Fear of crime beyond the walls: Effects of gated communities in neighbouring public spaces. The case of the Greater Metropolitan Area of Costa Rica.

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I, Karla Barrantes Chaves confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

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ABSTRACT

This thesis explores the distribution of fear of crime in neighbourhoods next to gated communities, and their variants, by considering poverty levels and elements of the built environment. Fear of crime is a constant concern in Latin America and gated communities have been spreading rapidly as they are seen as 'shelters' against crime. They are typically walled or fenced, with private security and surveillance devices; their externalities are commonly associated with spatial segregation, socio-economic effects and alterations of the urban fabric. However, there is still a lack of empirical data about the effect of gated communities on the fear of crime at their peripheries. This thesis addresses that research gap by investigating the urban area of Costa Rica (GAM).

The research design is a qualitative approach based on eight case studies. These are neighbourhoods bordering gated communities within the GAM and represent a diverse range of poverty. In each neighbourhood, a walking interview was carried out with community members; it was tracked by GPS and audio recorded. Additionally, there were focus groups, observations and in-depth interviews. A set of maps were produced by georeferencing people's comments through qualitative software and GIS. The core of the empirical data was analysed mostly through thematic analysis by a comparative structure of the eight case studies.

The findings suggest that the physical presence of gated communities produces an emotional response in people living outside their gates, which is fuelled by features of the built environment, residential segregation and inequalities. This research found that non-gated residents in high and middle poverty feel anxious about gated residents, and self-reported intensity of fear increases next to gated communities' edges in almost all poverty ranges. It suggests that fear of crime might also operate in the opposite direction, from neighbouring areas to gated communities.

IMPACT STATEMENT

This research demonstrates how gated communities affect the spatial distribution of fear of crime in their adjacent neighbourhoods. Gated developments have spread quickly in Costa Rica and Latin America, increasing residential segregation and disrupting the urban fabric. This thesis explores the effects of gated communities from an overlooked angle; investigating the perception of safety in public spaces outside gated communities and considering how this has repercussions at differing levels of poverty. The diverse range of case studies employed in this work helps in the analysis of how this urban phenomenon impacts differentially on wealthy and deprived neighbourhoods; women and men; and adults and teenagers.

The investigation expands the academic literature on planning and other fields by exploring how urbanisation patterns, such as gated communities, fuel a feedback loop of fear of crime by both intensifying fear and sustaining it at the same time. Moreover, this research's novel methodological approach contributes to the current body of literature about walking methods and geographic information systems (GIS) for qualitative research. The methods used provide an exemplar that could be replicated in other areas of the Global South and the same, or similar, processes could be reproduced in other research contexts.

Outside academia, the findings of this work will contribute to understanding the consequences of planning policies on people's perceptions of the built environment and how these policies have increased the inequality gap. This thesis proposes new approaches to rethinking the way in which gated communities have been built and suggests an alternative use of existing planning frameworks. These proposals could be implemented beyond the Costa Rican context and be adapted for use in other Latin American countries. The initial findings of this research have already been presented to the Costa Rican Ministry of Housing and Human Settlements (MIVAH) in 2018, which demonstrated an openness to tackling the situation. Another institution involved in the planning framework is the National Institute of Housing and Urban Development (INVU); this, and other institutions linked to the field, will

be contacted and presented with the findings. This connection will be made through the University of Costa Rica (UCR) which has sponsored this research. Furthermore, the Costa Rican constitution (art.88) states that the UCR must issue an opinion about the legal projects of the Costa Rican Legislative Assembly, which provides a window of opportunity for introducing the subject.

The impact of this thesis will be felt at different levels: regionally by providing information to local governments to incorporate in their urban codes; nationally through suggestions to institutions and visualising the result of planning policies; and, finally, internationally by providing evidence of a phenomenon that is occurring with similar patterns not only in Latin America but also in Central America, a region with evident inequalities and high levels of violence. The outcomes of this thesis will be disseminated through scholarly journals, book chapters on relevant studies and in various academic publications; also, they will be used for teaching purposes. The findings have already been presented at conferences in Europe, Latin America and for invited talks. It is expected that the results will also be shared with a range of policy makers in order to foster cooperation between academics, institutions and practitioners.

To my parents Dulce and Mario

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List of Acronyms

CCTV Closed-circuit television

GIS Geographic Information Systems

GPS Global Positioning System

GDP Gross Domestic Product

G.C. Gated community (acronym used in pictures)

CPTED Crime Prevention Through Environmental Design

Acronyms from Spanish names

(Costa Rican institutions and terminology)

ENAHO National Household Survey [Encuesta Nacional de Hogares]

GAM Greater Metropolitan Area [*Gran Área Metropolitana*]

IGN National Institute of Geography [*Instituto Geográfico Nacional*]

INEC National Institute of Statistics and Census [*Instituto Nacional de Estadísticas y Censos*]

INVU National Institute of Housing and Urban Development [*Instituto Nacional de Vivienda y Urbanismo*]

MIDEPLAN Ministry of National Planning and Economic Policy [Ministerio de Planificación Nacional y Política Económica]

MIVAH Ministry of housing and human settlements [Ministerio de Vivienda y Asentamientos Humanos]

NBI Unfulfilled Needs [*Necesidades Básicas Insatisfechas*]

PEN State of the Nation Project [Programa Estado de la Nación]

ProDUS Research Program in Sustainable Urban Development [Programa de Investigación en Desarrollo Urbano Sostenible]

UGM Minimal Geostatistical Units [*Unidad Geoestadística Mínima*]

Chapter 1. Introduction

Fear of crime has a profound impact on people's quality of life. This feeling has devastating effects in many areas of society, economy and social integration (Tandogan & Ilhan, 2016). Individuals face fears in different ways; often their precautionary measures involve restricting the use of the city and public spaces are the places where those feelings are most marked. However, the city could also be a catalyst for those anxieties and the built environment might play a role in intensifying or preventing fear of crime.

A human being's search for safety is a basic need. Maslow's Hierarchy of Needs proposes a model of five tiers, each stage must be fulfilled in order to upgrade to the next level. The order of those needs from the bottom to the top are:

- physiological
- safety
- love and belonging
- esteem, and
- self-actualisation.

After meeting physical needs such as food, shelter, water or sleep, safety is the next one on the list; human beings need 'security; stability; dependency; protection; freedom from fear' (Maslow, 1954:p.39). Therefore, the search for protection is something instinctive; however, the route chosen to obtain that safeguard could affect other members of society.

Gated communities might be seen, for many people, as an option for protection against criminality. This phenomenon started in the United States in the 1980s (Blakely & Snyder, 1997) but quickly expanded in urbanising countries (Webster, Glasze & Frantz, 2002). Gated communities have their conceptual basis on the 'defensible spaces' (Newman, 1973) that proposes the interventions of physical space to facilitate community control. This model encourages community guardianship but also real and symbolic barriers

which, according to Newman, can indeed improve natural surveillance because the space is under the inhabitants' jurisdiction.

Blakely and Snyder (1997) argue that walls around neighbourhoods are more than physical barriers; they are the result of aspirations based on fear and a defence of privilege. Those groups considered themselves as threatened by the social circumstances; according to Caldeira (2000:p.1), they commonly build exclusive fortified enclaves, supported by fear discourses that contribute to legitimising the proliferation of segregation. She says that those practices 'intertwine with other processes of social transformation: transitions to democracy in Latin America, end of apartheid in South Africa and socialism in Eastern Europe, and immigration in Southern California'.

The need for promoting more inclusive and safe cities has been proposed as part of the 2030 Agenda for Sustainable Development, adopted by the United Nations in 2015. It states: 'Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable' (United Nations, 2020:para.11). Among the indicators for the realisation of this goal is the average share of public spaces and the supply of universal access to 'safe, inclusive and accessible, green and public spaces' (United Nations, 2020:para.11.7). Later, in 2016, in the United Nations Conference on Housing and Sustainable Urban Development (Habitat III) that principle was reinforced after adopting The New Urban Agenda, in which cities and human settlements:

> Are participatory, promote civic engagement, engender a sense of belonging and ownership among all their inhabitants, prioritize safe, inclusive, accessible, green and quality public spaces that are friendly for families, enhance social and intergenerational interactions, cultural expressions and political participation, as appropriate, and foster social cohesion, inclusion and safety in peaceful and pluralistic societies, where the needs of all inhabitants are met, recognizing the specific needs of those in vulnerable situations (United Nations, 2017:p.5)

Despite this awareness of the need for creating inclusive and safe cities that promote social cohesion, as suggested in many international agreements, they require an implementation agenda in each country's regulations. That is

maybe one of the most challenging steps, as it required the alignment of public institutions which, in some cases, have reproduced particular urban patterns without being aware of social consequences.

