

Safety in Public Spaces using Urban Planning

- A Comparative Study in Bogotá, Colombia

Sara Sandefeldt

Safety in Public Spaces using Urban Planning: A Comparative Study in
Bogotá, Colombia

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Safety in Public Spaces using Urban Planning: A Comparative Study in Bogotá, Colombia

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Abstract

Many cities around the world are facing the same challenges when it comes to the ability for women to move around and feel safe in public spaces. For women, using public spaces entails fear of sexual violence and of being attacked, which forces them to always be vigilant and reduces their quality of life.

Throughout history, cities have consisted of mainly male planners, designers and government leaders who have created urban spaces that perpetuate outdated gender norms and inequalities. Cities, as they are today, prioritise men's health, mobility, safety, leisure, and economic well-being over women. This heritage of inequalities has been aggravated by the lack of participatory urban design, and especially of the failure to involve women in urban planning and renewal processes.

The purpose of this thesis is to identify what factors in urban spaces can be characterised as unsafe and to analyse if public space can become safer for women by implementing different planning theories. The thesis aims to answer how adequate urban planning can make public spaces feel safer for women.

The focus on women was chosen because gender transcends all other social relations such as class, age, ethnicity, and religion, and it also transcends all socioeconomic factors such as education, employment, and income. The focus was also chosen because women make up for more than half of the humankind and are still thought of as a minority. Even though this thesis has been limited to being about safety for women in cities, a lot that is stated about women in this thesis, also is the case for LGBTQIA+ people. They also experience discrimination in cities which leads to decreased quality of life.

The research was carried out as a case study in Bogotá, Colombia. With the rapid, uncontrolled urban development of Bogotá, there is a high probability that the urban spaces have been neglected and resulted in feeling unsafe, unwelcoming, and insecure. Which is why there is a need for analysing urban spaces in Bogotá and perhaps being able to reach their full potential. Three different areas were chosen in Bogotá which through site visits were observed, compared, and analysed with relevant theories. The chosen areas are called Las Nieves, Quinta Camacho, and Bella Suiza, and they are all areas mainly containing housing.

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The theories chosen for the thesis are based on the work from two major urban planners, Jan Gehl and Jane Jacobs. Gehl believes that for an area to be safe it must be well adapted for human scale and feel welcoming. To be able to analyse this he presents the 12 Quality Criteria an urban space should possess. To be able to analyse if a public place is safe for women, three criteria were added to the 12 Quality Criteria in this thesis. The Modified Quality Criteria is used when referring to Gehl's adjusted 12 Quality Criteria.

According to Jacobs, diversity is the most important factor a city must have to be safe. A homogeneous visitor audience together with an at least equally homogeneous surrounding environment results in empty streets during certain times of the day, and it is important that the street is never completely empty. To get diversity in a city there are four aspects that should be accommodated at the same time: mix of functions, short blocks, mix of houses and high concentration of people.

According to the results from both the Modified Quality Criteria and Jacobs theory about diversity, the area with most restaurants, low buildings and well-maintained streets was the safest one. The results from Jacobs' theory about diversity, shows that none of the other two areas can be perceived as safe since they do not meet the criteria for being diverse. The second safest neighbourhood according to the Modified Quality Criteria was the one with well-maintained streets, nice parks but both gated communities and similar functions located in the same area. The least safe neighbourhood was the poorly maintained one with broken sidewalks, bars on windows and scribblings on houses. This neighbourhood also had similar functions taking up large space, like parking lots and universities.

The conclusion of the thesis is that there are many aspects that can make an area perceived as unsafe and to make an urban space feel safer for women with urban planning it is important that a woman's perspective must be implemented to the planning process. Three aspects, with associated sub-aspects, were developed through the study to create safer urban environments for women. These can be summarised as follows:

- Presence of human life
 - Diversity
 - Different functions
 - Comfort, Protection, Delight
- Overview
 - See-through greenery

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- No dark spaces
- Short blocks
- No barriers
- Lighting
 - Streetlights
 - No narrow streets combined with tall buildings
 - No dense greenery

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Sammanfattning

Många städer runt om i världen står inför samma utmaningar när det gäller kvinnors förmåga att röra sig och känna sig trygga i offentliga utrymmen. För kvinnor innebär användningen av offentliga utrymmen rädsla för sexuellt våld och för att bli attackerade, vilket tvingar dem att alltid vara vaksamma och minskar deras livskvalitet.

Genom historien har städer planerats av främst manliga planerare, designers och politiker som har skapat stadsrum som vidmakthåller föråldrade könsnormer och ojämlikheter. Städer, som de är idag, prioriterar mäns hälsa, rörlighet, säkerhet, fritid och ekonomiska välbefinnande framför kvinnor. Detta arv av ojämlikheter har förvärrats av bristen på brukarmedverkan vid stadsplanering, och särskilt av misslyckandet med att involvera kvinnor i stadsplanering och förnyelseprocesser.

Syftet med denna avhandling är att identifiera vilka faktorer i stadsrum som kan karakteriseras som otrygga och att analysera om det offentliga rummet kan bli tryggare för kvinnor genom att implementera olika planeringsteorier. Avhandlingen syftar till att svara på hur adekvat stadsplanering kan få offentliga utrymmen att kännas tryggare för kvinnor.

Fokus på kvinnor valdes eftersom kön överskrider alla andra sociala relationer som klass, ålder, etnicitet och religion, och det överskrider också alla socioekonomiska faktorer som utbildning, sysselsättning och inkomst. Inriktningen valdes också eftersom kvinnor utgör mer än hälften av mänskligheten och fortfarande betraktas som en minoritet. Även om den här avhandlingen har begränsats till att handla om säkerhet för kvinnor i städer, så är mycket som sägs om kvinnor i denna avhandling också fallet för HBTQIA+-personer, som också upplever diskriminering i städer vilket leder till försämrad livskvalitet.

Forskningen utfördes som en fältstudie i Bogotá, Colombia. Med den snabba, okontrollerade stadsutvecklingen i Bogotá är det stor sannolikhet att stadsrummen har försumrats och resulterat i att de känns otrygga, ovälkomna och osäkra. Därför finns det ett behov av att analysera stadsrum i Bogotá och kanske kunna nå deras fulla potential. Tre olika områden valdes i Bogotá för att genom platsbesök observera, jämföra och analysera med relevanta teorier. De utvalda områdena heter Las Nieves, Quinta Camacho och Bella Suiza, och de är alla områden som huvudsakligen innehåller bostäder.

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De teorier som valts för examensarbetet är baserade på arbetet från två stora stadsplanerare, Jan Gehl och Jane Jacobs. Gehl menar att för att ett område ska vara säkert måste det vara väl anpassat för mänsklig skala och kännas välkomnande. För att kunna analysera detta presenterar han de 12 kvalitetskriterier ett stadsrum bör ha. För att kunna analysera om en offentlig plats är säker för särskilt kvinnor har tre kriterier lagts till de 12 kvalitetskriterierna i denna studie. De modifierade kvalitetskriterierna används vid hänvisning till Gehl's justerade kvalitetskriterier i studien.

Enligt Jacobs är mångfald den viktigaste faktorn en stad måste ha för att vara säker. En homogen besökspublik tillsammans med en minst lika homogen omgivande miljö resulterar i tomma gator under vissa tider på dygnet och det är viktigt att gatan aldrig är helt tom. För att få mångfald i en stad är det fyra aspekter som bör rymmas samtidigt: funktionsblandning, korta kvarter, blandning av hus och hög koncentration av människor.

Enligt resultaten från både de modifierade kvalitetskriterier och Jacobs teori om mångfald var området med flest restauranger, låga byggnader och välskötta gator det säkraste. Resultaten från Jacobs teori om mångfald, visar att inget av de andra två områdena kan uppfattas som säkert eftersom de inte uppfyller kriterierna för mångfald. Det näst säkraste kvarteret enligt de modifierade kvalitetskriterier var det med välskötta gator, fina parker men både gated communities och liknande funktioner belägna i samma område. Den minst säkra stadsdelen var den dåligt underhållna med trasiga trottoarer, galler på fönster och klotter på hus. Denna stadsdel hade också liknande funktioner som tog stor plats, som parkeringsplatser och universitet.

Slutsatsen av examensarbetet är att det finns många aspekter som kan göra att ett område upplevs som otryggt och för att ett stadsrum ska kännas tryggare för kvinnor med stadsplanering är det viktigt att ett kvinnoperspektiv måste implementeras i planeringen. Tre aspekter, med tillhörande delaspekter, utvecklades genom studien för att skapa säkrare stadsmiljöer för kvinnor. Dessa kan sammanfattas enligt följande:

- Mänsklig närvaro
 - Mångfald
 - Mix av funktioner
 - Skydd, komfort, njutning
- Översikt
 - Genomsynlig grönska
 - Inga mörka utrymmen
 - Korta kvarter

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- Inga barriärer
- Ljus
 - Belysning
 - Mänsklig skala
 - Ingen tät vegetation

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Definitions

The definitions here are short definitions to accommodate the reader's understanding of the thesis.

Gated Communities – a fenced, residential area that is separated from the rest of the society with some form of entry access control (Lovén, 2010).

Gentrification - Social status increase within an area as a result of people with a higher socio-economic status than the existing population moving to the area (NE.se).

Neighbourhood – a geographically localised area with a set of social networks within a city or rural area (Schuck and Rosenbuam, 2006). In this thesis, neighbourhoods are referred as neighbourhoods dedicated for housing.

Public place – a space that is accessible open to the public (Gehl, 2010).

Safety – the condition of being protected from harm or other danger (UN-HABITAT, 2008).

Soft edges – facades that are interesting and a lot of things happen, both regarding activity on the ground floors and design of the building.

Stratifications - A classification system for Bogotá's areas with the intention of creating cross-class subsidies that would help those in the lower strata pay for public services.

Urban planning – development and designing process of the built environment, transportation, communications, among other things (McGill, 2008).

Urban space - spaces intended for use by the public

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1 Introduction

1.1 Background

Since the end of the 20th century, fear and insecurity have gained a large place in discussions about urban planning. Fear of crime such as assault, rape, beatings, and robbery are linked to the urban public areas. The fear of being the target of crime or accidents affects people's habits and keeps them away from different places and situations which limits freedom of movement and activity. However, the urban space is not experienced equally by everyone. For women, children, and the elderly, it can be experienced completely differently than, for example, men (Pollack, 2001).

The dominating explanation factor for the extent of fear and insecurity has in several situations proved to be gender. Women are statistically more afraid than men of being in public places, such as parks and empty streets. Andersson's (2001) study on women's fear of threats and violence in the urban space has shown that women avoid places, choose safe roads, move quickly and so on, to minimise feelings of fear and insecurity. Andersson believes that the fear limits women's mobility and that several public spaces simply become inaccessible to women.

One of the variables that conditions the use of the public space the most is the perception of safety, with a feeling of anxiety and the fear of being a victim of crime (Bjornstrom & Ralston, 2014). For women, using public spaces entails fear of sexual violence and of being attacked, which forces them to always be vigilant (Santiso, 2000).

Fear is often not based on real events or data, but rather, on occasions, it is defined by the perception of an area. In this regard, several studies have been made that analyse the relationship of the perception of safety with the quality of the urban environment (Valenzuela, 2016).

The study of Valenzuela (2016) suggests that the perception of safety does not solely depend on the built environment, but also on the urban dynamics (land uses, presence of people, among others). Generally, spaces with a diversity of users and a greater presence of people increase the perception of safety for women (Rashid et al., 2019; Cicoletto & Col.lectiu Punt 6, 2017; Jacobs, 1973; Amat, Cardona, Goula & Saldaña, 2015).

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Most of the cities around the world are facing the same challenges when it comes to the ability for women to move around and feel safe in public spaces. With inadequate lighting at night comes the feeling of vulnerability; badly designed public places that fail to fulfil the needs of the whole community; and public transportations systems, where commuters get prioritised before caregivers and the threat of assault or harassment prevents the use (Arup, 2022).

Cities today are planned, built, and managed in a way that decreases women's quality of life by restricting their ability to move around as they wish (ibid). Planners and designers look at humans as a gender-neutral group, even though the experiences and perspectives between the genders show clear differences (Andersson, 2001).

A historic and contemporary group of mainly male planners, designers and government leaders have created urban spaces that perpetuate outdated gender norms and inequalities. Cities, as they are today, prioritise men's health, mobility, safety, leisure, and economic well-being over women. This heritage of inequalities has been aggravated by the lack of participatory urban design, and especially of the failure to involve women in urban planning and renewal processes (Arup, 2022).

Cities themselves often add to or aggravate gender inequities, whether it is by accident or a consequence from inadequate planning and design. The way many cities are planned often makes women feel unsafe, fails to provide their basic needs, and restricts their social and economic opportunities. As a result, billions of women are overridden by the environments in which they live and work (ibid).

Throughout history, cities have been planned with the focus on mobility, accessibility, and security. The problem is that security does not have the same meaning for women and men. Security in an urban environment has often been linked together with traffic and has mainly been about avoiding injuries related to traffic. But for women, security has been shown to be linked to the perception of safety and not needing to be afraid of violence or the threat of violence (Andersson, 2001).

A consequence of urbanisation is when cities are planned without consideration of gender, diversity, or social inequities, which can widen the gaps between different groups in society (Arup, 2022). We are in serious need of a radically new approach to the city, that today is perceived as dangerous and disorderly for women - and other groups - who must be excluded for their own protection, in many places (Wilson, 1997).

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To be able to achieve truly inclusive cities, the only way is to incorporate the needs, views, and requirements of different groups - especially the most vulnerable and excluded ones - at all stages. Cities designed for women would be safer, healthier, more attractive, and vibrant, and overall, much more pleasant to live in for everyone (Arup, 2022). So, for an area to be planned for women and not reduce women's quality of life, it must be perceived as safe.

1.2 Purpose

The purpose of this study is to identify what factors in urban spaces that can be characterised as unsafe, and to analyse if public space can become safer for women by implementing different urban planning theories. The thesis aims to answer what urban planning-aspects in selected residential areas in Bogotá that are perceived as unsafe for women.

The focus of this thesis is on how urban planning can be used to improve safety for women in an urban space in Bogotá. The focus on women was chosen because gender transcends all other social relations such as class, age, ethnicity, and religion, and it also transcends all socioeconomic factors such as education, employment, and income. The focus was also chosen because women make up more than half of the humankind and are still thought of as a minority. Although women as a group is the focus for this thesis, it is important to bear in mind that some women are more vulnerable to harassment in public spaces, than others.

Even though this thesis has been limited to being about safety for women in cities, a lot that is stated about women in this thesis, also is the case for LGBTQIA+ people. They also experience discrimination in cities which leads to decreased quality of life.

1.3 Limitations

Since a lot of parts in Bogotá are not safe to be in, the study had to be limited to the more visited and safe parts of Bogotá, which are the eastern parts from the centre and up north. Most parts in Bogotá are not safe after dark which is why the three selected areas was not visited during the dark hours of the day. This has meant that lighting, which is an important factor regarding women's safety in urban space, has not been able to be fully analysed. Because of security reasons, no photographs have been taken in the areas. Instead, the photographs are taken from Google Maps.

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The limitation of time has affected the extent of the thesis, and the choice of methodology and theories. Jan Gehl and Jane Jacobs are the two methodologists chosen for the thesis due their safety focus and since these have been studied thoroughly through the author's education in Lund. These two were also chosen to avoid language barriers that arose among several other methodologists and theorists, especially Latin American ones.

1.4 Global goals

With this study involving the perspective of gender in cities, came the need for looking into the 17 Sustainable Development goals.

