scale or city scale, such as public transport infrastructures and facilities, with the micro-scale or neighborhood scale such as trails, pedestrian bridges, and neighborhood parks [97].

The priorities for the areas that were selected came from understanding the territory in its broadest and most complex sense including the cultural conditions with the natural and existing built environment. Part of the programmed was to legalize the informal housing in the natural environments invaded by informal settlements in the hills and streams, which was a success. The requirement for each project was to design with a vision to connect the physical space, the uses and the social interactions ensuring continuity in all the interventions. All the public facilities were spread in different strategic points of the city to ensure the inclusion of low-income neighborhoods. Something relevant in this strategy was the participation of different stakeholders, working to foster local participation and appropriation before, during and after the interventions. Each community was highly involved through all the phases of the urban projects, having channels of communication, and coordinating relations between the different institutions and actors that were participating in the project [98].

The relationship between the micro and macro scale was decisive for the success of the plan. The focus was to build projects of quality in some of the city's poorest neighbourhoods and impulse policies for education and culture. The new facilities became an opportunity for the community to access gathering spaces that serve as urban landmarks too and contribute to decreasing the exclusion turning into permeable places for integration [99]. The first programmed included five new library parks: Belen, La Latera, La Quinta, San Javier, and España, being the latter one of the chosen examples of this thesis because of the impact that it had. These libraries included playgrounds, internet access, and reading rooms, being examples of places that not only serve as public spaces, but as a connection, inclusion, and equality places for all the citizens.



FIGURE 31 : Medellín Travel. (N.d.). *Comune 13*. [Photograph]. Street Art. <https://www.medellin.travel/comuna-13/?lang=en>

⁹⁷ Castro, L. (2011). Bogota and Medellín: Architecture and Politics. Wiley Online Library. <https://onlinelibrary.wiley.com/doi/epdf/10.1002/ad.1246>: pp. 99.

⁹⁸ Ibid. pp. 100.

⁹⁹ Ibid. pp. 100.

There was a big emphasis in education too, as the construction of new schools, remodeling of the existing ones, and the creation of educational programs were part of the projects looking for sustainability in the long term. The network of public spaces in between with the improved pedestrian mobility allowed people to meet and move through Medellin and the metrocable, the articulated BRT, and the existing subway network allowed isolated neighborhoods to be connected and integrate all the zones as a whole [100].

The policies of Social Urbanism that Medellin implemented in between mobility strategies and public spaces were created by understanding the different neighborhoods and brought structural changes in some strategic sectors of poor neighborhoods and integrated marginalized communities. The architecture and urban interventions were tools to indicate the political intention of municipal programmed. Integral urban projects and punctual interventions aim to improve the public spaces and housing which by consequence generate a new image of the city and provide it with new landmarks and symbolic references transforming into permeable and livable neighborhoods. The result was a transformation from poorest and violent neighborhoods to places where the residents can feel a sense of equality and belonging [101].

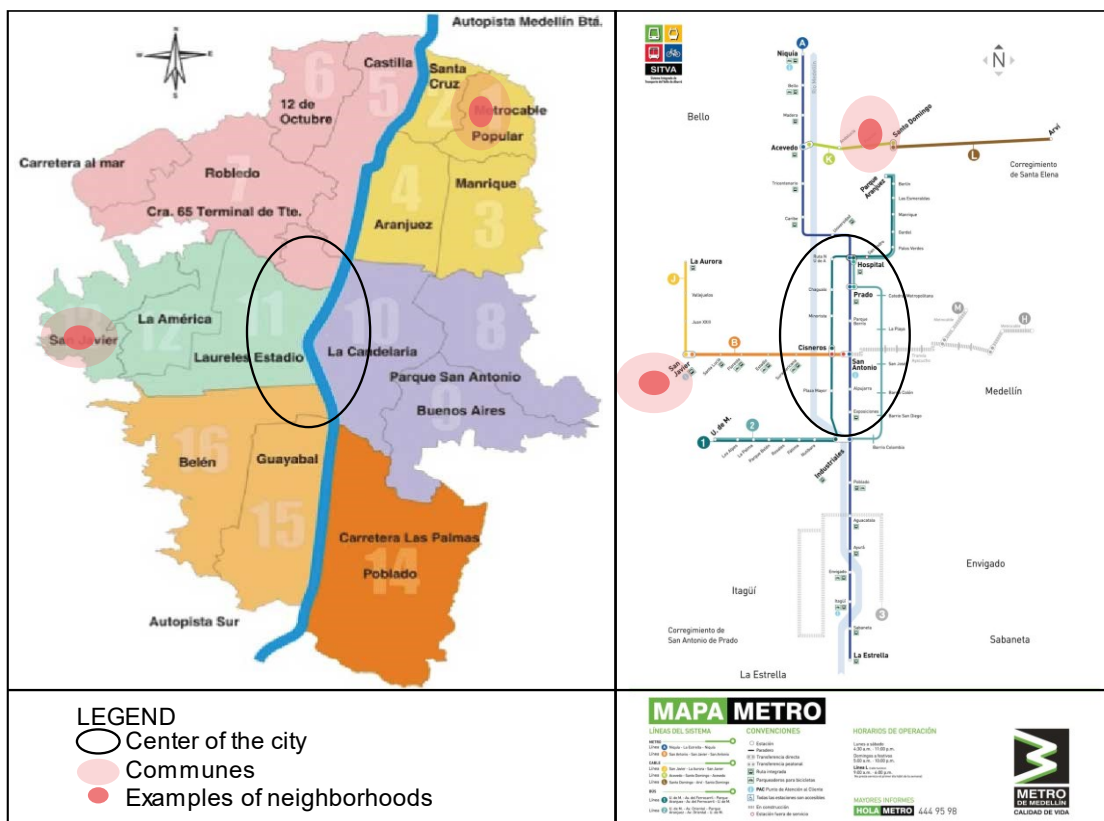


FIGURE 32: Map of Medellin showing the city center, and the neighborhoods picked as examples as well as the public transport system.

¹⁰⁰ Castro, L. (2011). Bogota and Medellin: Architecture and Politics. Wiley Online Library. <https://onlinelibrary.wiley.com/doi/epdf/10.1002/ad.1246>; pp. 103.

¹⁰¹ Ibid.

The neighborhoods that were selected as examples for this case study are Santo Domingo and Las Independencias, in both areas the city developed important regeneration projects, having an impact in the connectivity of the area and the quality of life of its citizens. In Santo Domingo the metroable transformed the city and the new public spaces improved the pedestrian connection, giving a continuity to the rest of the city. For Las Independencias, the city built a gigantic mechanical stair that help the citizens to arrive to some areas that before took them a great amount of physical effort, in a short trip that has become even touristic for outsiders. Also, they implemented policies, so graffiti can become legal and supported by the government which creates a different relationship with street art, giving a new aesthetic to this neighborhood. The importance of going in deep with some neighborhoods is to give the reader the idea of what type of places the city of Medellin has. In the next map (see figure 32) the neighborhoods are marked, also the city center, to have an idea of where are located.

III.V.I SANTO DOMINGO SAVIO

The Barrio Santo Domingo Savio is in the Northeastern zone inside the commune 1 of Medellin, Colombia. This area was selected as the first stage for implementation of the pilot project with a frame time of five years. The reason was because it presented the lowest quality of life and human development index (HDI) in the city [102]. As it was explained before, this city used to be one of the most dangerous places in the world but after some urban projects the city initiative was to improve the infrastructure with an emphasis on mobility and public spaces. The Northeast Integral Urban Project (Proyecto Urbano Integral (PUI) Nororiental) proposed different projects like the famous metroable, which was the first cable in the world used as public transit, consisting of a gondola lift system integrated with the subway. The metroable connect this neighborhood

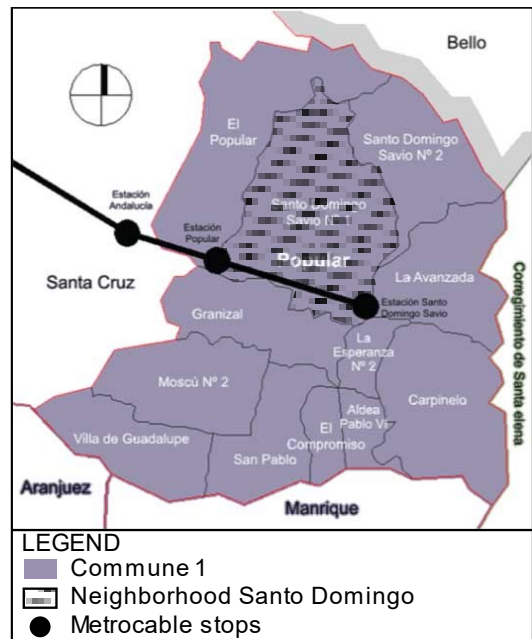


FIGURE 33: Map of the commune 1 showing the location of Santo Domingo and the metroable stops.

to the rest of the city by public transportation, Santo Domingo Savio is the fourth and last station located in the line K of the Medellín Metro, and the first station of the line L [103]. These new stations were protagonists

¹⁰² Castro, L. (2011). Bogota and Medellin: Architecture and Politics. Wiley Online Library. <https://onlinelibrary.wiley.com/doi/epdf/10.1002/ad.1246>: pp. 100.

¹⁰³ Echeverri, A. (2016). "Proyecto Urbano Integral (PUI)", <<http://alejandroecheverri-valencia.co/proyecto-urbano-integralpui/>>

in the strategy of physical intervention in the city and part of the socially sustainable model for this isolated neighborhood mostly occupied by marginal housing [104].

The city developed different urban projects including libraries, educational facilities, social housing in risk areas, and many public parks that contribute to the social integration of the city [105]. One of these projects was The Spain Library (Parque Biblioteca España), inaugurated in 2007, designed by the Colombian Architect Giancarlo Mazzanti, and consists of three buildings resembling giant



FIGURE 34: Tobon, C. (2007). Biblioteca Parque España, vista aerea [Photograph]. <https://www.plataformaarquitectura.cl/cl/026075/biblioteca-parque-espana-giancarlo-mazzanti/57423e0be58ecee2f8002b5-biblioteca-parque-espana-giancarlo-mazzanti-foto>

boulders at the edge of the mountain. The intersection between the urban fabric and the library aim to exert a positive effect on the criminality rates inside this neighborhood, having a large public space that serves as a balcony to the city connecting the station of the metro cable increasing the urban connection and meeting places in the city [106]. The objective was to create a public space that supported social inclusion, coexistence of different groups, a place for people to meet, and access to information Giancarlo Mazzanti, the architect of the library, said: “*our purpose was to give the people of this poor community the opportunity to take them into another world and change their reality*” [107].

The intervention in this area was positive for the social dynamics of the area, proving to be a successful example of urban revitalization for a zone that used to be a violent environment [108]. In the social management stage, in the whole project the community leaders, leaders of social organizations and professionals from the social area of the project met to collaborate. These meetings were a bridge in between the community and the state helping the citizens to feel part of the project and for the government to respond to punctual needs of the neighborhood [109].

¹⁰⁴ Heinrichs, D., & Bernet, J. S. (2014). *Public Transport and Accessibility in Informal Settlements: Aerial Cable Cars in Medellín, Colombia*. Transportation Research Procedia, 4: pp. 55–67.

¹⁰⁵ Castro, L. (2011). *Bogota and Medellín: Architecture and Politics*. Wiley Online Library. <https://onlinelibrary.wiley.com/doi/epdf/10.1002/ad.1246>: pp. 100.

¹⁰⁶ Fracalossi, I. (2021). *Parque Biblioteca España*. Giancarlo Mazzanti. Plataforma Arquitectura. <https://www.plataformaarquitectura.cl/cl/02-6075/biblioteca-parque-espana-giancarlo-mazzanti>

¹⁰⁷ Nevárez J. (2021). Biblioteca España (Spain Library Park), Medellín, Colombia. *Actions with My Neighborhood. The Urban Library*. Springer, Cham. https://doi.org/10.1007/978-3-030-57965-4_7: pp. 2

¹⁰⁸ Ibid.

¹⁰⁹ Asprilla, Yefer. (2012). Metrocable de Medellín: un servicio público de transporte Ambientalmente Sostenible y Socialmente Incluyente. *Tecnogestión*, 8: pp. 40.

III.V.II LAS INDEPENDENCIAS

San Javier or The Commune 13 is one of the sixteen communes of Medellín and is located to the west of the city, in its 74 km² it houses more than eighteen neighborhoods. This was probably the most violent area of the city due to its location, which was isolated from the city center, the topography of the place, and the poverty of the inhabitants of the area. The northeastern and the southwestern of the city of Medellín were built in the hills that are parallel to the Aburrá Valley of Medellín in a



FIGURE 35 : Medellín Travel. (N.d.). *Commune 13*. [Photograph]. Escalator. <https://www.medellin.travel/comuna-13/?lang=en>

sloping terrain in a way that makes traditional road access difficult. This created a serious problem for traditional mobility inside the area and, it became inaccessible for police and army [¹¹⁰]. This district is the connection to the highway, and it is tricky to access so Pablo Escobar saw the potential of this area and took it under its control which transformed the Commune 13 into a fighting place of cartels and violence.

Some decades ago, it seemed that the local and national governments had abandoned the place to the gangs and the cartel affecting the perception of the neighborhood and impacting in a negative way the socio-economic fabric and the development of the area [¹¹¹]. After 1998, there was a significant drop in the homicide rate, but the concern was still the possibility that the violence began to spread beyond the poorest neighborhoods, particularly in the commune 13. In the mid-2000s the local community leaders and the city government began to think more about the future of the commune and the challenges facing the neighborhoods within the broader context of urban change [¹¹²]. As in other projects of the city, many stakeholders were involved in different urban projects and social programs that helped to improve the life quality of the neighborhood, for instance, counselors, psychologists, NGOs, and community youth groups such as Sal y Luz, create programs that helped the residents to overcome the years of trauma. To improve neighborhood security the police have worked in collaboration with community members and the municipal government dedicated 30% of the budget to education [¹¹³].

¹¹⁰ Drummond, H., Dizgun, J. & Keeling, D.J. (2012). Medellín: A City Reborn? *Focus Geogr*, 55: pp. 149.

¹¹¹ Ibid. pp. 146.

¹¹² Ibid. pp. 149.

¹¹³ Ibid.

Policy makers put emphasis on this type of creative industries allowing urban space to capacitate, attract and retain talents. The transformation of these public spaces was planned to use the abilities of the inhabitants involving private, public, and social actors. The aim was to modify the collective memory of the conflict, finding alternatives that can transform this perception into a sense of peace, identity, and memory of the victims [118]. The specific socio-



FIGURE 37 : Medellín Travel. (N.d.). *Comune 13*. [Photograph]. Escalator.

economic characteristics were taken in consideration inside the Urban Integral Plan that was looking for coordinated actions in matters of education, transport, culture, health, and housing designed to empower local communities. Culture became a priority in public policy giving the municipality the facility to promote massive musical events and urban public spaces like public libraries and cultural centers.

¹¹⁸ Restrepo, J. M. (2013). Collective memory and governance through graffiti in Medellín, Colombia. Séptimo Congreso Latinoamericano de Ciencia Política: pp. 7.

III.VI MILAN, ITALY

Milan is the second largest city in size in Italy and is the capital of the Lombardy region. Its population is around 1,3 million people with a surface of 187 square kilometers. Milan is known for its artistic and historical heritage. In the 20th century there was a big industrial growth transforming Milan into the first city in Italy in the economic field. The transformation of Milan from an industrial city to a post-industrial metropolis involved different projects to regenerate and change the constitution of the population. It passed from having a bourgeoisie occupying the historic center and a marginalized population living in the peripheries, to a multi-ethnic population rich in diversity that can be found in almost all the neighborhoods of the city. The main problem with Milan is the one that many other cities face with urbanization, that encourages social and economic growth, but at the same time, leads to many problems such as population density, traffic, lack of housing and resources, pollution, etc.



FIGURE 38: Fabre, M. (2017). *Blue Hour in Milan* [Photograph]. <https://www.flickr.com/photos/miquelfabre>

The real transformation process started in 1999 in a collaboration between private developers, the Municipality of Milan, and Lombardy Region [119]. The city implemented many different projects through competitions among the years for instance, in 2003 the competition for the new Lombardy Region headquarters took place, then in 2004 Petra Balisse won the one for the new Porta Nuova (see figure 39) gardens with the project “Biblioteca degli alberi” project (the Trees Library). In 2005, the Municipality of Milan and the private



FIGURE 39: Porta Nuova. (2015). Porta Garibaldi [Render]. <http://www.residenzeportanuova.com/it>

developer Hines signed the development of the Garibaldi-Repubblica area with the PII-Programma Integrato di Intervento (Integrate Intervention Program) [120]. But the important step was in 2006 with the draft of the LGP (Local Government Plan), replacing the old General Regulatory Plan, the LGP was proposing to have a more strategic approach to local development, requiring the participation of citizens since the early stages of the process. The LGP was approved until 2011 under the name ‘Milano per scelta’ (Milan by choice); this is an internet-based portal to inform the public about the projects but at the same time allow citizens to express their opinions [121].

Over the last decade, the planning department of the municipality of Milan took the role based on co-creation with citizens and other relevant stakeholders instead of playing the traditional strong leadership role. By 2012 Milan started to look for a Smart City agenda together with the idea of Smart City integrated with social sustainability. Normally, the idea of sustainability focusses on economic and environmental rather than social sustainability; in the case of urban planning and regeneration, programmers and policies have an emphasis on the use of renewable resources, low-carbon emissions, and encouragement of pro-environmental behavior on the part of individuals [122]. The difference is that social sustainability concerns more how individuals or societies are living with each other and look for objectives related to this behavior taking into consideration the physical boundaries of their places. So, the principles for this social

¹¹⁹ Cimino, P. A. (2012). *From the idea of the city to the built city: the Garibaldi-Repubblica area*. Ordine degli architetti, P.P.C della provincia di Milano. Ordine Architetti. <https://www.ordinearchitetti.mi.it/en/mappe/itinerario/49-from-the-idea-of-the-city-to-the-built-city-the-garibaldi-repubblica-area/saggio>

¹²⁰ Ibid.

¹²¹ Trivellato, B. (2016). *How can ‘smart’ also be socially sustainable? Insights from the case of Milan*. European Urban and Regional Studies, 24(4): pp. 342.

¹²² Ibid. pp. 338.

sustainability are equity and health, dealing with issues such as spatial inequalities, participation, needs of the population, economy, environment and in the last years it also includes notions of happiness, wellbeing, and quality of life [123].

This Smart City Plan has six pillars that are: Smart Economy, Smart Living, Smart Environment, Smart Mobility, Smart People, Smart Governance [124]. The elements that they are trying to cover go from: environmental quality, air quality, social condition, architecture quality, etc., all of them having the emphasis of the relation between people, their daily activities and physical environment. The green and water system became the crucial component for the reconnection and interconnection for the process of urban regeneration in the city. The approach that the Municipality of Milan adopted was a top-down decision making and planning in relation to the Smart City strategy trying to integrate the plans developed by the municipality with the opinions and strategies proposed by the citizens and stakeholders. This collaboration with citizens and stakeholders started from the early stages of the process of formulating the Smart City strategy, not only in the implementation.

The citizens' feedback was requested since the first draft of the plan was completed showing that the administrations abandoned the traditional instruments of hierarchical planning and started involving different stakeholders which increased the degree of participatory decision-making [125]. In a macro-perspective Milan gave special attention to social sustainability through the process of development of policies and strategies, there was a review of the existing projects and different actions in synchrony with the public perception that help to adapt actions according to each reality. In the micro-level it was a search for having the local point of view to include a social dimension in the Smart City strategy integrating the context to it. The clear definition of



FIGURE 40: City Door Milano. (2019). *Nuclei di identità locale* [Illustration]. Comune Identifica i Quartieri Della Città. <https://www.citydoormilano.it/milano-cambio-nomi.html>

¹²³ Colantonio A. and Dixon T. (2009) *Measuring socially sustainable urban regeneration in Europe*. EIBURS research report. Oxford: Oxford Brookes University, Oxford Institute for Sustainable Development (OISD): pp. 18.

¹²⁴ Ibid. Trivellato, B. (2016). pp. 342

¹²⁵ Trivellato, B. (2016). *How can 'smart' also be socially sustainable? Insights from the case of Milan*. European Urban and Regional Studies, 24(4): pp. 347.

what the municipality wanted to achieve with this strategy was in part to the direction that internal and external stakeholders gave [126].

The analysis of the neighborhoods of Milan followed the NIL that can be defined as districts of Milan, in which it is possible to recognize historical and project areas, with different characteristics from each other. The NIL (Nuclei di Identità Locale, meaning: Local Identity Nucleus), introduced by the PGT (Piano di Governo del Territorio, meaning: Territory Governance Plan), is a tool for consulting the services' maps of each area in Milan, it also represents the neighborhoods inside Milan and the different identity realities, highlighting the unique and different characteristics for each nucleus. The NIL cards are an analytical planning tool, they summarize the socio-demographic and territorial components having as a purpose the study of neighborhoods in an oriented local development. Figure 40 shows the map of the NIL of Milano with the official names and boundaries in a colorful way to be easily identified. They are composed of six thematic sections that express the territorial phenomena of the present local dynamism. The first section introduce the structure of the resident population, the second one is the offer of services and the spatial distribution, the third one is the green and blue system including the open spaces and the water systems of the area, the fourth section is the infrastructural networks defying the accessibility and pedestrian areas, the next one explains the transformation in terms of urban planning and construction, finally, the last section include the public and private works planned by the administration, specifying the types of intervention and the state of implementation [127].

The importance of introducing Milan and the planning from some years ago is to understand the effort of the city government to give the people a better quality of life and even an identity



FIGURE 41: Dodaro, D., & Sereni, D. (2020). *Il quadrato semiotico dei quartieri di Milano* [Illustration]. <https://milano.corriere.it/>

¹²⁶ Ibid. pp. 348.

¹²⁷

according to the local reality of the neighborhoods. It is interesting how a city was able to build strong identities in neighborhoods implementing projects and that are easy to identify. For example, this, the next image (see figure 41) was a classification of neighborhoods according to Daniele Dodaro and Diletta Sereni that attempted to classify all the neighborhoods of the NIL in a schematic way to show the type of places they are. The NIL became an accurate way to order the neighborhoods and give them an identity as well as for the same citizens that inhabit Milan.

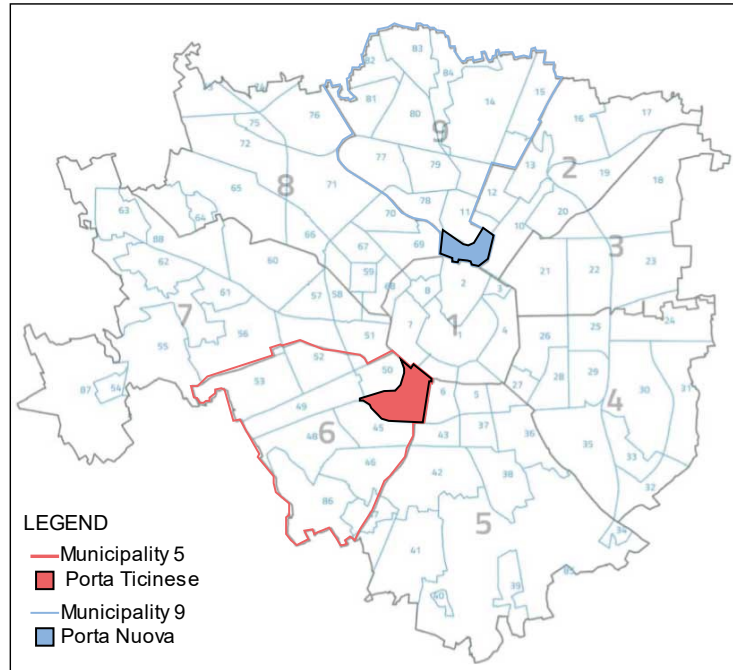


FIGURE 42: Map showing the two neighborhoods set as an example in this thesis using the NIL as a base map.