1.1. Gated communities: the overlooked externalities

The rapid spread of gated communities in the global south from the 1990s has been interpreted as a real estate mechanism to attract middle-income residents; mainly because land prices in urban centres have pushed those people towards the peripheries, where informal settlements have also been established (Libertun de Duren, 2012). Those developments have then been walled and monitored with safety devices to convince people to live next to marginalised areas; as a result, gated communities have created a new pattern of spatial segregation reinforcing stigmas about the 'others' and leaving behind the public life (Caldeira, 1996).

Chapter 2 will address how the growth of gated communities in Latin America is the result of external forces such as neoliberalism, globalisation and privatisation, and internal forces like status, lifestyle and safety (Coy, 2006). Fear of crime seems to be a consistent factor in promoting those developments; according to data from the Latinobarómetro study in 2018, around 83% of inhabitants from that region expressed some form of concern about being a victim of a crime (Corporación Latinobarómetro, 2020). In this regard, it seems Latin America is fertile ground to promote gated communities, under the discourse of safety.

However, gated communities provoke externalities over territory; these will also be discussed in Chapter 2. Some effects might be more evident than others, for instance, limitations on general mobility, because connections between road networks are interrupted by gated developments (Lemanski, 2006). Spatial segregation is another effect broadly mentioned in the literature (Blakely & Snyder, 1997; Caldeira, 2000). Other consequences are less 'visible', such as their influence in the land markets and local economy (Roitman, 2010) or reallocation of crime in their surroundings (Helsley & Strange, 1999; Breetzke, Landman & Cohn, 2014). However, the effects of gating over the neighbouring communities require still further research (Le

Goix, 2005). In this respect, during the literature review for this thesis, very limited empirical evidence was found about how gated developments affect fear of crime in neighbouring communities, which highlights the gap of knowledge in this area.

In Costa Rica, gated communities have been created under the condominium scheme which is an ownership system that consists of individual units with shared spaces. Pujol, Sánchez and Pérez (2011) made a quantitative analysis of the urban concentration patterns of closed condominiums in the metropolitan area of Costa Rica. They found that gated communities are not necessarily located in high-income areas; however, those deprived sectors are avoided. Furthermore, they mentioned that condominiums are located in places with few interactions between social groups. Those developments, similar to other countries in Latin America, seek the city's peripheries; Pujol, Sánchez and Pérez (2011) found that long commute times and wide use of private cars might be related to gated communities' construction. They also suggest, hypothetically, that the growing inequality (Gini index) in the urban areas of Costa Rica might be fostered by the spatial segregation that gated communities have precipitated. However, they admit that this statement still requires further research and highlight the urgent need for research about the impact of public policies over residential segregation.

Overall, many externalities of gated communities might be overlooked by local authorities. In this regard, the spread of large, gated communities in Costa Rica could also be the result of weak planning controls and the incapacity of the bureaucratic system to face those transformations efficiently.

1.2. Addressing the research problem

As shown in Chapter 3, in Costa Rica the construction licences for condominiums have grown rapidly since 1997. However, the planning regulations to control their physical features have been weak; the slow institutional process to update the municipal planning tools aggravates the regulatory void (Barrantes Chaves, 2019). In Costa Rica, there is still little research about the externalities of gated communities and their effects on fear of crime, mainly beyond their edges. This is also very limited in Latin America

as a whole. In this regard, this thesis addresses that knowledge gap through the following research questions:

Main question:

- How do gated communities affect the spatial distribution of fear of crime in the neighbouring public spaces?

Secondary questions:

- Is there any variation in fear of crime in those neighbourhoods with higher levels of poverty?
- Which conditions of the built environment within neighbourhoods influence the fear of crime?

These research questions contribute to the discussion that if gated communities are commonly seen as ‘shelters against crime’, paradoxically they might be catalysing the fear of crime towards the neighbouring public spaces, fuelling a vicious circle of fear. The secondary questions are intended to help to answer the main question as they explore variations on the distribution of fear of crime in respect of poverty levels, features of the built environment and other demographic characteristics. Once these two questions are addressed, it will be possible to understand the nuances of fear of crime in each study case and how their particular circumstances resonate into the spatial distribution of fear, as well as the role of gated communities in creating those perceptions. Chapter 4 gives further details on this procedure.

The research design was formulated through the case studies strategy by selecting eight neighbourhoods next to gated communities within the Greater Metropolitan Area (GAM) of Costa Rica. The data collection methods were: walking interviews; focus groups; in-depth interviews; and observations. Once the data were processed, their interpretation was carried out mainly through thematic analysis, complemented by discourse analysis for some sources.

In order to address the main research question, it is essential to define some key concepts; these have been broadly addressed in Chapter 2. However, they need introducing and summarising in order to gain a clear interpretation of this study.

Gated communities: The definition of gated communities in the literature seems to have an acceptable level of consensus. Low (2004:p.12) states that ‘A gated community is a residential development surrounded by walls, fences, or earth banks covered with bushes and shrubs, with a secured entrance’. Blakely and Snyder (1997:p.2) define gated communities as ‘residential areas with restricted access in which public spaces are privatised. They are security developments with designated perimeters, usually walls or fences, and controlled entrances that are intended to prevent penetration by nonresidents’. Caldeira (2000:p.258) who has researched the Latin American context, mainly the São Paulo case, calls them ‘Closed condominiums’. She refers to them as the residential version of fortified enclaves ‘They are physically demarcated and isolated by walls, fences, empty spaces, and design devices…They are controlled by armed guards and security systems, which enforce rules of inclusion and exclusion’. Those definitions suit the Costa Rican context; however, similar to the São Paulo case, they are built under the condominium scheme. Therefore, when this thesis refers to gated communities in Costa Rica, it means residential gated developments under condominium scheme, walled or fenced with private security.

Fear of crime: It is a complex phenomenon with different meanings in the literature; Ferraro and LaGrange (1987:p.72) refer to fear of crime as 'a negative emotional reaction to crime or the symbols associated with crime ... Physiologically speaking, fear involves a series of complex changes in bodily functioning that alerts an individual to potential danger’. Tandogan and Ilhan (2016:p.2011) define it as 'a feeling of "fear" and "insecurity" derived from a feeling of a person who senses his/her personal security to be under the threat'. Ferraro and LaGrange (1987) argue that fear of crime is an issue independent from victimisation; a reduction of actual crime does not necessarily mean a reduction of anxiety. As shown in Chapter 2, there are predictors commonly associated with fear of crime, such as gender, incomes inequalities or age. Anastasia Loukaitou-Sideris (2012) classifies those factors into three main categories: Socio-psychological, Socio-demographic and Environmental; across this thesis, those categories are intertwined. It is

particularly relevant in this research how those factors perform in public spaces and how they link to the presence of gated communities.

Public spaces: Discussions about the definition of public spaces are also approached in Chapter 2. Their definition commonly encompasses physical access to places but also temporal and social dimensions. Manadipur (2003:p.235) indicates that public spaces are where interpersonal relationships take place, as part of both an 'institutional and material common world'. Carmona, De Magalhães and Hammond (2008:p.4) argue that debates about public space in the literature have been ‘characterised by a host of overlapping and poorly defined terms’, which sometimes include subjective aspects. They provide a broad and narrow definition of public spaces in their work; both are discussed further in the literature review. The narrow definition is:

> Public space (narrowly defined) relates to all those parts of the built and natural environment where the public has free access. It encompasses all the streets, squares and other rights of way, whether predominantly in residential, commercial or community/civic uses; the open spaces and parks; and the 'public/private' spaces where public access is unrestricted (at least during daylight hours). It includes the interfaces with key internal and external and private spaces to which the public normally has free access. (Carmona, De Magalhães & Hammond, 2008:p.5)

For this research, that definition adjusts to the study’s aims; as it includes streets, parks, community infrastructure and places that might have a schedule of opening hours.

1.3. Argument of the thesis and its contribution.

This study argues that gated communities produce an emotional response for the people who live outside their gates; that reaction is not homogeneous between poverty levels. The diverse attitudes of non-gated residents towards those developments are triggered by two main circumstances: residential segregation (absence or presence) and physical features of the gated

developments. In order to understand if gated communities produced a distortion in fear of crime in the neighbouring residents, focus groups explored mainly the social dimension; whereas walking interviews addressed the reactions associated with the built environment. It was inevitable that there was an overlap of outcomes between both techniques; however, this intersection enabled reinforcing and complementing information. In this regard, Carmona et al. (2003) describe the importance of understanding the relationship between society and space, as urban design could create potential environments but not determine human behaviours. Hence, people's circumstances, memories, attachment to the setting or community ties influence their reactions in the urban space.

Community and individuals might have pre-existing fears or circumstances that are not necessarily linked to gated developments. For that reason, the walking interviews were initially conducted inside their neighbourhood on roads without contact with gated communities; that helped to understand their overall perceptions. Then, the walk was conducted along the neighbourhood's streets next to gated communities. It enabled a contrast in emotional responses to areas with and without walls or edges. Although other effects of gated communities, such as residential segregation, might affect the neighbourhood as a whole, the walking interviews enabled a chance to explore if the physical design of gated communities might affect safe perceptions because of particular details of the built environment. In this respect, this work addresses both macro and micro dimensions of possible effects of gated communities in neighbouring communities; further details are provided later in the thesis.