Involving a gender perspective to urban planning goes beyond just benefiting women: it ensures that the whole community can take part in the opportunities that cities offer, and it creates cities with wider social, economic, and environmental advantages. Adopting a gender-responsive approach can lead to more inclusive, equal, and sustainable societies. Women have been shown to plan and design with diversity in mind and are more likely to generate places that benefit all groups. Achieving equality between genders in our cities will contribute significantly to reaching many of the UN Sustainable Development Goals (Arup, 2022).

One of the 17 Global Sustainable Development goals that the study is permeated by is number 11; Sustainable cities and communities, and above all the sub-goals; Inclusive and sustainable urbanisation and creating safe and inclusive green areas for all. The main goal is to strive towards making cities safe, sustainable, resilient, and inclusive. With the goals comes the need for innovative and inclusive urban planning to make cities safe. The sub-goals aim for an inclusive urbanisation and to provide access to safe green areas and public places, especially for women, children, the elderly, and people with disabilities (United Nations, 2022).

1.5 Structure of the thesis

The thesis is structured as follows:

Chapter 2 explains the research framework and the method used for the thesis.

Chapter 3 introduces the subject of urban planning and provides an overview of relevant factors and different angles.

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Chapter 4 presents information about Colombia and Bogotá.

Chapter 5 contains the theoretical framework used in the thesis.

Chapter 6 presents the results of the thesis. This chapter also contains a general presentation of the three chosen areas and the observations from the site visits which were made with the theories presented in chapter 5 in mind.

Chapter 7 includes a discussion of the observations presented in chapter 6.

Chapter 8 contains the conclusion of the thesis, future research, and sources of error.

2 Methodology

2.1 Research approach

The research was carried out as a literature review, and a case study including direct observations in the Colombian capital city Bogotá.

Bogotá was chosen because of its rapid growth rate of the population in the last decades, which has meant that the land area has been forced to expand. This has led to the urgent development needs which in turn has resulted in widespread segregation and insecurity in Bogotá (Guzman, Oviedo, Bocarejo, 2013).

Due to the consequences of the fast urban development, safety in public spaces has become a big issue in Bogotá, making it an interesting location for the study. In Bogotá it is a recurring problem with robberies, thefts and assaults which occur both during the day and in the evening, making people, especially women, feel unsafe and afraid (Embassy of Sweden, 2022).

A literature review on urban planning, its negative effects today and its connection to safety were made in the study's initial stage before arrival in Colombia, and in a later stage, on site in the country. In the literature review, Colombia, including Bogotá, and the country's urban crisis is covered.

When arriving in Bogotá in September 2022, I first lived next to the area Las Nieves, in a student housing complex. I lived there for eight weeks before I moved up to live next to the area Quinta Camacho where I lived for three weeks. I never got the chance living next to Bella Suiza, but I visited the area several times.

2.2 Site visits

To obtain an understanding of Bogotá's different neighbourhoods, site visits were conducted throughout Bogotá, with a specific focus on the most popular areas. After deciding on the three specific areas to apply the theories on, observations were conducted during a two-month period, in October and November 2022. Research was made before to ensure the right areas were chosen. The three areas, Las Nieves, Quinta Camacho, and Bella Suiza, were chosen due to their various locations in Bogotá, their similar sizes, and the different reputation of how safe and secure they are.

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The three different areas were chosen from the three most popular localities in Bogotá; Santa Fe, Chapinero and Usaquén, see figure 2.1. The localities are all from different centuries; Santa Fe is a part of the International and Historical Centre of Bogotá and was founded in the 18th century, Chapinero was developed in the 19th century and Usaquén in the 20th century (Colture, 2019).



Figure 2.1. Map of Bogotá's localities (Para Viajar, 2022)

The selected areas differ in architecture, activity, and socio-economic standard, and belong to different stratifications in Bogotá. The areas in each locality were chosen due to how different they were experienced, both own experiences as well as experiences and information from contacts on site. The neighbourhoods are demarcated by large roads, within the localities, and are all along Seventh Avenue, one of the main roads in Bogotá (ibid).

The three different areas are all located in the east since the eastern parts of Bogotá are the parts that most people use (ibid). The first area is in the city centre, above 19th Street and is called Las Nieves. The second area is in Chapinero, above 67th Street and is called Quinta Camacho. The third area is in Usaquén, above 124th Street and is called Bella Suiza.

2.2.1 Observations

For analysing an urban space, direct observation is advocated and believed to be the key to successful studies of public life in the city. It is also believed that such method helps with understanding why people use some places and others do not (Gehl & Svarre, 2013). Which is why direct observation being a method that was used for the thesis. On the site visits the theoretical framework was applied for the observations of the three different neighbourhoods.

In addition to observation according to the selected theories, a tool by Gehl was used which is called the 12 Quality Criteria, which is a method for analysing how welcoming and well-functioning a public space is. The criteria are divided in three categories; Protection, Comfort and Pleasure, see figure 2.2, with the aim to identify an urban space's assets and shortcomings, and the assessment of the various criteria is done with a three-step scale. The method is like a checklist for the evaluation of urban spaces to identify an urban space's quality and shortcoming, which makes it relevant for applying the theory of physical factors to the selected urban spaces (Gehl, 2010).

I found that the 12 Quality Criteria lacked the perspective of women's safety, therefore I added a category about safety, focusing on women's safety in public spaces. To this category there are three criteria which are: Presence of human life, Overview, and Lighting. Gehl's now modified tool will be referred to in the rest of the thesis as the Modified Quality Criteria.

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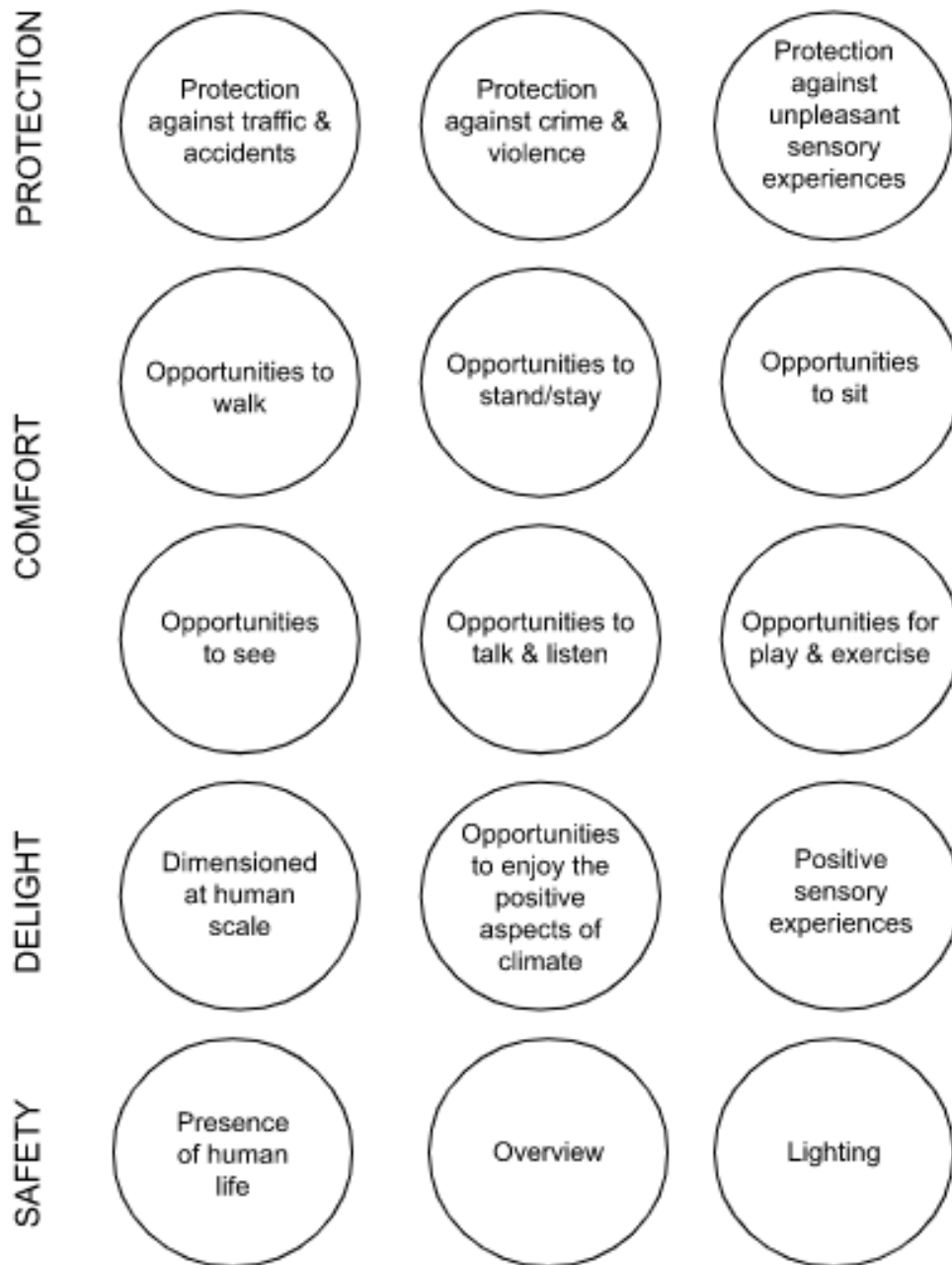


Figure 2.2. The Modified Quality Criteria.

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Frequent visits to the areas were made at different times and days for the best observations on the neighbourhood's different attributes and characteristics. The three neighbourhoods were studied both by walking around in them and by studying maps of them. The observations were documented on-site through notes, but not photographs as it is not appropriate to bring out either a phone or a camera on the streets in Bogotá. The photographs in the thesis were instead taken from Google Maps and Google Earth.

3 The issue of safety in urban planning

A living public space is a fundamental requirement for creating a functioning city. It is only when the city is alive that areas can offer safe and attractive public spaces. To bring people to the city, urban planning must make it easier for people to get to the city and to stay there. All parts of the city should make it easier for people to use it. Jan Gehl (2010) believes that physical planning can to a large extent influence what form life takes between the houses. Planning can provide opportunities for a certain type of activity and shape the environmental quality of the urban space and thereby influence people's behaviour.

3.1 Women's history in urban planning

The public space was only a place for men, in ancient Athens. Women were not allowed to use big parts of the city and were restricted by a special police force. In China, women only had access to special areas in the city which usually were behind walls without windows. With industrialism in the 19th century in the Western world, the separation between the home and the public space increased. The public space was a place for work, education, socialising, that was made by and for men. Women were restricted to their homes - the private space - and it was not acceptable for women to be in public spaces, especially not without her husband or father (Falú, 2017).

3.2 Cities are built for and by men

Even though the physical planning of cities has been considered gender neutral, most cities have been planned and designed by men. With a solely male perspective when deciding about and planning a city it is hard to say that the city is planned for a gender-neutral crowd (Arup, 2022).

The focus for many urban planners, and especially transportation planners, for a long time has been security. To create solutions that are quick and secure. In most cases, it appears that security means to minimise the risks of accidents that can result in personal injury or death through various forms of solutions, but also that the risks are linked to accidents, caused by ignorance, technical deficiencies, or carelessness, which also could be classified as unintended events. This creates problems as security for many women turns out to be the same as safety, and safety means not having to be afraid of threats and violence. Threats and violence are not an accidental event, and are not due to technical deficiencies or ignorance, they are intended events (ibid).

3.3 Fear and safety

Fear is experienced in different ways for people, but people also fear the same things. Fear is affected by the time, place, and life situation. Fear exists in all social classes, ages, ethnicities, religions, genders, and decreases the quality of life for people experiencing it. The variable that differs the most when it comes to fear is gender. Women are more afraid than men. Women are afraid of men, and they are primarily afraid of getting exposed to sexual violence. Another spectrum of this fear is that whenever a woman gets exposed to sexual violence, it affects other women with the increased fear it brings (ibid).

Feelings of fear and security are common. This does not mean that women walk around and are always afraid. However, it means that they, in their everyday life, consciously or unconsciously, relate to the risk of being exposed to some form of sexualized violence. Strategies, approaches, or combat methods can be discerned as recurring elements in women's everyday life. The sexualized violence affects almost exclusively women, it is directed against the woman as a characteristic of her gender (Andersson, 2001).

Fear is often connected to the public space and for women the fear is greater during the dark hours of the day. Fear of assault is one of the greatest limitations of women's movement in cities. Fear has a spatial connection, and the places shown to be especially threatening are parks and empty streets. In a survey focusing on fear connected to parks, from Leicester, it was found that women change their moving pattern because of fear. Women avoid big open spaces, spaces with bad or no lighting or visibility and places with overgrown greenery. The fear means severe restrictions on women's ability to freely use the public space and will thereby decrease their quality of life (ibid).

3.4 Car oriented cities

In a lot of countries, investments in motorways have been about moving people between point A and point B as quickly and securely as possible. This single focus has had consequences in several ways (Cervero, Guerra, Al, 2017).

Over the 20th century, street widths and parking lots continuously increased, resulting in large parts of public space being claimed. In some cities in the world, it has gone so far that parking lots take up more than a third of the city's area. The transportation infrastructure from the 20th century has often had adverse effects on people and places.

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Intersections and multi-lane roads that are difficult and dangerous to cross have hindered people from moving around freely and children's ability to play. Even if the transportation investments have accelerated development and connected people on a regional level, they have also uprooted and polluted communities (ibid).

Communities that are walkable, safe, and healthy places, which also promote sustainability and equality, are better for everyone. This is the opposite of the 20th century modernism's stress on segregated land uses, fast movements, and large building complexes. Today we instead argue for more human-scale urban spaces, with smaller blocks, shared spaces, and places for recreation. It has become more popular all around the world to reclaim public space from private vehicles to be able to create great, walkable urban spaces that are more people oriented (ibid).

4 Colombia and Bogotá

Colombia is a country located in the northwest of South America with a population of about 52 million, see figure 4.1. Colombia has borders to the Caribbean Sea and the Pacific Ocean, and the countries Brazil, Peru, Ecuador, Panama, and Venezuela. (Woods, 2021).



Figure 4.1. Picture of Colombia's location (Geology.com, 2022)

4.1 History

Before the Spaniards came to Colombia in the 1500s, the country was populated by indigenous people, where the majority were hunters or nomadic agriculturists. There were a lot of different tribes living in Colombia at the time, such as the Inca, the Chibcha and the Música people. When the Spaniards arrived in Colombia, the existing inhabitants there were living in small, scattered communities and they made their living by agriculture and trade. With the Spanish conquest in parts of Latin America and the growth of the Spanish empire, a new union was created between Colombia, Venezuela, Ecuador, and Panama, with Bogotá as its capital. In 1819 the Spanish reign came to an end and Colombia was declared independent with the help from the well-known general and soon-to-be hero Simón Bolívar. The union, now called Gran Colombia, was disintegrated by 1830 due to its political diversity which also made a big impact on the independent nation of Colombia's future (Woods, 2021).

Two parties were established in Colombia; the Conservatives and the Liberals, with roots in the former parties that split Gran Colombia. The rivalry between these parties resulted in sequences of rebellion and civil wars during the 19th century and parts of

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the 20th century. In 1957 the leaders of the two parties came to an agreement after hundreds of thousands of people had lost their lives in different riots and wars between them, where they signed a pact to share power for the next 16 years. This pact disallowed parties other than the Liberals and the Conservatives which led to new conflicts and the seeds for guerrilla uprising being sown (ibid).

The following decades were characterised by the birth and armed conflicts of new guerrillas and paramilitary groups, but also the cocaine industry along with its cartels. In 2002 a new president named Álvaro Uribe was elected and while his predecessor Andrés Pastrana had tried negotiating with the, at the time, two largest guerrilla groups - FARC and ELN - Uribe chose a different technique. He introduced two simultaneous programs - a military pushback of the guerrilla groups and a demobilisation offer for both sides. With these programs the murder rates decreased by 40 % between 2002 and 2008 and with the newly elected president Juan Manuel Santos, Uribe's former defence minister, more plans for bringing peace to Colombia took place. By 2016 a peace agreement with FARC and the Colombian government was signed and marked the end of a 52-year-old conflict (ibid).