The next sub-chapters exposed two types of neighborhoods inside Milan which are Garibaldi and Navigli. Figure 42 shows the location of these neighborhoods using the NIL as a base map to give the idea of the location of them. These are examples of what were the backgrounds in small scale and the process of becoming livable places where citizens feel identify with.

III.VI.I GARIBALDI, PORTA NUOVA

Porta Nuova is a neighborhood in the municipality 9 of the metropolitan city of Milan (see figure 44). One of the most notorious projects was the redevelopment of the abandoned rail yards adjacent to the Garibaldi train station. The master plan included a mixed-use development composed of residential, office, retail, and hotels connected with commerce in the ground level and pedestrian paths including a public park of 9 hectares allowing creating pedestrian connections

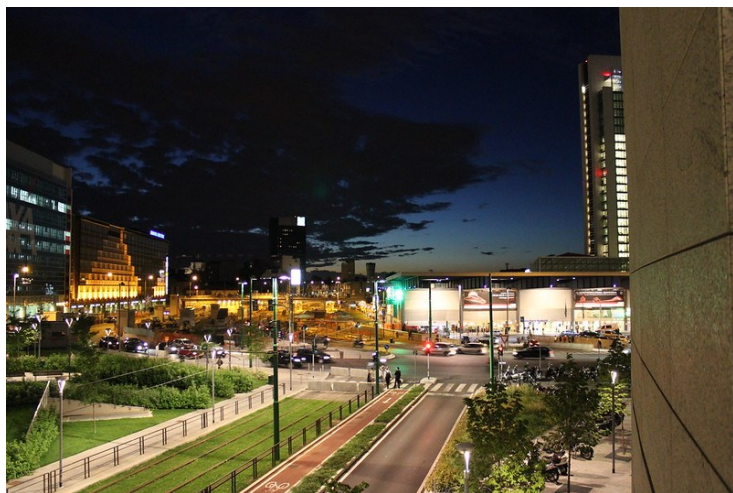


FIGURE 43: Metro Centric. (2013). *Milano Porta Garibaldi* [Photograph]. <https://www.flickr.com/photos/>

between the neighborhoods Isola and Garibaldi. The buildings had the certified LEED Gold, providing drip irrigation systems, climate-based controllers, extraction of groundwater for non-potable water supply, and low-flow fixtures to reduce the water consumption. Also, the use of recycled content building materials was used, and different techniques of construction were applied to reduce the energy consumption [128].

The Porta Nuova development can be divided into: Porta Nuova-Garibaldi Repubblica, Porta Nuova-Varesine, Porta Nuova Isola. Porta Nuova was one of the largest urban development projects in Europe, it involved more than 20 architectural firms from eight countries. The aim of the project's master plan of 29 hectares was to

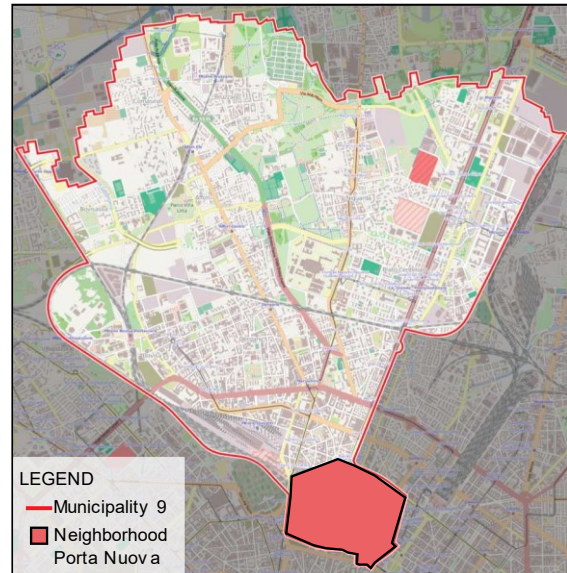


FIGURE 44: Map of the Municipality 9 showing the location of the neighborhood Porta Nuova.

revitalize an abandoned area and connect it to the three adjacent neighborhoods [129]. The main heart of Garibaldi is the urban square aiming to connect the different projects, having a pedestrian area with the new business center [130]. This railway station acquired a different role after the urban intervention transforming the neighborhood from an abandoned place to a livable, attractive, and safe place for the residents and participants [131]. This is an example of how mobility can be transformed into a multi-use public space that brings the opportunity for the citizens to have a place for socialization.

According to the webpage CERVED, Porta Nuova is a fashion and business district which is suitable for young workers and couples with a lot of opportunities for recreation and leisure activities, including open spaces [132]. The district offers different activities such as night life, shopping and restaurants that makes it an interesting place for living with a defined identity of the place.

¹²⁸ Franta, J. (2014). The Role of the Railway Stations that defined the Urban Structure of Milan. Tradition and Heritage in the Contemporary Image of the City: Monograph. Vol. 3, Practise and Process / Edited by Tomasz Jeleński, Stanisław Juchnowicz, Ewelina Woźniak-Szpakiewicz: pp. 147.

¹²⁹ Phillips, P. (2016). Porta Nuova. Urban Land Institute: pp. 1.

¹³⁰ Cimino, P. A. (2012). From the idea of the city to the built city: the Garibaldi-Repubblica area. Ordine degli architetti, P.P.C della provincia di Milano. Ordine Architetti. <https://www.ordinearchitetti.mi.it/en/mappe/itinerario/49-from-the-idea-of-the-city-to-the-built-city-the-garibaldi-repubblica-area/saggio>

¹³¹ Ibid. Franta, J. (2014). pp. 148.

¹³² Vivere in zona Garibaldi - Porta Nuova Milano: cosa sapere | Bee The City. (2021). Porta Nuova. <https://beethecity.com/it/milano/guida-alle-zone/garibaldi-porta-nuova>

III.VI.II PORTA TICINESE

Porta Ticinese is located in the municipality number 6 of Milan. Its main characteristic is the relationship with the Darsena that nowadays provides a vital lung and a public space for the population. This area used to be a place without any use, the canal was closed and abandoned, becoming a parking space without water. In 2003, the municipality of Milan announced the reorganization of Darsena's neighbourhoods, including the re-opening of the canal, which was one of the most ambitious projects of the city. After almost 30 years of degradation, the objective now was to get back to the original role of the Navigli system in the life of the citizens as a meeting point and landmark taking in consideration the structural and environmental constraints [¹³³].

After a contest for the design of the project the preliminary works started in 2004 having different problems with the excavation, bringing to the surface archaeological finds of Spanish brick walls dated to the XVI century. This interrupted the project for almost a decade, it was until 2011 that the municipality took out a popular referendum with questions about how to improve the public transportation and pedestrian paths, the reduction of traffic and pollution, reduction of land exploitation and greenhouse gas emission, the preservation of the infrastructure of the Expo 2015, and finally, the recovery of Darsena urban harbor and ecological area



FIGURE 45: Naviglio Martesana coverage (1929). (I Navigli lombardi, n.d.).



FIGURE 46: Franz, T. (2016). Navigli [Photograph]. <https://www.flickr.com/>

¹³³ D'imperio, S. (2020). *Darsena regeneration. Economic impact assessment of the 2015 project*. [Master Thesis, Politecnico di Milano.] POLITesi. <https://www.politesi.polimi.it/handle/10589/153930?mode=simple>: pp. 25.

including the reopening of the water channels belonging to Navigli system [134]. The responses of the citizens were positive, and the works officially restarted bringing the recovery of an area that was left to decay.

The objectives were: improve the aesthetic quality of the area and restore the historical architecture value (the Spanish Walls, for example), improve the livability of the zone creating new public spaces for social interactions such as new pedestrian areas and a municipal market, requalification of the natural environment focusing on the water, and increase the touristic activities benefiting the

local commercial places. In the figures 45 and 46 we can clearly see the before and after of the Navigli and how this area used to be and underused space and now is a place where people enjoy having recreational activities. Currently the city is looking to create an underground tunnel to allow the water to pass through the city center in 2026. Nowadays the neighborhood is a space full of night life with a lot of people doing their social activities in the surroundings enjoying the open canal.

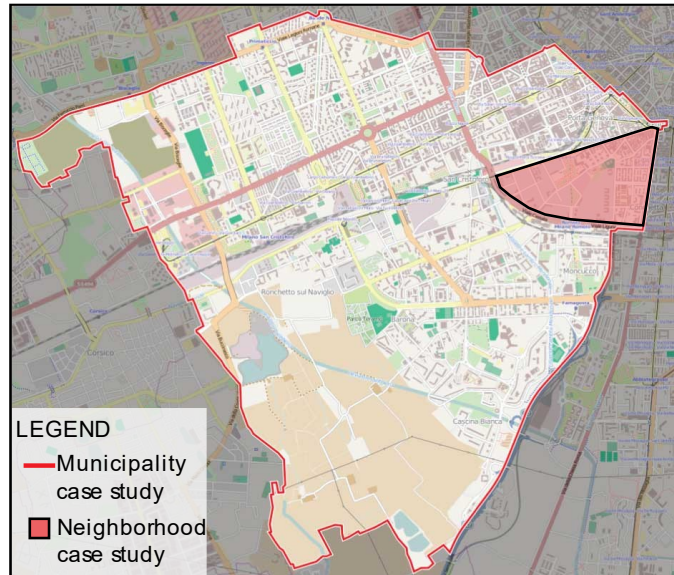


FIGURE 47: Map of the Municipality 9 showing the location of the neighborhood Porta Nuova.

¹³⁴ Boatti, A. (2015) *Basi di riferimento per l'affidamento dell'incarico: Studio di fattibilità per la riapertura dei Navigli milanesi nell'ambito della riattivazione del sistema complessivo dei Navigli e della sua navigabilità*, I. Report Citta di Milano: pp. 11.

CHAPTER IV – THROUGH THE EYES OF LOCALS

IV.I ASKING ABOUT GENIUS LOCI

This chapter is about the findings of the research and surveys of the questionnaires that some citizens replied to about their cities and neighborhoods. The final sample consisted of 94 replies from Medellin and 130 from Milan, having a total of 224 samples. There were three surveys with the same answers but in different languages: Italian and English for Milan and Spanish for Medellin. The importance of having two diverse cities was to find if the context does or does not matter for having a sense of belonging among the participants. Also, this helped find real determinants of what makes people feel part of a place or not because having diverse situations is a way to understand what is important for people. For example, if the comparison would be done with two Italian cities or two Colombian cities, the chances that the replies would have been determinate more by the general culture than what is important or not. Also, having different insecurity levels and economic status can tend to create speculations about where people find their cities and neighborhoods more livable. An example is that we can assume that in Milanese people would have more sense of belonging because it is safer and in general the economic situation of the citizens is better than in Medellin.

The first questions are focused on the personal information of the participant that is gender, age, in which part of the city they live. This last one is useful to filtrate according to the area the answers of people of the same neighborhood were similar. In this section, we asked for information about with whom they live to see if your private environment could be a determinant of having or not Sense of Belonging. Also, their housing situation, if it is their own houses or they rented it and for how long have they been living there. These two questions are good starting points to see if the participants are planning to stay for long or not, and with the hypothesis that the longer you are living in the same place the higher, you will have a sense of belonging to it. Another question was if they work or study in the same neighborhood because there is a chance that the more time you spend in the same place the more related you can feel about it.

The next section was focused on mobility, starting with asking the people which type of transport they normally use and how often they use public transport. Then the purpose was to find the principal reason why people do not use public transport (if they do not). This was to understand if they perceived public infrastructure as insecure, or found if in the cities or some neighborhoods there is a problem of accessibility, or if the main reason is comfort, etc. One of the tentative hypotheses was that probably the accessibility to public transport can be one of the main reasons that people can feel they belong since it is highly related to feeling safe enough to use public transport and to have a connection with the rest of the city. Also, slow mobility was included asking people if they cycle to their nearest destinations since having the possibility of cycling and walking could make someone feel better in their immediate environment. It was asked the

reasons why participants do not cycle to understand if it is because most of them do not like it or if there is not good infrastructure for them to do that: this can be a good recommendation for urban planners to propose or not bike paths in those cities.

The third section had as the main interest to understand the daily activities of the participants: where they do their daily/weekly shopping, where they do activities for leisure, how far they are if they do not join recreational activities in their neighborhood what is the main reason, etc. This is for understanding what the citizens like and whatnot, and what services are available close to their neighborhoods. This type of question could help urban planners to understand what some of the participants think about their districts and what kind of services could help the areas to attract their residents. The perception of recreational activities is important to have a good quality of life and if they can persuade a hobby or a social activity, the person would probably feel more related to their neighborhood. Question number 22 was the main core of this questionnaire: Do you feel you belong in your neighborhood? This was the focus of the comparison in the discussion since it is the direct answer that this thesis is looking to understand, and the rest of the questions is an attempt to find the why yes or why not.

Later, it was asked why they choose to live there if it was their decision or not, and what is the principal motivation to live in those neighborhoods. Out of curiosity, it was asked to the people what their main opinion of the urban projects is implemented in the past 30 years to see how involved they are in the places they are living. Other important questions were if they feel happy, safe, and proud about their neighborhoods, this helps us to understand the perceived space and the feelings the neighborhoods evoke in them. In the next round of questions, it was asked about the neighbors in general, if they share the same values, if they think the people living around are nice if they feel they have a community there. This can determine the importance of having a community to the sense of belonging and if we study this one together with the questions about recreational activities it can be possible to get ideas that could bring a stronger community.

Finally, some questions that could bring negative perceptions were included such as who much trash is in the neighborhood if there are a lot of noises if there is vandalism and finally, how secure they feel in the neighborhood. This shows what the people perceive about their places and if there is a relationship to their neighborhoods. These questions started from the theory that the safer the people feel the more they would feel they belong to their neighborhoods. So here this thesis tested what is the relationship of these parameters with the sense of belonging. This research was looking for getting the feelings of the people and not data, for example, crime rates. It would have been easier to analyze it from this type of research but more than having the exact rate, this thesis is looking for the perception of security. The importance of this study is to show the option of getting direct opinions and find ways to use it in urban planning to find the best way of proposing a project that can understand the feelings and needs of the population.

In the next three sub-chapters, the findings were exposed in form of graphics and charts to make it easier for the lector the reading. The first two sub-chapters are the direct answers to the surveys of the cities of Medellin and Milan. The third one is a comparison between both using the SPSS program and using the Chi-square test (see chapter *III.I.III Chi-square test of independence*), having as a principal goal to understand the Sense of Belonging of both cities and the determinants of it.

IV.II MEDELLIN, COLOMBIA

The survey was distributed with different social media sites and the final number of answers were 94. In the next chart (see chart A1) we can see the age of the participants which were in a range of 21 to 68 years being 28 the most common pick. There was an equilibrium in gender (see chart A2) which make it easier to find a relationship with it or not. In the commune we can notice that there were no people participating from communes 2, 3, 5, 6, 8, and 10, which is not so helpful for the analysis, the most common answer was citizens from commune 13 (see chart A3).

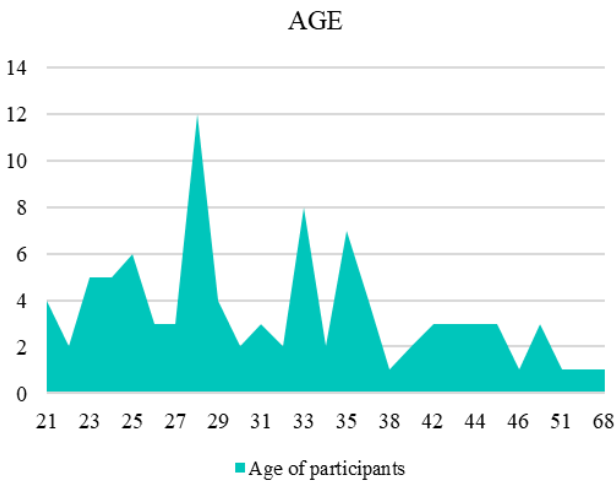


CHART A1: Answers of the participants to the question: “What is your age?”.

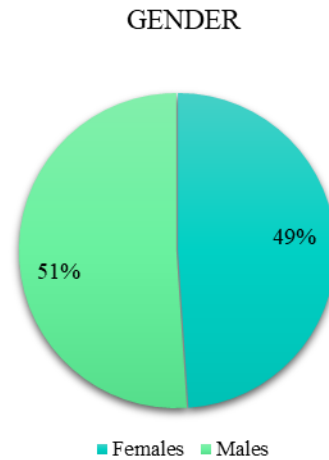


CHART A2: Answers of the participants to the question: “What is your gender?”.

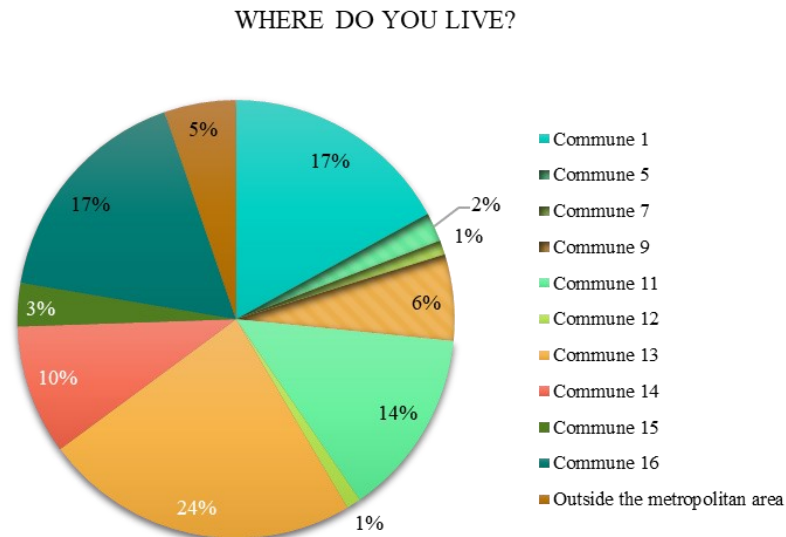


CHART A3: Answers of the participants to the question: “Where do you live?”.

In the next question we can see that many of the participants have live in the same neighborhood for more than 11 years (see chart A11). About the examples of neighborhoods used in this thesis, we can see that in terms of percentage many people that participated in the survey live inside them (see chart A5). Finally, we can notice that most participants need to make longer trips every day since they are not working or studying in the same area (see chart A6).

FOR HOW LONG HAVE YOU BEEN LIVING HERE?

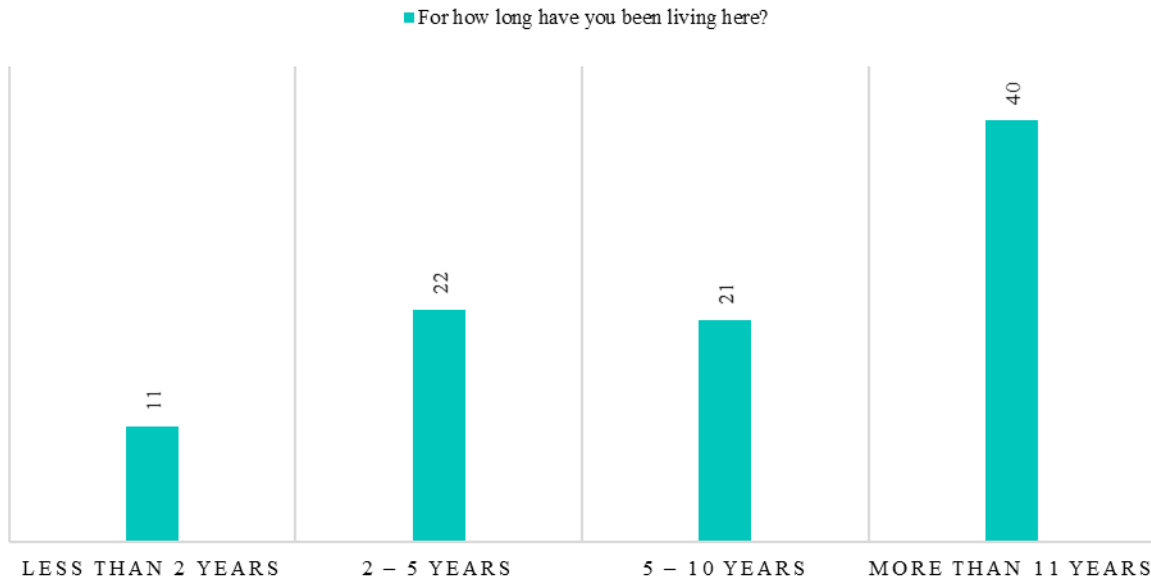


CHART A4: Answers of the participants to the question: "For how long you have been living here?".

DO YOU LIVE IN THESE NEIGHBORHOODS...?

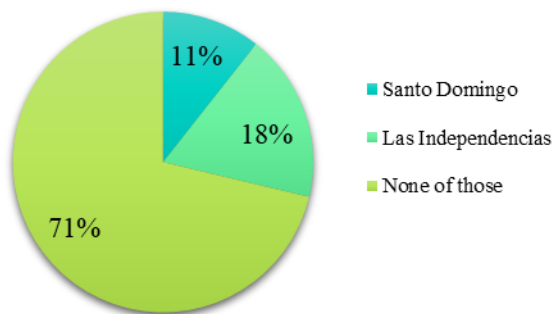


CHART A5: Answers of the participants to the question: "Do you live in these neighborhoods...?".

WHERE IS THE LOCATION OF YOUR SCHOOL / OFFICE?

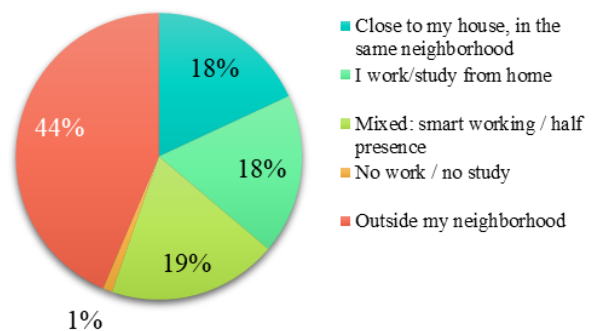


CHART A6: Answers of the participants to the question: "Where is the location of your school / office?".

A high level of participants lives with their parents, after that option the next more common reply was that they live alone (see chart A7). In terms of arrangement the participants mostly have a house of their property or are living with a relative that owns it (see chart A8).