This thesis contributes to the knowledge in diverse ways. It approaches the impact of gated communities from a hardly ever explored angle, which is their effects on fear of crime towards neighbouring communities. This study also enriches the theory about fear of crime by delivering empirical evidence about the impacts of dynamic and static elements of the built environment on fear of crime (e.g. traffic and walls); although there is extensive research in that field, this work contributes to a growing body of studies using GIS to support those relationships. It also gives a glimpse of fear of crime in teenagers, which is a

topic that requires further research (Melde, 2011). Also, the thesis engages with more empirical evidence about how men and women perceive the built environment and the linking of those feelings to fear of crime. Moreover, it helps to underline how some planning policies might affect fear of crime, as local governments have the responsibility of controlling the physical features of gated communities in Costa Rica.

The contribution of this research is also methodological. This work applies the principles of walking interviews (Evans & Jones, 2011) but proposes a mechanism to link the spatial information obtained from the talk's track with the qualitative narrative from the conversation; other resources of analysis were added to those tools; they are described in Chapter 4. In general, the methodological structure, the walking interviews and focus groups, as well as their triangulation with in-depth interviews and observations, could be replicated in other studies.

This thesis will contribute to the efforts for researching fear of crime in Latin America. It seeks to collaborate with inputs for investigation in Central America, a region with many challenges and inequalities. Costa Rica, despite being among the Latin American countries with more favourable indicators in healthcare, education, poverty and life expectancy at birth, has levels of fear of crime that are among the highest in the region. It will be noted in Chapter 3, that the intentional homicide rate in this country is considerably lower than the Latin America average; however, according to the Latinobarómetro 2018, Costa Ricans report ranges of fear of crime similar to El Salvador which holds the highest rate of intentional homicide in Latin America and worldwide (World Bank, 2020a).

Costa Rica also reproduces characteristics from other countries in the region. For instance, its income inequality has been growing and the figures are approaching the Latin American average (PEN, 2019a); furthermore, the spatial pattern of gated communities follows the same model as other countries in Central and Latin America. Those particularities, but also similarities, suggest that the Costa Rican case might contribute significantly to the study of the relationship between disparities and fear of crime in the region.

1.4. Outline of the thesis

A general overview of each chapter is presented below, the structure of the thesis includes theoretical discussions, context information, description of the study cases, empirical data, implication of the research in the state of knowledge, recommendations and a research agenda.

Chapter 2 engages two central theoretical debates; the first is related to fear of crime and its associated factors; the second one focuses on the causes and effects of gated communities worldwide but mostly in the Latin American context. This chapter, beyond exploring the literature related to both fields, shows how they are intertwined, as fear of crime might not only be a cause but also an effect of gated communities; the literature review also scans gaps in knowledge about that relationship. The chapter closes by discussing the theoretical and methodological challenges in researching the distribution of fear of crime in the peripheries of those developments.

Chapter 3 describes the Costa Rican context. The chapter provides an overview of this country within the Latin America scene. Also, it gives a brief synopsis of the armed dispute in Central America, which has led to drugs conflicts catalysing fear of crime within the region. After positioning Costa Rica in that context, the chapter details characteristics of the study area. Then it gives an overview of the planning framework and legal procedures to build gated communities; also, an historical description of their spread in the country. The chapter concludes with a contextualisation about forms of community organisation in Costa Rica.

Chapter 4 gives the methodological approach. It details the research questions, hypothesis and the interpretative paradigm of the research. Then it describes some ontological and epistemological approaches. This chapter also justifies the unit of analysis and reasons why researching fear of crime outside of gated communities is necessary. The main body of the chapter is the description of the research methods, which include: selection criteria of the case studies, selection process, logistics of fieldwork, data collection and analysis. After that, it details the organisation of the empirical chapters. It finishes with the ethical considerations of the thesis.

Chapter 5 describes physical and demographic characteristics of the eight case studies. It also addresses aspects of community organisation in each one. The chapter is based on census data, secondary information, aerial photographs and some data collected from the empirical work. This chapter also details some limitations of secondary information. It closes by comparing the conditions of the eight case studies, mainly regarding the census information presented across the chapter.

Chapters 6 and 7 are the empirical chapters; they are organised by macro and micro scope. This thesis classified the effects of gated communities in neighbouring communities by macro (neighbourhood as a whole) and micro (physical details) dimensions considering poverty and the built environment. Both dimensions have overlaps because they address common themes but from different perspectives. For instance, regarding the enclosure and gates, Chapter 6 analyses its effects in residential segregation, whilst Chapter 7 explores the physical barriers (e.g. walls) and their consequences in the perception of the built environment. Both dimensions have implications in people's fear of crime; as will be addressed in this research, more details about the empirical chapters' organisation are shown in Chapter 4.

Chapter 6 is the first empirical chapter; it focuses on the spatial intensity of fear of crime and macro factors associated to the neighbourhood's environment. For this study, those macro factors encompass residential segregation, community ties, precautionary measures and general perceptions, experiences and feelings. This chapter starts with an overview of the main topics raised by the communities and their relationship with the self-reported intensity of fear. Then it shows the results of focus groups with teenagers and contrasts those outcomes with the views of adults. Some of the information in this chapter was triangulated with institutional perspectives (in-depth interviews with local governments). The chapter closes with patterns associated to macro factors of neighbourhoods' conditions.

Chapter 7 focuses on the micro elements of the built environment linked by the communities to fear of crime. This is the second empirical chapter. It encompasses attitudes towards the built environment and their

georeferentiation, a section focused on public spaces and another one about men and women's perceptions. Furthermore, this chapter explores the emotions reported next to the edges of gated communities against neighbours' perceptions in areas without contact with those walls. Some data in this chapter are triangulated with observations which were quantified and detailed in an individual section. The chapter finishes with the micro pattern of the built environment associated with fear of crime. The objective of this chapter is to explore if the physical structure of gated communities produces any effect on the perception of the built environment and any signs of associated fear.

Chapter 8 contains the discussion. It brings together the outcomes from Chapters 6 and 7. Those findings are organised according to the research questions; the secondary questions address fear of crime through two dimensions: poverty levels and built environment. They are cross-cutting themes in both macro and micro dimensions (Chapter 6 and 7). In this regard, the first section discusses the evidence for the secondary question about fear of crime and poverty levels (at macro and micro level) and its relationship with gated communities. The next section focuses on the other secondary question about the built environment and distribution of fear of crime; again, at macro and micro level. After completing those analyses, the subsequent section focuses on responding to the secondary questions and, then, the main research question. The chapter finishes by positioning the findings in the state of knowledge; it describes how those outcomes contribute to confirm some statements in the literature but also to fill some gaps.

Chapter 9 provides the conclusions. It summarises the findings within the Latin American context, acknowledging the limitations and challenges of the study. This chapter also addresses the implications of the study for urban policies and makes recommendations about planning management within the condominium ownership scheme. The chapter closes with a proposal for a research agenda in both fear of crime and gated communities.

Chapter 2. Literature review: Fear of crime and built environment

This chapter will engage in different debates around two main themes: fear of crime and the building of gated communities. Although they are structured as different sections, this literature review will bring together the connection between both topics, emphasising the implications for public spaces. Figure 2.1 summarises that approach.