4.2 Bogotá

Bogotá is the capital city of Colombia with a population of about 8 million people. The city is in the centre of Colombia on an elevation of around 2600 metres above sea level, since it is situated in the Andes, see figures 4.2 and 4.3 (Woods, 2021).

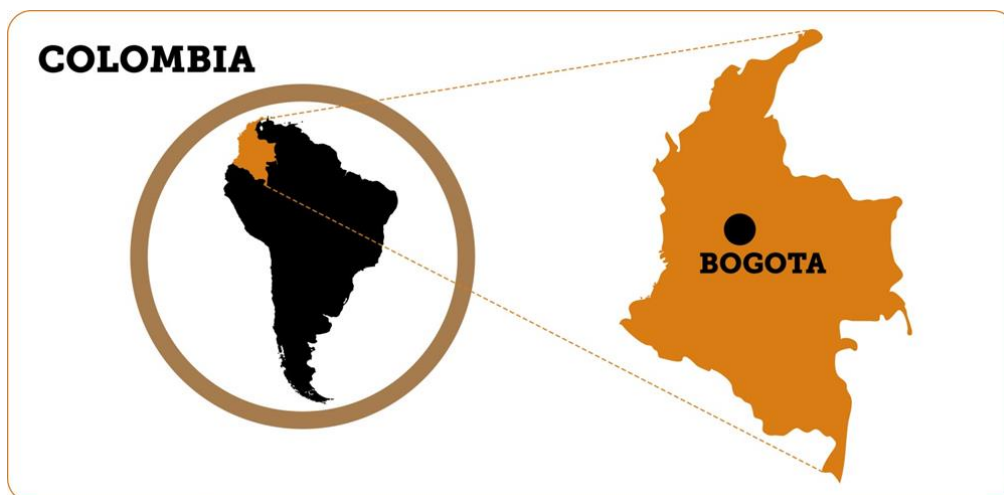


Figure 4.2. Picture of Bogotá's location in Colombia (Geology.com, 2022)

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Figure 4.3. Map of Colombia (Google Earth, 2022)

4.2.1 History

The city initially developed on the flat land of the eastern basin of the Bogotá River. The old city encompasses the growth of the urban area until the end of the 19th century, a result of a persistent transformation process, and a mild growth over the original core over nearly four centuries. During this time the densification of the urban area started to take off, the redevelopment was taking over larger parts of the city and the enlargement of roads was initiated. For all this to be possible, big proportions of forests and agricultural lands had to be expropriated and destroyed (Sorensen & Okata, 2013).

The primary reason for the need to expand the city was and still is the population growth and at the beginning of the 20th century Bogotá only had around 100.000 inhabitants and an area of about 570 ha. During the time from the end of the 19th century and up until the 1920's, new residential neighbourhoods, disconnected from the city, were developed. These areas were designed as an open and hierarchical grid containing several public spaces with parks and specific areas for education, health, and sports (ibid).

The urban area growth in Bogotá up until the 1950-60's constitutes today's central zone. With the 1950s, the periphery was expanded with residential areas and informal neighbourhoods, and zones for industrial or services use were developed. The growth rate between 1951 and 1964 was 6.8 % with a population of 1.7 million in 1960, see

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table 4.1. This period highlights the first phase of the accelerated expansion of the city and the hierarchical road system began to develop. It developed independently of the whole urban area and the existing neighbourhoods which are all thought of as separate areas with great differences and connected to the road system in different ways (ibid).

Year	Population	Area (km²)	Density (population/km²)
1910	145 000	5,70	25 439
1938	335 512	25,14	13 346
1951	715 362	27,00	26 495
1964	1 697 311	146,15	11 613
1973	2 861 913	222,99	12 834
1985	4 441 470	234,24	18 961
1993	5 484 244	266,56	20 574
2005	6 778 691	340,00	19 937
2020	8 034 649	370,36	21 694

Table 4.1. Population growth in Bogotá (Sorensen & Okata, 2013) (El Tiempo, 2020).

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Figure 4.4. Map of Bogotá (Google Earth, 2022)

4.2.2 Urban development

The city is characterised by the distinction of the urban fabric and the large difference between the neighbourhoods. The different neighbourhoods could be divided into three different types where one type resembles American low-density suburbs, with a lot of public spaces; another type has smaller lots and row housing and is designed for the middle class; and the last neighbourhood type has higher densities with less room for public spaces and is known as the "working class areas" (Sorensen & Okata 2013).

The urban shape of the city remained the same as in the 1500's for a long time, as a checkerboard with a plaza in the centre. With the city growing, more square blocks were added, keeping the same urban fabric. The buildings in the city used to be low, often only one story, and in some cases two stories. The two-story buildings were inhabited by the wealthiest families of Bogotá. At this time the massive growth rate did not generate a technical and institutional framework that could control the development

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of the city. The city's ongoing demand for more goods and services were not satisfied due to insufficient economical and technical resources which deteriorated social cohesion (ibid).

It was not until the 1990s an institutional, legal, and technical framework was created for urban development. With this new framework a principle was adopted that the ownership of land is not absolute, and it now came with a social and ecological responsibility. It operated as the foundation of the issuing of laws on environmental and regional planning, which gave a new approach to urban planning (ibid).

4.2.3 Urban crisis

In the 1980s, a great urban crisis that had been growing in Colombia for the last decades, manifested itself. It appeared as a growing insecurity and unsafety, problems with mobility and public transport, a shortage of housing, an institutional crisis, and severe social divisions. With Bogotá's accelerating population growth and lacking the necessary technical and institutional framework to deal with it, the problems and thus the urban crisis became aggregated. The crisis can be summarised in the following features:

Increasing insecurity

In the 1980's, Bogotá was one of the most violent cities in the world. In 1994 there were 82 registered homicides for every 100.000 inhabitants - one of highest on the continent. Violence enhanced by drug dealing which contributed to guerrilla warfare.

Weakness of public finances

Bogotá was practically bankrupt in 1994 - the country had no revenues and was in a financial crisis. Bogotá could not provide its citizens with necessary goods or services.

Governance problems and lack of transparency

The government and other leaders of the city had a big corruption problem which gave the inhabitants of the city a hard time trusting them. Under this period the city was known as being impossible to govern.

Urban segregation and housing shortages for the poorest groups

The northern and central parts of the city were occupied by rich groups and the poorer groups got banished to the southern and eastern parts where there was a lack of services and inadequate transportation. Almost 6000 ha of the developed city was illegally built which counts as home to 26 % of the population.

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Obsolete transportation system

The transportation system was outdated and was made up of 40 private bus companies. The road system was in a bad state which, together with the bus companies, gave each inhabitant of the city an average of 4 h travelling per day. The city had a grave problem with congestion and accessibility, especially in the eastern and southern parts of the city, which were the homes for the poorest groups.

The inability to construct and defend public space

At this time the sidewalks of the city were occupied by cars and stores and a lot of public places like parks, closed. The public space came to represent a dangerous place which was poorly constructed. By 1994 the city contained 3 square meters of green area per inhabitant, which is very low in international standards.

Unplanned growth

With the accelerated and unplanned growth, the need for services and commerce in neighbourhoods that already had another function, came. Office buildings took over residential areas and houses got replaced by buildings on a lot-by-lot basis. This spontaneous renovation took over a lot of public space and parks and it diminished the city's environmental quality. Without any regulations or planning framework the city quickly became chaotic.

An ineffective planning regime

During the second half of the 20th century, a lot of different planning schemes had been tried but failed at solving the problems, so they were abandoned. The grave problems that prevented the city's development could not be solved by any planning regime at this time. The inhabitants' lack of faith with the urban planning was evident (ibid).

4.2.4 Politics

The end of the crisis was supported by the efforts made by the mayors of Bogotá from the last 30 years. Two of these mayors especially stand out since they were not supported by traditional political parties but instead were supported by civic movements. But mainly, both mayors had a significant impact on Bogotá's and the inhabitants of Bogotá's wellbeing and future. The first one, Antanas Mockus, focused on civic and democratic culture. He promoted efficient administration and developed different programs to help with the citizen behaviour to gain the respect for life in the city. One of the programs Mockus developed is called Civic Culture: Creating a safer city, and its purpose was to transform the city and the behaviour of its inhabitants. The

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methods used in the program involved civil autoregulation, training of government employees, and the development of places where functionaries and citizens could cooperate, and relations were constructed. The Civic Culture program seeks to generate a respect for the city and the rules provided by civic identity and to raise a sense of belonging to the city and to arouse the community's participation (ibid).

The other mayor that stood out is Enrique Peñalosa, who focused on the public places and the mobility in the city. One of his goals was the recovery of public space with the purpose to build a city that is more liveable and friendly and that respects its citizens and pedestrians. A city containing all the necessary places for the inhabitant's mobility, resting places, places to connect with other people. A city that facilitates inhabitants' living together peacefully and that generates the recognition of civic duties and rights (ibid).

At different places in the city, interventions were undertaken, to recover the public spaces. A large system of pedestrian streets was constructed over the city, allowing pedestrians to move in a secure, comfortable, and environmentally clean way. Almost 60 % of the city's parks were recovered, improved, and maintained. Renovation of both monumental public spaces and public facilities to improve their status as the city's representative places and insure a welcoming attitude toward the city and its inhabitants. More than seven million square metres of public space have been recovered since 1998 (ibid).

One of Peñalosa's solutions for the public space is an event called Ciclovía, which in Bogotá occurs on Sundays where they temporarily close certain streets to automobiles for pedestrians and cyclists. The ciclovías in Bogota measures up to approximately 120 km and are used by around 2 million people including elderly, children, women with strollers and so on. It has become a neutral space for both gender and age and it goes across many stratifications. It has made it easier for women to get out and around the city (Hernandez, 2008).

4.2.5 Migration

In some parts of Colombia, mostly outside of the cities in province areas, it can be quite dangerous. In most cases this is due to violence and armed conflicts and leads to people migrating into the cities and in most cases to Bogotá. There are also a lot of refugees and migrants from Venezuela in Colombia and mainly in Bogotá. The reason for people migrating to Bogotá can partly be explained by the fact that Bogotá represents the largest labour market in Colombia and that migrants and refugees look at Bogotá as the

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city of opportunities. But in reality, there is high unemployment in Bogotá, especially regarding refugees and migrants and the city is very segregated. Colombia is known to be one of the most unequal countries in the world and the country faces a lot of challenges. It is especially unequal for refugees and migrants, and particularly for those that are women. These experience more harassment, feel more unsafe and are to a greater extent unemployed (MMC, 2020).

4.2.6 Segregation

Bogotá's areas have been divided in different socio-economic stratifications, where they get classified from 1-6, with 1 being the poorest and 6 the richest, see figure 4.5. The idea with the system is that people with higher strata, 5 and 6, pay more for services and utilities such as electricity, water and garbage collection, subsidising the lower strata, 1 and 2. The system was initially launched in the 80's and aimed to be a solidarity system, but instead is accused of contributing to social segregation. The ideals of the stratification system are impeccable: reduce inequalities by helping the poor pay less. More than 50 % of Bogotá's inhabitants live in strata 1 and 2, mainly in slums on the hillsides, and only 1,9 % live in stratum 6 (Jessel, 2017).

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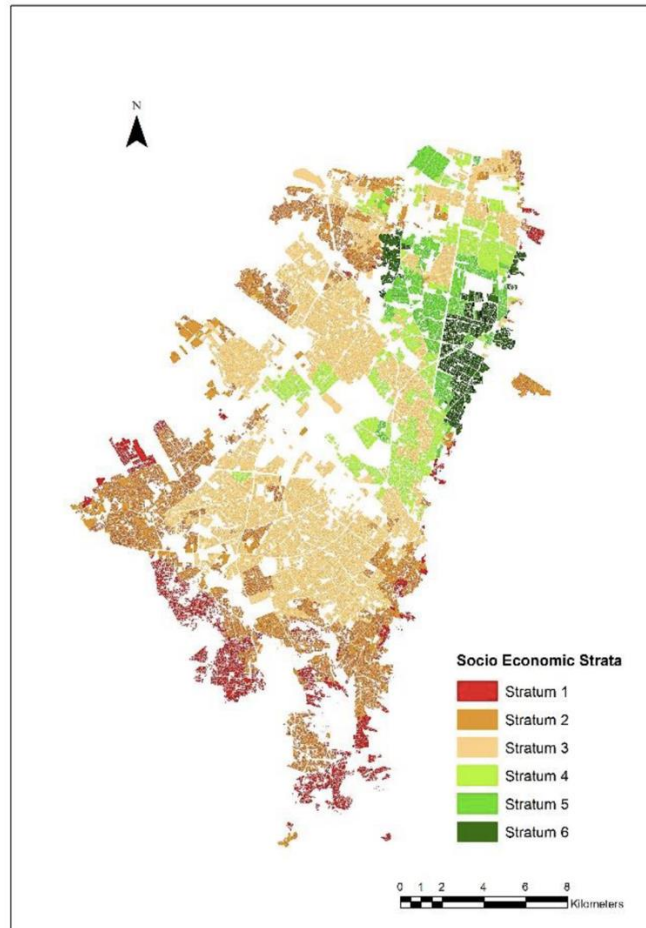


Figure 4.5. Map over socio economic strata in Bogotá (Brussel, Zuidgeest, Pfeffer, van Maarseveen, 2019)

4.2.7 Traffic

Bogotá is extremely car-oriented and there are always traffic jams in the city, making it very hard to get around. The public transportation system being used in central Bogotá is buses, called Transmilenio. Some of the buses have their own lane in the road, but several buses do not, so these also get stuck in traffic jams. Bogotá is a very big city, so the distances are often too long to be walkable, or the areas are not safe to walk in. There are some bike roads, but not many relative to the city's size. A lot of people therefore take their own car or a cab to get around the city (Woods, 2021).

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The big roads in the city create barriers, especially when the pedestrians and cyclists must walk over a footbridge instead of pedestrian and cyclist crossings in the same level. Many areas are screened off by the major roads, making it even harder to get around the city, or just between different areas.

4.2.8 Climate

Bogotá is in a location with an oceanic climate which is a humid temperature climate or also called a subtropical highland climate. The year alternates with dry and rainy seasons and the temperature remains relatively constant all year round. Because of the high altitude the UV light is intense, and the solar radiation is very strong. In Bogotá it is common to have torrential rains during the rainy seasons, making the streets flooded. There is always weather to be protected from in Bogotá, whether it is the rainy season or dry season (Weather Atlas, 2019).

5 Theories

The theories in this paper will mainly be based on the work from two major urban planners, Jan Gehl and Jane Jacobs.

Gehl (2010) believes that the problem with urban planning for several years has been that the human dimension has been overlooked, mostly in favour of car traffic. He claims that for a city to be attractive and hospitable it must be built and planned from and for a human perspective, which is his focus with urban planning. Gehl focuses on the importance of creating natural flows on the streets between different rooms. He states that harsh boundaries and contrasts makes a public space impersonal and less available. When it feels natural to be and to stay in a place, people will make a habit of being there and it will lead to the emergence of life in the city. Gehl believes that people, especially women, want to use and stay in a public space that they feel safe and secure in, and for an area to be safe it must be attractive, welcoming and facilitate social activity.

Jacobs (2011) strives to create an understanding about how cities work and through that see patterns and explain how cities can be interpreted. The street is an important element when trying to analyse a city according to Jacobs. She believes that the street is the most important organ in a city that defines a public space, but without its surroundings the street is nothing. If the streets are interesting, the area or even the whole city will feel interesting. If the streets are interesting, people are going to spend time on them or go detours to use them, which will get more people to the streets and make the streets and the city feel safer for women.