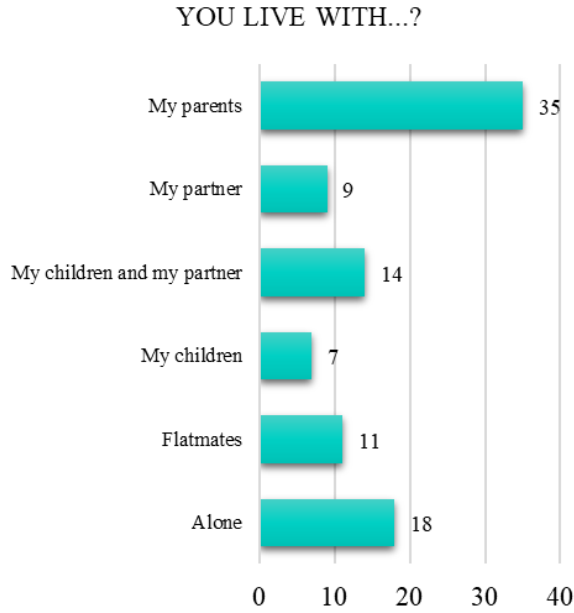


CHART A7: Answers of the participants to the question: “*You live...?*”.

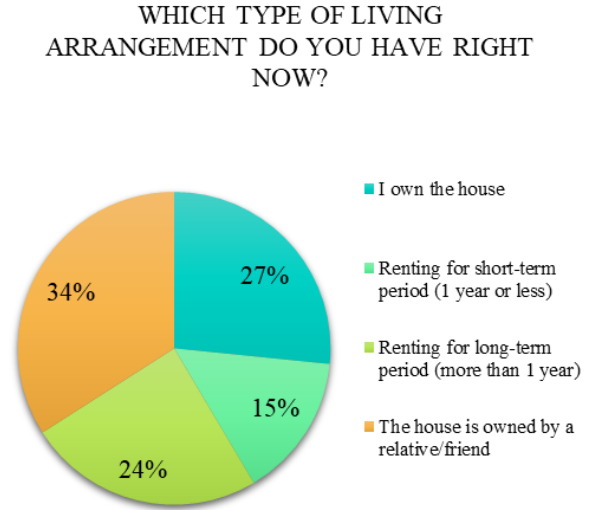


CHART A8: Answers of the participants to the question: “*Which type of living arrangement do you have right now?*”.

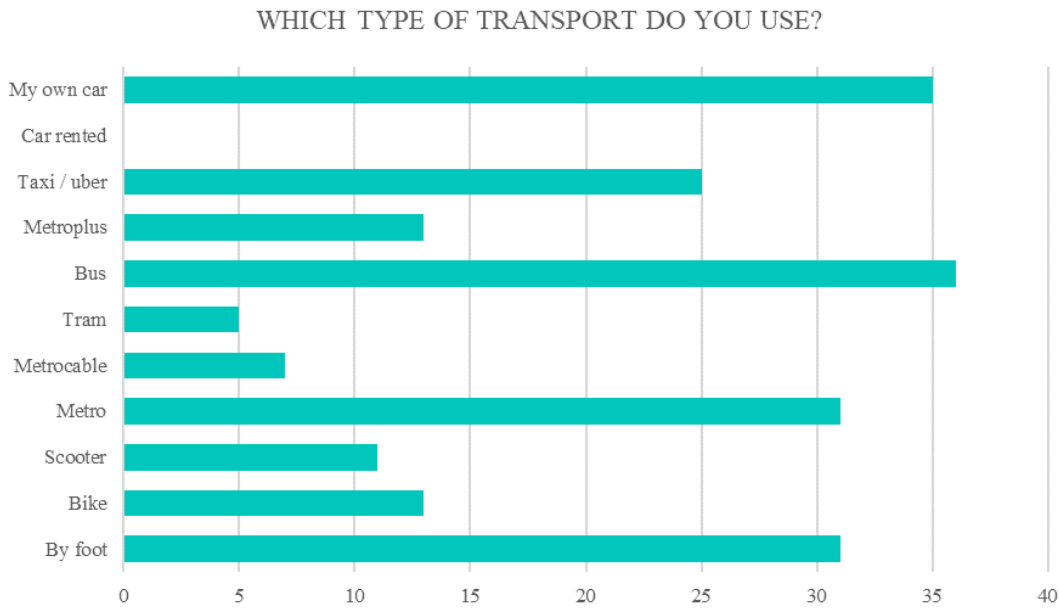


CHART A9: Answers of the participants to the question: “*Which type of transport do you normally use?*”

Concerning the public transport, in CHART A9 we can see that a higher number of people have their own car but if they must move in public transport most of them prefer the metro or bus, or even try to arrive by feet. In charts A10 and A11 is clear that people are not comfortable using public transport although accessibility does not seem a problem because in chart A12 we can see that people live close to a public transport station.

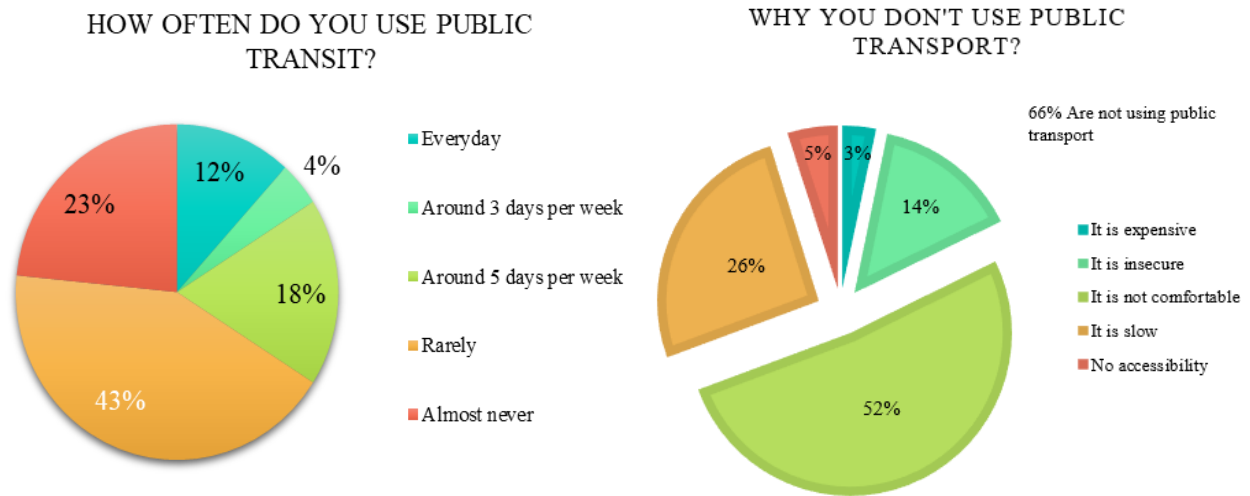


CHART A10: Answers of the participants to the question: "How often do you use public transit?".

CHART A11: Answers of the participants to the question: "If you do not use public transit, what is the reason?".

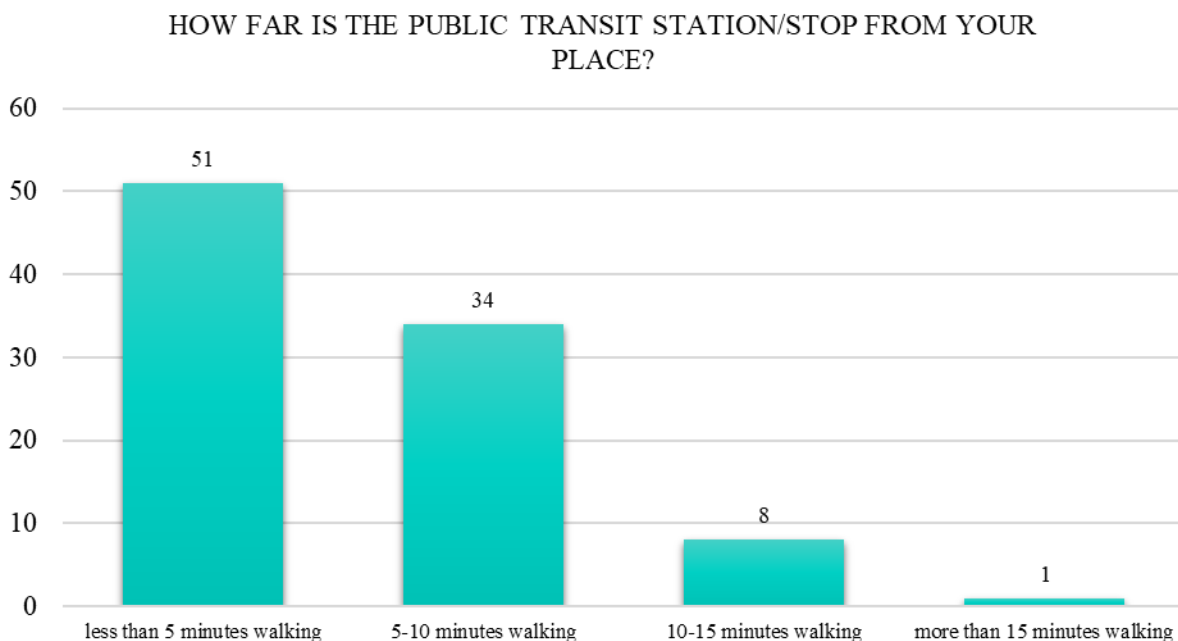


CHART A12: Answers of the participants to the question: "How far is the Public transit station/stop from your place?".

In general, the people that answer the survey find “normal” the security of public transport, so we can assume they do not feel neither safe nor unsafe (see chart A13), but they seem to feel that the public transport is too slow, so the time is the reason why most of the people prefer to take a private car to move around (see chart A14). Finally, people do not cycle because they perceived is dangerous and, most of them do not have a bike but results (and the research about the topography of the city) show that is not a city where cycling is a common way for moving around (see charts A15 and A16).

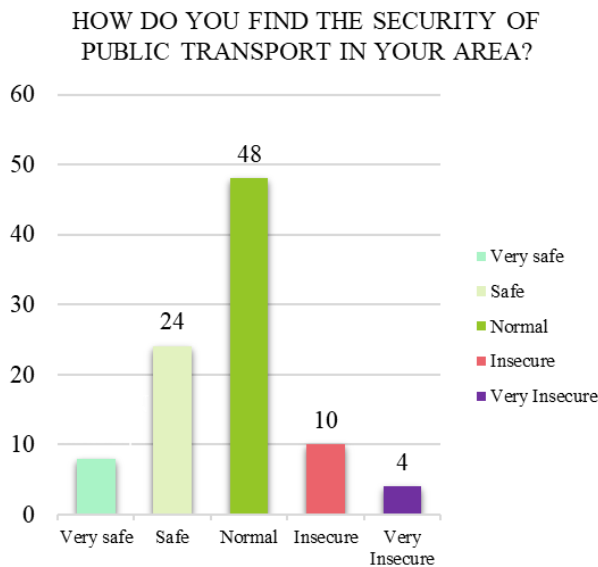


CHART A13: Answers of the participants to the question: “How do you find the security of public transport in the area?”.

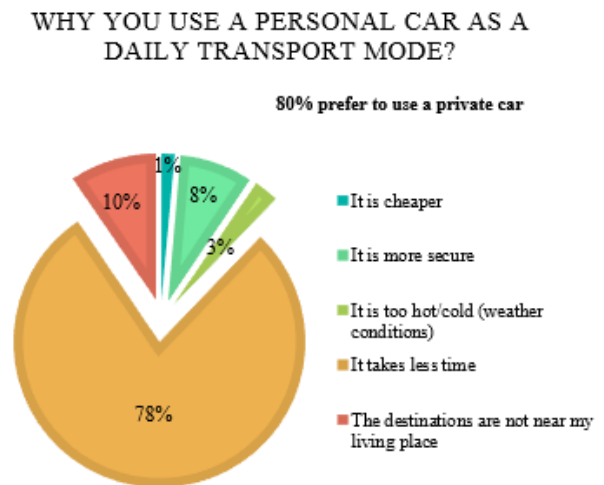


CHART A14: Answers of the participants to the question: “If you use a personal car as daily transport mode, what is the main reason?”.

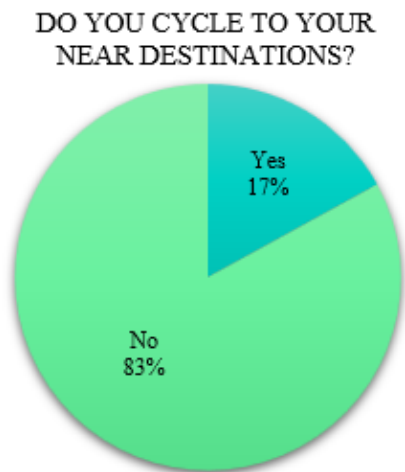


CHART A15: Answers of the participants to the question: “Do you cycle to your near destinations inside your neighborhood?”.

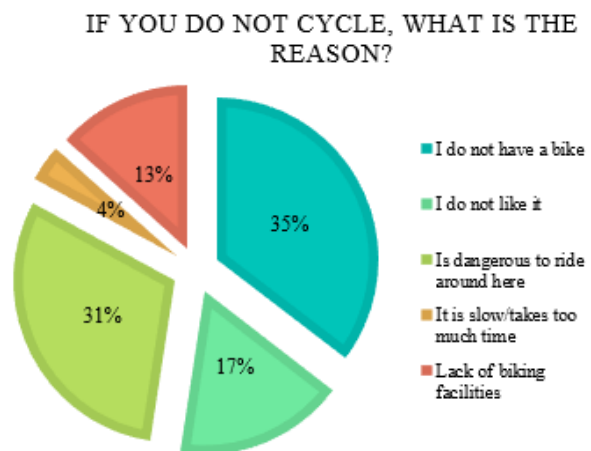


CHART A16: Answers of the participants to the question: “If you do not cycle to your near destinations, what is the reason?”.

Most of the participants use to shop inside their neighborhood (see CHARTS A17 and A18) but a lot of them seem to feel more comfortable going to other places when it comes to recreational activities (see CHARTS A19 and A20), this can tell us that probably there are not enough activities inside some neighborhoods.

WHERE DO YOU PERFORM MOST OF YOUR DAILY/WEEKLY SHOPPING?

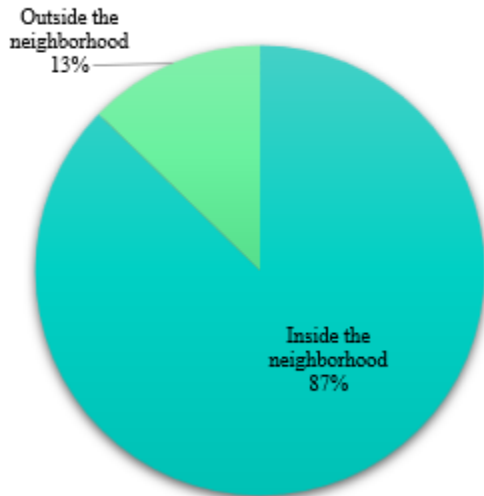


CHART A17: Answers of the participants to the question: *“Where do you perform most of your daily/weekly shopping?”*.

HOW FAR IS YOUR CLOSEST GROCERY STORE?

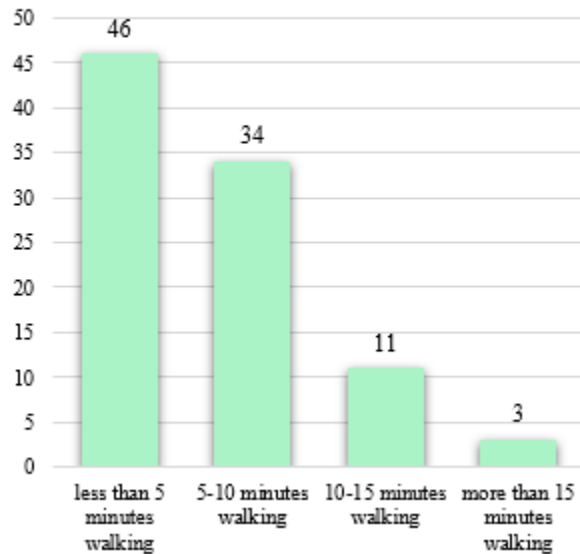


CHART A18: Answers of the participants to the question: *“How far is your closest grocery store?”*.

WHERE DO YOU GO FOR RECREATIONAL ACTIVITIES?

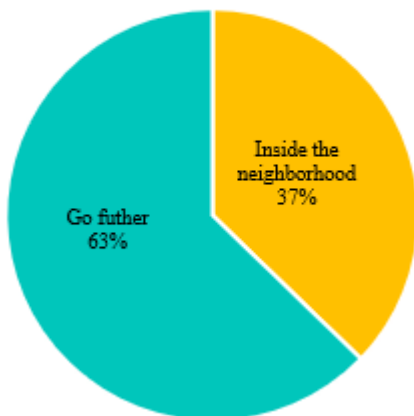


CHART A19: Answers of the participants to the question: *“For recreational activities do you prefer to stay in your neighborhood or go further?”*

IF YOU DO NOT JOIN RECREATIONAL ACTIVITIES IN YOUR NEIGHBORHOOD, WHAT IS THE MAIN REASON?

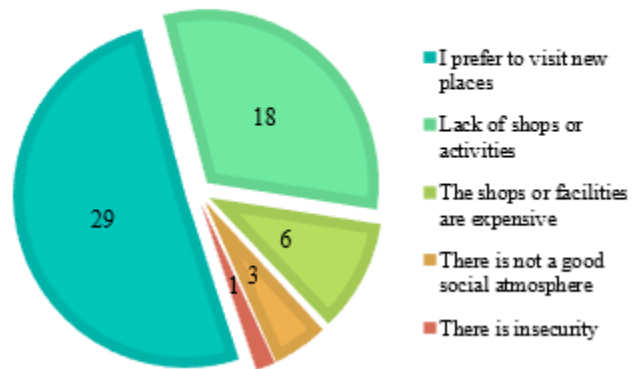


CHART A20: Answers of the participants to the question: *“If you do not join social activities (like shopping/entertainment) in your neighborhood, what is the reason?”*

Then, we have that around the city (where the participants are from) the most common activities are sports and outdoors, like parks (see chart A21). Most of the neighborhoods are residential and restaurants or shops. The CHART A22 is probably the most relevant one because it is the one showing us if people feel they belong or not to their neighborhood. The CHART A23 is showing us the reason why people are living in that specific neighbourhood, and we can notice that the most common answer is that the participants are there since they were born.

WHAT ARE THE MOST COMMON TYPES OF ACTIVITIES THAT YOU CAN FIND IN YOUR NEIGHBORHOOD?

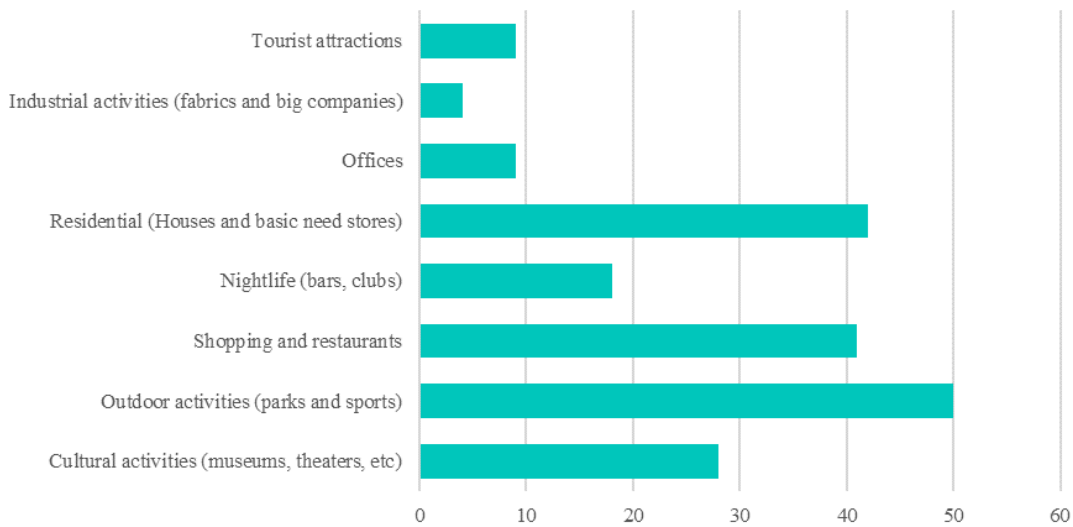


CHART A21: Answers of the participants to the question: “What are the most common types of activities that you can find in your neighborhood?”.

DO YOU FEEL YOU BELONG IN YOUR NEIGHBORHOOD?

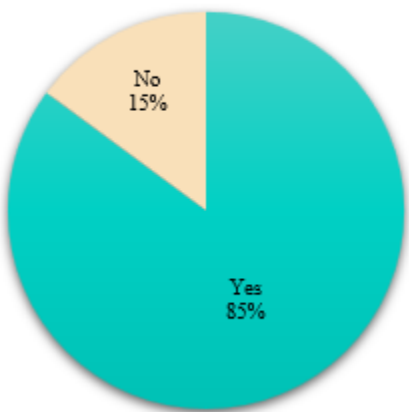


CHART A22: Answers of the participants to the question: “Do you feel you belong in your neighborhood?”.

WHY DID YOU CHOOSE THIS NEIGHBORHOOD TO LIVE?

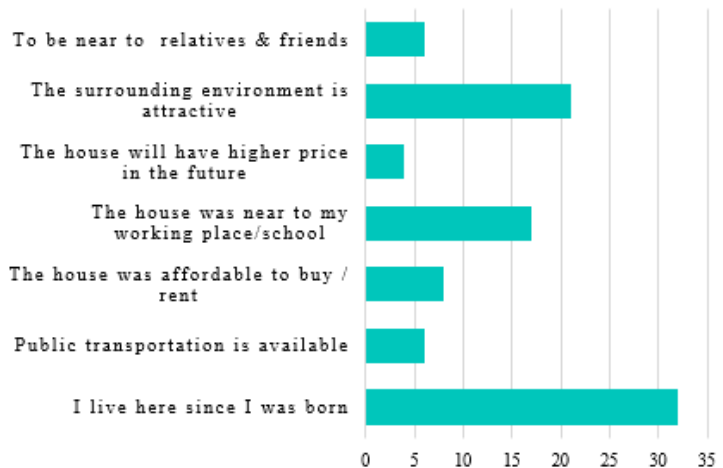
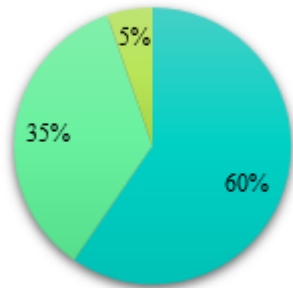


CHART A23: Answers of the participants to the question: “Why did you choose this neighborhood to live?”.

The next thing we can notice with the survey is that most of the people are not aware of the urban regeneration projects that the government implemented 20 years ago (see chart A24). The ones that have knowledge are in favour of those changes having a small percentage that think it was better before. Something important to highlight are the charts A25 and A26 because it seems that people in general are quite happy and proud about their neighbourhood, from the 94 people doing the survey none of them feel that they are not happy where they live or that they would feel ashamed about it.

WHAT IS YOUR OPINION ABOUT THE URBAN REGENERATION OF YOUR NEIGHBORHOOD?



- I do not know anything about it
- I think it helped the neighborhood
- I think it was better before

CHART A24: Answers of the participants to the question: "What is your opinion about the urban regeneration of your neighborhood?".

I AM HAPPY WHERE I LIVE NOW

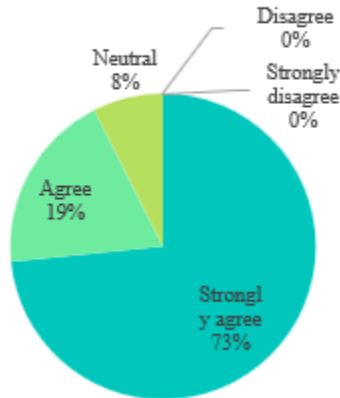


CHART A25: Answers of the participants to the question: "I am happy where I live now".