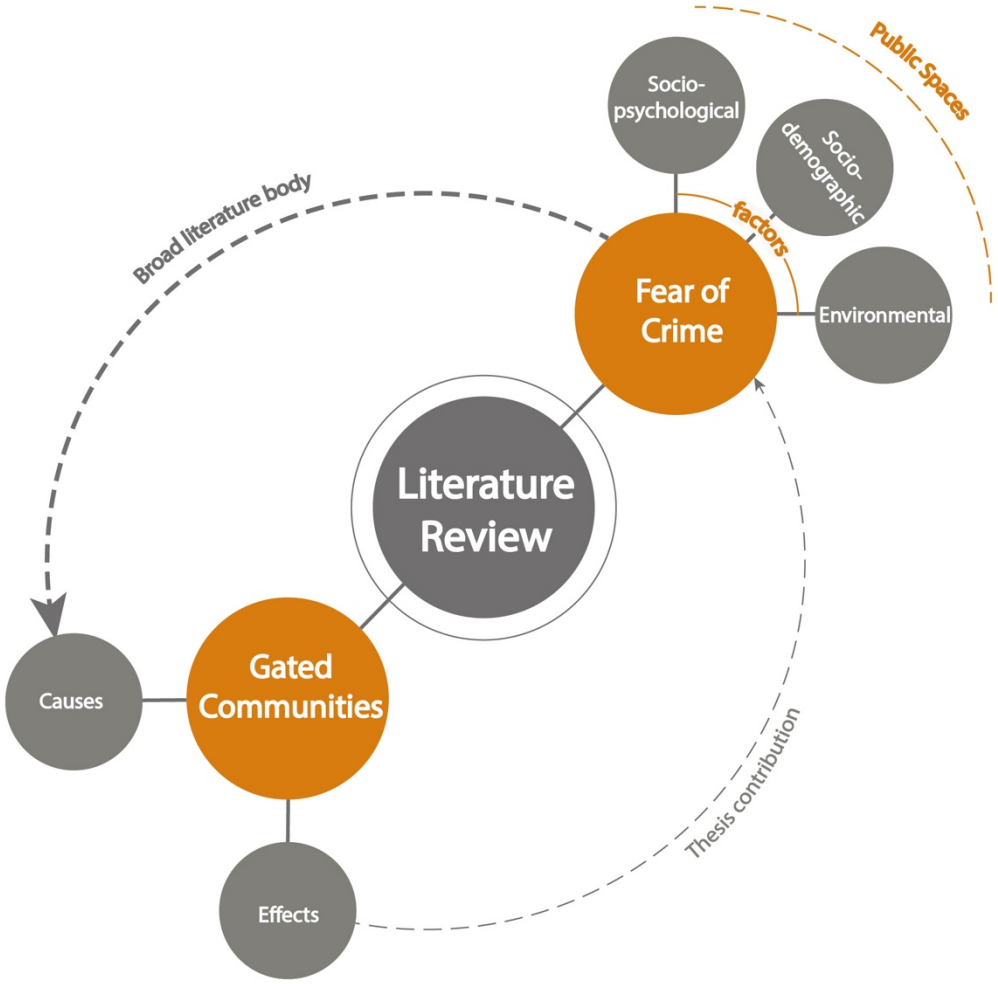
Fear of crime is a complex phenomenon and Loukaitou-Sideris (2012) identifies three main categories: socio-psychological, socio-demographic and environmental. The first part of the discussion uses the Loukaitou-Sideris' classification as a general guide for positioning different approaches. This theoretical framework presents diverging attitudes from scholars in respect of the causes of fear of crime and pays special attention to the debate about how the built environment might not only predict fear of crime but also prevent it. The debate leads to different approaches about urban design and the management of public and private realms.

The second part of the theoretical framework discusses the growth of gated communities and their possible causes and consequences. The discourse on fear of crime has contributed to legitimising the effects of gated communities (Low, 2001); consequences such as spatial segregation and physical barriers seem to be being normalised under the rationalisation of a need for protection. However, externalities such as isolation in neighbouring areas might, in turn, exacerbate safety issues (Minton, 2009). The debates about causes and effects might help to explain if gated communities are part of a 'feedback loop' of fear (Lee, 2001), as this feeling might actually fuel it and it may, indeed, also be nurturing it. After analysing different perspectives, this investigation still noticed a gap in the empirical data for solving this puzzle.

The chapter will consider approaches mainly from Latin America but also from other parts of the world. Information about fear of crime in that region seems to be limited, mainly due to a critical dispersion and lack of systematisation

(Dammert, 2012; García-Castro & Barrantes, 2016; Corbacho, Philipp & Ruiz-Vega, 2015). This thesis contributes towards enriching the body of literature available from Latin America.

Figure 2.1. Organisation of literature review



Source: Author's elaboration

2.1. Factors associated with fear of crime: A theoretical review.

The meaning of fear of crime has been broadly discussed in the literature. Tandogan and Ilhan (2016:p.2011) define it as 'a feeling of "fear" and "insecurity" derived from a feeling of a person who senses his/her personal security to be under the threat'. They highlight that fear of crime is a problem independent from the crime itself; a reduction of actual crime does not necessarily mean a fall in the perception of fear. For instance, Snyders and

Landman (2018) found in their research in South Africa that main crime hot-spots in neighbourhoods, such as shopping nodes, are not necessarily the most avoided places. Instead, people abstain from visiting parks or other public spaces because they perceive the risk of victimisation might be higher there.

Ferraro and LaGrange (1987) argue that the definition of 'fear of crime' has acquired many different meanings in the literature and the accuracy of the term might be questionable. Following the work of DuBow, McCabe and Kaplan (1979) about reactions to crime, Ferraro and LaGrange (1987) adopt the term 'crime perception' referring to 'fear of crime'. They argue that crime perception can be either cognitive or affective. For instance, the cognitive dimension encompasses judgements about risk based on past examples of victimisation, whereas the reactions to those judgments constitute the affective dimension, such as fear for the victimisation of others. Crime perception also involves values related to individual intolerances or emotions. Ferraro and LaGrange (1987:p.72) finally refer to fear of crime as ‘a negative emotional reaction to crime or the symbols associated with crime […]. Physiologically speaking, fear involves a series of complex changes in bodily functioning that alerts an individual to potential danger’.

Fear of crime embraces a range of emotions but it is also shaped by personal backgrounds or different aspects of the environment itself. This feeling might be influenced by factors such as gender, income level, ethnicity, age, the education achieved, duration of residence or sense of belonging to a neighbourhood (Gray, Jackson & Farrall, 2011). Clemente and Kleiman (1976) indicate that sex, race, city size and age are the most significant aspects. Additionally, Hale (1996) points out that gender, age and social class are relevant predictors of fear.

This section further explores different theories and hypotheses about predictors and modifiers of fear of crime. Anastasia Loukaitou-Sideris’s (2012) three main categories are:

- Socio-psychological: These are psychological elements that conduce to create unsafe places and perceived risks, such as prior victimisation,

media stories, warnings, memories and experiences, reputation of the place or familiarity with the setting.

- Socio-demographic: Fear of crime might fluctuate by socio-demographic characteristics such as gender, ethnicity, disability, age or poverty.
- Environmental: The physical characteristics of a place might influence its perceived safety; for example, geographic setting, physical and social incivilities, natural surveillance, darkness or enclosed spaces.

Those categories are, in themselves, complex and overlap each other, as fear of crime is a multidimensional phenomenon. This section displays theoretical contributions about fear of crime, organised by the categories above but keeping the built environment as a thread running throughout them.

2.1.1. Socio-psychological factors

The accumulative process of experiences through the years affects people's responses to an entire set of situations (Koskela & Pain, 2000:p.278). In this respect, the rational judgment of danger does not define the 'conscious or subconscious decision to be fearful in particular environments'. Individual and collective memories might be fuelled by known episodes of victimisation, discourses or stories in the media.

Victimisation

Victimisation is commonly defined as the result of becoming a victim of a crime. The relationships between victimisation and fear of crime have different approaches. Hale (1996) mentions that crime incidents could affect people's perception of safety, both directly (personal experience) or indirectly (local information or other people's experiences). Previous studies have suggested a weak relationship between victimisation and fear of crime (Garofalo, 1979; Agnew, 1985); however, within the Latin American context Ruiz and Turcios (2009) have found positive relationships, especially among low-income groups. Individual beliefs might affect the impact of victimisation, for example, Agnew (1985) argues that sometimes people tend to employ neutralisation

techniques, trying to downplay the severity of the crime by persuading themselves that the offence suffered was not very painful.

Additional research suggests that levels of perceived danger are higher than the empirical probability of victimisation (Hassinger,1985; Burgess,1994; PNUD, 2006a). People create their own mental maps based on personal experiences of victimisation (Koskela & Pain, 2000); those perceptions might intensify if the area has been reported in media stories (Shotland et al., 1979; Koskela & Pain, 2000). However, Godfrey (2017) argues that people have imprecise memories and it is not always possible to reproduce a complete set of events, therefore they highlight specific memories to make a credible narrative and the feelings conveyed are charged with current concerns. As a result, victimisation chronicles in public spaces might be fed either by personal experiences, others' experiences or stories shared in the media or other channels.

Beyond actual narratives, victimisation has been commonly quantified through surveys and police reports. The surveys are usually random samples in which people describe previous experiences of crime. The police reports are based on their records: they can be victim's police complaints or other police records. Although crime rates are commonly employed to evaluate judicial reaction and predict crimes, many infringements are never reported (Zaykowski, 2015). According to Skogan (1984), victims are hesitant to notify the police because there is a 'cost-benefit' metaphor. People assess the pros and cons of starting a process with the authorities; the most frequent rationalisation is that the degree of a crime's importance is not worth a judicial proceeding. As a result of those unreported crimes, there is a gap between actual and reported victimisation, known as the 'dark figure' (Skogan,1984). The victimisation surveys (commonly random samples) help in the understanding of that performance; for instance, more than 70% of Costa Rican crimes that happened during 2014 were not reported (INEC, 2015a).