For an area to be perceived as safe for women, there are several factors that it should fulfil. The area should contain the presence of human life, both from people being on the street, but also from buildings on the streets. The urban spaces should be possible to overview with no dark corners, or overly grown parks or greenery which prevents the possibility to see. Lighting is also very important for the possibility for women to feel safe in an area. An area can be perceived as dark both due to the lack of streetlights but also due to the lack of natural light reaching the ground, because of narrow streets and tall buildings (Arup, 2022).

5.1 The work of Jan Gehl

To be able to plan a public environment which facilitates social activity it is important according to Gehl (2010) to understand how our senses work in a city.

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Jan Gehl's (2010) view of safety is that it is a necessary condition for creating inviting, well-functioning cities. This applies to both actual safety as well as perceived safety. In 2010 he released his book *Cities for people*. In the book, he shows tools and methods that can be used to create urban landscapes that strive to be well-adapted for a human scale. To be able to work with the human scale, he presents the 12 Quality Criteria an urban area should possess.

By enhancing urban life in such a way that people go out and spend time in public places, both actual and perceived safety will increase. The presence of other people sends out signals that a place is safe and this in turn causes more people to keep their eyes on the street when something interesting is happening there. Not only life on the street but also along the way is important. Mixed functions at different times of the day, combined with homes whose windows glow reassuringly in the evenings send signals that there are other people nearby. The ground floors are especially important. This is where the contact with the street takes place, and the residents can see what is happening outside on the street. He calls this "soft edges" and signals to people that the city is welcoming (Gehl, 2010).

In 1971, Jan Gehl released his first book called *Life between buildings*, where he raised theories connected to the design of an urban space. According to Gehl, for a public space to be perceived as safe, it is important that the space is welcoming, secure and, as previously stated, populated (Gehl, 2004). Gehl believes that people who try to guard their property at all costs, put up gates, barred windows and in extreme cases; move into gated communities will create the opposite and instead create an illusion that the area is not safe (Gehl, 2010).

5.1.1 The Modified Quality Criteria

A basic precondition for people to want to use and stay in an urban space is that they feel secure there. It is therefore of the utmost importance that the room is designed so that people are protected against accidents, crimes, and unpleasant weather experiences. When the urban space is designed so that people can feel secure there, measures are required to make the space welcoming and a prerequisite for an urban room to be welcoming is that it offers good comfort and invites people to activity. To promote people's stay in the urban space, it is important to also consider people's impressions and the design of the urban space so that it is inviting both physically and mentally. It is through our senses that we experience the environment around us and to feel comfortable, it is therefore important that these are satisfied. An urban space,

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successful with the above criteria will be an inviting, secure, and harmonious urban space that brings life and movement which will result in a more attractive and welcoming space (Gehl, 2010).

As mentioned in section 2.2 a new category, Safety, was added to the 12 Quality Criteria, in order to analyse the urban space regarding safety for women. To the category, three criteria are added. The criteria are Presence of human life, Overview, and Lighting. These are three aspects based on the results from the literature review and the observations from the author.

Gehl's 12 Quality Criteria are presented in detail below, including the added category Safety.

Category 1: Protection

The first step in the method is to ensure there is reasonable protection against injuries, insecurities, risks, and unpleasant influences such as negative climate aspects. If only one of these major protection concerns is unmet, it may prove futile to protect the other qualities. To feel safe and secure in a public space is a basic prerequisite for people to want to be in that space. Therefore, it is of paramount importance that the public space is designed so that people are protected against traffic and accidents, violence and crimes and unpleasant experiences such as precipitation, wind, traffic noise and pollution. All three protection criteria are significant and must be fulfilled for an urban space to be well-used (Gehl, 2010).

Criteria 1: Protection against traffic and accidents

A public space should make you feel protected against traffic and accidents. Pedestrians should feel safe and secure in the space. An area should protect pedestrians and eliminate the fear of traffic.

Criteria 2: Protection against violence and crime

For an area to make people feel protected against violence and crime it should have a lively public realm, there should be eyes on the street, the lighting should be good and the functions in the neighbourhood should be overlapping day and night.

Criteria 3: Protection against unpleasant sensory experiences

An area should protect people from the unpleasant sensory experiences, such as wind, rain, snow, cold, heat, pollution, dust, noise, and glare.

Category 2: Comfort

The second step is to ensure that the comfort qualities meet the criteria. These include that the space offers comfort and is inviting people to the most important activities that underlie their use of the public space. These activities are walking, sitting, standing, seeing, hearing, talking and self-expression (Gehl, 2010).

Criteria 4: Opportunities to walk

There should be room for walking in an area, without obstacles and with good surfaces. An area should be accessible for everyone, and the facades should be interesting for people to want to walk in the area.

Criteria 5: Opportunities to stand/stay

An area should contain attractive zones for standing and staying, where people feel comfortable, with supports for standing.

Criteria 6: Opportunities to sit

The possibility to sit down in a public space is very important to create living cities. It will contribute to people staying on the streets longer and is one of the fundamental requirements in the city. Different people prefer different kinds of seating so to create a lively city it is important to include different kinds of seats in different places in a public space.

Criteria 7: Opportunities to see

The opportunity to see is important for an area to feel safe and comfortable. Lighting is important for the ability to see, and so are the distances. People feel safer with unhindered sightlines, especially when it comes to parks. There should also be interesting views in an area for people to want to be there.

Criteria 8: Opportunities to talk and listen

For the opportunities to talk and listen, the noise levels must be low. There should also be street furniture that provides so called talkscapes.

Criteria 9: Opportunities for play and exercise

An area should invite creativity, physical activity, exercise, and play, during all seasons and both by day and night.

Category 3: Delight

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The last step is analysing the quality of the delight of the public space. This involves a good human scale of the buildings and surroundings, the opportunities to enjoy the positive climate aspects and positive aesthetic experiences (Gehl, 2010).

Criteria 10: Scale

The buildings and spaces in an area should be designed after the human scale.

Criteria 11: Opportunities to enjoy the positive aspects of climate

There should be places for both sun and shade, that provide both heat and coolness, and breeze.

Criteria 12: Positive sensory experiences

For an area to provide sensory experiences there should be good design and detailing, good materials, fine views, and greenery such as trees and plants, and water.

Category 4: Safety¹

Criteria 13: Presence of human life

The presence of human life is a prerequisite for a woman to feel safe in an area. For an area to provide presence of human life it must have a mix of functions with different opening hours and different visitors. Presence of human life can also come from the buildings in the area. With entrances, windows, and balconies facing the streets bringing light and life to the streets, the perception of safety will increase.

Criteria 14: Overview

For women to feel safe in an area, the area must be easily overviewed. There cannot be any dark spaces, no dense greenery, and no barriers blocking the view. The blocks should also be short and preferably have rounded corners in the intersections for the best overview possible.

Criteria 15: Lighting

One of the most important factors when talking about women's safety is lighting. An area must be lit for it to be safe. This is both regarding days and nights. At night it is important for the area to have good streetlights and for light from inside buildings to reach the street. For this to happen, entrances and windows must be facing the streets

¹ Added by the author.

without barriers and the natural light is also important. If an area is built with narrow streets and tall buildings these will block the natural light from reaching the streets.

5.2 The ideas of Jane Jacobs

In 1961, Jane Jacobs published the book *The Death and Life of Great American Cities*, where she presented ideas about the city as including, safe and full of diversity. Jacobs (2011) believes that a central component to achieving safety is the street, in combination with adjacent buildings and businesses.

5.2.1 Diversity

According to Jacobs (2011), diversity is the most important factor a city must have to be safe. And as stated in the introduction spaces with a diversity of users and greater presence of people increase the perception of safety for women.

A homogeneous visitor audience together with an at least equally homogeneous surrounding environment results in empty streets during certain times of the day, and it is important that the street is never completely empty. Safety is something that is created by a lot of people together, and preferably a lot of different people. An area with a diverse crowd will most likely be populated during large parts of the day and make the area feel safer. To get diversity in a city there are four aspects that should be accommodated at the same time:

Aspect 1: Mix of functions

The first aspect is an effective mix of functions and activities that contribute to different people having reason to move in an area. An efficient mix of activities means that people move on the streets and there is an even distribution of people throughout the day. A wide range of trade is directly connected to a diversity of people, says Jacobs. Establishing diversity also requires that workplaces, schools, housing, and so on, are in the area. In most cases a mix of functions in a city is good, but there are examples when this does not work. For example, heavy industries are very hard to place in a city centre or a neighbourhood. However, functions like universities can be spread around the city so that other people can take part of their environments. This will also bring down the barriers between other people and students which will contribute to increased diversity in the city. It is important though, that large functions such as universities, are not clustered together, making the area a single-functional one, resulting in the area being empty during large parts of the day (Jacobs, 2011).

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Streets with life and movement that offer a diversified environment are vital for the city to function. But for more people to use the streets on large parts of the day, there must be a variety of services on the street such as shops, bars and restaurants that are open on various hours of the day. The businesses should be scattered in the city to create mobility in many places but at the same time is not so spread out that the concentration of people becomes too sparse. The businesses themselves also contribute to safer streets as shopkeepers are concerned that the street outside their shop should be safe to attract customers. A varied offer is thus required to attract people, both during the day and in the evening (ibid).

Aspect 2: Short blocks

The second aspect for diversity to be established is the possibility to move around easily in an urban space. Most of the blocks in the area must be short, which means that the street corners must come close to each other. Shorter blocks make it easier to move around within an area and it will increase the mobility in a city when the areas open to the public in a different way than if the blocks would have been long. This would promote getting to other parts of the area and people interacting. Shorter blocks will create a network of streets that will increase the options, they will however not increase the diversity by themselves, they are just a tool that together with other tools facilitates the spread of diversity (Jacobs, 2011).

Even if a block is short, it can be perceived as longer if it is not proportional. A narrow street with tall buildings on it will be perceived as longer because of the disproportional scale. A block can also be perceived as shorter by making the edges in the intersections soft and not sharp, among other things. This will also open the intersection and make the area feel more welcoming (ibid).

Aspect 3: Mix of houses

The third aspect for increased diversity is the large mix of different houses. The houses in the area should vary in age and condition with a considerable number of old houses, to offer housing and premises with different prices and grants, which will attract both different inhabitants and different businesses. This kind of neighbourhood will now have a large mix of inhabitants and visitors. Why you want to preserve older buildings according to Jacobs (2011) is because newly built areas usually contribute to a one-sided culture of use. Rents are generally higher and thus counteract the variety of

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businesses, companies, and residents in the area as not everyone has the same finances as required.

There are several aspects that will determine how alive a street will be. A visually appealing street that offers diversity is a more interesting street that will attract more people. A street that looks the same and goes on without any distractions or interruptions will be an empty street because people will not want to walk on that street due to its lack of interesting things to rest your eyes on or to look at along the way. A street should be of high quality and be available for everyone. It should contain variety, turns and interruptions to be experienced as interesting. Interruptions on the street will make it perceived as shorter and people are prepared to walk longer distances. The variety can for example be blocks with different big or small places on them. It is also possible to exploit topographical variations. Elements such as squares and parks between houses are also good tools to vary an area. When there is variation on the street it will be perceived as a livelier street (ibid).

The best visual interruptions will arise when diversity is established, Jacobs believes. When many different ideas and organisations are mixed, visual interruptions will appear and attract attention due to its different character. There are also visual interruptions that attract attention due to their placing. If visual interruptions are used in the right way, it can be a powerful tool to be able to change a whole area's character. But it is important that the visual interruptions are made aesthetic and not in a sloppy way as it can give the street a negative impression instead. Despite the many advantages, visual interruption should be used sparingly, so not all streets contain these elements. Because if these elements become a rule instead of an exception, their function falls (ibid).

Aspect 4: High concentration of people

The fourth and last aspect for diversity to be established in an area is for it to have a high concentration of people during as large parts of the day as possible. Jacobs believes that housing developments should be dense to contribute to a high concentration of people. A sufficiently dense population creates safety and more opportunities for human interaction. A high concentration of people also provides the basis for maintaining a wide range of services and other offerings. If the concentration of people is low, there will only be room for what the majority demands and the diversity will suffer. What an appropriate housing density is varies from different areas. It should be so dense that it helps the diversity to spread on the site, but when houses

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must be built so densely that they require standardisation where many similar houses are built at the same time, diversity will be inhibited (Jacobs, 2011).

Jacobs states that a high quantity of people helps create safety by having more people watching the streets. It is when the street is empty that people can rightfully experience feeling unsafe because the general supervision disappears. Eyes must be on the streets, eyes that belong to the natural proprietors of the street. This implies that all buildings must be facing the streets and not turning their backs. The sidewalks must be used continuously, both to increase the eyes on the streets but also to induce the residents of the streets to look out from their windows, watching people on the street (ibid).

For people to want to be in a neighbourhood, the streets should be well maintained and clean. Poorly maintained streets with potholes, and worn-down houses with scribbling and broken windows, is not a welcoming neighbourhood and will not attract a lot of people (ibid).

5.3 Summary

To make a neighbourhood feel safe for women, the neighbourhood should fulfil different factors. To make people want to go to and spend time in a neighbourhood it is, according to Gehl, important that people feel safe and secure in the area. This is fulfilled by making the area attractive, welcoming, and facilitating social activity. And if an area meets the 12 Quality Criteria, this is achieved. By also meeting the three additional criteria, included in the Modified Quality Criteria, regarding safety, the neighbourhood can be a safer place for women. According to Jacobs, diversity is the factor that is going to get human life to the streets, and what is going to make the streets safer for women. So, by fulfilling the four aspects regarding diversity, the streets are going to be more crowded and safer for women.

6 Observations

The case study was carried out in several site visits to the three different areas to obtain a picture of how the area is perceived and to get an idea of what makes the areas feel safe or unsafe for women. In this chapter, the observations of the case study are presented.

The observations are divided into three parts; firstly, the areas have been generally observed by the author and this is presented under Site visits, secondly the areas have been observed with the Modified Quality Criteria in mind and lastly the areas have been observed according to Jane Jacobs theories about diversity.

6.1 Site visits

During the site visits, both the physical and functional conditions of the areas were observed to be able to analyse their assets and flaws in the matter of safety for women. The neighbourhoods were generally analysed at first and the presentation of the findings are based on the observations made by the author.

The three different areas are in three different localities in Bogotá: Santa Fe, Chapinero and Usaquén. These are all located in the east of Bogotá, see figure 6.1, but are also the most popular localities, which is why they were chosen. Santa Fe is located furthest south out of the three localities, Chapinero in the middle, and Usaquén furthest north, see figure 6.2.