I LIKE TO TELL OTHERS THAT I LIVE IN MY NEIGHBORHOOD

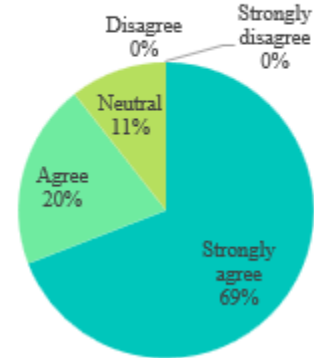


CHART A26: Answers of the participants to the question: "I like to tell others that I live in my neighborhood".

PEOPLE IN MY NEIGHBORHOOD...

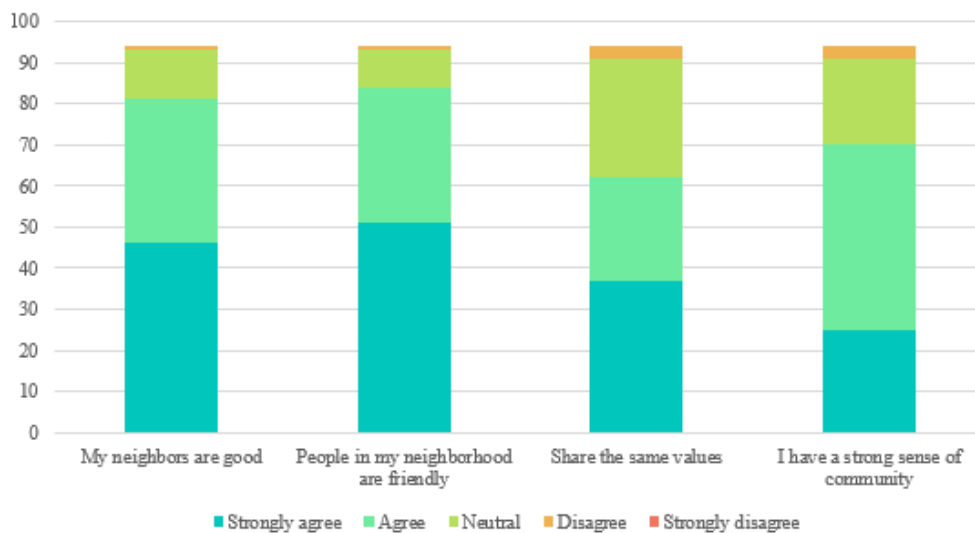


CHART A27: Answers of the participants to the questions: "My neighbors are good / Most people in my neighborhood are friendly/ People in my neighborhood share the same values / I have a strong sense of community here"

In general, the opinion of the people in this survey about their neighborhood is positive: Maybe they do not have a strong sense of community, but they have a good relationship with their neighbors (see chart A27). People feel safe enough to have walks around the neighborhood, but we can notice that two weak spots are the lack of activities and that the architecture around is not so interested (see chart A28). In negative aspects, noise can be a problem, but vandalism and trash are not considered as one according to the participants. So, the perception seems to be positive in general, the answers show us that people are comfortable inside their neighborhoods (see chart A29).

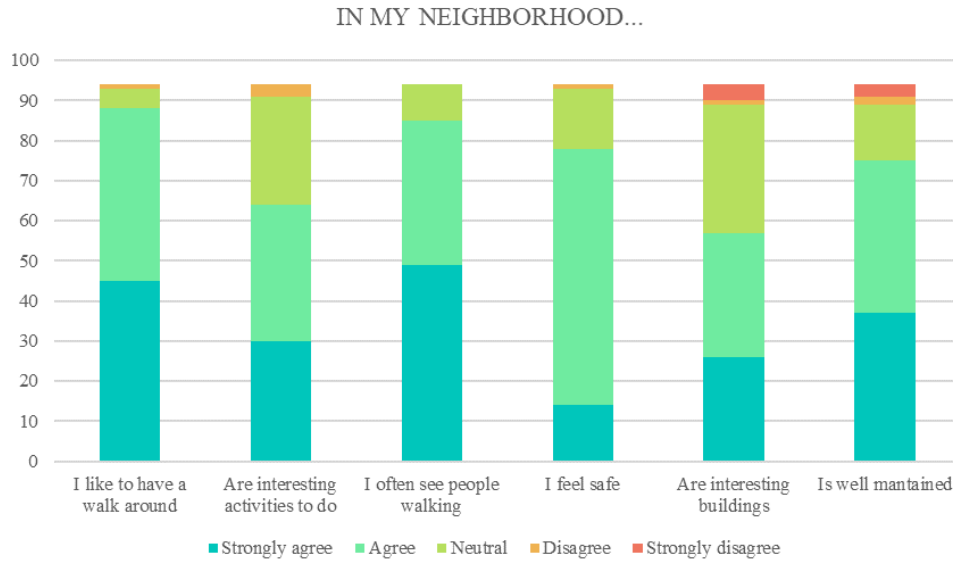


CHART A28: Answers of the participants to the questions: “I like to have a walk around my neighborhood / I feel safe in this neighborhood / There are interesting activities to do in my neighborhood / I often see people walking in my neighborhood / The buildings in my neighborhood are interesting / My neighborhood is well maintained”.

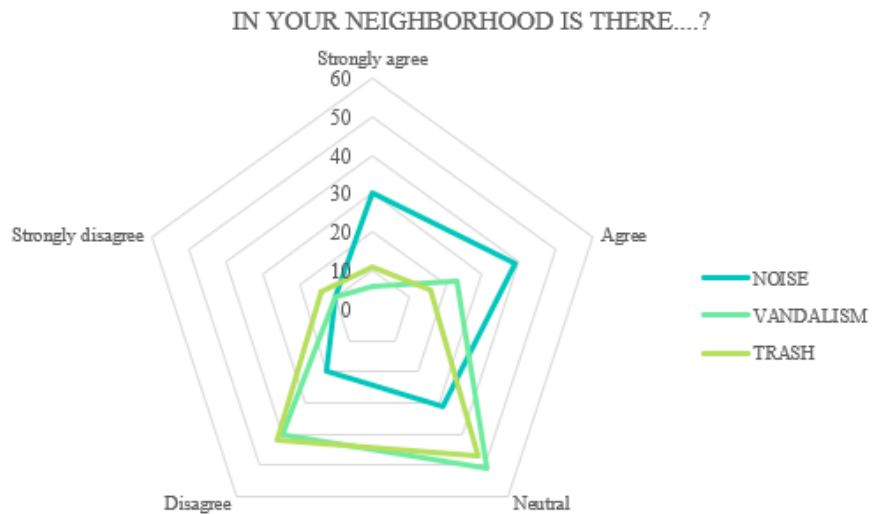


CHART A29: Answers of the participants to the questions: “There is a lot of noise in my neighborhood / There is vandalism in my neighborhood / There is too much trash on the streets”.

IV.III MILAN, ITALY

For Milan two surveys were distributed (one in English and other one in Italian) with different social media sites and the final number of answers were 130. In the next charts we can see the age of the participants having a range of 20 to 60 years with the most common age being 25 (see chart B1) and there is a balance between genders (see chart B2). There were answers from people of all 9 municipalities and even some of them living outside the metropolitan area. Most of the participants live in the Municipality 1 which is the city center (see chart B3).

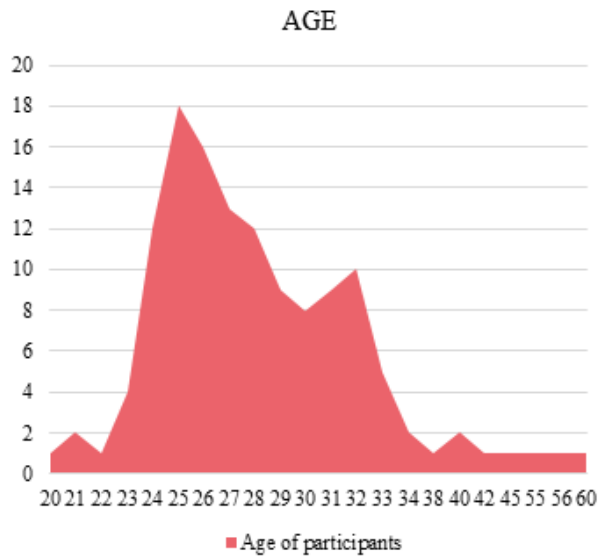


CHART B1: Answers of the participants to the question: “What is your age?”.

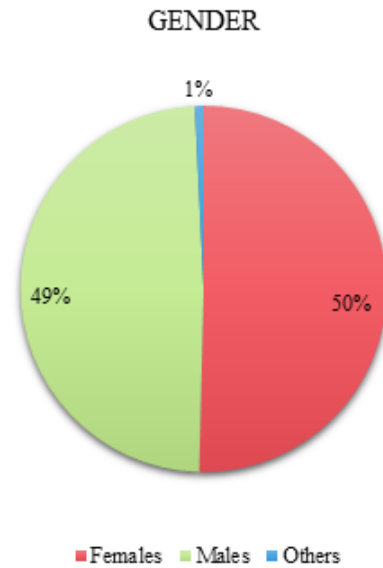


CHART B2: Answers of the participants to the question: “What is your gender?”.

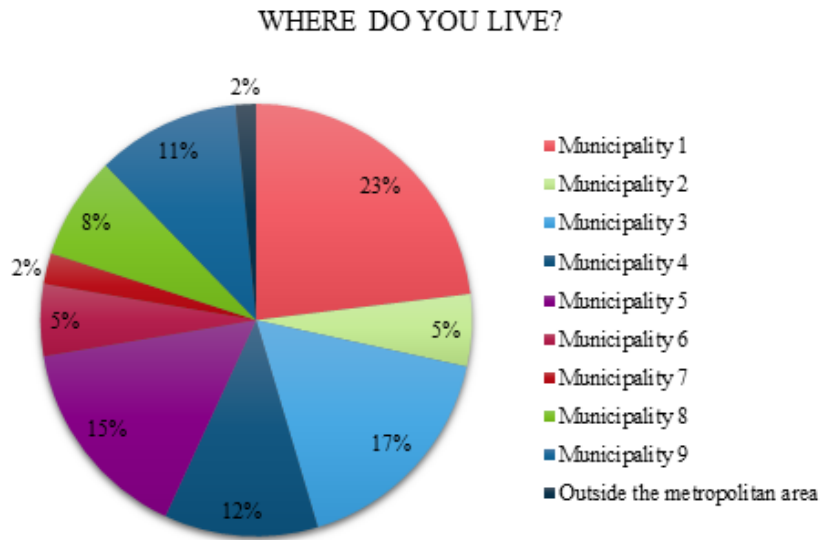


CHART B3: Answers of the participants to the question: “Where do you live?”.

In CHART B4 we can see that most of the participants have live in the same neighborhood for 5 to 10 years, and the next most common choice was people that just moved in. About the examples of neighborhoods used in this thesis, we can see that in terms of percentage many people that participated in the survey live inside them, even more than in the previous case study (see chart B5). Most of the participants need to go out of their neighborhoods to do their daily activities but a quarter of them live in the same neighborhood or do smart work (see chart B6).

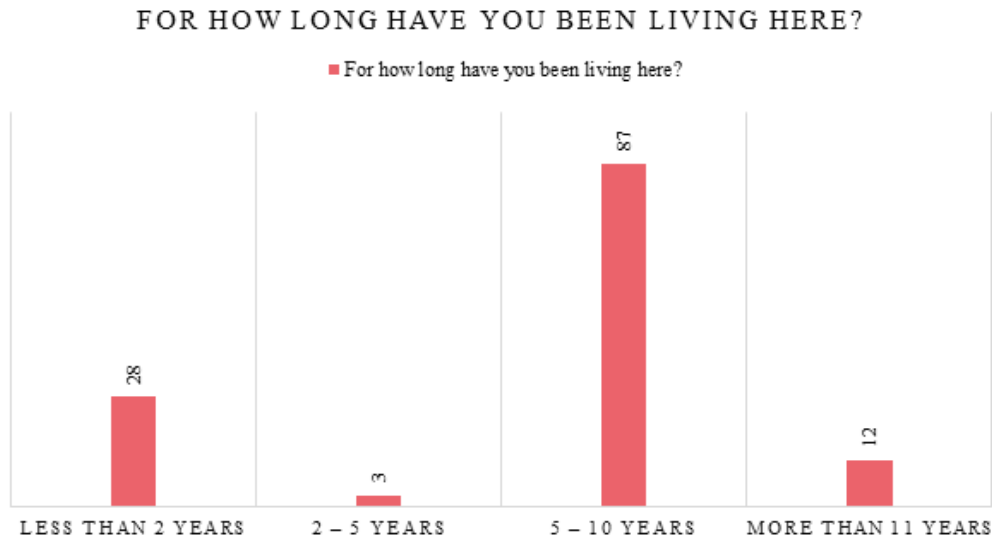


CHART B4: Answers of the participants to the question: "For how long you have been living here?".

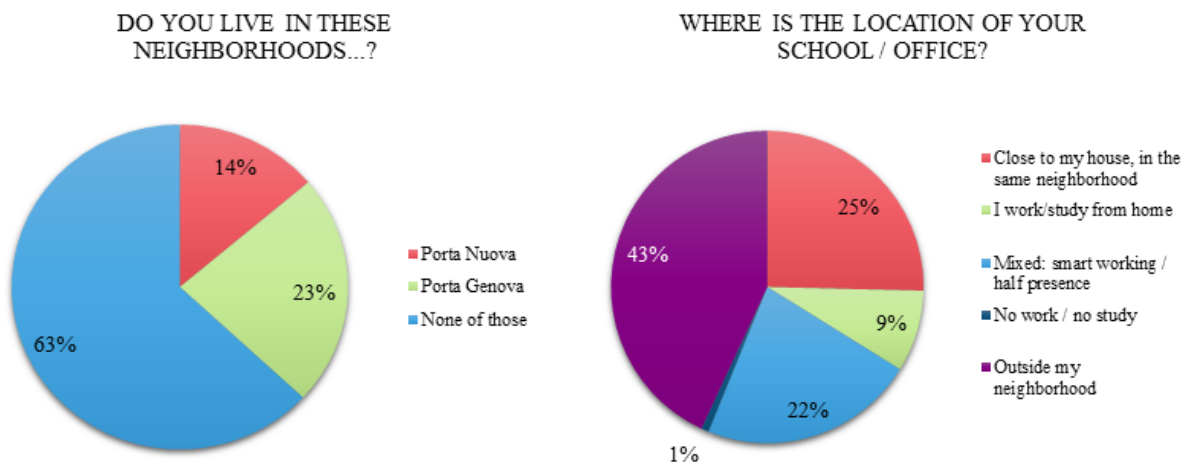


CHART B5: Answers of the participants to the question: "Do you live in these neighborhoods...?".

CHART B6: Answers of the participants to the question: "Where is the location of your school / office?".

The responses of the people that live in Milan indicate that most of them live with flatmates, after that option the next more common reply was that they live alone (see chart B7). In terms of arrangement (see chart B8) 84% of the participants are renting, half of them in short term and the other half in a longer term. Just the 11% own the house so we can deduce that the people that replied these surveys are not planning to stay for long in the city.

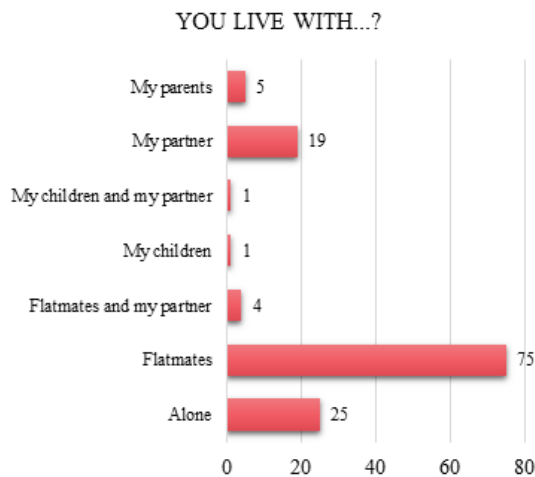


CHART B7: Answers of the participants to the question: “*You live...?*”.

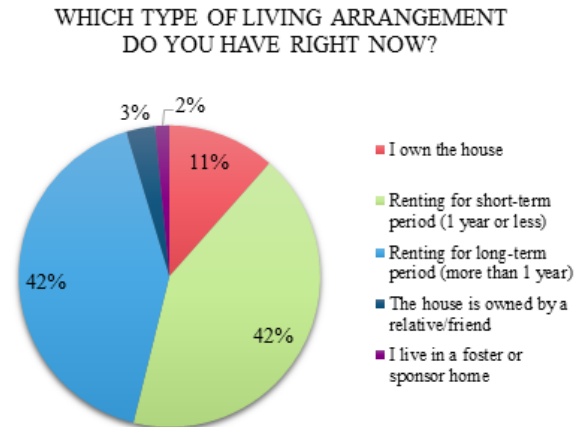


CHART B8: Answers of the participants to the question: “*Which type of living arrangement do you have right now?*”.

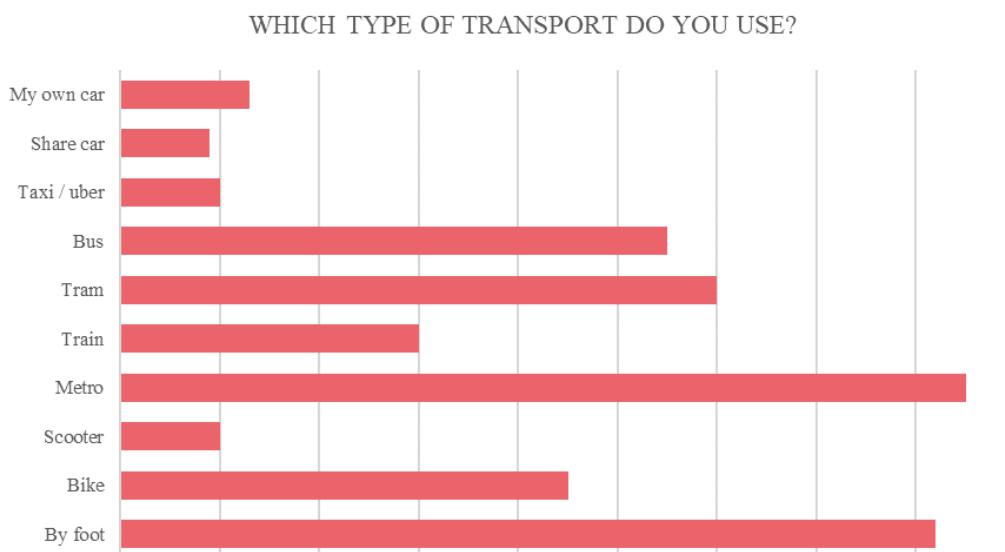


CHART B9: Answers of the participants to the question: “*Which type of transport do you normally use?*”

In CHART B9 we can notice that not a lot of people that answered these surveys have a private car, most of them use the public transport such as the metro, tram, and bus. Also, a lot of people normally walk to their destinations. There are many public transports stops as we can deduct from CHART B12, so accessibility is not a problem, we noticed that there are 39% of the surveyed people do not use the public transport. The most common reason why they do not used it is because of the time and comfort so some of them prefer to use alternatives as private cars, bikes, or scooters (see chart B10 and B11)

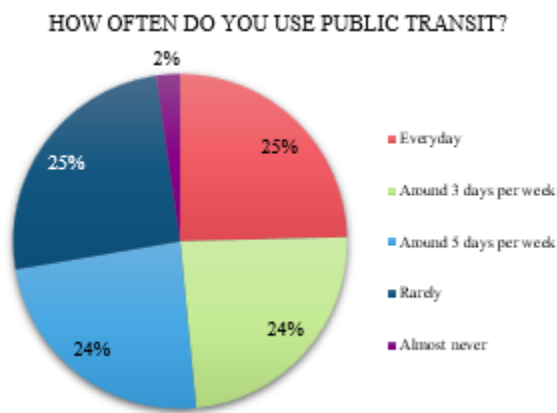


CHART B10: Answers of the participants to the question: “How often do you use public transit?”.

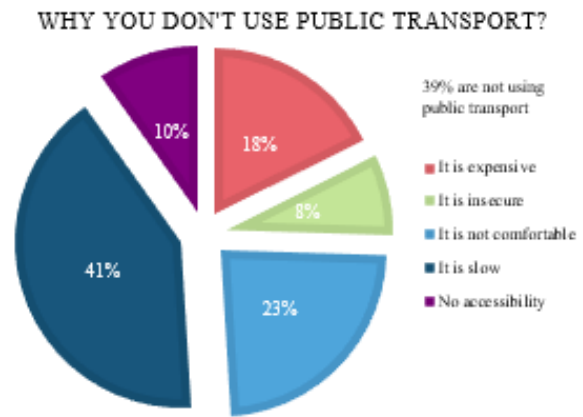


CHART B11: Answers of the participants to the question: “If you do not use public transit, what is the reason?”

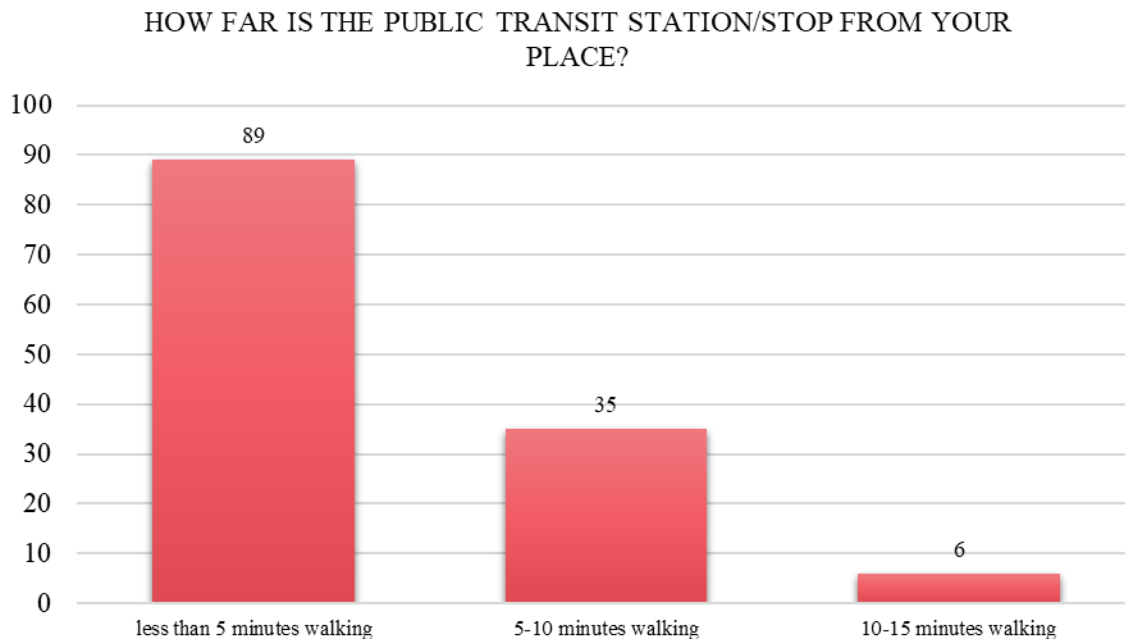


CHART B12: Answers of the participants to the question: “How far is the Public transit station/stop from your place?”.