Corbacho, Philipp and Ruiz-Vega (2015) explored the relationship between victimisation and social capital across 19 countries in Latin America. They found that victimisation significantly reduces vertical trust; delinquency victims

have a 10% lower probability of trusting local police in comparison with non-victims. They highlight that, worldwide, Latin America and the Caribbean hold the lowest values of trust in their local police, with around 50% of inhabitants having no trust in this institution, which might itself aggravate the victims' perception about the police performance. Nonetheless, Corbacho, Philipp and Ruiz-Vega (2015) did not find robust evidence to link victimisation to the loss of trust in friends or business partners.

The *Corporación Latinobarometro* carries out annual surveys about a broad range of topics in 18 countries of Latin America, with a sample of between 1,000 and 1,200 people surveyed per country. The victimisation percentage reported in its databases in 2018 was 23.5%; which was a significant decrease in comparison to 2016 when 35.6% participants affirmed that themselves or relatives had been victims of a crime in the last 12 months.Regarding the type of crime and its impact, 35% of participants mentioned crime on streets as the most frequent; however, 64% believe that interfamilial violence against women is the most harmful crime in their countries (Corporación Latinobarometro, 2018). Further details in Chapter 3.

Ruiz and Turcios (2009) researched victimisation and perceived safety in five Ibero-American nations; however, as 73% of their sample were participants from middle- to low-income households, they did not evidence differences between different income levels. Nevertheless, their findings still suggest that women have lower levels of victimisation but their perception of danger is higher than men. Ruiz and Turcios consider that a negative relation between victimisation and fear of crime in women happens because the type of crime inflicted on women has a deeper impact rather than a higher frequency. The data, in fact, suggest that women are less victimised than men but many of the crimes that are commonly associated as being against women are not always defined as offences by the authorities; for instance, in Costa Rica, sexual harassment in public spaces was not considered a crime until 2020 (Law 9877). Ortiz Escalante (2014) points out that many types of gender-based violence are not stipulated as offences. In this respect, rates of victimisation might underestimate some offences due to the perceived normalisation or lack of awareness about some types of crimes that are mainly

suffered by women. The section ‘Socio-demographic factors’ will provide more details on this topic.

Relationship between victimisation and fear of crime in Latin America has its own nuances. Despite some literature reporting a limited relationship between both phenomena; Vilalta Perdomo (2010) found a positive association in Mexico City, which concurs with Ruiz and Turcios’ (2009) findings in Argentina, Colombia, El Salvador, Spain and Perú. Vilalta Perdomo’s (2010) results suggest a rise in the fear of crime when the interviewees have been victims of a crime or when the trust in the local police is weak. Moreover, he did not report any statistical significance between fear and the commonly associated factors, such as neighbourhood features, gender, age or levels of income. García-Castro and Barrantes (2016), in a literature review about fear of crime in Latin America, identified five main perspectives about victimisation and fear of crime:

a. criminality is not a daily reflection on people's lives unless one event is big enough to catch media attention. Law violations, punishment and prisoners' conditions are not a priority in electoral campaigns.

b. dominant classes use criminality and fear of crime as a tool to control public discourse, hence the voice of criminality is an ideological speech, more than a reflection of reality.

c. measures or devices used by people to protect themselves, paradoxically, have increased feelings of insecurity.

d. fear of crime is higher in women than men. Although victimisation rates for murders or robbery are lower in women, they might connect any crime to the possibility of being raped.

e. governments have used fear and violence as a mechanism to manipulate citizens, therefore, measures adopted are strongly linked to political ideologies.

This has all led to the state where how victimisation is conveyed shapes people’s beliefs. Dammert (2012:p.31) holds that fear of crime has been one of the most common resources of social control, 'Governance by fear that

takes the form of general concern, hysteria, apprehension of threats (real or imagined) has been the strategy of politics for centuries'. In Costa Rica, Fonseca and Sandoval (2006) attribute a rise in fear of crime not just to increasing victimisation rates but to the media coverage of violent events. They found that television develops fear of crime in precisely those people who see these types of news items.

Fear discourse, media and control

Discourse is defined by Foucault (2002:p.54) as 'practices that systematically form the objects of which they speak'. The discourse provides representations and signs 'a sort of recipe for the exercise of power' (Foucault, 1977:p.102). Therefore, the control of bodies through manipulation of ideas is more effective than the impositions of physical punishments (Foucault, 1977).

Fear of crime in Latin America seems to be used in political discourses with limited theoretical knowledge (Dammert, 2012). Dammert is critical of the lack of clarity in the understanding of basic terms such as criminality, violence and fear of crime; she holds that these confusions bring severe consequences to social contexts, implementation of public policies and the way the media conveys those terms to the public. In Costa Rica, fear of crime has been part of the political rhetoric since the 1990s (Huhn, 2012) and studies suggest that fear discourse has also been reproduced by the media (Fonseca & Sandoval, 2006; Huhn, 2012).

In Latin America, the relationship between the media and fear of crime has been frequently associated with a political control discourse (Huhn, 2008, 2009; Martini, 2007; Dammert, 2012; García-Castro & Barrantes, 2016). The disproportionate representation of crime in the media and in political speeches has helped to change public opinion, as media is seen as a mirror of reality (Huhn, 2009). Sensationalist rhetoric seems to dominate the media in different regions, for instance, in Argentina most of the newspapers focus on the criminal facts rather than the sentencing (Martini, 2007) whilst in Mexico, news has been correlated with the levels of fear (Vilalta Perdomo, 2010). In Costa Rica, perceived safety might not be affected significantly by newspapers, however, 78.3% people who see crimes on TV news, consider that Costa Rica

is ‘little of nothing’ secure (Fonseca & Sandoval, 2006). This concurs with the ‘cultivation theory’ (Gerbner & Gross, 1976) which suggests that the longer the exposure on TV, the greater the probability that the people are influenced by what was seen. Around 65% of Latin-Americans think that powerful people influence the media; however, 68% consider that the media is doing a 'good' or 'very good' job (Corporación Latinobarometro, 2016). In this respect, the credibility of the media does not seem to be substantially affected by the preconceptions about who controls them.

However, the media’s role in fear of crime might be arguable. Hearth and Gilbert (1996) mentioned that although television contains higher levels of crime than the real world, as Gerbner and Gross (1976) had previously pointed out, that the evidence is not enough to believe that significant levels of concern are transferred to the viewers. They mention that factors such as the type of programming, the credulity of the viewer, how justice is displayed in the programme and the level of understanding of the crime, create a mixture of patterns rather than a unique effect. O'Keefe and Reid-Nash (1987) carried out research into the impact of crime news reported on television and in newspapers. They found that individuals who pay attention to crime news on TV are more concerned with their own safety. However, they did not find a significant relationship between the larger attention to crimes in newspapers and fear of crime. This might be explained because newspaper readers can select which articles to read or skip, in contrast to those watching news programmes.

Nonetheless, it seems that, overall, the relationship between the media and fear of crime is still weak. Ditton et al. (2004:p.601) conclude in their research that 'there is no relationship between fear of crime and quantitatively assessed consumption of various types of media and that this study is similar to most attempts (that fail) to discover such a relationship'. They suggest that media could increase anxiety randomly and the link between fear of crime and television viewing needs further analysis. It is not just the amount of time spent watching television, it is the type of programmes and how viewers perceive and interpret the content that matters.

The use of social media and digital television might be revealing different outcomes, as they make it possible to choose what news to watch. For instance, in the United States, around 62% of adults obtain news from social media sites (Gottfried & Shearer, 2016). Intravia et al. (2017) found that social and psychological factors associated with fear of crime might increase when the time spent using social media is more significant. In this respect, the link between social media and fear of crime requires further research, as the content of viewers might vary according to personal preferences and social media algorithms.

Fear of victimisation seems to be a constant concern in Latin America. Of the 83% of participants in the Latinobarometro study who expressed concern about being a victim of a crime: 40% said all the time, 27% sometimes and 16% occasionally (Corporación Latinobarómetro, 2018). Community policing attempts have been carried out as a response to those fears. They are organised by local residents who run surveillance patrols and seek to establish cooperation between the neighbourhood and the police; these groups grew up in the 1990s (Müller, 2010). Initially, they increased positive expectations but, once in operation, there were conflicts. For instance, Müller (2010) doubts if the programme contributed to the harmonious cooperation between citizenship and the police in Mexico. He identified some abusive conduct from community officers and feelings of mutual mistrust between community officers and local residents. In Costa Rica 'community policing' was introduced in 1998; by 2006, there were 3,590 groups in the country (Huhn, 2012). Huhn holds that community policing might reinforce the vicious circle between criminality and fear of crime; as the initiative is based on fear, it visualises the problem even more. Also, people's reports portray personal preconceptions about who could be an offender.