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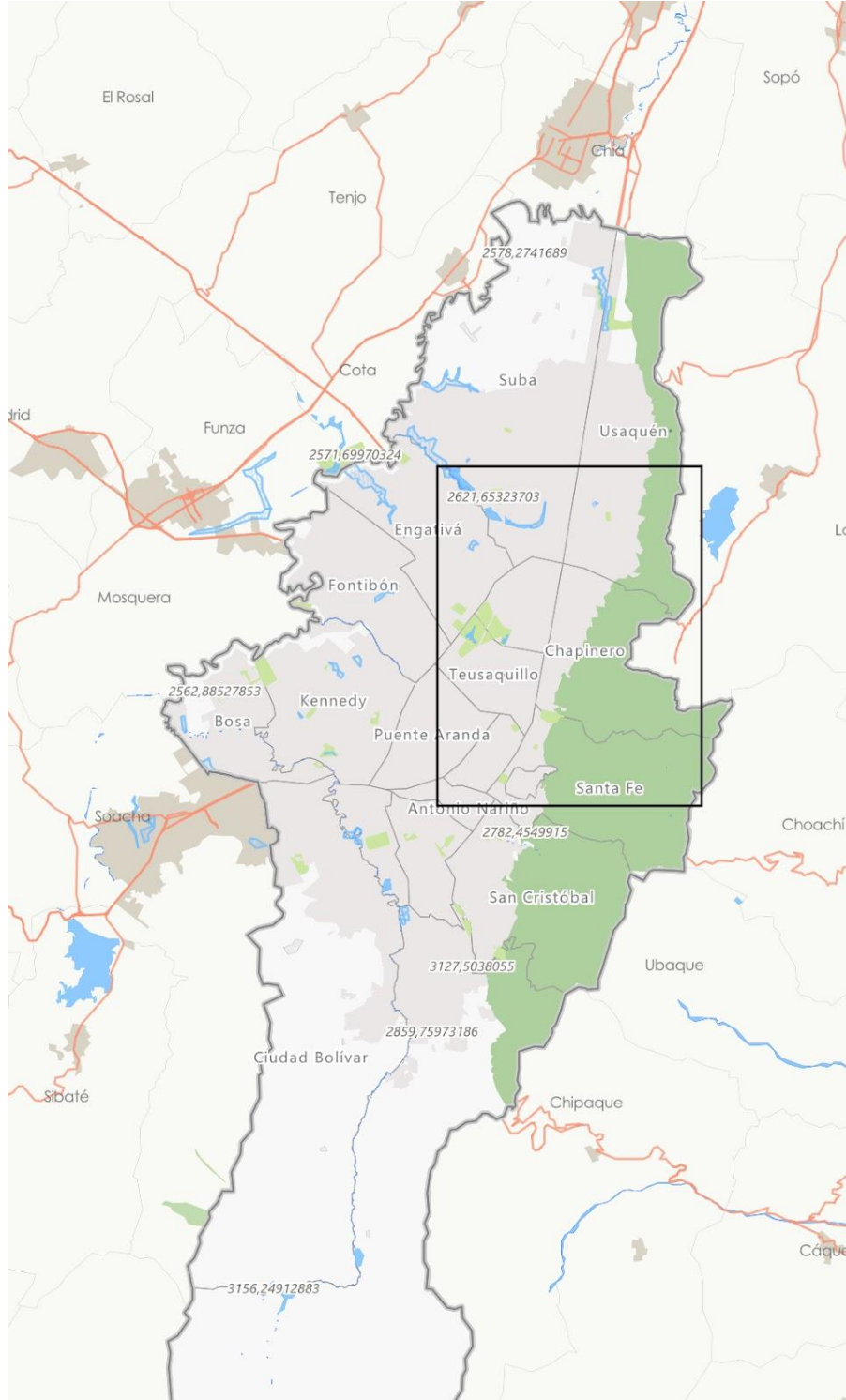


Figure 6.1. Map of Bogotá showing the area of the selected neighbourhoods (Mapas Bogotá, 2022)

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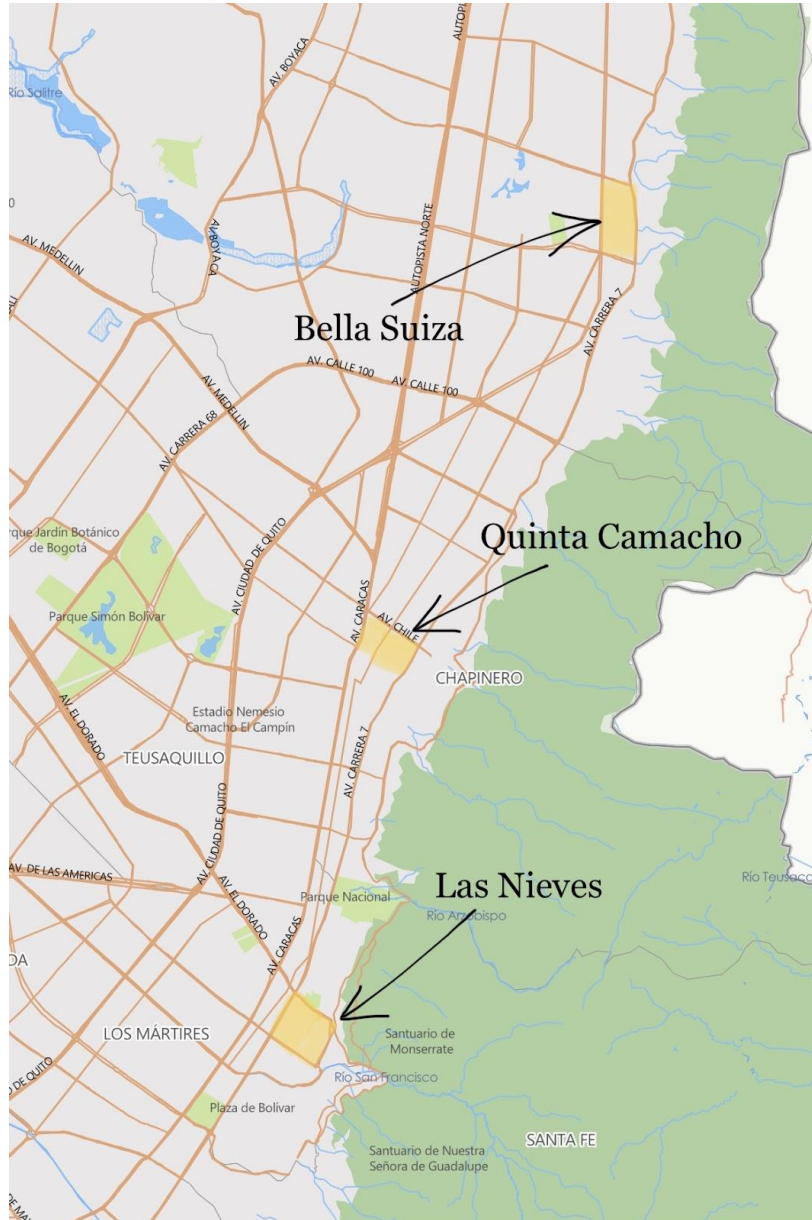


Figure 6.2. Map of the selected areas in Bogotá (Mapas Bogotá, 2022)

6.1.1 Las Nieves

Las Nieves is a neighbourhood of the locality Santa Fe in the city of Bogotá. It belongs to the historical parts of the city centre and is located in the east next to the mountains (Diaz, 2010).

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The neighbourhood is separated from the northern areas by 26th Street, from the southern areas by 19th Street, from the western areas by Tenth Avenue and from the eastern parts by Third Avenue, see figure 6.3. Both 19th and 26th Street are heavily trafficked. Just a few blocks south of the area, the famous tourist area, La Candelaria, is located (Google Earth, 2022).

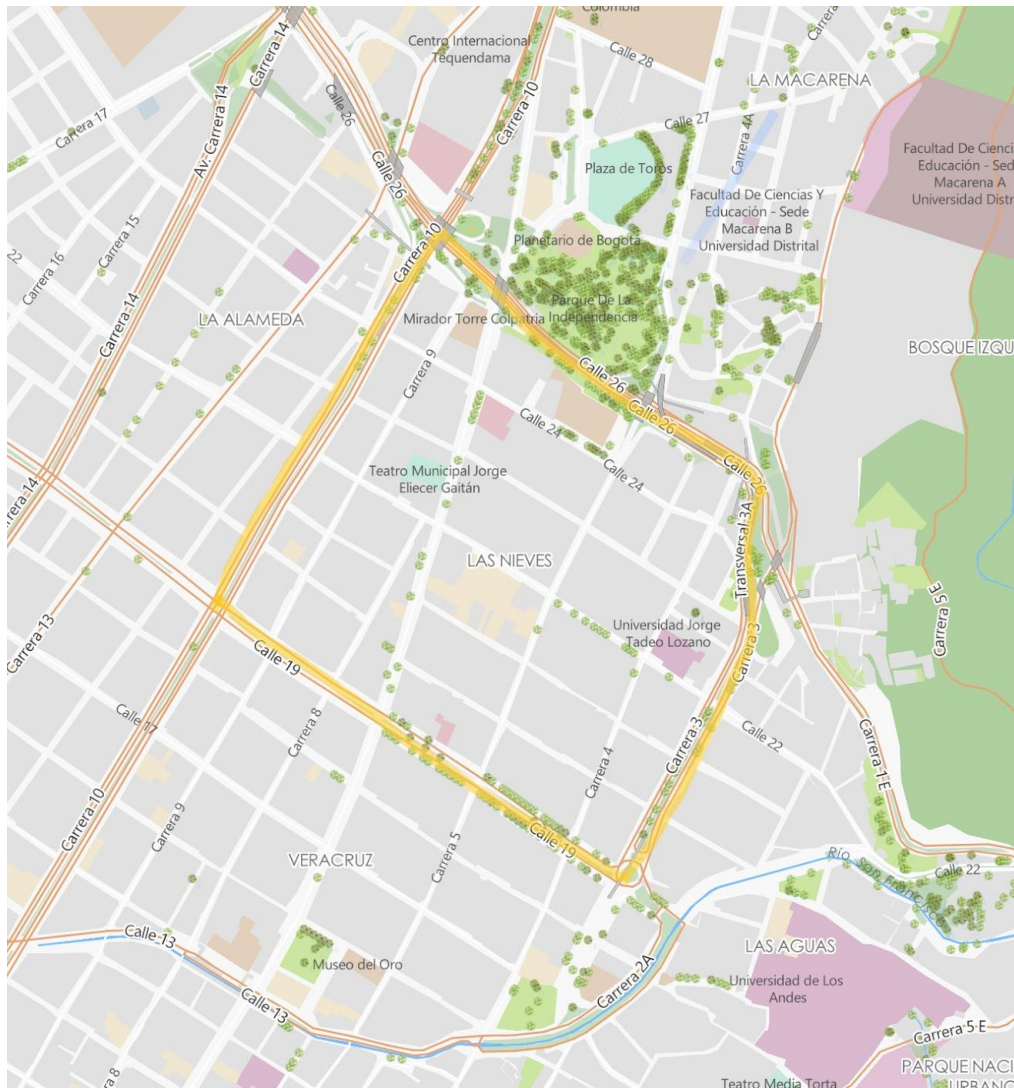


Figure 6.3. Map of Las Nieves (Mapas Bogotá, 2022)

In this area, there are universities, museums, theatres, libraries, a church, and similar functions. The area also contains several student housing and large office buildings.

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The businesses and services in Las Nieves are mainly located on the seventh street and 19th street, but there are some smaller ones within the area.

The buildings in the area were originally only low-rise buildings, but lately more high-rise buildings have been built, see figure 6.5, and today there are even several skyscrapers, see figure 6.4 (Colture, 2019). Many of the buildings in the area are in bad shape. It is not unusual with broken windows or scribbles on the facades. During the site visits to Las Nieves, it was noticed that there were quite a lot of homeless people staying in the area.



Figure 6.4. Example of skyscrapers in Las Nieves (Google Maps, 2022)



Figure 6.5. Example of buildings in Las Nieves (Google Maps, 2020).

There are many parking lots that are delimited to the sidewalks with a long and high stone wall or a long fence, sometimes with barbed wires on top of them, see figures 6.6 and 6.7. The parking lots might have been placed in this neighbourhood due to the number of workplaces in the area, but most of the parking lots close at night.

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Figure 6.6. Example of wall with wires, protecting a parking lot (Google Maps, 2020)



Figure 6.7. Example of fence, protecting parking lot in Las Nieves (Google Maps 2020)

The streets in Las Nieves are generally in poor condition with very high curbs. Most of the streets and sidewalks in the area are very narrow and worn down, and several of them are also broken with potholes, see figure 6.8. The materials of the sidewalks differ and there does not seem to be any continuity. Around the universities, among others, the pavements are in better condition and a lot wider, see figure 6.9.



Figure 6.8. Example of broken street in Las Nieves (Google Maps 2020)



Figure 6.9. Example of pavement in front of university in Las Nieves (Google Maps 2020)

In figure 6.10 below, a section from street 21 in Las Nieves is shown to clarify how the scale and proportions may be in the area. The section is only estimated due to the inaccessibility to measure neither streets nor buildings in Bogotá.

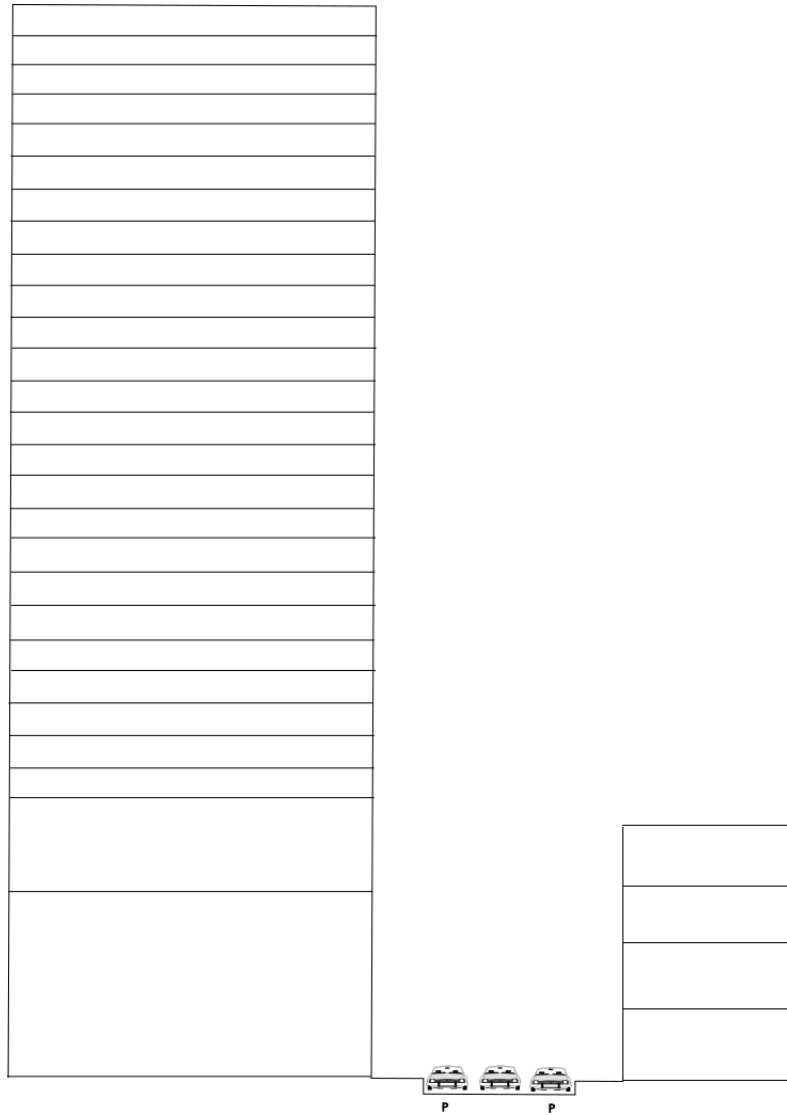


Figure 6.10. A section from street 21 in Las Nieves.

6.1.2 Quinta Camacho

Quinta Camacho is a neighbourhood located in the locality Chapinero in the north-eastern part of Bogotá. Quinta Camacho consists of about 30 blocks of various shapes and sizes, and is located between 67th and 72nd Street, and between Seventh and 14th Avenue, see figure 6.11, also called Avenue Caracas. Both Avenue Caracas and

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Seventh Avenue are trafficked with both cars and buses, and on the seventh street also a bike lane (Villa, 2020).