People who answered this survey find a good relationship with the public transport system, in general they mostly perceived safe, and there is 68% of the participants who use public transport as a daily transport mode (see chart B13). In CHART B14 the people who prefer to drive a private car is mostly because of weather conditions or to save time. In CHART B15 we can see a high level of people that use bicycles to arrive to destinations nearby, and in the next chart (see chart B16) we can see that the main reason why people do not cycle is because they do not have a bike. This can be translated as an opportunity for implementing projects for increasing the access to bikes around the neighbourhoods.

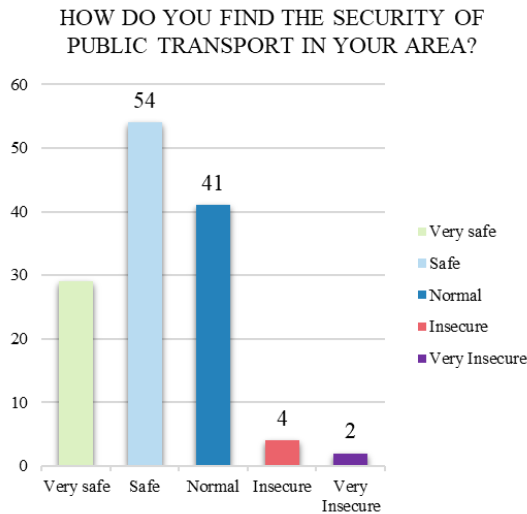


CHART B13: Answers of the participants to the question: "How do you find the security of public transport in the area?".

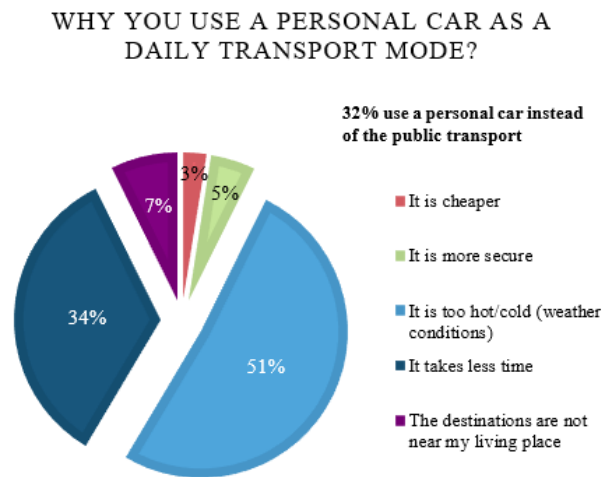


CHART B14: Answers of the participants to the question: "If you use a personal car as daily transport mode, what is the main reason?".

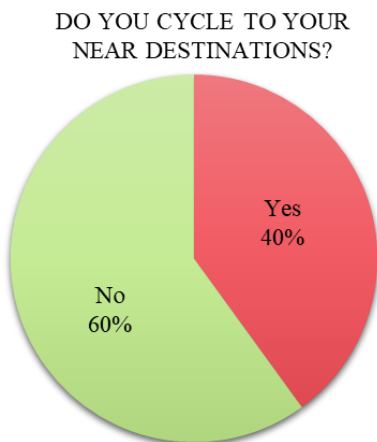


CHART B15: Answers of the participants to the question: "Do you cycle to your near destinations inside your neighborhood?".

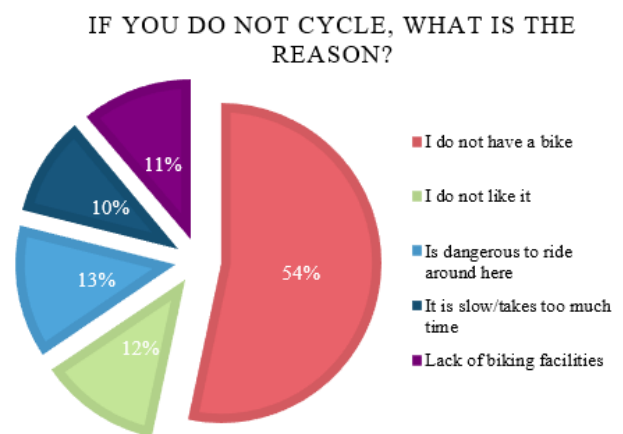


CHART B16: Answers of the participants to the question: "If you do not cycle to your near destinations, what is the reason?".

Most of the participants do their shopping inside their neighbourhood, also they normally have access to a grocery shop by feet (see chart B17 and B18). More than half of the people that answered these surveys do not join recreational activities inside their same neighbourhood (see chart B19). The main reason is that they prefer to visit new places, or they feel there are not enough interesting activities to do (see chart B20).

WHERE DO YOU PERFORM MOST OF YOUR DAILY/WEEKLY SHOPPING?

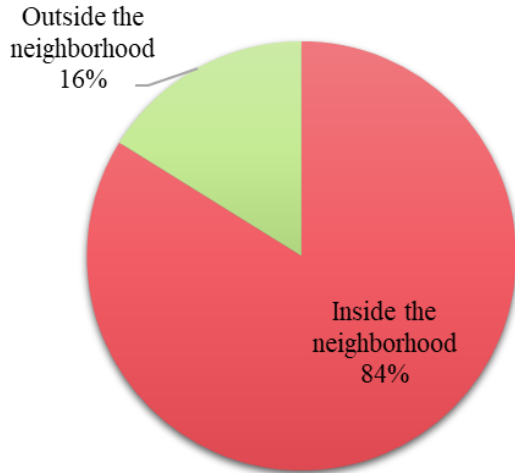


CHART B17: Answers of the participants to the question: "Where do you perform most of your daily/weekly shopping?"

HOW FAR IS YOUR CLOSEST GROCERY STORE?

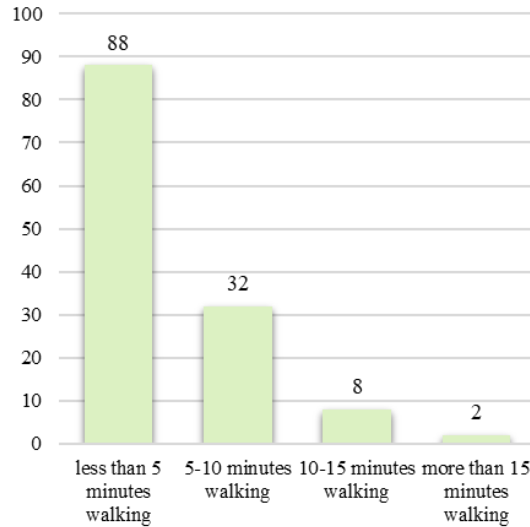


CHART B18: Answers of the participants to the question: "How far is your closest grocery store?"

WHERE DO YOU GO FOR RECREATIONAL ACTIVITIES?

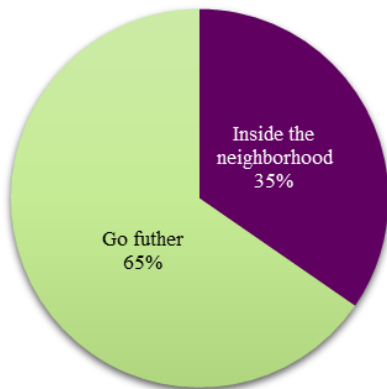


CHART B19: Answers of the participants to the question: "For recreational activities do you prefer to stay in your neighborhood or go further?"

IF YOU DO NOT JOIN RECREATIONAL ACTIVITIES IN YOUR NEIGHBORHOOD, WHAT IS THE REASON?

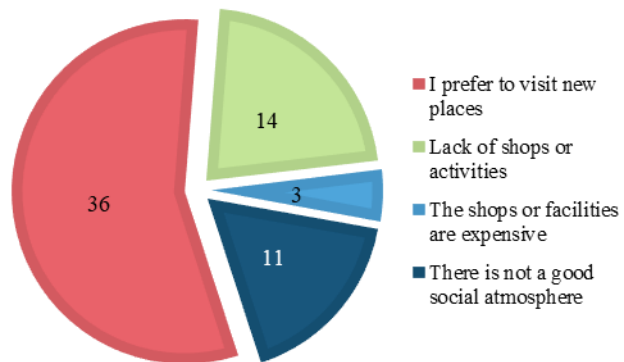


CHART B20: Answers of the participants to the question: "If you do not join social activities (like shopping/entertainment) in your neighborhood, what is the reason?"

In CHART B21 we can noticed that most of the participants perceived that the common classification of their neighborhood should be residential, with outdoor activities, shopping, restaurants, and night life. For being an Italian city the perception of the people in this survey is that tourism and cultural activities are not the strong point of this city. The next question that is going to be the core of our comparison between cities is the sense of belonging (see chart B22), which more than the half of the people surveyed said yes but in comparison with the previous city was not as high as expected. In CHART B23 we can see that the principal reason for picking a neighborhood is the price followed by the location of school or work. It seems that just few people live there since they were born or that they move to be close to relatives.

WHAT ARE THE MOST COMMON TYPES OF ACTIVITIES THAT YOU CAN FIND IN YOUR NEIGHBORHOOD?

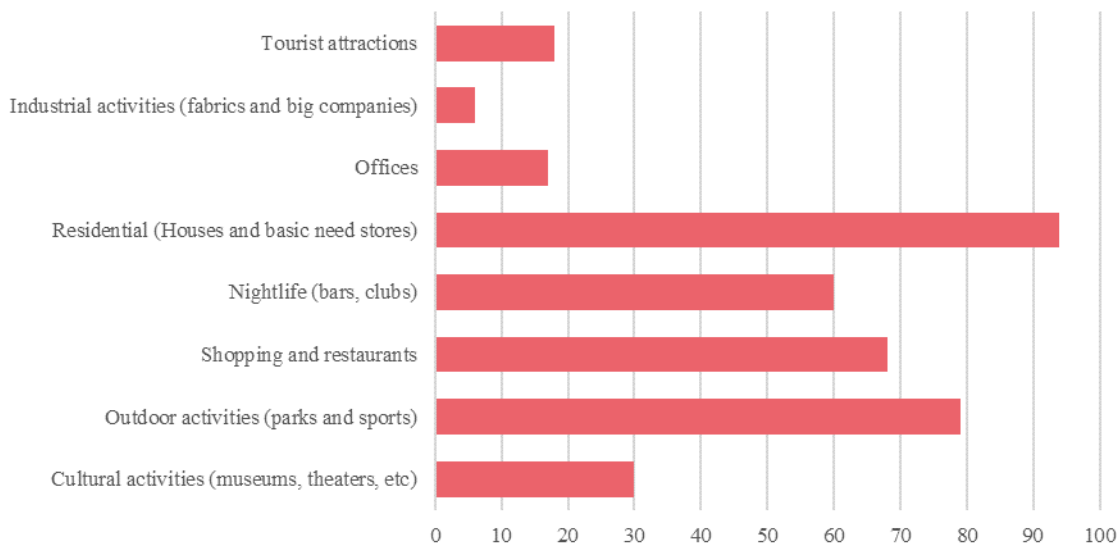


CHART B21: Answers of the participants to the question: “*What are the most common types of activities that you can find in your neighborhood?*”.

DO YOU FEEL YOU BELONG IN YOUR NEIGHBORHOOD?

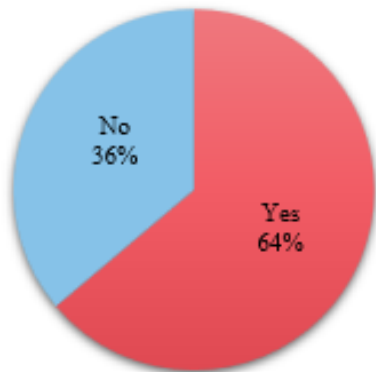


CHART B22: Answers of the participants to the question: “*Do you feel you belong in your neighborhood?*”.

WHY DID YOU CHOOSE THIS NEIGHBORHOOD TO LIVE?

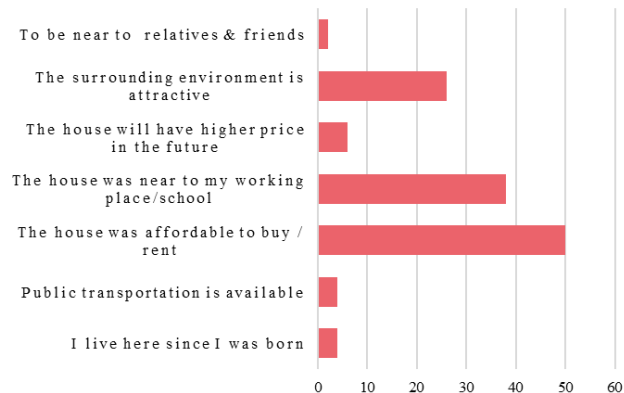
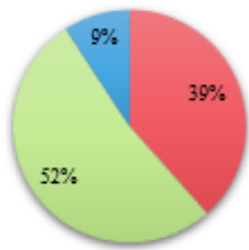


CHART B23: Answers of the participants to the question: “*Why did you choose this neighborhood to live?*”.

In comparison with Medellin, we can see in CHART B24 that a little more than the half of the participants have some notion of what is happening in levels of urban planning around the neighborhoods. In general, participants feel happy and proud of the place they live, having just 5% in both questions that do not feel that way (see chart B25). 82% of the participants feel happy to live in their neighborhoods which is a good number in average (see chart B26). In general, the questions about the neighbors and the community are average; participants do not perceive in a negative way the people in their neighborhood, but they do not feel to have a strong sense of community (see CHART B27).

WHAT IS YOUR OPINION ABOUT THE URBAN REGENERATION OF YOUR NEIGHBORHOOD?



■ I do not know anything about it
 ■ I think it helped the neighborhood
 ■ I think it was better before

CHART B24: Answers of the participants to the question: "What is your opinion about the urban regeneration of your neighborhood?".

I AM HAPPY WHERE I LIVE NOW

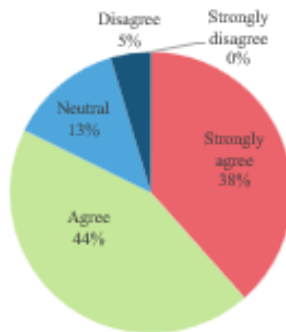


CHART B25: Answers of the participants to the question: "I am happy where I live now".

I LIKE TO TELL OTHERS THAT I LIVE IN MY NEIGHBORHOOD

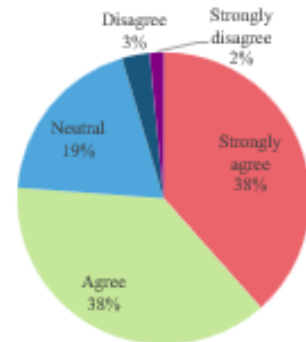


CHART B26: Answers of the participants to the question: "I like to tell others that I live in my neighborhood".

PEOPLE IN MY NEIGHBORHOOD...

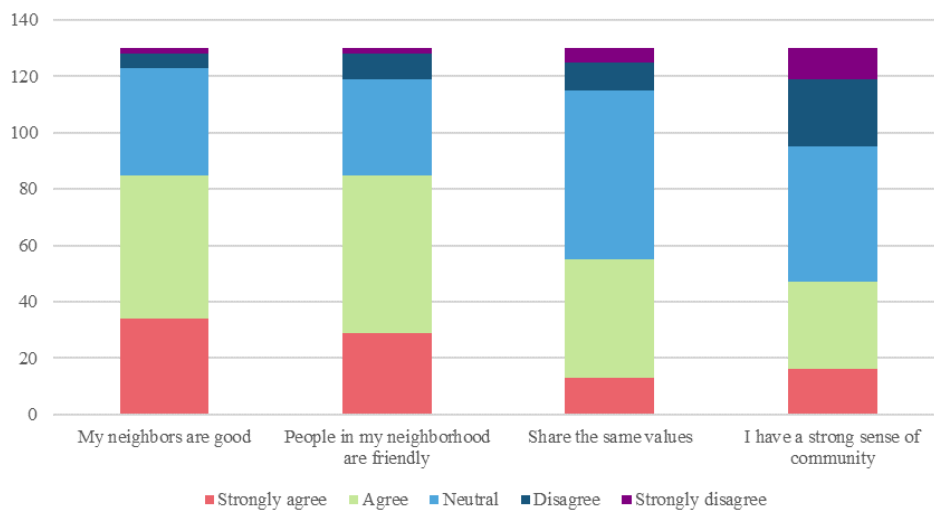


CHART B27: Answers of the participants to the questions: "My neighbors are good / Most people in my neighborhood are friendly/ People in my neighborhood share the same values / I have a strong sense of community here"

In general, the participants feel safe in their neighborhoods, they kind of like the buildings and they consider there are interesting activities to do (although in the previous answer they were not so willing to do recreational activities in their neighborhoods) (see chart B28). They feel safe and they feel they can be able to walk around the neighborhood which is confirmed in the previous chart B9 where we can notice that a lot of them walk to their daily destinations. Many of the participants feel that noise can be a problem, but they feel that vandalism and the trash is “normal”, exists in their neighborhoods but not in a degree that they feel uncomfortable about it (see chart B29).

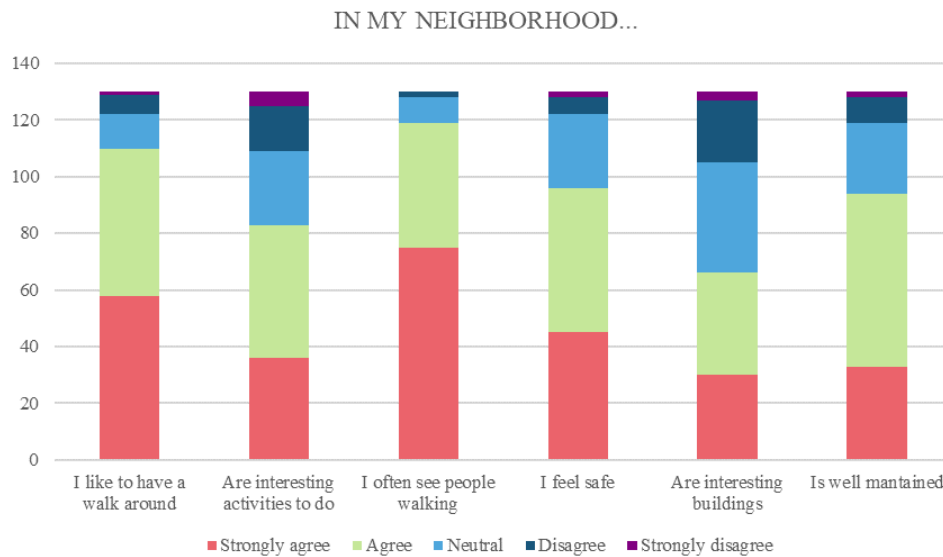


CHART B28: Answers of the participants to the questions: “I like to have a walk around my neighborhood / I feel safe in this neighborhood / There are interesting activities to do in my neighborhood / I often see people walking in my neighborhood / The buildings in my neighborhood are interesting / My neighborhood is well maintained”.

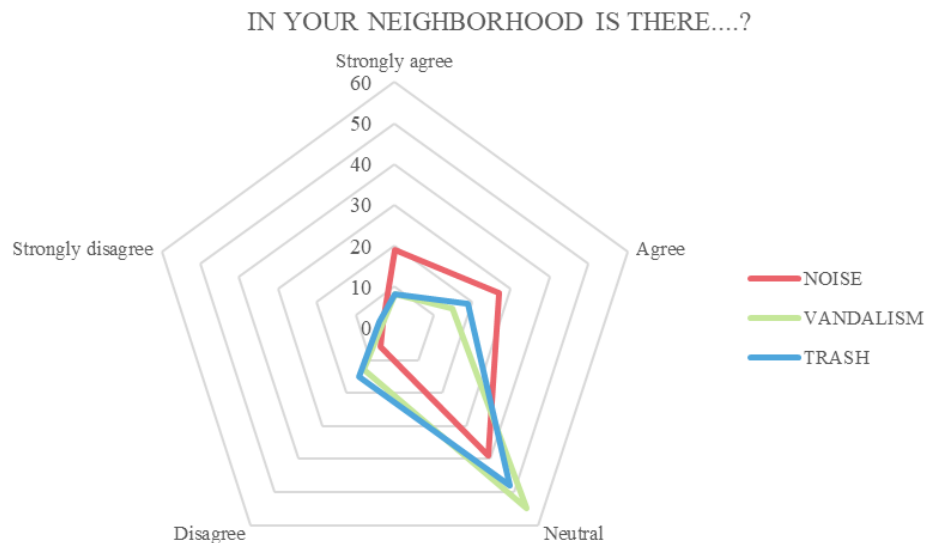


CHART B29: Answers of the participants to the questions: “There is a lot of noise in my neighborhood / There is vandalism in my neighborhood / There is too much trash on the streets”.

IV.IV COMPARING MEDELLIN AND MILAN

After presenting the raw answers from Medellin and Milan, in this thesis, I used a direct comparison of both cities using the program SPSS and the Chi-Square Test to find the significant differences between them. The first question and the base of this analysis is the responses to the question: “Do you feel you belong to your neighborhood?” (see chart C1 and Table 2). The test proved that it does matter in which city you live to have a higher level of belonging. The total responses were 224 for both, having 130 of Milan and 94 of Medellin. The same criteria were used for all the questions in the comparison, unless for the optional questions specified in the analysis of each one.

<i>Crosstabulation</i>		DO YOU FEEL YOU BELONG TO YOUR NEIGHBORHOOD?		N. of Part.
		Yes	No	
City	Milan	64%	36%	130
	Medellin	85%	15%	94
Total		73%	27%	224

TABLE 2: Comparison between cities and sense of belonging. Replies from surveys (see surveys).

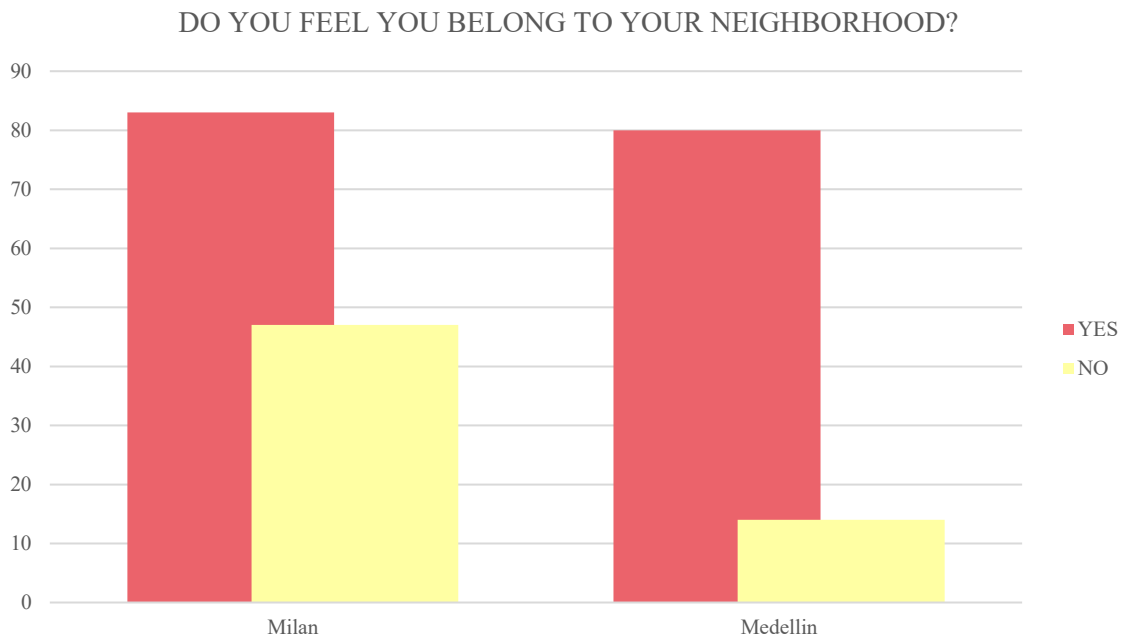


CHART C1: Comparison between participants of different cities to the question: “Do you belong to your neighborhood”.