Some types of community surveillance might affect the public space and social relationships, discouraging the presence of strangers in neighbourhoods. Many scholars have highlighted the importance of interaction between strangers and locals to improve the city's liveability (Sennett, 1977, 2018; Jacobs, 1961; Gehl, 2010); however, implementation of this principle might require further efforts in Latin America as the percentage of interpersonal trust

(trust in others) was 14% in 2018 (Corporacion Latinobarómetro, 2018), which is low in comparison to Europe with 44% and Southeast Asia with 32% (IDB, 2019).

The discourse of fear influences urbanisation patterns in Costa Rica and Central America, giving way to gated communities (Huhn, Oettler & Peetz; 2007). According to a PNUD report, the feeling of insecurity has become widespread because of the news, stories from family and friends and actual crime rates, which reveal inefficient mechanisms from the state to protect people's fundamental rights (PNUD, 2005b). Fear of crime has altered people's behaviour:

> They live in a condominium rather than open spaces, put razor wire around what was once an open garden and, in their free time bring their children to a mall instead of taking walks, going to parks or enjoying public spaces (PNUD, 2005b:p.4).

In this regard, the transformation of urbanisation patterns introduced by gated communities might be affecting not just the urban fabric, it could be changing the way people share with other members of society.

Burgess (1994) suggests some social strategies to reduce fear of crime in public spaces, such as:

a. better standards of maintenance – environmental incivilities should be eliminated as soon as they are found, to avoid possible offences to different groups

b. activity generators, local authorities should promote strategies to attract people to public spaces, especially children and women. Burgess claims that when an area is safe for women, it is likely to be safe for anyone

c. community involvement, communities must be consulted and involved in programmes to reduce the fear of crime.

She finally states that, within a society where people no longer trust each other, parks could become a resistant place.

2.1.2. Socio-demographic factors

This section explores demographic predictors commonly associated to fear of crime, such as gender, age and inequalities in income. Although there are responses commonly linked to certain groups, those factors also overlap with socio-psychological and environmental factors.

Perceived safety in women

Among the demographic factors related to fear of crime, gender seems to be the most useful predictor (Sacco,1990; Ferraro, 1996). A large body of literature associates women's fear of crime to sexual violence (Hassinger, 1985; Pain, 1991; Ferraro, 1996; Macmillan, Nierobisz & Welsh, 2000; Tandogan & Ilhan, 2016). As suggested earlier, women have lower victimisation rates in most crimes, except for rape and sexual assault (Ferraro, 1996; Hale, 1996; Tandogan & Ilhan, 2016). However, women are more fearful of all types of crimes than men (Sacco, 1990; Hale, 1996; Falú, 2009; Tandogan & Ilhan, 2016).

Women frequently have particular concerns in public spaces. Their spatial patterns usually imply a movement limitation (Hassinger, 1985; Pain, 1991; Burgess, 1994; Madanipour, 1996; Falú, 2009; Ibarra García and Escamilla-Herrera, 2016). Pain (1991:p.420) claims that while 'men tend to protect home and person in response to fear of crime, women take social and lifestyle precautions which are most costly in terms of personal freedom'. Those restrictions seem to imply discrimination against women in the use of public spaces (Falú, 2009).

A study by Tandogan and Ilhan (2016:p.2016) reinforces the deep implications of fear of crime in women; from avoiding dark and isolated places to considering how they dress. The research was carried out through an email questionnaire; they found that 97.6% of responders recognised that fear of crime restricts their freedom in public spaces, therefore 'sense of insecurity imposes limitations on women's participation to public life of the city'.

Tandogan and Ilhan (2016:p.2015) also revealed that 72.7% of respondents expressed that they feel unsafe in urban spaces. The highest levels of fear

were found during the hours of darkness. Through a multiple-choice questionnaire, 250 women mentioned places where they felt unsafe at night:

> isolated, quiet streets and roads (88%), dark subways (85.6%), poorly-lit streets or other places (81.2 %), empty parks and woods (70.4%), abandoned, desolated and poor buildings in urban spaces (67.6%), subway stations and other public transits (57.6%), densely wooded areas (50%) and every kind of urban space where women dressed in mini-skirts and décolleté (49.6%), urban spaces with no mixed use available after dark (41.6%) […] when they walk by graffiti spaces (8.4%) or overcrowded places (11.6%) during morning rush hours.

As shown, desolated places without activity create more worries among the participants than other areas; the contrast between concerns about isolated streets of 88% and overcrowded areas of11.6% can be noted. However, the sample employed for this study might have some limitations as it was not randomly selected and the questionnaire was completed by email, which suggests that some low-income population with reduced access to technology might be underrepresented.

Sutton and Farrall (2005:p.219) question the assumption that women are always more fearful of crime than men. They attribute those results to men's resistance to report their feelings accurately. In their study, they correlated 'reported fear of crime' with a 'lie scale score' comparing men's and women's responses to a questionnaire. The model predicted the level of fear in men and women and the probability that they were lying. They found that fear of crime reported by men was 10% lower than it was expected to be. Sutton and Farrall identified that men suppress their expression of fear due to 'gender roles' which prevent them admitting to those feelings as they tend to give 'socially acceptable' responses. Their findings suggest that men may report a higher fear of crime than women, when they are 'being perfectly honest'. Sutton and Farrall clarify that those results do not imply that men are liars or women's responses are exaggerated; they suggest that maybe fear of crime in men has been underestimated.

However, women's fears on the streets (in contrast to men's) are strongly related to the possibility of becoming a victim of sexual harassment, mainly when the perpetrator might be a stranger (Macmillan, Nierobisz & Welsh, 2000). This constant concern can happen on a 'regular basis on urban streets during a walk from a parking facility to a workplace' (Hassinger, 1985:p.296). It seems women are more worried about being attacked outside by a stranger than being assaulted in private by somebody already known (Bannister, 1993); however, evidence suggests that sexual attacks occur more commonly in the private sphere (Bannister, 1993; Pain,1991; Ortiz Escalante, 2014). Sacco (1990) holds that victimisation surveys typically do not consider that women have been disproportionately victims of sexual assault and violence from known people and that those crimes are usually unreported. Sacco attributes this situation to the lack of awareness from criminal justice officials about the types of injuries to which women are more exposed; drawing attention to a 'male-centred understanding' about what is typically harmful. Besides, Pain (1991) mentions that sexual crimes have been underrepresented in criminal statistics due to women tending to report aggressions from strangers more frequently rather than from people already known.

Despite statements generalising women's fear, Koskela and Pain (2000) point out that postmodern feminist approaches to fear of crime claim for the recognition of a diversity among women, as reactions can vary according to ethnicity, age, incomes, sexuality or settlement. To achieve this end, the feminist scholar and activist Angela Y. Davis claims that feminism must address either race or economic equality and go beyond the traditional gender structures (Bhandar & Ziadah, 2020).

The feminist theoretical discussions about fear of crime and the built environment were summarised by Koskela and Pain (2000) in two groups. First, the scholars who base their thoughts in the critical tradition that fear is certainly encapsulated in power gender relations, then another group, from the architecture and planning field, who believe that women have been marginalised from the design of the built environment. In light of these considerations and their empirical work, Koskela and Pain (2000) conclude that women can be fearful in places with different physical features. The

reputation of a place is central to deciding which places must be avoided, as fear of crime is also a construction of narratives. They believe that social and physical elements cannot be disconnected, places may be influenced by fear and vice versa; therefore, countries should learn from those complexities rather than ‘developing women's safety strategies based on myths of stranger rapists in public space, to whom “faults” in the built environment lend otherwise unavailable opportunities to attack’. (Koskela & Pain, 2000:p.279).

In this regard, Beebeejaun (2017) highlights the importance of using walking as a strategy to understand women's spatial experiences of fear. She states that fear of crime has a temporal dimension and planners should learn about the complexity of feminist projects to improve women's engagement with the public space. For instance, Beebeejaun (2017:p.328) illustrates how an initiative led by the 'Women's Design Service in Bristol' in the UK, worked with women who were fearful because a new motorway divided in two an area, operating as a barrier an increasing the chance of unwanted interactions.

Muxí Martinez (2011) from the feminist team Col•lectiu Punt 6 states that a paradigm change is required to build safer cities for women because the space is not neutral, and women have different movement patterns than men. Ortiz Escalante (2014) summarises from UN-Habitat and other organisations aspects about safety for women. They encompass the design of safe spaces, escape poverty, financial independence, self-seem, and strategies to prevent gender-based violence, healthy and safe communities. Furthermore, she also highlights how women's diversity (such as ethnicity, poverty levels or migration status) has been overlooked in the city design.

Does fear of crime increase with age?

Age is a significant factor in fear of crime (Clemente & Kleiman, 1976; Hale, 1996; Melde, 2011). There is a consensus that people become fearful as they grow older (Lebowitz, 1975; Hale, 1996; Ceccato & Bamzar, 2016). Although seniors show the lowest victimisation rates, they seem to be more likely to manifest fear of crime (Ceccato & Bamzar, 2016). Economic concerns primarily related to uncertainty about personal finances might also raise anxiety in this population (Hale, 1996; Ceccato & Bamzar, 2016).