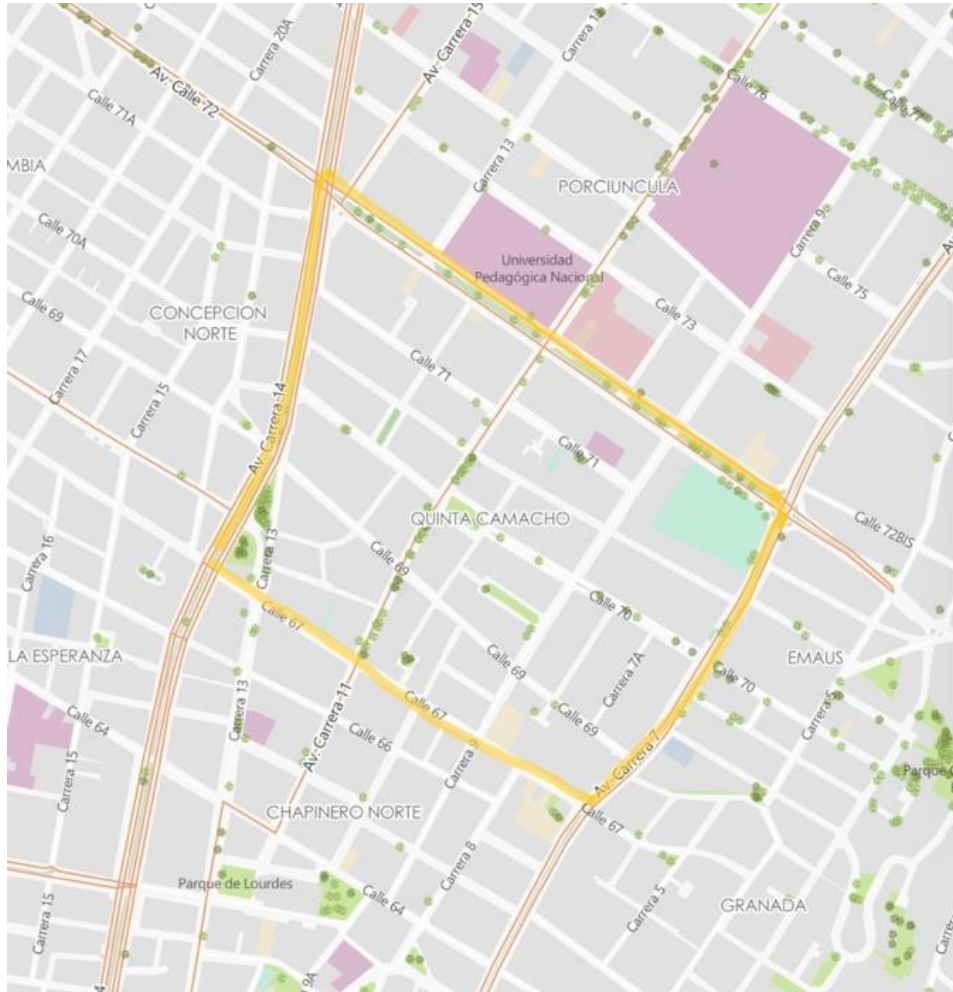


Figure 6.11. Map over Quinta Camacho (Mapas de Bogotá, 2022)

The buildings in this neighbourhood are mostly around two stories, except for a few higher buildings. In Quinta Camacho, the houses are mainly in good shape and often made of bricks, see figure 6.12, but there are several houses in worse shape.

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Figure 6.12. Example of houses Quinta Camacho (Google Maps, 2022)

There is a lot of housing in Quinta Camacho, but the area is also packed with restaurants and bars, often with outdoor seating facing the street, see figure 6.13. There are also theatres and other services in the area, mainly on 67th Street but also within the area.



Figure 6.13. Example of restaurants with outdoor seating in Quinta Camacho (Google Maps, 2022)

In the area there are several smaller parks and a lot of greenery planted in the area. The sidewalks in Quinta Camacho are wide and well maintained by rule. On each side of the street, there are sidewalks often with trees planted between the sidewalk and the street, see figure 6.14. Most of the roads within the area are one-way, but some of the two-way streets have a strip of grass with trees on it to divide the two lanes.

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Figure 6.14. Example of greenery and trees in Quinta Camacho (Google Maps, 2022)

The section below is from avenue 9 in Quinta Camacho, see figure 6.15. Its purpose is to give a sense of examples of proportion and scale in the area. The section is only estimated due to the inaccessibility to measure neither streets nor buildings in Bogotá.

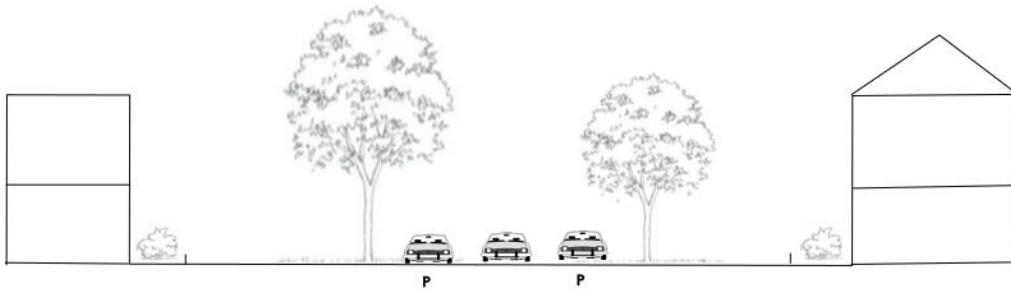


Figure 6.15. Section from avenue 9 in Quinta Camacho.

6.1.3 Bella Suiza

Bella Suiza is a neighbourhood located in the northern part of Bogotá in the locality Usaquén. The neighbourhood is bounded by Seventh and Ninth Avenue to the east and west, and by 127th and 134th Street to the north and south, see figure 7.16.

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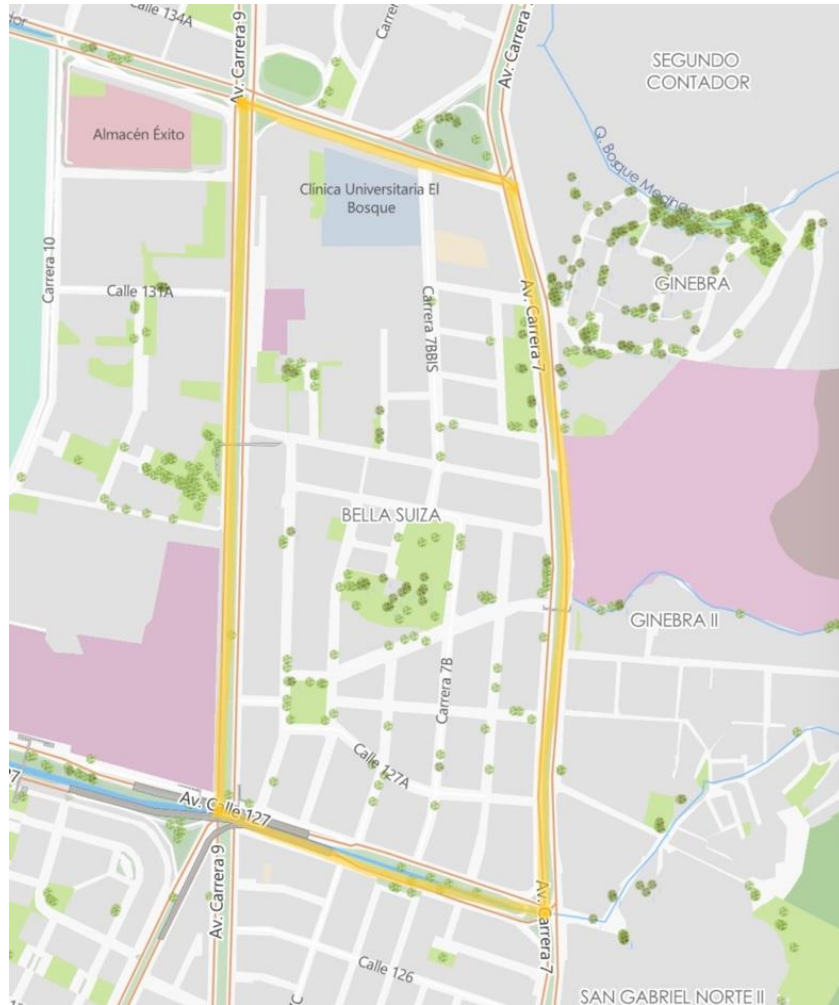


Figure 6.16. Map over Bella Suiza (Mapas de Bogotá, 2022)

The area is mainly a residential area with many gated communities of different sizes. In the northern part of the neighbourhood there are universities, libraries, and a hospital. In this area there is a block in front of the university where there are a few restaurants and services. Most of the businesses and services in the neighbourhood are clustered in two streets in the area, with the one by the university as one and the other one in the most southern part of the area, see figure 6.17. There are also a few services scattered in the area.

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Figure 6.17. Clustered services in the south of Bella Suiza (Google Maps, 2022)

The houses in Bella Suiza are well maintained and very homogeneous. They are mainly in the same architectural style and around six stories high, see figure 6.18. There are a few both higher buildings and lower buildings in the neighbourhood with different architectural styles. Many of the buildings in the area have balconies facing the streets, see figure 6.19.



Figure 6.18. Example of house in Bella Suiza (Google Maps, 2022)



Figure 6.19. Example of house with balconies in Bella Suiza (Google Maps, 2022)

In the middle of the neighbourhood there is a big park called the Bella Suiza Park, where there are many benches, an outdoor gym, a playground, and lots of space for other activities. The park is clean, well maintained and consists of a lot of greenery. There are a lot of housings located around the park, with balconies, windows and patios facing the park. Besides the Bella Suiza Park, there are several smaller parks in the area and a lot of greenery in the whole neighbourhood. The sidewalks in the neighbourhood

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are wide and are clearly demarcated from the road with grass, bushes, and trees, see figure 6.20.



Figure 6.20. Example of greenery and trees in Bella Suiza (Google maps, 2022)

In figure 6.21 below, there is a section from avenue 7c in Bella Suiza. It gives a sense of the proportions and scales in the neighbourhood. The section is only an estimation due to the inaccessibility to measure buildings and streets in Bogotá.

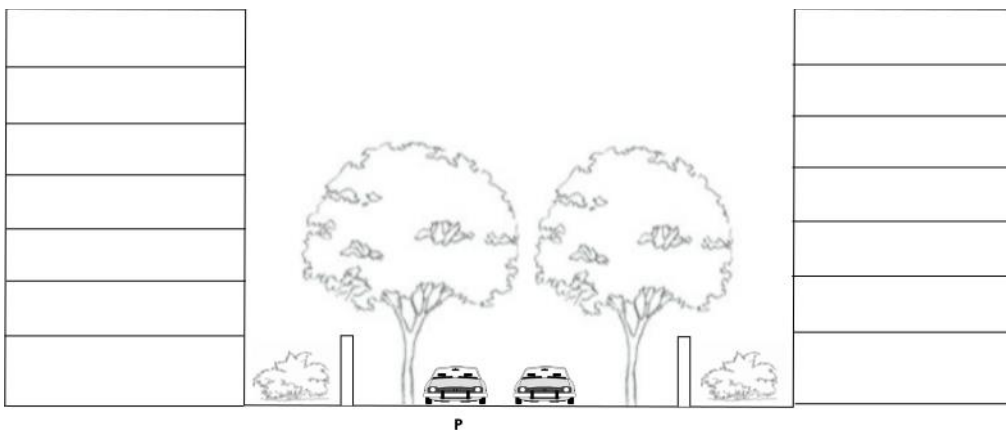


Figure 6.21. Section from avenue 7c in Bella Suiza.

6.2 Analysis according to the Modified Quality Criteria

To be able to analyse the areas, the Modified Quality Criteria is used, see Sections 2.2.1 and 5.1.1. It is divided into four categories with subcategories. Every area has been observed based on the criteria and rated depending on how they fulfil it. An area can either meet the criteria, somewhat meet the criteria, or not meet the criteria. Below follows a description of how each area meets each criteria. A summary of the rating is shown in Section 6.2.1.

Category 1: Protection

Criteria 1: Protection against traffic and accidents

In Las Nieves, the sidewalks are mainly narrow, but the roads are mostly one-way. Within the area, there is a large street with vehicles running in both directions. The sidewalks are generally in bad shape, with a lot of potholes and cracks. On some sidewalks, the curbs are very high which can protect pedestrians against accidents, but also be the reason for accidents due to them being unusually high.

There are often trees between the sidewalks and the streets, in Quinta Camacho. The sidewalks are wide and intact, and some have poles facing the street in several open corners that can protect against possible accidents, see figure 6.22. The traffic is relatively calm within this neighbourhood.

In Bella Suiza there are trees along many of the sidewalks that protect against traffic and possible accidents, see figure 6.23. The roads within the area are also smaller and not so trafficked.

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Figure 6.22. Poles protecting sidewalks in Quinta Camacho (Google Maps, 2022)



Figure 6.23. Example of trees along the street in Bella Suiza (Google Maps, 2022)

Criteria 2: Protection against violence and crime

Las Nieves has some streets that are crowded while others are empty. People are usually in the area during the day since there are many schools and workplaces in the area. In the evenings, the area is emptier and poorly lit. Many of the services close relatively early in the evening and use pull-down protection for doors and windows, which also means that no light comes out into the streets, see figure 6.24.



Figure 6.24. Example of pull-down protection on stores in Las Nieves (Google Maps, 2020)



Figure 6.25. Example of gates protecting residents (Google Maps, 2022)

Many people use Quinta Camacho as it is full of restaurants and has a large grocery store in the middle of it. In addition, many people live in the area and the parks are used around the clock by many different people.

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In Bella Suiza there are not that many people on the street. Instead, people gather on the streets in the outskirts of the neighbourhood that have many businesses and restaurants, as well as in the large park. The fact that the neighbourhood contains a lot of gated communities gives the impression that residents protect themselves against violence and crime but that people on the street are left to fend for themselves, see figure 6.25.

Criteria 3: Protection against unpleasant sensory experiences

You are quite exposed to the weather in Las Nieves. The area does not have many trees and bushes in general, that protect you from the weather. It is only in a few places where there are trees. The many high-rise buildings in the area can catch the wind into the area, but also bring shadow to the streets. Even pollution is something you really must put up with in the area, due to the heavily trafficked roads around it. In Las Nieves it is common to have bars to protect windows and doors, see figure 6.26, and a lot of the windowpanes are already broken, and there is doodling and scribbling on most of the buildings.



Figure 6.26. Example of bars on windows and doors in Las Nieves (Google Maps, 2020)

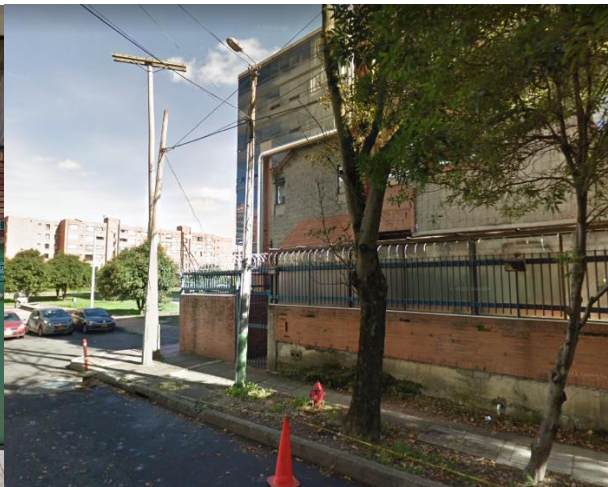


Figure 6.27. Example of fences with barbed wires in Bella Suiza (Google Maps 2022)

There is a lot of greenery in Quinta Camacho, both in the form of trees along the sidewalk that protect against sun and rain, but also in the form of smaller parks.

Bella Suiza is full of greenery and large trees that protect against the weather. These are both located along the streets and sidewalks, but also in several front lawns and

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public parks. In some cases, in the area there are bars for windows and doors, barbed wire above the fence and fencing for doors, see figure 6.27.

Category 2: Comfort

Criteria 4: Opportunities to walk

There are a lot of potholes in the streets in Las Nieves, and the sidewalks are made of many different materials which make the streets very uneven. A lot of the sidewalks are made of tiles, and these are often broken and collect water when it rains and splashes up if you walk on them. Seventh Avenue is a pedestrian street within Las Nieves though, and it is frequently used.