The first step for this comparison was the attempt to answer the main question of this thesis: Is the sense of belonging different depending on the city? The results show us that there is a difference in the sense of belonging depending on the cities. People in Medellin tend to feel more part of their neighborhood than the people of Milan that answered the surveys.

	PEARSON CHI-SQUARE	df	Asymptotic Significance	CRAMER'S V	Approximate Significance
Difference of Sense of Belonging in between cities	12.443 ^a	1	< 0.001	0.236	<0.001
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 25.60.					
b. Computed only for a 2x2 table					

TABLE 3: using SPSS and the Chi-square test it was analyzed what is the significance of the deafferentation in both cities.

Using the chi-square test (see table 3) we can notice there is a difference of less than the .05 of Asymptotic significance confirming statistically that it matters in which city you are living to feel or not the sense of belonging. With Cramer’s V we can determine how strong is the relationship, since the results show a value of .236 which, using Table 1, has an interpretation of a Weak Positive Association. So, although there is a difference between living in one city or the other the association is not the principal cause of having or not a sense of belonging. In the next texts, charts, and tables the important determinants for having a sense of belonging were tried to be found, and which ones were not important.

In table 4 the questions related to personal information were tested and compared with the values of Sense of Belonging. This part was related to the personal conditions of each one of the participants such as gender, who they are living with, the part of the city they are living in, for how long, etc. The first thing that we can notice is that neither gender nor the knowledge about urban regeneration impacts the result of having or not Sense of Belonging, which means there is no relevant difference in those two questions regarding the main topic. Then, we have three variants that presented a weak positive association like the time people have been living in their homes, which we can deduce that the more the people are living in the same place, the more related they feel about it. The second one was with who they live with, we can notice in chart C2 that the people that live with their direct families such as children or parents feel they belong more to their neighborhoods. The last one is the living arrangement which demonstrates that the people who own a house feel they belong more than the people that are renting. Finally, the moderate positive associations were two, the one that shows the part of the city they are living proving the point that the neighborhood matter in terms of belonging to a place. And the last one of this section was the personal reasons the participants had to pick the place they live. In chart C3 the different reasons were converted in a graphic way showing that the people that pick the neighborhood because they liked the environment are more likely to feel they belong to their neighborhood.

VARIABLES	PEARSON CHI-SQUARE	df	Asymptotic Significance	Notes	CRAMER'S V	Approx. Significance	Interpretation of PRE-Measures
Does gender influence a sense of belonging?	.413 ^a	2	0.814	a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is .27.	0.043	0.814	No association
Is this part of the city influenced by a sense of belonging?	57.478 ^a	19	<0.001	a. 22 cells (55.0%) have expected count less than 5. The minimum expected count is .27.	0.507	<0.001	Moderate Positive Association
Is the time people have been living in a place influenced by a sense of belonging?	9.366 ^a	3	0.025	a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.54	0.204	0.025	Weak Positive Association
With whom do you live influence the sense of belonging?	15.813 ^a	6	0.015	a. 4 cells (28.6%) have expected count less than 5. The minimum expected count is 1.09.	0.266	0.015	Weak Positive Association
Is the living arrangement impacting the sense of belonging?	11.112 ^a	4	0.025	a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is .54.	0.223	0.025	Weak Positive Association
Is the reason why they pick the location of their homes impacts their sense of belonging?	36.249 ^a	7	<0.001	a. 4 cells (25.0%) have expected count less than 5. The minimum expected count is 1.91.	0.402	<0.001	Moderate Positive Association
Does the perception in urban regeneration have a relationship with the sense of belonging?	3.083 ^a	2	0.214	a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.90.	0.117	0.214	No association

TABLE 4: using SPSS and the Chi-square test it was analyzed what is the significance in between sense of belonging and personal variables.

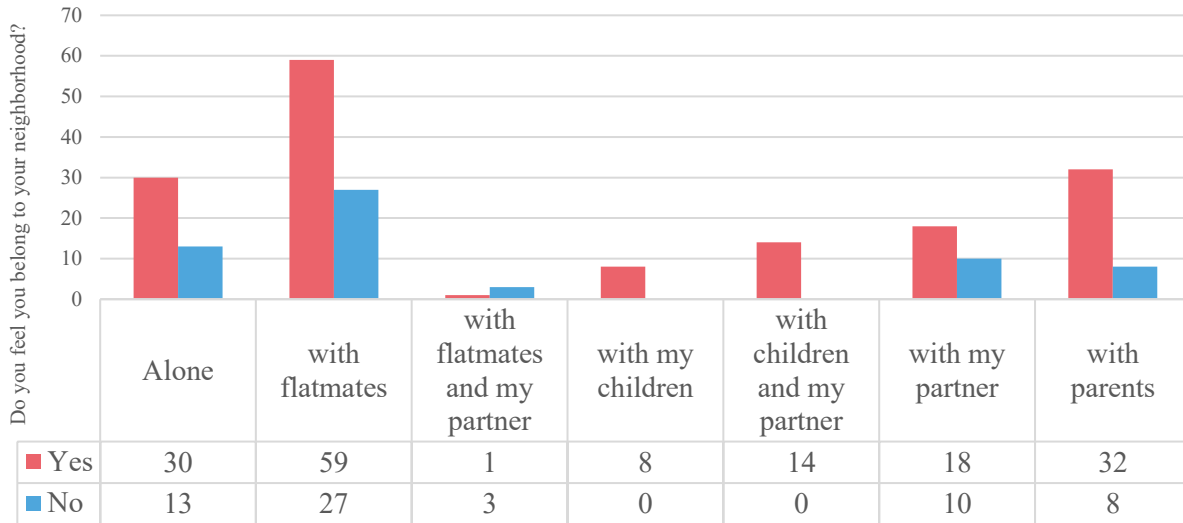


CHART C2: Comparison between the feeling of belonging with the constitution of people in the homes of each participant.

Chart C3 shows the answers about the reasons the people had to move to that area, people that live all their lives in the same place tend to feel more related to it, as well as the people who decided to move there because the environment was considered attractive. The people that move because of their children have also shown that they feel they belong to their neighborhood, as well as if we see the previous chart, we can deduce that kids can be a strong way of feeling belongingness. Public transportation is also a reason that makes people feel they are part of their district, probably because they are free to move to different points of the city. On the other hand, people that move there because of their work or price are not feeling on average as part of their neighborhood as the other groups.

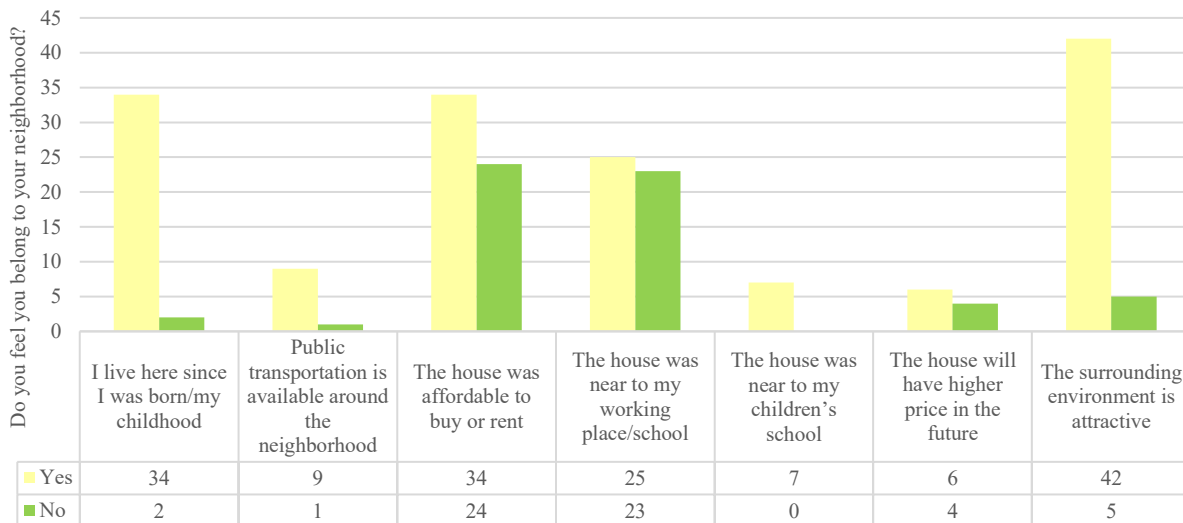


CHART C3: Comparison between the feeling of belonging with the constitution of people in the homes of each participant.

In table 5 the Sense of Belonging and the situation about mobility were compared, most of the results show that there is no association between the feeling of belonging and the situation about mobility. In this case, is important to remember that the results in both cities (See Charts A9-A16 for Medellin and B9-B16 for Milan) were different because of the personal situation in each case. In Medellin people tend to use private cars while in Milan the use of public transport is more common, however, it does not influence directly to the Sense of Belonging. The only variable that proved to have a weak positive association was the frequency of the use of public transport. Because of the dissimilarities of the conditions in both cities, the use of public transport will not be compared directly and for the aim of this thesis, all the questions associated with mobility were analyzed according to the city.

VARIABLES	PEARSON CHI-SQUARE	df	Asymptotic Significance	Notes	CRAMER'S V	Approx. Significance	Interpretation of PRE-Measures
Does the frequency for taking public transport impact the sense of belonging?	14.482 ^a	4	0.006	a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.81.	0.254	0.006	Weak Positive Association
Is the distance of where is the public transport affects the sense of belonging?	2.734 ^a	3	0.435	a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is .27.	0.110	0.435	No association
Does the perception of security in public transport impact the sense of belonging?	8.255 ^a	4	0.083	a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 1.63.	0.192	0.083	No association
Does using a personal car impact to the sense of belonging?	11.803 ^a	6	0.067	a. 10 cells (71.4%) have expected count less than 5. The minimum expected count is .21.	0.349	0.067	No association
Does cycling have an impact in sense of belonging?	2.175 ^a	1	0.140	a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 18.52.	0.099	0.140	No association

TABLE 5: using SPSS and the Chi-square test it was analyzed what is the significance in between sense of belonging and mobility variables.

In table 6 the variables about shopping and recreational activities were analyzed in contrast to the sense of belonging. First the location of the work or school seems that it does not matter if they studied/work in or outside the neighborhood. Also, the distance of the grocery shops does not influence the Sense of Belonging, but in general, the answers have shown that in most of the neighborhoods there is a store close to them. Shopping inside the neighborhood shows a relation with a sense of belonging, the people that do not feel more unlikely to being part of their neighborhood, which makes sense since the main activity they do not even do is in their district. Participation in recreational activities also has a weak positive association with belongingness (see chart C3). Finally, the more interesting activities are inside the neighborhood the better connection of the people that feel part of their districts.

VARIABLES	PEARSON CHI-SQUARE	df	Asymptotic Significance	Notes	CRAMER'S V	Approx. Significance	Interpretation of PRE-Measures
Is the place where your daily activities influence the sense of belonging?	6.672 ^a	4	0.154	a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is .54.	0.173	0.154	No association
Does shopping inside the neighborhood or not impact the sense of belonging?	5.767 ^a	1	0.016	a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.26.	0.260	0.016	Weak Positive Association
Does the distance of grocery shops influence the Sense of Belonging?	5.717 ^a	3	0.126	a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.36.	0.160	0.126	No association
Does participating in recreational activities in the neighborhood impact the sense of belonging?	9.873 ^a	1	0.002	a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 22.06.	0.210	0.002	Weak Positive Association
Does having interesting activities inside the neighborhood influence the Sense of Belonging?	36.928 ^a	4	<0.001	a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.36.	0.406	<0.001	Moderate Positive Association

TABLE 6: using SPSS and the Chi-square test it was analyzed what is the significance in between sense of belonging and services variables.

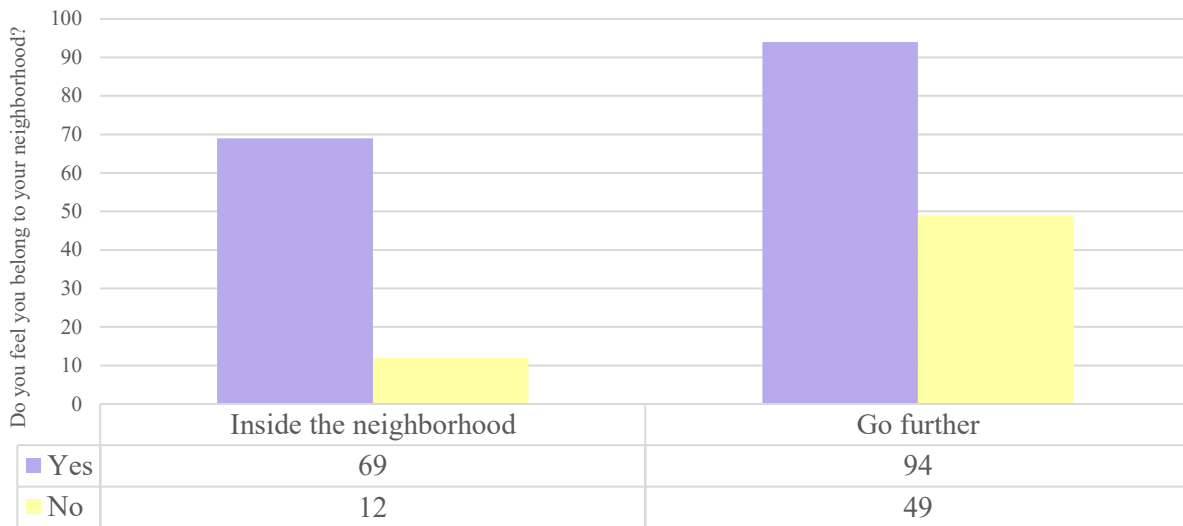


CHART C4: Comparison between the feeling of belonging with the people that participate in recreational activities inside and outside their neighborhoods.

In chart C4 we can see that the people that do recreational activities inside their neighborhoods tend to reply positively to the question of belongingness while the people that go further normally answer that they do not belong to the district. In chart C5 the participants that think that the activities in their neighborhoods are interesting tend to feel more part of their area, while the people that found that there are no good activities are inclined to not feel they belong.

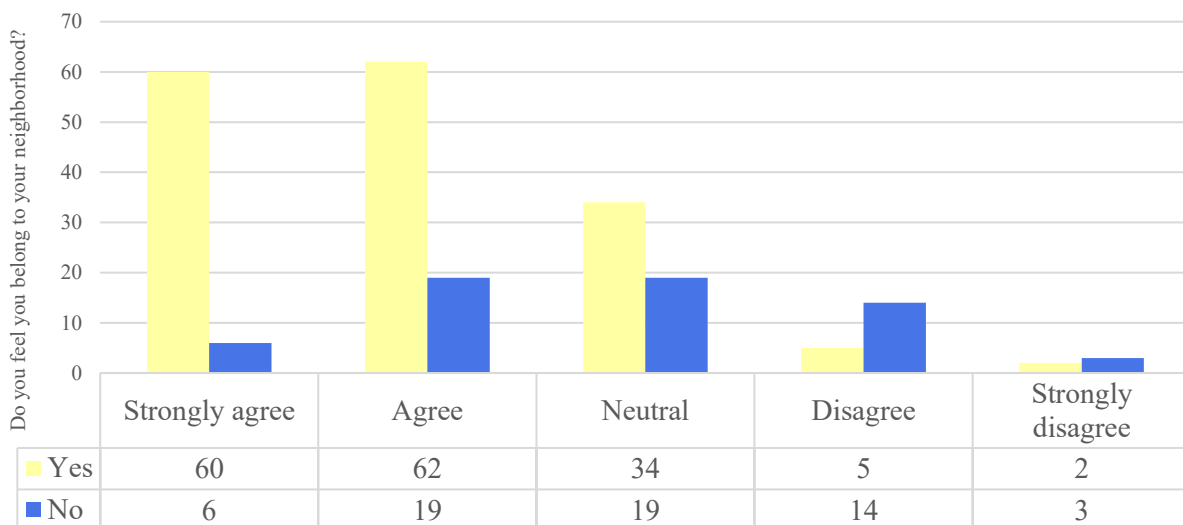


CHART C5: Participants were asked about their perception of how interesting the activities in their neighborhood are and it was compared with the feel of belongingness.

In the following table (see table 7), the questions and values that concern the neighbors and community were grouped to see what the link between them and the Sense of belonging is. The questions seem to have an impact on the belongingness of the participants, being the sense of community and the values the ones with a higher association (moderate positive association). The fact that neighbors are good and friendly had a weak positive association with the sense of belonging. In general, we can observe that having a community in which participants can feel identify is an important parameter to the Sense of Belonging since the social environment is an important factor according to the investigation made in chapter II. Another analysis could be the relationship between the sense of community with recreational activities since the chances that people get along can increase if they enjoy doing activities together.

VARIABLES	PEARSON CHI-SQUARE	df	Asymptotic Significance	Notes	Lambda	Approximate Significance	Interpretation of PRE-Measures
Does having good neighbors influence the Sense of Belonging?	28.596 ^a	4	<0.001	a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is .54.	0.357	<0.001	Weak Positive Association
Does having friendly neighbors influence the Sense of Belonging?	35.743 ^a	4	<0.001	a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is .54.	0.399	<0.001	Weak Positive Association
Does sharing values with the neighbors influence the Sense of Belonging?	54.472 ^a	4	<0.001	a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 1.37.	0.494	<0.001	Moderate Positive Association
Does having a strong sense of community affects the Sense of Belonging?	50.492 ^a	4	<0.001	a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 3.00.	0.475	<0.001	Moderate Positive Association

TABLE 7: using SPSS and the Chi-square test it was analyzed what is the significance in between sense of belonging and community variables.

In table 8 the questions related to feelings and senses were grouped, first, we have that the feeling of happiness and feeling belongingness have a moderate positive relationship, so the happier the people are where they live the more part of their neighborhoods they would feel. How proud they feel about the places where they live shows a weak positive association and shows that people that do not like to tell others where

they live do not feel part of that places. The fact that people can walk around their neighborhood and see others do the same also influences their feeling of being part of it, this can be related to the association of safety enough to walk around and to have a good area where people feel comfortable outdoors. The maintenance and the building around the neighborhood show also a weak positive association which means that a “nicer” neighborhood is a parameter of having more feeling of pertinence to the neighborhood.

VARIABLES	PEARSON CHI-SQUARE	df	Asymptotic Significance	Notes	Lambda	Approximate Significance	Interpretation of PRE-Measures
Is happiness related to the Sense of Belonging?	56.901 ^a	3	<0.001	a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.62.	0.506	<0.001	Moderate Positive Association
Is being proud of the place you live influence the Sense of Belonging?	29.149 ^a	4	<0.001	a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is .54.	0.361	<0.001	Weak Positive Association
Is enjoying walking around the neighborhood a factor that influence Sense of Belonging?	29.052 ^a	4	<0.001	a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is .27.	0.360	<0.001	Weak Positive Association
Seeing people walking influences the Sense of Belonging?	26.423 ^a	3	<0.001	a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is .54.	0.343	<0.001	Weak Positive Association
Does the maintenance of the neighborhood influence the Sense of Belonging?	9.740 ^a	4	0.045	a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 1.36.	0.209	0.045	Weak Positive Association
Does the architecture in the neighborhood influence the Sense of Belonging?	15.474 ^a	4	0.004	a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 1.91.	0.263	0.004	Weak Positive Association

TABLE 8: using SPSS and the Chi-square test it was analyzed what is the significance in between sense of belonging and sensorial variables.

Finally, in table 9 some negative aspects of the neighborhood were asked, such as noises, trash, vandalism, and security. The factor that seems to not be a determinant of having or not the sense of belonging is the trash, which with the chi-square presented no association at all. Noises are factors that influence how people feel about their neighborhoods, but in a way, people preferred to live in a ‘neutral’ neighborhood than in a quiet neighborhood according to the responses (see chart C6). Vandalism affects their perception, as security, in general, the participants feel better when they feel safe and that makes them feel that they belong to their neighborhood.

VARIABLES	PEARSON CHI-SQUARE	df	Asymptotic Significance	Notes	Lambda	Approximate Significance	Interpretation of PRE-Measures
Do noises influence the Sense of Belonging?	37.895 ^a	4	<0.001	a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 3.54.	0.411	<0.001	Moderate Positive Association
Is trash a factor that influences the Sense of Belonging?	3.944 ^a	4	0.414	a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 3.27.	0.133	0.414	No association
Is vandalism a factor that influence Sense of Belonging?	10.559 ^a	4	0.032	a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 4.90.	0.217	0.032	Weak Positive Association
Does feeling safe influence the Sense of Belonging?	19.367 ^a	4	<0.001	a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is .54.	0.294	<0.001	Weak Positive Association

TABLE 9: using SPSS and the Chi-square test it was analyzed what is the significance in between sense of belonging and negative variables.

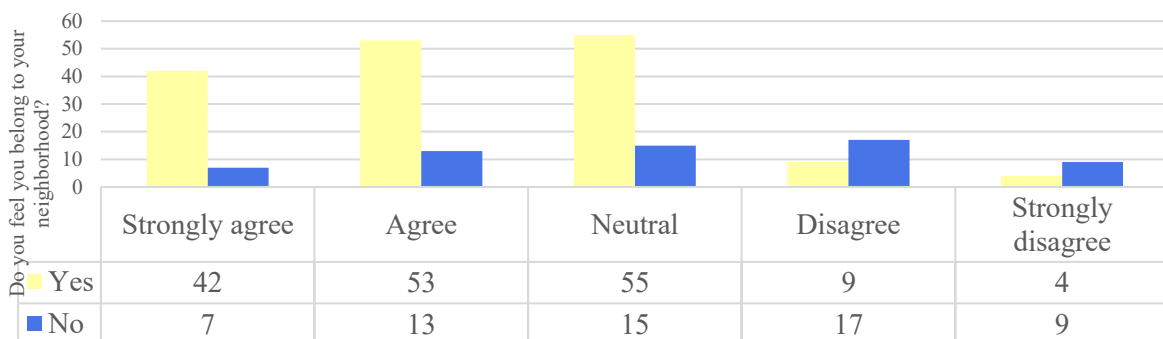


CHART C6: comparison between feeling the sense of belonging with the amount of noise in the neighborhood.

CHAPTER V - DISCUSSION

V.I DEFINING THE SENSE OF BELONGING

The results of this research on the Sense of Belonging of the participants in the cities Medellin and Milan are discussed in this chapter. The investigation focused on understanding the perception of an inhabitant aiming to understand what makes a participant feel he or she belong to a place. Having two case studies in different continents was a way to prove that every location has its Genius Loci, however, it does not mean that the people living there would feel they belong to the place. Recognizing the importance of the perceived space is a way to lead to better projects and including the opinions of the participants is necessary to achieve success in architecture and urban planning. The objective of this thesis was to define first what makes a participant feel or not the Sense of Belonging, establishing the first step for planners to being able to identify this and provide tools to improve the belongingness.