Lebowitz (1975) found that older people in the United States were more fearful than young residents in low-income areas but less afraid than youngsters in higher-income communities. Furthermore, those over 60 years of age had more anxiety in large cities than rural areas; a positive relationship between fear of crime and city size remained almost constant in all age groups, except for those under 40 in the suburbs. His study was consistent with gender differences; Lebowitz found that the percentage of fearfulness in people over 60 years was 65% in women and 25% in males. Lebowitz concludes that there is no general age differential in reported fear of crime while walking in one's neighbourhood but it can be magnified by age, loneliness, gender and income.

A more recent study by Ceccato and Bamzar (2016) in Stockholm, shows micro differences in perceived safety across neighbourhoods; they reveal that older people feel safer in familiar places, mainly those outdoor areas close to their residence building. Also, they change their walking route to avoid unsafe areas, even if that forces them to walk more. Their study confirms that older adults are more fearful than others in the same neighbourhood, as some social interactions might intensify their anxiety. For instance, if someone suffers a crime within the community and this person talks about it, he or she becomes a 'fear generator' increasing other people’s worries.

Although there is a large body of evidence with positive associations between fear of crime and age, LaGrange and Ferraro (1989:p.715) question the conventional methodologies to obtain those data, they argue that typical questions magnify the actual level of fear. For instance: 'How safe do you feel or would you feel being out alone in your neighborhood at night?' or 'Is there any area right around here – that is, within a mile – where you would be afraid to walk alone at night?'. LaGrange and Ferraro (1989) hold that these types of questions overestimate the levels of fear by predicting situations and that many times they are irrelevant in older people’s everyday life as older people have less tendency to travel alone at night. So, in response, they applied a model using an index created from 11 indicators of fear. Their findings through specific measuring instruments show, contrary to what is reported in the literature, that older adults might be even less fearful than younger adults.

Melde (2011:p.1007) agrees that a general consensus about age and fear of crime must be reviewed 'While adolescents experience a higher rate of victimisation than adults, research on fear of crime has historically focused on adult samples'. Based on the 2008 National Crime Victimization Survey in the United States, he highlights that those between 12 and 15 years old suffer the highest rate of violent victimisation with 42.2 per 1,000 individuals. In contrast, the rate for people between 35 and 49 is 16.7 per 1,000 individuals. He believes that fear of crime in adolescents needs still more study to understand the social sources of this phenomenon.

Arriagada and Morales (2006) researched fear of crime and urban segregation in social housing in Chile. They revealed that young heads of households (between 18 and 24 years) have higher levels of fear than older adults, contrary to the convention; however, their role as heads of households could add more pressure to economic stability and increase personal anxieties. As shown earlier, older people in lower-income areas also present higher levels of fear. That suggests that income inequalities might be a cross-cutting issue in fear of crime.

Income inequality and perception of insecurity

Wilkinson and Pickett (2009) draw attention to income inequality as a feasible explanation for many social problems. They propose that people lack protection in more unequal societies and become more sensitive to issues regarding their status and social success. They also believe that feelings of shame and humiliation might play an essential role in responding to specific conflicts, as in unequal societies people commonly do not have buffers of protection. Therefore, trust levels are lower, people are less willing to mediate for the common good and 'seem to be more pugnacious' (Wilkinson & Pickett, 2009:p.140). They observe that status competition increases and pride becomes a matter of dispute in hierarchical societies.

Income inequality has been associated with both wellbeing and fear of crime (Franklin, Franklin & Fearn, 2008; Wilkinson and Pickett, 2009; Hummelsheim, et al., 2011; Vauclair & Bratanova, 2017: Kragten & Rözer, 2016). The Income Inequality Hypothesis (IIH) states that 'income inequality has a negative effect

on individual's health, partially because it reduces social trust' (Kragten & Rözer, 2016:p.1015). Wilkinson and Pickett (2009) used the United Nations' data to analyse the relationship between inequality and violence, and they found that homicides and assaults are more common in unequal societies; for instance, in the United States those states with more income inequalities had the highest rate of homicides.

Vauclair and Bratanova (2017), using data from the European Social Survey, tested both the IIH and the Vulnerability Hypotheses (vulnerable groups and fear). Between 2008 and 2010, they analysed information from 29 countries and their results confirm the IIH finding regarding a positive association between fear of crime and income inequality. The Vulnerability Hypothesis also showed that elderly, disabled people and women reported greater fear of crime in unequal societies; surprisingly, ethnic minorities did not follow the same pattern. Their study concluded that 'fear of crime explains the inverse association between income inequality and subjective wellbeing' (Vauclair & Bratanova, 2017:p.221).

Further discussion has arisen about fear of crime as being a catalyst of exclusion, thereby feeding a vicious circle. Vieno, Roccato and Russo (2013) argue that the perception of being unsafe is a reflection of social insecurities rather than concerns about crime in itself. They highlight the need for promoting more equal societies, with responsible welfare and educational systems as a mechanism against fear of crime instead of resorting to 'zero tolerance' policies. Kliksberg (2008) discusses the relationship between Latin America's 'zero tolerance' practices and the increase of social exclusion in the youth population. He argues that Latin America has 25% of its young people out of the educational system. Due to the 'iron fist' of 'zero-tolerance' policies establishes strong punishments for small offences; those strategies have generated 'cannon fodder' for organised crime which offers material and symbolic incentives to vulnerable youths. For instance, in El Salvador, Honduras and Guatemala, since the 'zero-tolerance' laws started, murder rates have had a significant increase (USAID, 2006). Social exclusion seems to raise the issue; in Central America during a survey made of people from 'maras' [gangs], the members explained that their gangs were the only place

that offered them a sense of belonging (Kliksberg, 2008). Kliksberg concludes that structural causes of criminality in young people are mainly related to labour and educational exclusion, as well as family disintegration.

Welfare policies could help reduce anxiety produced by conflicts and perceived insecurity. Hummelsheim, et. al.(2011:p.337) ran a study based on the European Social Survey 2004–2005. Their findings suggest that the state's measures to enhance cognitive and social skills might have contributed to reducing levels of anxiety, as individuals obtain more confidence in dealing with demanding situations. Their empirical outcomes highlight that a higher social expenditure 'was associated with a lower fear of crime; a higher degree of decommodification of social welfare policy was accompanied by lower levels of crime-related feelings of insecurity'. Thereby the state could contribute to building the buffers of protection which, according to Wilkinson and Pickett (2009), might help to reduce violent responses.

Fear of crime seems to be higher among people who consider themselves socially marginalised, without future expectations and dissatisfied with the welfare system (Vieno, Roccato & Russo, 2013). However, Franklin, Franklin and Fearn (2008) found differences across vulnerable groups regarding cognitive (perceived risk) and affective dimension of fear (worry of victimisation). Those groups with lower levels of income, minorities, females and older adults, reported higher levels of anxiety within the cognitive dimension. In contrast, within the affective dimension, factors such as race, age, income and education had significance in the opposite direction. It suggests that vulnerability variables might perform differently in cognitive and affective dimensions.

Other variations in the relationship between fear of crime and incomes were found in the Costa Rican National Survey in Citizen Safety 2004. It showed greater fear of crime among those with higher incomes; this figure was consistent in respect of public spaces or private spheres, as well as in cases of patrimonial and physical violence (PNUD, 2005a). However, further research is required for monitoring those figures in Costa Rica, as many

systematic studies related to crime are focused on victimisation rather than fear of crime and its complexity.

Fear factors might also have variations when people interact within the public space; the management of the built environment might foster social interaction or, by contrast, the avoidance of particular places. The next section explores the relationship between fear of crime and the built environment.

2.1.3. Environmental factors

A large body of literature has found connections between the built environment and fear of crime (Ferraro & LaGrange,1987; Hale, 1996; Brunton-Smith & Sturgis, 2011; Loukaitou-Sideris, 2012; Mihinjac & Saville, 2019; Ceccato, 2020). Discourses and theories have emerged about crime prevention through the built environment, some of them with significant contradictions but also with overlaps. A group of different practitioners have focused their views on physical features of space and general controls; such as the Broken Windows theory (Wilson & Kelling, 1982), Defensible Spaces (Newman, 1973) or Situational Crime Prevention (Clarke, 1983; Crawford, 1998). These postulations seek to impede crime through community guardianship and specific elements of urban design. In contrast, other views conceive the built environment as an open and dynamic system, for instance, Eyes on the Street (Jacobs, 1961), the human dimension of public space (Gehl, 2010), the city as a dynamic element (Lynch, 1960) and the open city (Sennett, 2007, 2018). Those theoretical approaches visualise safety through urban activations, encounters with strangers and permeability between borders. Another approach exploring the relationship between crime and the built environment is called Crime Prevention Through Environmental Design (CPTED); introduced by C. Ray Jeffery in the early 1970s, his intention was to merge elements of built environment and behavioural sciences (Mihinjac & Gregory, 2019).