Streets and sidewalks are mainly intact and wide in Quinta Camacho, see figure 6.29. There are several places without crosswalks, but the car traffic in the area is so light that it is not needed. The buildings are interesting in the area, and many patios are nicely decorated with lights and plants.

In Bella Suiza, the pavements are in excellent condition. They are also relatively wide, although large parts of many pavements are made up of grass where trees are planted. So, the area of the sidewalk where you must walk can be perceived as a bit narrow, see figure 6.28.



Figure 6.28. Example of sidewalk in Bella Suiza (Google Maps 2022)



Figure 6.29. Example of a street in Quinta Camacho (Google Maps, 2022)

Criteria 5: Opportunities to stand/stay

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The sidewalks in Las Nieves are usually too narrow to stand and stay, but there are many long walls you can stand and lean against.

In Quinta Camacho, there are many walls, trees and posts you can stand and lean against.

There are many walls to lean against within Bella Suiza as well as very beautiful greenery within the area, which is very well maintained.

Criteria 6: Opportunities to sit

On most of the streets in Las Nieves, there are not many possibilities to sit, there are a few possibilities around the universities and there are several benches on Seventh Avenue.

The low walls in Quinta Camacho can function as secondary seating. In the parks there are many places to sit. Otherwise, there are no benches on the streets, except at bus stops. There are also many benches in the parks, see figure 6.30.

The many low walls in Bella Suiza function as secondary seating. Several benches are also integrated into some of the walls. There are many benches in the parks, see figure 6.31.



Figure 6.30. Benches in a park in Quinta Camacho (Google Maps 2022)

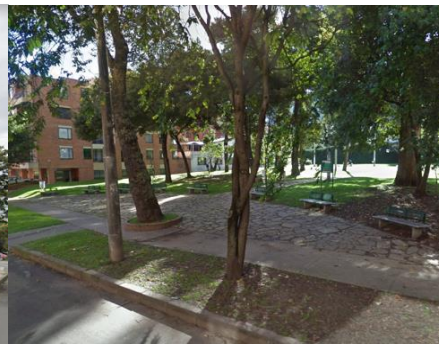


Figure 6.31. Benches in Bella Suiza Park (Google Maps 2022)

Criteria 7: Opportunities to see

As there are not many trees or other greenery on the streets in Las Nieves, you have good visibility during the day, however, the lighting is worse in the evenings. The tall

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buildings in the area cast a shadow over large areas, which can make it even darker in the evenings.

In Quinta Camacho, there is a lot of light on the street, both from streetlamps, but also from restaurant patios and all residential windows in the area. The greenery in the area does not make it much darker, as the trees by the sidewalk are more sparsely spaced and usually only on one sidewalk along a road, and there are also a lot of low light lanterns under the trees. The parks have greenery of varying height and density, which means that they do not obstruct the view.

There is a lot of lush greenery along the streets in Bella Suiza, which stops some light from coming down to the street, see figure 6.32. There is light coming from several buildings, however there are many walls of gated communities that stop the light from reaching the street, see figure 6.33.



Figure 6.32. Example of greenery in Bella Suiza (Google Maps 2022)



Figure 6.33. Example of walls and gates in Bella Suiza (Google Maps, 2022)

Criteria 8: Opportunities to talk and listen

In Las Nieves there are relatively loud noises from 19th Street that run right next to the area. Many larger roads also run north of the area, which also emit a lot of noise.

Since there are no major roads within Quinta Camacho, the sound volume and noise are relatively low in the area. Some of the roads in the outskirts of the area are more trafficked though, but the noise from these does not travel far. In the parks, there are many benches that create so-called talkscapes.

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Within Bella Suiza, noise levels are relatively low, however, there is a very large road with high speeds just outside in the west which brings some noise to the nearest streets and homes. There is a lot of street furniture that brings talkscapes in the area.

Criteria 9: Opportunities for play and exercise

There are no opportunities for play or exercise within Las Nieves that are not private.

In Quinta Camacho, it is mostly the parks that invite you to play and exercise.

In the large park in Bella Suiza there are opportunities for all kinds of exercise and play. There are both outdoor gyms, playgrounds and walking paths in parks.

Category 3: Delight

Criteria 10: Dimensioned at human scale

There are many tall buildings in Las Nieves, which makes many streets feel narrower, see figure 6.34. The streets are already relatively narrow and the same goes for the sidewalks, see figure 6.35. The area also contains some lower buildings, but also long walls that block off large parking lots.



Figure 6.34. Example of high-rise building in Las Nieves (Google Maps, 2020)

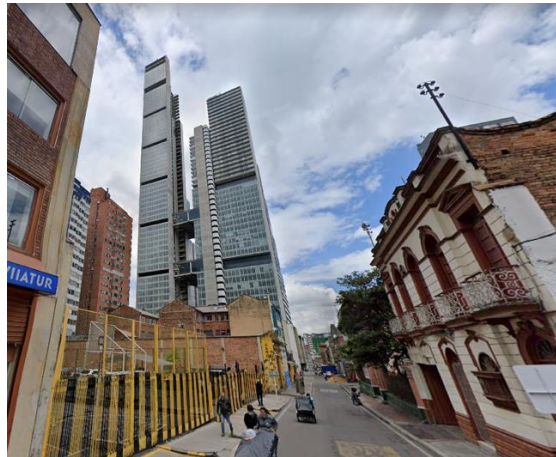


Figure 6.35. Example of a street in Las Nieves (Google Maps, 2020)

Most of the buildings in Quinta Camacho are low, around two stories.

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The houses are of similar height in Bella Suiza, around seven stories, but here there are a few higher complexes.

Criteria 11: Opportunities to enjoy the positive aspects of climate

The high buildings in Las Nieves provide shade to large areas.

With all the trees and greenery in Quinta Camacho, there is plenty of shade. But it is also possible to walk in the sun in the area as the trees are on some streets are planted along one side of the street.

With all the large trees in Bella Suiza, a lot of shade is created, but you can also get sun in some places in the neighbourhood.

Criteria 12: Positive sensory experiences

In Las Nieves, many of the lower buildings are originally of older architecture and design. There are also many graffiti paintings on walls in the area.

In most of the corners facing intersections in Quinta Camacho, there are many rounded edges of houses, walls, and bushes, which opens the intersections and makes them feel more welcoming, see figure 6.36. There are many beautiful houses with different designs in the area. Although most of the houses are low, the trend is broken by some taller houses, see figure 6.37. The greenery in the area varies in size and type along the streets.



Figure 6.36. Example of rounded corners in intersections in Quinta Camacho (Google Maps, 2022)



Figure 6.37. Example of houses and visual interruptions in Quinta Camacho (Google Maps, 2022)

There is very beautifully maintained greenery in large parts of Bella Suiza. Most houses are brick houses, but most of them are the same age, shape and with a similar design.

Category 4: Safety

Criteria 13: Presence of human life

Similar functions, such as universities, office buildings and parking lots, in Las Nieves make the streets empty during large parts of the day. For women, empty streets are perceived as unsafe, and they would probably take a detour and choose another path than walk into an empty area. There are some people on the streets in Las Nieves, but it is usually during rush hours. On the two main streets, 19th Street and Seventh Avenue, there are a lot of people during many hours of the day.

The many restaurants in Quinta Camacho will attract a lot of people to the area. But for the area to feel even safer for women with more presence of human life, it should contain more different businesses, stores and bars that attract a lot of different people during different parts of the day. The fact that most of the buildings in Quinta Camacho are residences and around two stories, brings human life from the inside of the houses to the streets. This will create a feeling that people are close and watching over you, which for women is an important factor in feeling safe.

The similar functions in the northern part of Bella Suiza will result in that part being empty during large parts of the day, which will make the area perceived as unsafe for women. Even the streets in the more residency-filled parts of the area are quite empty. This can be a result of the many gated communities which indicates that there is something to protect oneself from on the streets. This makes one feel unsafe and vulnerable on the street, and most of all that no one is watching over you. This in combination with the lack of restaurants, stores and businesses that attract outsiders to the area, but also get residents out on the streets, will make the streets perceived as unsafe for women.

Criteria 14: Overview

Some of the blocks in Las Nieves are longer than usual, and this combined with long walls protecting parking lots, makes the blocks seem even longer, which for women is an unsafe factor due to the barrier effect they bring. The many narrow streets and sidewalks will increase this feeling and decrease the possibility to get an overview of the area.

The many low buildings with wide streets and sidewalks make Quinta Camacho very easily overlooked. It is common that the corners in the intersections are cut off which makes the area even more overlookable. The contains a lot of greenery and trees, but

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these are positioned sparsely and are of different height and densities. Even in the parks in the area, the greenery is not too dense or high, and are not experienced as intimidating.

In Bella Suiza, the many walls surrounding the gated communities create a barrier effect, and in combination with the tall buildings in the area it comes off as a bit intimidating and not easily overviewed. The greenery and trees in Bella Suiza are relatively tall and dense and can create a feeling of unsafety, especially where they are standing in groups and there is no ability to see through them. For women, this is an aspect that brings a sense of unsafety and will often make women choose another path to avoid passing these areas that cannot be overlooked.

Criteria 15: Lighting

The high-rise buildings in combination with narrow streets in Las Nieves will make the streets darker and more intimidating. The fact that several of the buildings do not have windows on parts of their walls, prevents light and life from coming out to the streets.

The many trees and bushes in Quinta Camacho do not prevent the light from either the sky or streetlights from reaching the streets. This is mainly because of the width of the streets and sidewalks, but also because of the choice of different trees and bushes. On many of the houses there are front patios, either private or in connection with restaurants. These are often lit up with different lights or light strings, which spread out into the streets.

The dense greenery in Bella Suiza and the tall trees will prevent light from coming down to the streets. The same goes for the many tall buildings, especially in combination with narrow streets. The walls protecting the gated communities, will also prevent light from windows on the first stories, from coming out to the streets.

6.2.1 Summary

Below follows the grading of each neighbourhood's result, see figure 6.40, according to the Modified Quality Criteria, see figure 6.39. Every subcategory is graded based on the scale in figure 6.38.

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-  Meet the criteria
-  Somewhat meet the criteria
-  Do not meet the criteria

Figure 6.38. Grading scale of the Modified Quality Criteria.

- Protection
 - 1) Protection against traffic & accidents
 - 2) Protections against crime & violence
 - 3) Protection against unpleasant sensory experiences
- Comfort
 - 4) Opportunities to walk
 - 5) Opportunities to stand/stay
 - 6) Opportunities to sit
 - 7) Opportunities to see
 - 8) Opportunities to talk & listen
 - 9) Opportunities for play & exercise
- Delight
 - 10) Dimensioned at human scale
 - 11) Opportunities to enjoy the positive aspects of climate
 - 12) Positive sensory experiences
- Safety
 - 13) Presence of human life
 - 14) Overview
 - 15) Lighting

Figure 6.39. The Modified Quality Criteria

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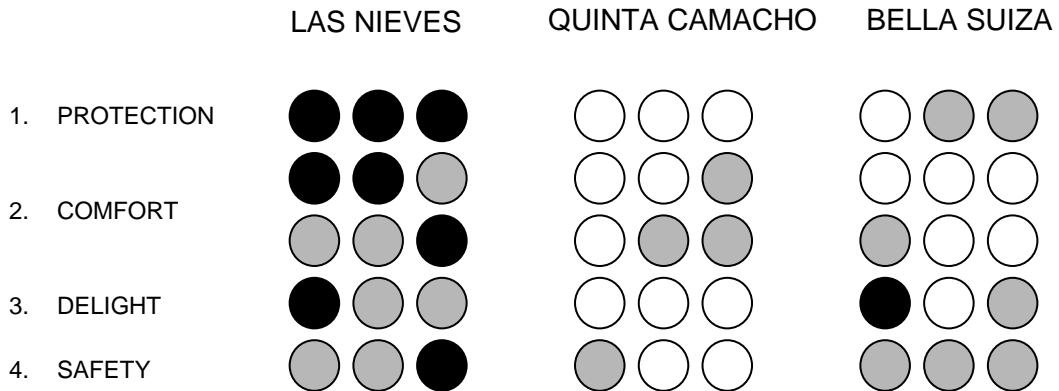


Figure 6.40. Grading of the three selected neighbourhoods according to the Modified Quality Criteria.

6.3 Diversity

For the analysis of the three areas according to Jane Jacobs, her theory about diversity is used. This theory is divided into four aspects that all must be fulfilled for the area to be perceived as safe. Below follows a description of how each area fulfils each aspect.

Aspect 1: Mix of functions

In Las Nieves, most of the services and businesses are located on the larger streets in the area, on 19th Street and Seventh Avenue, but there are also many smaller services within the area. The services are varied but often close early in the evening, if not already at daytime. The area has several universities and workplaces, and some student housing. The neighbourhood has a lot of theatres, but many of them are closed now. There are also some other functions in the area, like libraries and museums. A major part of the neighbourhood is taken up by parking lots.

Quinta Camacho contains many restaurants and bars, and on the larger roads that delimit the area, there are many different services and businesses. The different services and restaurants are together open at large parts of the day. There are both housing and workplaces in the neighbourhood, but most office buildings are located on the streets at the edges of the area.

In the northern part of Bella Suiza there are universities, a hospital, and several restaurants, and in the southern part there are services and restaurants. In between these

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there are a few small stores, but mainly this area contains residences. The service and restaurants in Bella Suiza all close in the evening, and at latest at nine.

Aspect 2: Short blocks

Many of the blocks in Las Nieves are short, but there are a few blocks where, for example, universities are located that are much longer. For the universities, libraries, and other large buildings to fit, some blocks have been integrated into the double size. Some of the blocks are also perceived as longer since they contain high-raised buildings or even skyscrapers.

In Quinta Camacho, most of the blocks are short, but they are all the same. The blocks in this neighbourhood differ a lot and the checkerboard pattern are disrupted sometimes. But due to the wide streets, the blocks are perceived shorter than they are sometimes.

Bella Suiza also has a lot of short blocks, but these are clustered together, making the rest of the blocks somewhat larger. Especially the area with the universities and the hospital. Here there is a large, fenced area which instead is perceived as a very large block. The gated communities also make the blocks feel longer.

Aspect 3: Mix of houses

In Las Nieves the houses differ a lot, from older, one story, single-residential houses to modern, high skyscrapers or large residential complexes for students. Many of the old houses in this neighbourhood have been torn down, making space for the several high-rise buildings. In Las Nieves there are a lot of visual interruptions with the several skyscrapers and other very tall and large buildings. This area also lacks small parks between buildings and instead contains many parking lots with walls or fences towards the streets.

Quinta Camacho has many older houses, but also several modern ones. They are mainly very low, but there are some visual interruptions from higher buildings. There are a few smaller parks between the buildings in the area, and the buildings, as well as their front lawns, are designed differently.

The houses in Bella Suiza are very homogeneous both in terms of age, condition, design, and size. There are some older houses in the north of the neighbourhood and a

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few high-rise buildings, contributing to some visual interruptions. There are some parks around the neighbourhood, both large and small.

Aspect 4: High concentration of people

In Las Nieves there are a lot of office buildings but also some housing, the largest ones being for students. Which will both bring people to the area during some parts of the day but especially leave the area empty during large parts of the day. Some of the high-rise buildings do not have windows to residences on the lower floors of the buildings. Which means that the life inside the houses does not come out into the street and makes the street feel desolate and empty. The neighbourhood is also generally in poor condition and both streets, sidewalks and buildings are broken and run down. There are a lot of broken windows and worn-down buildings in the area, and many windows also have bars in front of them. This will give the impression that the neighbourhood is not taken care of and that nobody wants to be in it.