To achieve the understanding of the Sense of Belonging it was important to consider the physical aspect and the perceived aspect of space. The components of the perceived space play an important role in the feeling of belongingness of the participants, they can turn into instruments for planning to produce better proposals. Christian Norberg-Schulz stated that “*Human identity presupposes the identity of a place, and that stabilitas loci, therefore is a basic human need*” [135]. So we can confirm that the identity of a place is attached to the identity of the people that are living in it, without the perception of the inhabitants it turns to just be a space. The senses, feelings, behaviors, culture, and society are ways to construct the perceived aspect that deals mainly with the intangible things, which make them difficult to integrate into architecture and urban planning. The perception of the participants, in general, plays an important role in having quality of life since the needs of the people should be heard out to be implemented in the built environment.

The physical space of Genius Loci might be different in between regions, the built and the natural environment. In the case studies that this thesis took we can see the contrasts in both aspects, for Medellin the landscape is a city full of different heights because of the hills, but the implementation of infrastructure was brilliant since it has a direct adaption to the topography, like the metro cable or the mechanic stairs. In the meanwhile, Milan is trying to recover the natural environment and allowing going from an industrial city to a green one using the requalification of canals and parks. The way planning is taking advantage of the main characteristics of both places are good examples of urban planning.

Another point to take into consideration while doing a direct comparison between cities is the fact that Genius Loci makes an emphasis on the significance of the relationship between the places and their past.

¹³⁵ Norberg-Schultz Christian, *Genius Loci: Towards a Phenomenology of Architecture*, Rizzoli, New York (1980): pp. 180.

The fragments of the history should be understood and seen within context, having qualities of permanence that generate a sense of identity and belonging. Inside Medellin, we can notice how they took the graffiti that used to be seen as a bad connotation and how the government change completely the perception with different art programs that turn the perception of the place and nowadays, they are seen as beautiful street arts that gives joy to the citizens and tourists. In Milan, the inclusion of the Spanish walls and the re-opening of the Darsena was a way to take a vision from the past and translated it into the present context. Including the history of a place translating it into a contemporary use contributes to preserve and give an emphasis to the identity of the location.

The perceived space can be difficult to study since each of the participants can have different ideas in their mind, but in general, we can deduce the importance of the senses on the perception of a city. Aesthetic spaces, maintained buildings, and clean areas are ways that people feel proud and happy about their environment, and as consequence, they feel they belong to it. For this research, the sight was the sense that it appeals the most since it is the easier to measure and having information about what citizens perceive the first sight. But it is important to keep in mind that architecture and urban planning are disciplines that surround us with all the senses. Everyone is forced to relate to the built environment and as urban planners, we have the responsibility to keep that in mind to produce plans that create good sensations for the participants. In the mind of the people these senses are translated into feelings, for example, when a participant sees more people on the street taking a walk, this person feels safer and tends to also take walks around the neighborhood.

Getting to the topic about people, TABLE 7 shows the relationship between community and belongingness. As humans are sociable creatures by nature, there is a high emphasis on the sense of belonging related to the neighbors and community inside the place. When people feel their neighbors have the same values and it is easier to approach them, they tend to feel they belong more than the people that do not feel any type of connection with their social environment. This can be improved by having more activities in a neighborhood that creates opportunities for building a community.

Looking at the questions that had been formulated to consider the main characteristics for having a Sense of Belonging but also, deeper studies should be needed to have a more specific answer to this. This thesis used a qualitative analysis method through surveys to formulate findings in form of variables enabling a comparison of each city and the perspective of the participants about their neighborhoods. The main contribution in this approach is to allow creation tools that could include people's opinions and perceptions of space to create better places. The essence of Genius Loci is the way people feel about a place, having belongingness is an attribute that contributes to having a better quality of life among the citizens

The thesis concludes that Genius Loci plays an important function in the city, but the most important point is the Sense of Belonging that reverberates in the lives of the citizens in their personal and social lives. The

results of the surveys show that there is a relationship in the feeling of belonging with the social environment and this can be improved by giving to the community activities that they can enjoy in the neighborhood. Having different ways to interact with the environment is fundamental for the citizens to feel part of the district they live in by providing quality spaces that can make a difference in the way a person relates to the location. In the next sub-chapter, there is a deeper analysis of the findings that this researcher got from the answers of the citizens of both cities.

V.II INTERPRETATION OF THE PARTICIPANT’S ANSWERS

The main question of the surveys was: *“Do you feel you belong to your neighborhood?”* This was to answer the main research question of the thesis: *“Is there a difference between how people feel the sense of belonging in different cities or does the context does not matter? Is the sense of belonging different depending on the city?”* According to the data and the chi-square test, we can confirm that there is a difference in the Sense of Belonging depending on the city (see chart C1 and Table 3). Even that both cities have a strong historical past, the relationship with people and belongingness is different. When the researcher started to analyze them, the first expectation was that as Milan is safer and economically stronger, people would feel happier and have a better attachment to the city, but the findings say the opposite. Investigating the quality of life, we can find that Milan, in terms of economy, is more important than Medellin because of its stock market. The cities that have stock exchanges have the characteristic of influencing international or national’s financial markets [136]. However, this survey and research did not use questions focused on the economy or work opportunities of the citizens.

Forgoing deep into the sense of belonging and the comparison between Milan and Medellin this research found interesting pages that have a similar approach as this thesis. One of them is versus, which by using data from other pages analyze the quality of life of each city and give some points to rank them in terms of livability.

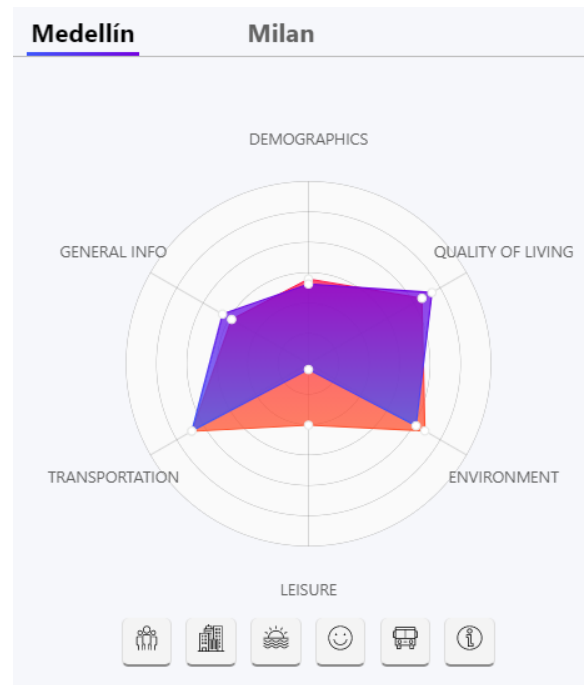


FIGURE 48: Versus. (2021). *Medellin vs Milan: What is the difference?* <https://versus.com/en/medellin-vs-milan>

¹³⁶ Christiansen, H., & Koldertsova, A. (2008). The Role of Stock Exchange in Corporate Governance (Vol. 2009/1). Financial Market Trends.

Also, participants can give their opinion and comment about what they think about living in a city or another. Having platforms that can connect residents and give advice for people that are moving is useful and helpful to make a feel of welcoming before even its arrival to a city. The next image (see figure 48) was taken from the page “VERSUS” where we can see that there are some similarities between the cities although Milan (shown in red) seems to be a more livable place to live since it has more leisure activities than Medellin (shown in blue) [¹³⁷]. Having this in mind and being a starting point to compare, this chapter went deeper with the sense of belonging trying to answer the next question: “*What are the determinants for having a sense of belonging in a place?*”

Previously in chapter IV.IV COMPARING MEDELLIN AND MILAN, the answers of the participants were divided into categories to facilitate the reading of the lector. Something to remark before proceeding is that the sample size is not big enough to be able to have definite results, but as an attempt of trying to define determinants of Sense of Belonging this can be a good starting point. The first topic to talk about would be the personal information of the participants (see table 4). Gender does not seem to be a determinant of having or not a sense of belonging, the sample size was balanced in both genders and this variable does not show a difference in the replies of the people. On the other side, the district where people are living has a moderate association, people in some neighborhoods feel more part of it compared to others. More than a determinant it is a fact that where you live matters to feel you belong or not, so there are some characteristics that some areas have that make people feel belongingness.

Then we have the questions “For how long you have been living there?” The cross-tabulation shows that people living there for 5 to 10 years feel more part of their places. If we analyze the answers separately in each city, we can see that people of Milan normally have been living there less time than in Medellin. The most common response of Milan’s inhabitants is 5 to 10 years while in Medellin most of them have been living there for more than 11 years. There might be a relationship with the time that people live in the same place and the sense of belonging, but the more interesting is that the people that feel more part of their district are not the people that have been living there their whole life but the ones that live around 5 to 10 years (in the average of both cities). It can be related to the reason why people decided to live in that place, probably the group of persons that live in the time frame of 5 to 10 years decided by themselves to live there and not be forced because they were born there. Having interviews with the people can be a good way to find out this relationship.

Moving forward, the constitution of their homes, or the people they are living with, has a weak influence on the sense of belonging. Participants that live with their children or parents tend to feel they belong more to their neighborhoods than the ones that live with flatmates or alone. We can deduce that having strong

¹³⁷ Versus. (2021). Medellin vs Milan: What is the difference? <https://versus.com/en/medell%C3%ADn-vs-milan>

private connections help to improve the belongingness among the people, but since this is a matter of the private space (see chapter II.III.I.II BUILT ENVIRONMENT) this study is not taking this factor as a final determinant, but for further studies can be an interesting topic. The next factor to analyze is the living arrangement the participants had, this one showed that people with their own house or living in a house of a relative respond positively to the main question of this thesis than the people that are renting. Having a space that the person owns seems to be a cause for people to feel they belong or not to a neighborhood and, make the citizens think about their future conditions of living. The final comparison in this section was about their opinion about the urban regeneration that the city had, but it seems to not be a relevant topic for feeling part or not of a place.

The next section groups the questions about mobility, this one was harder to compare since the conditions of both cities are different. If we go back to the individual graphics of Medellin and Milan (see charts A10, A11, and B10, B11) the mobility is perceived differently in both cities. In Medellin people are more likely to use a private car than in Milan, having 66% versus 38% of people that do not use public transport. In Medellin, people avoid public transport because is not comfortable while in Milan the most common answer of why people do not use public transport is because of the time it takes. Accessibility in both cities does not seem to be a problem and concerning security, people feel safer in Milan than in Medellin using public transport. In Medellin using public transport seems to be more insecure, but not as much as it was expected, or at least that is the perception the people answering the surveys have. In terms of preference, 80% of the answers from Medellin are in favor of use cars against just 32% of Milan. The principal complaint in Medellin is the time it takes while in Milan is the weather conditions, the temperature of public transport can be an opportunity in this city to take some actions since it is a high objection of the citizens.

The answers of the participants show that people do not cycle a lot in either of the cities: in Medellin, just 17% does while in Milan is 40%, still slow for a city where so many people like to walk around (see charts A16, A17, B16, B17 for cycling and A9, B9 for mobility preferences). In Milan is interesting that the 60% of the people that reply that do not cycle do not because they do not have a bike (more than half of it) so this can be translated as an opportunity for boosting programs to promote cycling in Milan. In Medellin, even that this was also a common option, there is a high amount of people (38%) that do not cycle because it is dangerous. This can also be a way to understand that having better infrastructure can change the perception of the population about cycling.

The next group of questions was focused on the daily activities of the population, here we can notice that people working or studying inside or outside their neighborhoods are not a relevant determinant that influences the sense of belonging. The place they do their groceries, for instance, is one of the reasons why people feel more attached or not to their district. This is easy to understand since the people that do their shopping in the same area feel more comfortable and part of it. To go deep into this topic, it could be an

interesting question to ask why people do not shop in their neighborhoods, it can be for lack of services or because they do not like the ones they have in the same area. This can help understand the needs and the type of neighborhoods' market. Distance of the grocery shops does not affect our research question, but it is important to highlight that in both cases (see charts A18 and B19) the grocery stores are not far away from the participants' homes. Participating in recreational activities influences the Sense of Belonging, half of the people that answered they do not join recreational activities in their neighborhoods do not feel they belong to their district. The more people spend time having fun in the same place the more identify they feel about it. The next parameter is the interesting activities the citizens have inside the neighborhood, this one shows a higher relationship to the sense of belonging. It seems that the more interesting they find their activities the more belongingness they feel (see chart C4). In both cities, shopping and leisure are important parameters for feel they are part of their neighborhood because they feel attracted to stay in it in their free time.

Talking about the community, we can see that all the questions about the neighbors and the people around have a great impact on the Sense of Belonging. From the answers of the participants is easy to see that the more friendly and nice the neighbors are the more feel of belonging the people had. The participants that disagree with these two statements were not feeling belongingness in their neighborhoods. The stronger they feel attached to their social environment the more positive responses were coming from the participants. The values and sense of community were a little stronger determinant related to the sense of belonging; we can deduce that the more identify the people feel with others the better feeling they have about their districts. A good way to improve the sense of community can be through providing activities and programs to give the participants opportunities to talk and coexist in a good environment with others. Finally, we get to the senses and feelings. The happier people feel the more belongingness they have, but who can we measure happiness? This feeling is a sum of all that it was explained before, it was a great feeling to see that neither of the cities people 'strongly disagree' with the statement of "I feel happy where I live now". In both cities, people tend to have a good feeling about their neighborhoods. Being proud of the place you live is a good parameter to consider if the participants are comfortable about their districts. Having a well-maintained neighborhood with interesting buildings around also impacts the sense of belonging which is a matter of aesthetics. Keeping in mind the maintenance of a place in terms of planning is helpful to create a positive connection in the environment both built and natural.

Trash might not seem to be a determinant of having or not the sense of belonging but, as maintenance is, probably the participants do not feel a negative connotation about this factor. Vandalism affects the perception of people and how safe they feel in their neighborhoods. Improving the security for the participants is always positive, it helps people to be confident about the public transport and to walk around

their areas. Improving infrastructure, in general, helps people feel better about the areas they are living their everyday lives.

V.II.I DETERMINANTS OF SENSE OF BELONGING

After analyzing the results of the surveys, this research aims to find what can be a determinant for having or not the sense of belonging among the citizens. The focus was the micro-scale, even that the study was the city in general, so the factors founded on this research are center on neighborhoods.

- **The location of the neighborhood:** this study showed that is not if the neighborhood is close to the center of the city or not, but how well connected the area is. Comparing the results, people that live outside the metropolitan city do not feel a feeling of belonging to their place, periphery is always a challenge due to gentrification. Also, we can notice that there are some neighborhoods where people were more open to feel part of it than others. Districts are playing an important factor in the Sense of Belonging among citizens.
- **The time participants have been living in the area:** the more time people spend in a place, the more identity they feel with it, however, this goes hand in hand with the next factor that is the reason why people live there.
- **The reason to live in a place:** participants that felt they chose their neighborhoods for a reason that is not because it was convenient to buy or rent felt more belongingness than the ones that do. Also, we must consider that people who have a house of their own were more positive about their Sense of Belonging than the people that rent. Owning a place, they feel they chose because they simply like it increases the feel of belongingness.
- **The services available:** being able to shop inside the same quartier and having different options for leisure increase the Sense of belonging. Is not only having the service but to make people like the place they are going to do their everyday lives make a big difference. Understanding what the community need is the tool of increasing belongingness in a neighborhood.
- **The recreational activities inside the neighborhood:** Having interesting activities make people attracted to stay more time in the neighborhood, for example, pursuing a hobby is an important way for increasing the quality of life of the participants.
- **Having a community:** Feel they belong to a society results to be an important factor to this topic, having recreational activities they can share with their neighbors is a way to get to know more the people around and for consequence build a community.
- **The feeling of safety:** This can be improved in different areas, for instance, in mobility providing better infrastructure can help the perception of the citizens, for example having safer paths for bikes.

Walkability is another well-known factor; people feel better when they know they can go on foot, and they see others doing the same.

V.II.II RECOMMENDATIONS INSIDE THE CASE STUDIES

Asking the residents about what they feel about their neighborhoods in the cities of Medellin and Milan pointed out some ideas that can be useful for planners to take into consideration because they are showing some problems.

- **Affordable housing:** In the previous section, we can notice that people feel more attached to a place if they have a house of their own. The high number of participants that rent in Milan (half of the people that took the survey) point out a problem that was not the focus of the study but is something that should be considered. The expensive housing in Milan is a problem that has grown in the past years and compared to a city as Medellin where the economy is not as strong, but they have better chances to have a house of their own, is telling us that this is something to pay attention to.
- **Infrastructure:** The replies of Milan pointed out that people do not feel comfortable using public transport because of weather conditions. This is an opportunity for improving mobility in the city of Milan since there can be ways to implementing systems that could mitigate the temperature of public transport and increase its use it. In Medellin, the principal complaint was time, having a deeper analysis of the public transport in Medellin can be a way of improving the use of it since it is a city that people still prefer the use of private cars.
- **Cycling:** In Milan, most of the participants reply that they do not cycle because they do not have a bike. Strategies such as fomenting bike-share or programs for the citizens to afford a bike can become a good opportunity for them to use slow mobility taking in consideration that the topography of Milan is adequate for it. In Medellin is more complicated since there is a problem of lacking infrastructure for cycling creating the perception for citizens that is dangerous to ride around. Creating safer paths can be a way of providing the opportunity for people to ride instead of using private cars.
- **Services:** Even that in both cities they have services to shop for, for example, some people prefer to go to other places to buy their groceries because they consider that the ones nearby are expensive for example. In both cities having an analysis of what people want as a service is a big opportunity as well as providing diversity in the neighborhoods.
- **Leisure activities:** Providing activities for the population to enjoy in their free time is a way to improve the sense of belonging. In both cities some neighborhoods seem to lack interesting

activities, a deeper study of recreational activities can be a great opportunity to increase the life quality.

- **Activities for the community:** fomenting the sense of community helps to increase the sense of belonging. This recommendation is a consequence of the previous one.

V.III BACK TO SENSE OF BELONGING

Comparing two different cities as case studies was an interesting way to measure perception and confirm that Genius Loci exists in both. Besides the mobility section, the rest of the answers were similar, people have similar conditions to being capable of feel a Sense of Belonging. If we go back to the literature, the concept of Genius Loci and the Sense of Belonging is nothing new inside architecture and urban planning. However, the spirit of a place is not always taken into consideration in neither modern architecture nor urban planning. This mainly happens because its metaphysical characteristics and internal complexity elude scientific analysis by generating problematics on defining qualitative measures and indicators. The importance of this idea cannot be set aside as it leads to a better quality of life due to the participants being able to relate to the environment and establish a deep connection to the location. The built environment has its traditions and cultural values that add up to the urban heritage of a place, which is at risk of being lost if it is not incorporated into the planning [¹³⁸].

The complexity of this concept is the many topics it can be applied: urban heritage, perception, sociology, psychology, etc. The purpose of defining Genius Loci is to understand the soul of a place and how it could be a key connector to the site and the people living in it. This research tried to define some determinants that can improve the Sense of Belonging, paying attention to them can increase the quality of life of the participants. This is the principal responsibility of urban planners; the real success of a plan is when people live and feel better because of its implementation. Citizens can be a catalyst in the process of planning, including their opinion can make a big difference, for this it can start from small research such as the one used on this thesis to deeper ones trying to find the best solutions for a specific place. Understanding the uniqueness of a place, respecting it, and looking forward to preserving it and improve it is what the sense of belonging in urban planning is about.

As an urban planner, the more useful knowledge that this research produced, was understanding what makes a space a place. Dividing it into five spaces helped me to have a better perspective of the difference between the tangible and intangible, going in deep with the perceived space became a tool that I will use in the future in my professional life. Asking about the sense of belonging to the citizens and creating data with my own

¹³⁸ Walczak, Bartosz Marek. (2015). "Built heritage perception through representation of its atmosphere", *Ambiances* [Online], 1 | 2015, Online since 12 September 2015, connection on 30 March 2021. URL: <http://journals.openedition.org/ambiances/640>; DOI: <https://doi.org/10.4000/ambiances.640>; pp. 2.

surveys has been an interesting experiment that helped me to produce information that I was not aware I can collect. Learning a method to compare them directly using a new program was a way to push my own limits and improve as an urban planner since now I understand how different disciplines can produce better proposals.

V.III LIMITATIONS IN THE RESEARCH

In this thesis many different limitations appear in the time frame, it is important to sum the most relevant for future researchers in the same topic. I identified three main limitations that were the ones that I need is important to mention for future researchers. My first limitation was personal since it was the first time, I was researching with so many different topics and, producing data by myself was another personal challenge. So, my experience of conducting research and producing academic papers was the first limitation I faced adding that the topic I selected was wide and with different paths to take. Although, for my formation, it was important to face this type of obstacle because it helped me to improve in different areas and even learn from topics, I did not even think I would ever know. Studying sociology, psychology, perception, etc., complementing learning how to create and analyze the data is a way to fully understand what an interdisciplinary project means.

The second limitation was the lack of literature on the topic, although Genius Loci is easy to find in a lot of different books, the concept applied to a case study is not that common. Normally, the studies are conducted on a micro-scale, such as a building or a small area, but it was difficult to find Genius Loci in neighborhoods or cities. It was even a bigger challenge to compare the sense of belonging in a European City with a Latin American city, so even that the main reason for selecting Milan and Medellin was to compare cities with no similar context, it was hard to understand the path that the research was taking. Having this limitation in mind confirms to me that more studies like this are needed since we can see that the sense of belonging is not depending on the typical quality of life rate that we can find on the internet. Maybe using contrasting examples as researchers and urban planners could help to create better tools and learn from the strong points of each part of the world.

The third limitation that I faced was the sample size, being the principal limitation of this thesis, the original intention was to get around two hundred and fifty answers from each city since the conditions of both surveys needed to be the same the only way to pass the questionnaires was through social media. Larger sample size could have generated more accurate results using SPSS and the chi-square test because they would have more data to compare. Another way that could be an alternative that does not imply having bigger samples could be having focus groups of people of different neighborhoods and ask them directly their opinion. This could produce interesting results about the opinion and the perception of the participants. The only problem could be now to try to understand what the parameters of Genius Loci are since having

personal answers could expand too much the data to create graphics or simpler ways to translate the words of the participants.

Regarding the sample size, the principal tool for working on research is one of the most important decisions to consider in a study like this one. Having limited resources makes it more difficult to have accurate studies, but at the same time, could be an opportunity to be creative. The principal problem that I found in surveys is the lack of participation, it was a lot of time searching in social media participants that could be able to fill the questionnaires. There is a possibility that looking for people in the streets could make easier the collection of data since in my personal experience I find out that people tend to fill this type of survey if they have a personal connection with the researcher, or if a friend asks, or if they see you face to face. Contact with people during pandemic times would be a limitation if the decision of looking for people on the streets should be taken.

Finally, analyzing deeply the reasons why the sample size was not as big as expected I concluded that it must do a lot with the length of the questionnaire. If the questions were less probably more people should be willing to participate, but at the same time, many of the questions were relevant for this thesis. Cover different topics in few questions is a big challenge but fit is done well, it can conduct to have more and better results.

CHAPTER VI – CONCLUSIONS

This thesis concludes by confirming that there is a difference of Sense of Belonging for the citizens according to the location and to different conditions affecting the perception of a person about a place. To be able to use Genius Loci in urban planning is necessary to understand the perceived space and the relationship with the physical space. In Chapter 1 the main research questions were:

1. Is there a difference between how people feel the sense of belonging in different cities or does the context does not matter? Is the sense of belonging different depending on the city?
2. What are the determinants for having a sense of belonging in a place?

Followed by the sub-questions:

- a. Do the people in the case studies (Medellin and Milan) feel a sense of belonging in their neighborhoods?
- b. What is the perception of the citizens in the places they live?
- c. Does Having services and infrastructure makes a difference in the feeling part of a neighborhood?
- d. Are feelings of security or happiness affect the sense of belonging?
- e. Is the community and neighbors (society) a factor to have a sense of belonging?
- f. Is the culture, background, or conditions affecting the sense of belonging of the inhabitants?
- g. Are residents feeling part of the neighborhoods where there was an intervention?

Those questions answered in the discussion of Chapter V, the following sub-chapters provide a general outcome of the research in this thesis.

VI.I CONCLUSIONS ABOUT THE SENSE OF BELONGING

What makes a space a place? The way of how a city is perceived is the representation of the participants' lives through time and space. This thesis aims to define the sense of belonging by comparing the opinion of citizens in two case studies that were Milan and Medellin. The starting point was the origin of the concept 'Genius Loci' referring to the "protective spirit of a place" according to the Roman mythology, followed by the contemporary approaches and exploring the studies in architectural phenomenology defining it as "the distinctive atmosphere of a specific place". The main purpose of this thesis was to recognize the sense of belonging in contemporary cities and understand the perception of people in the concept so it can be started to be included in urban planning.

Genius Loci is an ancient concept that has important implications in urban planning and design and including it can increase the quality of life among participants. Recognizing the unique qualities of a place and the perception they produce in the mind of the participant is the first step to incorporate it into different disciplines. This research tried to confirm the values of the sense of belonging and define the factors for having it through collecting data from the participants of the case studies. Analyzing the perception of

citizens can be a tool for recognizing the concept and using it in favor to create better proposals that can improve people's lives as well as the same environment that surrounds them. Involving the concept into urban planning is important because there is not enough research on this topic, so it is not always taken into consideration. Different disciplines can produce positive outcomes from its studying and application such as urban planners, architects, designers, researchers, sociologists, psychologists, artists, and scholars.

As it was described in Chapter II, a place is influenced by different factors that produce its uniqueness or spirit. A place that does not produce any type of feelings or emotions in the participants is just empty spaces without purpose. The 'lack of connection' with a place affects the lives of the people and their interaction with others, reverberating in their qualities of life. Having a connection with the physical space has positive connotations to the mental and psychological health of the participants. Architecture and design have a direct repercussion on the lives of the people, it can affect it or improve it, understanding this connection is mandatory for designing spaces. The relationship of the space and the participants can be understood when the people are included, participation can manage to produce better results. In the findings is notorious the role that having a sense of community is playing in belongingness, collaboration in between the people and the planners are the right path to understand and improve the sense of belonging and management of the local resources.

The knowledge that the Genius Loci can provide about a place can be translated into practical concepts to improve urban planning and design, as well as other types of disciplines. Considering and respecting the past of a location, the natural environment, the contemporary buildings, and the relationship with the perceived space of the participants can produce a harmonious future for the place. Learning and using this concept of the unique spirit of the place can bring important benefits to urban planning.

VI.II RECOMMENDATIONS FOR URBAN PLANNERS

The most important recommendation I can state for urban planners is to have an interdisciplinary team. During the research and the journey of producing and analyzing the information, I noticed that my perspective became better the more I studied about different disciplines. Having two advisors enrich my vision since I learned different tools and I acquire knowledge that I did not have before. This work was the study and comparison of two cities with different backgrounds, cultures, locations, geographies, etc., and the panorama about what brings the Sense of Belonging was expanded. Genius Loci can exist in a different context but that does not mean that there should be a Sense of Belonging. Being able to compare senses and feelings was what made this studied interested since it was not about life quality parameters but to understand what can bring true joy to the participants.

In research, I strongly recommend for data collection to use short and strong questions, the shorter is the survey the higher are the possibilities to have a bigger sample. If possible, try to connect directly to people,

having a personal relationship with the participants help to increase the amount of responses. Also, use different methods such as interviews and focus groups that would give stronger qualitative data.

VI.III FUTURE RESEARCH

Sense of Belonging is a potential path to understand what the participants are needs and is an opportunity to have a deep study in culture, architecture, landscape, urban planning, policy, and other related disciplines that can reverberate in the improving of the quality of life of the citizens. Examples of questions that came after doing this research are:

- a) Studying the differences of the Sense of Belonging inside the neighborhoods: A bigger sample of a similar study can provide the data needed to directly compare the neighborhoods and understanding what is missing and where. Also, it can be an opportunity to understand the identity and the spirit of a place on a smaller scale, examining the specific needs of the population.
- b) Emotional mapping: The perception of the citizens can provide tools to map their emotions about places. This is something that is not new, but this type of research can become a graphic way for understanding what type of sensations a place is producing. Negative feelings such as fear can be transformed through the correct approach of urban intervention.
- c) Ways to improve infrastructure: Analyzing the feeling of belonging and the emotions these places are producing can be a tool for improving according to the citizens' needs. An example is how this research noticed that there is a need to improve the climate conditions of public transport in Milan. This can be used in other topics and going deeper to provide quality services for the population.
- d) Perception of historical heritage: The memory of a place is an important factor for Genius Loci, in this research it was not explored deeply but it can be a way to approach the Sense of Belonging in citizens.

VI.IV FINAL NOTE

This research tried to compare different cities to understand the Sense of Belonging among the participants trying to give general parameters to determine what are the conditions to improve it. However, it can be applied to other cities and neighborhoods and can be a base to integrate the Genius Loci into urban planning or even on a smaller scale like architecture. Genius Loci is a wide concept that can cover different topics in terms of research but is relevant for scholars that are looking for understanding the Spirit of a Place. The perception of the citizens is relevant in planning to create better proposals that can improve the quality of life of the population.

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LIST OF FIGURES

- FIGURE 1: *Introducing the physical and perceived space*. The diagram is explaining what is the physical space and the perceived space that is how a person experience the physical world. 6
- FIGURE 2: *Tlalpan Church Chapel in Mexico City*. Luis Barragan selected work for the Pritzker. (2021). [Photograph]. <https://www.pritzkerprize.com/laureates/1980> 7
- FIGURE 3: *Old Town Hall in the center of Prague in Czech Republic*. Virtual Tours Prague. (2020). [Photograph]. https://res.cloudinary.com/dsmafmqwi/image/upload/c_fill,f_auto,h_1280,q_auto/v1/virtualtrips/tours/hw6hv7f7wr2eez2rtolq 8
- FIGURE 4: *Map of Manhattan's Neighborhoods*. Civitatis Tours. (N.d.). [Map]. <https://www.introducingnewyork.com/manhattan-neighborhoods> 9
- FIGURE 5: *People watch Notre-Dame in flames*. Camus, T. (2019, April 15). [Photograph]. <https://www.theglobeandmail.com/world/us-politics/article-notre-dame-fire-may-have-been-caused-by-computer-glitch-cathedral/#c-image-0> 10
- FIGURE 7: *Amsterdam Life, people cycling around*. Peoples, M. (2014). [Photograph]. <https://www.flickr.com/photos/leftymgp/15021653141/> 11
- FIGURE 8: World map showing the selected case studies. The first close is inside the country of Colombia, showing in red the city of Medellin. The second one is the country of Italy, showing as case study the city of Milan. 13
- FIGURE 9: *Commune 13 in Medellin, Colombia*. *Medellin Travel*. (n.d.). [Photograph]. Panoramic View. <https://www.medellin.travel/comuna-13/?lang=en> 14
- FIGURE 10: *Naviglio Grande in Milan, Italy*. Leonardi, G. (2021, February 8). [Photograph]. <https://www.bbc.com/travel/article/20210208-milan-italys-lost-city-of-canals> 15
- FIGURE 11: *A wall painting from Herculaneum*. (N.d.). [Photograph]. Ancient Roman Arts. <https://www.bible-history.com/ibh/Roman+Arts/Wall+Painting/Genius+Loci> 20
- FIGURE 12: Cartwright, M. (2013, October 03). [Photograph]. *Romulus & Remus*. World History Encyclopedia. <https://www.worldhistory.org/image/1456/romulus--remus/> 21

FIGURE 13: Maria Jose, C. A. (n.d.). <i>México-Tenochtitlán</i> [Photograph]. https://mxcity.mx/2015/09/conoces-la-verdad-detras-la-leyenda-del-aguila-sobre-un-nopal-devorando-una-serpiente/	22
FIGURE 14: Mursell, I. (2009). <i>Model of chinampas in the National Museum of Anthropology, Mexico City</i> [Photograph]. https://www.mexicolore.co.uk/images-ans/ans_46_01_2.jpg	23
FIGURE 15: <i>The Roman Forum The spring of Juturna</i> . (2012, January 1). [Photograph]. https://www.imago-images.de/st/0067663769	24
FIGURE 16: Diagram showing the relationship between the Physical Space and the Perceived Space. The quality of space is perceived by the senses that produce emotions.	28
FIGURE 17: Diagram explaining how spaces create a place. The sum creates the Spirit of a Place or Genius Loci.	29
FIGURE 18: Diagram explaining how physical space is classified using morphology, topology, and typology.	31
FIGURE 19: Dreamstime. (2020). Mountains and forest Landscape in Norway [Photograph]. https://www.dreamstime.com/mountains-forest-landscape-norway-aerial-view-scandinavian-nature-travel-wilderness-image102689481	33
FIGURE 20: Diagram inspired in Pignatelli explanation of public, semi-public, semi-private and private space.	35
FIGURE 21: Diagram of perception of an object by the person through the senses.	35
FIGURE 22: Diagram the five senses that creates the perceived space.	36
FIGURE 23: Hubbard, T. L. (2018). Aesthetics and Preferences in Spatial and Scene Composition. <i>Spatial Biases in Perception and Cognition</i> , 222–240. https://doi.org/10.1017/9781316651247.016 .	37
FIGURE 24: Diagram for the constitution of behavioral space.	39
FIGURE 25: scheme of the levels in urban planning, showing the starting point from the micro-scale to the supra-scale.	40
FIGURE 26: Hasler, S., & Chenal, J. (2017). Digital tools and citizen participation: Towards sustainable and responsive urban planning. 3rd Annual International Conference on Urban Planning and Property Development: pp. 2.	41

FIGURE 27: Mappa del territorio comunale di Milano suddiviso in zone. (2016, July 9). [Map].	47
https://www.openstreetmap.org/#map=6/51.330/10.453	
FIGURE 28: SajoR. (2007, June 15). Mapa de las Comunas de Medellín, Colombia [Map].	47
https://es.wikipedia.org/wiki/Comunas_de_Medell%C3%ADn#/media/Archivo:Comunas_de_Medellin.svg	
FIGURE 29: Medellin Travel. (n.d.). Aerial view [Photograph]. Mechanic Stairs.	57
https://www.medellin.travel/comuna-13/?lang=en	
FIGURE 30: Medellin Travel. (N.d.). Commune 13. [Photograph]. Mechanic Stairs.	59
https://www.medellin.travel/comuna-13/?lang=en	
FIGURE 31: Medellin Travel. (N.d.). Commune 13. [Photograph]. Street Art.	60
https://www.medellin.travel/comuna-13/?lang=en	
FIGURE 32: 11 Map of Medellin showing the city center, and the neighborhoods picked as examples as well as the public transport system.	61
FIGURE 33: 11 Map of the commune 1 showing the location of Santo Domingo and the metro cable stops.	62
FIGURE 34: Tobon, C. (2007). Biblioteca Parque España, vista aerea [Photograph].	63
https://www.plataformaarquitectura.cl/cl/026075/biblioteca-parque-espana-giancarlo-mazzanti/57423e0be58ecee2f80002b5-biblioteca-parque-espana-giancarlo-mazzanti-foto	
FIGURE 35: Medellin Travel. (N.d.). Commune 13. [Photograph]. Escalator.	64
https://www.medellin.travel/comuna-13/?lang=en	
FIGURE 36: Map of the commune 13 showing the location of Las Independencias and the metro cable stops.	65
FIGURE 37: Medellin Travel. (N.d.). Commune 13. [Photograph]. Escalator.	66
https://www.medellin.travel/comuna-13/?lang=en	
FIGURE 38: Fabre, M. (2017). Blue Hour in Milan [Photograph].	67
https://www.flickr.com/photos/miquelfabre	
FIGURE 39: Porta Nuova. (2015). Porta Garibaldi [Render].	68
http://www.residenzeportanuova.com/it	

FIGURE 40: City Door Milano. (2019). Nuclei di identità locale [Illustration]. Comune Identifica i Quartieri Della Città. https://www.citydoormilano.it/milano-cambio-nomi.html	69
FIGURE 41: Dodaro, D., & Sereni, D. (2020). Il quadrato semiotico dei quartieri di Milano [Illustration]. https://milano.corriere.it/	70
FIGURE 42: Map showing the two neighborhoods set as an example in this thesis using the NIL as a base map.	71
FIGURE 43: Metro Centric. (2013). Milano Porta Garibaldi [Photograph]. https://www.flickr.com/photos/16782093@N03/11228351223/in/photolist-i7deCt-i7dnjF-i7cR1N-i7dahV-i7cvb6-i75qf6-i74zTY-i74Mqq-i74HBp-cjo1yN-2cS1ysD-cjo1Zy-i75nd4-cjo2pU-qE7QZq-vrSg7q-wpkouV-wwnJm2-yhnCuG-oWiEZJ-nPnJ3r-nTSW5n-8pfbPC-cjo7aG-9GrkM5-5HZNZV-o2sJm7-pKxxT6-dVg4fM-2dY2raB-cjo6QL-oiKYDw-ogi9js-cjo4s7-o2tLx8-cjo6k1-cjo5Hj-cjo3Eo-cjo827-cjo3m1-cjo43u-cjo5kA-cjo4XA-cjo7zo-CHXC95-oakbJe-o3DzNa-gcebXU-pqhARG-n47JWD	71
FIGURE 44: Map of the Municipality 9 showing the location of the neighborhood Porta Nuova.	72
FIGURE 45: Naviglio Martesana coverage (1929). (I Navigli lombardi, n.d.).	73
FIGURE 46: Franz, T. (2016). Navigli [Photograph]. https://www.flickr.com/photos/99385036@N06/27012758191/in/photolist-Ha2rUc-rpw2xy-qXHPVa-rnjh8q-8pfbxm-yf9P6Q-a6ofM2-cxwrgo-t2eaY-2keBaV4-HFFjN-VbdiqQ-Hibinw-4ACnqH-7XJmZP-247gFo7-r83J6Y-4n32Y4-7XJjZZ-epW3E-r82R7m-YE2A1-81q1yM-vpTo4-fgVx5-r83G6W-28Kqyq6-7XMctN-zXacPH-e8dQU7-6fKBL3-6fKBNs-6fKBAQ-6fKBH5-6fKBFd-6fKBDy-t2eg2-SukVBp-FBn86-38hz8X-ecXhJd-Hhkgv8-G4CRyt-aWnDA-aWnP8-29RM4py-66xJGT-dq18vS-81taKf-5hK7m	73
FIGURE 47: Map of the Municipality 9 showing the location of the neighborhood Porta Nuova.	74
FIGURE 48: Versus. (2021). Medellín vs Milan: What is the difference? https://versus.com/en/medell%C3%ADn-vs-milan	108

LIST OF CHARTS

A1: Answers of the participants to the question: <i>“What is your age?”</i> .	78
A2: Answers of the participants to the question: <i>“What is your gender?”</i> .	78
A3: Answers of the participants to the question: <i>“Where do you live?”</i> .	78
A4: Answers of the participants to the question: <i>“For how long you have been living here?”</i> .	79
A5: Answers of the participants to the question: <i>“Do you live in these neighborhoods...?”</i> .	79
A6: Answers of the participants to the question: <i>“Where is the location of your school / office?”</i> .	79
A7: Answers of the participants to the question: <i>“You live...?”</i> .	80
A8: Answers of the participants to the question: <i>“Which type of living arrangement do you have right now?”</i> .	80
A9: Answers of the participants to the question: <i>“Which type of transport do you normally use?”</i>	80
A10: Answers of the participants to the question: <i>“How often do you use public transit?”</i> .	81
A11: Answers of the participants to the question: <i>“If you do not use public transit, what is the reason? (If you use it do not answer)”</i> .	81
A12: Answers of the participants to the question: <i>“How far is the Public transit station/stop from your place?”</i> .	81
A13: Answers of the participants to the question: <i>“How do you find the security of public transport in the area?”</i> .	82
A14: Answers of the participants to the question: <i>“If you use a personal car as daily transport mode, what is the main reason?”</i> .	82
A15: Answers of the participants to the question: <i>“Do you cycle to your near destinations inside your neighborhood?”</i> .	82
A16: Answers of the participants to the question: <i>“If you do not cycle to your near destinations, what is the reason?”</i> .	82

A17: Answers of the participants to the question: “Where do you perform most of your daily/weekly shopping?”.	83
A18: Answers of the participants to the question: “How far is your closest grocery store?”.	83
A19: Answers of the participants to the question: “For recreational activities do you prefer to stay in your neighborhood or go further?”	83
A20: Answers of the participants to the question: “If you do not join social activities (like shopping/entertainment) in your neighborhood, what is the reason? Do not answer if you shop in your neighborhood”.	83
A21: Answers of the participants to the question: “What are the most common types of activities that you can find in your neighborhood?”.	84
A22: Answers of the participants to the question: “Do you feel you belong in your neighborhood?”.	84
A23: Answers of the participants to the question: “Why did you choose this neighborhood to live?”.	84
A24: Answers of the participants to the question: “What is your opinion about the urban regeneration of your neighborhood?”.	85
A25: Answers of the participants to the question: “I am happy where I live now”.	85
A26: Answers of the participants to the question: “I like to tell others that I live in my neighborhood”.	85
A27: Answers of the participants to the questions: “My neighbors are good / Most people in my neighborhood are friendly/ People in my neighborhood share the same values / I have a strong sense of community here”.	85
A28: Answers of the participants to the questions: “I like to have a walk around my neighborhood / I feel safe in this neighborhood / There are interesting activities to do in my neighborhood / I often see people walking in my neighborhood / The buildings in my neighborhood are interesting / My neighborhood is well maintained”.	86

A29: Answers of the participants to the questions: <i>“There is a lot of noise in my neighborhood / There is vandalism in my neighborhood / There is too much trash on the streets”</i> .	86
B1: Answers of the participants to the question: <i>“What is your age?”</i> .	87
B2: Answers of the participants to the question: <i>“What is your gender?”</i> .	87
B3: Answers of the participants to the question: <i>“Where do you live?”</i> .	87
B4: Answers of the participants to the question: <i>“For how long you have been living here?”</i> .	88
B5: Answers of the participants to the question: <i>“Do you live in these neighborhoods...?”</i> .	88
B6: Answers of the participants to the question: <i>“Where is the location of your school / office?”</i> .	88
B7: Answers of the participants to the question: <i>“You live...?”</i> .	89
B8: Answers of the participants to the question: <i>“Which type of living arrangement do you have right now?”</i> .	89
B9: Answers of the participants to the question: <i>“Which type of transport do you normally use?”</i>	89
B10: Answers of the participants to the question: <i>“How often do you use public transit?”</i> .	90
B11: Answers of the participants to the question: <i>“If you do not use public transit, what is the reason? (If you use it do not answer)”</i> .	90
B12: Answers of the participants to the question: <i>“How far is the Public transit station/stop from your place?”</i> .	90
B13: Answers of the participants to the question: <i>“How do you find the security of public transport in the area?”</i> .	91
B14: Answers of the participants to the question: <i>“If you use a personal car as daily transport mode, what is the main reason?”</i> .	91
B15: Answers of the participants to the question: <i>“Do you cycle to your near destinations inside your neighborhood?”</i> .	91

B16: Answers of the participants to the question: <i>“If you do not cycle to your near destinations, what is the reason?”</i> .	91
B17: Answers of the participants to the question: <i>“Where do you perform most of your daily/weekly shopping?”</i> .	92
B18: Answers of the participants to the question: <i>“How far is your closest grocery store?”</i> .	92
B19: Answers of the participants to the question: <i>“For recreational activities do you prefer to stay in your neighborhood or go further?”</i>	92
B20: Answers of the participants to the question: <i>“If you do not join social activities (like shopping/entertainment) in your neighborhood, what is the reason? Do not answer if you shop in your neighborhood”</i> .	92
B21: Answers of the participants to the question: <i>“What are the most common types of activities that you can find in your neighborhood?”</i> .	93
B22: Answers of the participants to the question: <i>“Do you feel you belong in your neighborhood?”</i> .	93
B23: Answers of the participants to the question: <i>“Why did you choose this neighborhood to live?”</i> .	93
B24: Answers of the participants to the question: <i>“What is your opinion about the urban regeneration of your neighborhood?”</i> .	94
B25: Answers of the participants to the question: <i>“I am happy where I live now”</i> .	94
B26: Answers of the participants to the question: <i>“I like to tell others that I live in my neighborhood”</i> .	94
B27: Answers of the participants to the questions: <i>“My neighbors are good / Most people in my neighborhood are friendly/ People in my neighborhood share the same values / I have a strong sense of community here”</i> .	94
B28: Answers of the participants to the questions: <i>“I like to have a walk around my neighborhood / I feel safe in this neighborhood / There are interesting activities to do in my neighborhood / I often see people walking in my neighborhood / The buildings in my neighborhood are interesting / My neighborhood is well maintained”</i> .	95

B29: Answers of the participants to the questions: <i>“There is a lot of noise in my neighborhood / There is vandalism in my neighborhood / There is too much trash on the streets”</i> .	95
C1: Comparison between participants of different cities to the question: <i>“Do you belong to your neighborhood”</i> .	96
C2: Comparison between the feeling of belonging with the constitution of people in the homes of each participant.	99
C3: Comparison between the feeling of belonging with the constitution of people in the homes of each participant.	99
C4: Comparison between the feeling of belonging with the people that participate in recreational activities inside and outside their neighborhoods.	102
C5: Participants were asked about their perception of how interesting the activities in their neighborhood are and it was compared with the feel of belongingness.	102
C6: comparison between feeling the sense of belonging with the amount of noise in the neighborhood.	105

LIST OF TABLES

TABLE 1: interpretation of values for measure the coefficient of association between the variables in Chi-square tests.	54
TABLE 2: Comparison between cities and sense of belonging. Replies from surveys (see surveys).	96
TABLE 3: using SPSS and the Chi-square test it was analyzed what is the significance of the deafferentation in both cities.	97
TABLE 4: using SPSS and the Chi-square test it was analyzed what is the significance in between sense of belonging and personal variables.	98
TABLE 5: using SPSS and the Chi-square test it was analyzed what is the significance in between sense of belonging and mobility variables.	100
TABLE 6: using SPSS and the Chi-square test it was analyzed what is the significance in between sense of belonging and services variables.	101
TABLE 7: using SPSS and the Chi-square test it was analyzed what is the significance in between sense of belonging and community variables.	103
TABLE 8: using SPSS and the Chi-square test it was analyzed what is the significance in between sense of belonging and sensorial variables.	104
TABLE 9: using SPSS and the Chi-square test it was analyzed what is the significance in between sense of belonging and negative variables.	105