Many of the buildings in Quinta Camacho have a front lawn or patio facing the streets, either for residents or for bars or restaurants. This will give the impression that there are people present in the neighbourhood. There is mainly housing and restaurants within the area and office buildings in the outskirts, which is not an optimal division, but as residences are mixed with services within the area, more people will come here. The area is well maintained, with some minor flaws, like broken curbs or cracks in the pavement, making it perceived as taken care of and welcoming.

Bella Suiza is a well-maintained area both regarding the buildings, the streets, and sidewalks, but also the parks and other greenery in the neighbourhood. By this the area is taken care of and welcoming. Many of the buildings have balconies facing the streets, but there are also a lot of walls to the gated communities. The balconies get the life inside the building out to the street, and it is perceived that there are people present. But the walls around the gated communities will do the opposite, making the area perceived as unwelcoming and unsafe.

7 Discussion

Colombia has for a long time been an insecure and unsafe country with both civil wars and guerrillas, which have created deep wounds. But with the peace agreement between FARC and the Colombian government signed in 2016, the country can focus on healing those wounds and instead strive towards becoming a welcoming, equal, and safe country for everyone.

Because of the history of Colombia, cities all over the country struggle with inequality and unsafety. With the still growing population, Bogotá is faced with dealing with more inhabitants, including both migrants and refugees, and the risk of becoming more unequal and unsafe. To counteract this development, it is important to place great emphasis on urban planning.

Safety in Bogotá can of course not be solved with only urban planning. It is a city with large socio-economic gaps, and it is difficult to understand their conditions with being a country with widespread poverty which recently, and still in some places has had armed conflicts.

However, it is possible to create safer environments with urban planning starting with determining which aspects make the area unsafe. One example is the work UN Women are doing to create safe and empowering public spaces, where they with their global initiative develop, initiate, and evaluate different strategies and approaches to prevent women and girls from feeling unsafe in urban spaces (UN Women, 2020).

The purpose of this thesis has been to identify unsafe factors in urban areas in Bogotá and to analyse if these spaces can become safer for women with the implementations of different urban planning theories. The three selected neighbourhoods were perceived very differently regarding safety, and this has been explained through this thesis. To achieve this, Jan Gehl's and Jane Jacob's theories have been the starting point of the analysis. In this chapter, the results from the site visits are discussed, followed by ideas on further research and finally a reflection on sources of error.

7.1 Analysis

According to the results from Gehl's Quality Criteria, Quinta Camacho is the most attractive and welcoming neighbourhood, which according to Gehl, also would make it the safest neighbourhood for women. With the new criteria for the Modified Quality

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Criteria, regarding safety for women, Quinta Camacho is also considered the safest area. Consistent with this argument, Las Nieves is the most unsafe area and Bella Suiza the second safest. The results from Jane Jacobs theory about diversity also shows that Quinta Camacho is the safest neighbourhood for women, based on it meeting all the four criteria that should be accommodated at the same time to achieve a diverse area. The other two neighbourhoods do not meet all the four criteria and cannot be classified as diverse, and by that, according to Jacobs, not safe for women.

7.1.1 Las Nieves

Las Nieves feels like an area that once flourished but over time has been forgotten and worn down and now no one really cares about it. Especially since it is so close to La Candelaria, the touristy old town, which is full of old colourful houses. But the fact that Las Nieves is located so close to a tourist area, and Seventh Avenue which also attracts some tourists, means that it also gets to take part in the downside of tourism, such as petty theft.

The lack of soft edges and activity on the ground floor makes women feel unsafe and insecure because of the absence of eyes on the street from the buildings. The same applies to the tall buildings as people live so high up that they lose contact with the street, especially the houses lacking windows on the first stories. The tall buildings combined with the narrow streets also makes the area feel more cramped and darker, which will result in a lot of women choosing not to walk through the area because it will feel unsafe and intimidating.

The fact that universities take up such a big area of the neighbourhood will limit the eyes on the street during large parts of the day, because people use these functions during similar times of the day. Having several universities taking up such a large area in a neighbourhood also means that there is not as much room for other functions that create a mixed-use neighbourhood that attract a lot of different people. This means that the crowd in the neighbourhood will be somewhat homogeneous and cause the street during large parts of the day to be empty, making the area feel unsafe for women. This applies especially in the evenings and nights when the universities are empty. Surrounding areas will also be empty without supervision either from the university buildings or from the street. In addition, no light comes from these buildings in the evenings and nights when they are empty, making the streets relatively dark. The same applies for similar functions in the area, like museums and libraries.

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The several building complexes with student housing in the area means that there is also a homogeneous group living in the area. One problem with having so many student accommodations in an area is that it is not unusual for many of the residents to change each semester and the area does not get many permanent natural proprietors, especially not around these buildings. People that will not live in the area for a longer time will not care about the area as much as a permanent resident would. This will result in the streets in Las Nieves feeling a bit abandoned because of the lack of caretakers, which will keep the area worn down and rough looking.

The area can come off as interesting, though, with buildings of different size, age, architecture, and condition, however, there are too many high-rise buildings and skyscrapers that make the streets feel more intimidating and darker. These also contribute to the area getting a more negative impression because they create too many visual interruptions. The area also contains many old buildings, but many of these are in very bad shape and might not last for a much longer time.

One big problem with Las Nieves is that it is in generally bad shape. The buildings with either cracked or broken windows give the impression that no one takes care of them, and that they are very worn down and filled with scribbling. It does not give a welcoming and safe impression. The same applies to streets and sidewalks that are filled with trash, potholes, and cracks, among other things. The lack of greenery, parks, and other recreational areas in large parts of the neighbourhood also makes it not feel welcoming or interesting, and this probably contributes to the area not attracting many people. Around the area, however, there are a lot of people moving around, both on 19th Street and Seventh Avenue. This is because of all the services and restaurants, and that Seventh Avenue is a pedestrian street that draws a lot of people.

The few services on the smaller streets in the area do not attract as many people as the services on the larger streets, and these services also close relatively early in the evenings. After closing they cover both windows and doors with a metal cover, resulting in that no lights will come out on the street and making the streets feel more insecure and unsafe for women.

The fact that some of the blocks are short gives a better impression than if all blocks would have been long. It is easy to move around in the area and a certain feeling of safety is present because of it. However, both the large complexes of universities, student housing and similar, make the blocks appear longer, and often two blocks or more have been flushed together to make room for such a large complex. But these also shed some life to the neighbourhood, the large parking lots, though, surrounded by their

long walls toward the street, make the blocks seem much longer and the neighbourhood less safe since they decrease the number of eyes on the street. These are also single-functioning and take up a lot of space from the whole neighbourhood, creating similar problems as the universities.

7.1.2 Quinta Camacho

Quinta Camacho comes off as an area that people are proud to live in, where you know your neighbours and take care of your neighbourhood. The many low-rise buildings in the area, several with activity on the ground floors, bring life and light to the street. Both restaurants and people's private front lawns or patios facing the streets light up the streets and make you feel seen. Many of the houses are also only around two stories, which makes it easy to look out on the street. In this area there are therefore a lot of natural proprietors keeping their eyes on the streets which will make women feel safer.

Even though many of the houses are low, the area offers an interesting view with both high-rise buildings creating visual interruption and with small parks between the houses, making it interesting to walk around in the neighbourhood. The greenery makes it feel like people care about their neighbourhood and with the mostly well maintained and wide sidewalks you feel welcome. The greenery in the area is not too dense, which makes it possible to see through. The trees and bushes in the area are of different kind and height and do not shadow the streets and sidewalks too much due to their sparse positioning. Even the parks in Quinta Camacho are see-through and do not feel like barriers or intimidating, much because of the generous lighting in and around them. This makes the area perceived as much safer for women due to the lack of dark spaces and the overviewable parks and sidewalks.

Since many of the buildings in the area are of similar architecture, shape, and size, implies that there is a homogeneous crowd living in the neighbourhood. But there are also several houses in worse shape and of different sizes and architecture that implies the opposite. In the eyes of diversity, one could imply that there are too many similar houses for the residents to really be diverse and mixed.

Most of the people on the streets in Quinta Camacho are probably not residents, however, but visitors of the many restaurants and bars. People on the streets will make the streets interesting and increase the chances of residents looking out on the streets. This will create eyes on the streets and the area will somewhat be protected by its residents. The many restaurants in the area means that the area is crowded during both days and evenings, although there may be fewer people between regular mealtimes.

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But many restaurants in this area are open for large parts of the day, which means that there are still people moving around here.

In the streets surrounding the area there are many various businesses and workplaces that attract a lot of people. The many services, restaurants and cafés here also bring people and make the streets very populated during large parts of the day. Even though these streets are much more trafficked than the ones inside of Quinta Camacho, they offer interesting views and many different services that attract many people, making the area very crowded and perceived as safer for women.

7.1.3 Bella Suiza

In the northern part of Bella Suiza where the university and the hospital are located, it can become relatively deserted during large parts of the day, since people mostly are at the university and the hospital during daytime. And the fact that the businesses and restaurants are located on two separate streets at each end of the area means that people are drawn there, leaving the rest of the area relatively empty. There is therefore no significant presence of human life within the area, which will make the streets perceived as unsafe for women.

The impression of Bella Suiza is that it is only for its residents, with the many gated communities and lack of services. Most of the neighbourhood consists of similar buildings, both regarding architecture, shape, and size, implying that there is probably a homogeneous crowd living in the area. This results in the streets being empty during large parts of the day due to the presumably similar lifestyles of the inhabitants.

In the area it is not common that there are neither services nor residences on the ground floors. Instead, it is common to have a security guard keeping watch from the ground floor, which entails only one pair of eyes from each building onto the street. With the many gated communities in the neighbourhood, it will make the eyes on the streets even more limited making the streets perceived as more unsafe for women. The walls surrounding the gated communities will also prevent light from the residences coming out onto the street, which will make the streets feel more unsafe due to the lack of light and life from inside the buildings along the streets.

The many parks in this neighbourhood could possibly attract people, especially the Bella Suiza Park with its several functions. However, the greenery in the area is very dense and makes the streets darker. The denseness of the greenery and trees in the area

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also makes it harder to see through them, which will make spaces around them being perceived as unsafe for women.

The fact that the buildings in the area are very similar means that the area is not very interesting to walk around in and people will not take detours to go through there. This results in the fact that it is probably mostly residents who use large parts of the area. However, the few larger and taller buildings in the area create some visual interruptions and the same goes for the parks. And due to the very well-maintained streets and buildings, the neighbourhood feels more welcoming, taken care of and secure. Even the well-maintained front lawns, parks and greenery on the streets contribute to this.

7.1.4 Comparison

Many would think that the neighbourhood belonging to the highest strata would be the safest, but this is not the case according to the results. Bella Suiza, with the highest strata, is a very well-maintained neighbourhood, but due to its many gated communities and similar houses it attracts a very homogeneous crowd, and the streets will be empty during large parts of the day, making the neighbourhood more unsafe. The fact that the services in Bella Suiza also are clustered to each end of the neighbourhood, contribute to the streets in the rest of the neighbourhood being mostly empty of visitors.

According to the results, Quinta Camacho is the safest neighbourhood of the compared ones in this thesis. Mostly because of the many restaurants and bars in the neighbourhood, but also since most buildings are low and have activity in the ground floors, bringing life and light to the streets, making the streets perceived as safer. Even though Bella Suiza and Quinta Camacho both have a large proportion of similar houses in their neighbourhoods, the houses in Quinta Camacho are much lower, creating eyes on the streets, and are mixed with some houses of different shape, bringing a more heterogeneous crowd to the group of residents and more activity to the streets.

The least safe neighbourhood is Las Nieves, according to the results. Much which has to do with the badly maintained and the worn-down houses and streets, making the area feel unwelcoming, not taken care of and insecure. This will result in people not wanting to be and go through this area, making it somewhat deserted and perceived as unsafe.

One problem both Las Nieves and Bella Suiza have regarding safety for women, is that they have similar functions that are clustered together, taking up a lot of space in the neighbourhood and making these parts very homogeneous and deserted on large parts of the day. Although the neighbourhoods are different on many levels, the same

problem applies, making it clear that different functions in an area are important. And especially that similar functions, that are populated during the same times of the day, should not be clustered together.

In my opinion the neighbourhood Quinta Camacho is perceived as the safest one, with all the activity always going on and the presence of people and life that radiates from both the restaurants and services but also from the low buildings facing the street. The area feels welcoming and pleasant to walk around and stay in. The second safest neighbourhood, according to me, is Bella Suiza, mostly because of that the area is very well-maintained and located in a nicer district. But the question here is if it is only perceived as safe. If something were to happen here, there might not be any people to help you. The problem with Bella Suiza is that the area is relatively empty, and the gated communities imply that there is something you should protect yourself from on the streets.

The least safe neighbourhood out of the three observed ones is Las Nieves from my experiences. This is mainly based on how the area was perceived during the site visits. That it is in very poor condition, scrawled down, that many windows were broken or had bars on them, and that all businesses and services had some type of protection for their doors or barbed wires on their walls. This gave the impression that you must protect yourself from the street and that the streets in this neighbourhood are unsafe. Las Nieves also had many streets that were completely empty during the site visits, which in addition to the condition of the area made the streets feel very unsafe.

8 Conclusion and future research

In this chapter the conclusions from the master thesis are presented, along with future research and sources of error.

8.1 Conclusion

In conclusion there are several aspects that can make an area perceived as unsafe for women. An area that is poorly maintained and looks like no one cares about it, is not welcoming. This together with empty streets due to single-function areas that leave the street empty for large parts of the day, can give the impression that the area is unsafe and cause women to take detours to avoid it. An area that ignores the human scale will feel intimidating due to the lack of the eyes on the streets. And an area without services

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and restaurants in the ground floors that attract people to it will make you feel vulnerable due to the lack of human presence on the street.

Three aspects that are particularly important for women's safety in urban environments were observed during both the site visits and the literature review. These three were added to Gehl's 12 Quality Criteria, creating the Modified Quality Criteria, and the selected areas were also analysed according to these. The three different aspects are the presence of human life, overview, and lighting. These are differently dependent on both Gehl's and Jacob's theories, especially the presence of human life, which depends on the diversity of an area, the functions in the area, as well as the three categories Gehl addresses for an area to be attractive and welcoming, namely: protection, comfort, and delight. The three aspects, with associated sub-aspects, that have been developed through this study to create safer urban environments for women, can be summarised as follows:

- Presence of human life
 - Diversity
 - Different functions
 - Comfort, Protection, Delight
- Overview
 - See-through greenery
 - No dark spaces
 - Short blocks
 - No barriers
- Lighting
 - Streetlights
 - No narrow streets combined with tall buildings
 - No dense greenery

8.2 Future research

This is only one approach to try to plan safe cities. There are many different approaches to creating safer cities. One would be to investigate how diverse the inhabitants of an area really are. And if the areas contain different housing types such as rental property and tenant ownership.

Another opportunity would be to Investigate other socio-economic, sociological, and social factors, such as age, employment, ancestry, salary, education level of people living in the area, the population density in each area, and so on.

It would have been interesting to do an interview study to see if other people's opinions agree with the results in the thesis.

8.3 Sources of error

The results and analysis are based on the experiences and observations of only the author.

The areas were not visited at the same times or on the same days, which can give different views of them.

9 Reflection

Safety is an important issue for both the individual and the society because the feeling of being unsafe reduces people's willingness to use urban spaces. In this context, factors such as social isolation and reduced quality of life are often addressed because of not feeling safe.

How safe urban spaces are designed is a complex and current urban planning issue, which is why the subject has great relevance to be researched further. Creating inviting places where people want to be is a current topic, both in Bogotá and the rest of the world. In today's discussion about sustainable cities, public spaces play a big role. The hope is that this thesis can succeed in shedding some light on the value of safe and welcoming urban spaces, especially for women, and that the thesis can contribute with examples of how different places can be perceived differently regarding safety and why.

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