Newman (1973:p.204) in his book *Defensible Space: crime prevention through urban design*, argues that buildings' configuration, urban design and community control can play an essential role in crime prevention, 'within the present atmosphere of pervasive crime and ineffectual authority, the only

effective measure for assuring a safe living environment is community control'. However, this guardianship's view has been debated by other scholars. For instance, Minton (2009) points out that 'territoriality' and sense of ownership are the reasons why gated communities and *cul de sac* developments have been spreading across the United States and Britain since 1970. According to Minton, 'Defensible spaces' pretend to discourage the presence of strangers who are seen as a 'source of danger'. The exchange between friends and strangers has been mentioned by Sennett (1977) as essential for safety because it promotes gatherings between different types of people. Sennett (1970) also argues that the experience of living in a diverse group has the power of reducing feelings of insecurity and frustration because the image of the enemy is not clear.

Jacobs (1961) has highlighted the relevance of diversity in safety. She suggests four main conditions to achieve it:

a. variety of functions, making it possible that people use the city on different schedules

b. small blocks

c. different types of buildings in age and condition

d. density, including residents and visitors.

A combination of these diversity generators, or a good approximation, 'create effective economic pools of use' (Jacobs, 1961:p.197). She states that all four are necessary and the lack of any one could discourage the city's potential.

Another view, close to Newman's thoughts, is The Broken Windows theory (Wilson & Kelling, 1982:p.2) which holds the idea that there is a strong relationship between neighbourhood disorder and violence:

> At the community level, disorder and crime are usually inextricably linked, in a kind of developmental sequence. Social psychologists and police officers tend to agree that if a window in a building is broken and is left unrepaired, all the rest of the windows will soon be broken.

The Broken Windows theory has been widely disseminated and has been integrated into the safety politics in New York since 1994 (Greenberg, 2014). In Latin America, urban policymakers have imported those strategies from Anglo-Saxon countries. Müller (2010:p.21) argues that 'zero tolerance and/or broken windows' have contributed to 'the hegemony of *mano dura* (strong hand)' in the region. However, Sampson, Raudenbush and Earls (1997) question the rigid link between disorder signs and crime. They argue that social cohesion and willingness to take action for the common good could decrease violence; through theoretical modelling, they propose the Collective Efficacy theory which suggests that violence rates might reduce by combining informal social control, cohesion and trust.

In contrast, Franklin, Franklin and Fearn (2008), in a multilevel study, explored the affectation of vulnerability, disorder and social integration into the cognitive and affective dimensions of fear of crime. They suggest that both dimensions are mostly affected by personal perceptions of neighbourhood disorder (social and physical incivilities); as main predictors of fear they identify situations such as noise, traffic issues and youth gangs. Similar results were found by Brunton-Smith and Sturgis (2011). They also carried out a multilevel study and found that the most fearful people were urban residents in areas with higher levels of crime and signs of disorder (litter, vandalism, counting graffiti and run-down property). They were mainly women and young residents, victims of crime in the past, members of ethnic minorities and people with low educational qualifications.

Apart from physical features, other psychological and demographic predictors might contribute to those results. As discussed earlier, the term 'disorder' and its relationship with fear of crime has been a cause of debate among scholars. Recently, Sendra and Sennett (2020) explored how some infrastructures could be deliberately designed under a 'disorder' concept as part of an open system. Those elements could facilitate the spontaneous use of public spaces, negotiations or even arguments. The authors argued that, despite some conflicts in the management of the space, it stimulates community interactions, keeping the space active.

Commonly, The Broken Windows theory has been tested in its original direction (incivilities perceptions – risk perceptions). Link et al. (2017:p.676) refer to the lack of studies assessing the reverse theoretical pathway (risk perceptions – incivilities perceptions). In their research *Reversing Broken Windows: Evidence of Lagged, Multilevel Impacts of Risk Perceptions on Perceptions of Incivility,* they claim to have assessed, for the first time, this inverse course. They found that 'Individuals feeling more at risk of crime locally were more likely to see their immediate surroundings as more problematic later'. They note that street blocks, reported as dangerous, were perceived as unsafe first and the deterioration came one year later. This evidence suggests that people with the higher rates of fear of crime, tend, partially, to describe their neighbourhood as problematic than do those who do not have similar levels. Also, Sampson (2009) suggests that neighbourhoods with high signs of disorder tend to get a 'bad reputation', therefore, they are then avoided which feeds the stigmatisation of some places, particularly low-income areas, which leads to 'social reproduction of neighbourhood inequality' (Sampson, 2009:p.13).

In the same vein, the Situational Crime Prevention thesis (Clarke, 1983; Crawford, 1998) keeps the principles of the Broken Windows theory. It aims to impede crime by reducing opportunities for violence towards victims by modifying the built environment and identifying likely offenders. Clarke (1983:p.225) characterises Situational Crime Prevention as measures:

> 1. directed at highly specific forms of crime
>
> 2. that involve the management, design, or manipulation of the immediate environment in as systematic and permanent a way as possible
>
> 3. so as to reduce the opportunities for crime and increase its risk as perceived by a wide range of offenders.

Clarke (1983) and Crawford (1998) support the Routine activity theory (Cohen & Felson, 1979:p.589) which states that some changes in routine patterns can influence crime rates. This theory argues that there are three essential

elements to complete a crime '(1) motivated offenders, (2) suitable targets and (3) the absence of capable guardians against a violation'. Apparently, if one of these elements is avoided, the crime could be prevented. However, Carrion (2008) claims that these assumptions might help to feed an environment socially stigmatised and, as a result, public policies are developed based on knowledge from apparent and banal situations. Godfrey (2017) criticises how those 'panic theories' are still used by historians and criminologists to explain crimes, despite being heavily contested.

Another approach, mentioned earlier, which relates fear of crime and the built environment is the Crime Prevention Through Environmental Design (CPTED), initially proposed by Jeffery in 1971; the CPTED identifies diminishing fear of crime and actual criminality through an appropriate design of the built environment (Ceccato, 2020). Jeffery embraced the concept that physical environment has a relationship with the opportunity for crime; Mihinjac and Saville (2019) argue that his position differs from Newman's Defensible spaces (Newman, 1973) because Jeffery's concept of environment was wider. However, other scholars consider that CPTED has many elements in common with Newman's views, as both approaches search for the modification of the built environment to prevent crime (Carmona et al., 2003).

Mihinjac and Saville (2019:p.2) describes Jeffery's approach as a theoretical view connecting different disciplines. Therefore, it was not determined by the assumption that crime prevention was totally based on the built environment:

> His theoretical proposition included the organic sciences such as bio-social learning, psychological conditioning, genetics, and cognitive psychology (sciences that might help explain the motives of some crimes), along with physical sciences such as architecture, engineering, and urban planning (the sciences currently helping to explain the physical opportunities for crime).

However, this first generation of CPTED was still mainly focused on guardianship. Decades after, new approaches incorporated the social dimensions of the built environment and community participation; those efforts were called the 'second generation of CPTED' (Ceccato, 2020). According to

Mihinjac and Saville (2019), the second generation of CPTED adopts the idea that ‘ecology and neighbourhood health’ might produce crime but also prevent it, as Jane Jacobs had previously described in 1961. Later, Mihinjac and Saville (2019) introduce the theoretical bases for the ‘third generation of CPTED’ which includes liveability through the opportunities for improving the higher-level of Maslow’s needs, such as self-esteem, self-actualisation and transcendence (Maslow, 1943). For instance, Mihinjac and Saville (2019) mention that those needs could be fulfilled through community organisation, leadership, artistic manifestations, initiatives of environmental protection and sustainability.

In Costa Rica, the searching for safer spaces has generated the rise of some citizen and institutional initiatives, promoting the use of public spaces through conviviality, community participation and physical improvement. ONU Habitat (2013a) gathered some of those projects in the publication *Activaciones urbanas para la apropiación del espacio publico* [Urban activations for public space’s appropriation]. Despite those efforts, the performance of local governments in safety issues is still not yet meaningful (Ramírez, 2013). According to the Constitution and the Urban Planning Law, municipalities are in charge of urban planning in Costa Rica, including the management of public spaces. In this sense, Ramírez (2013) highlights the relevance for local governments to generate social cohesion through the activation and promotion of public spaces.

The public space

The public space is often one of the stages for fear of crime. It is where people might experience victimisation episodes, where they recall them, where they share them, where collective memories are written. Carmona, de Magalhães and Hammond (2008) hold that crime can rapidly corrode the quality of public spaces, as perceived risk restrains people from using areas, that, in turn, accelerates the decay process. In their research, they discuss two definitions of public space. First, a broad concept that encompasses components of a built and natural environment with different levels of restrictions and free access, such as parks, streets, open spaces, open countryside, private places

(such as shopping centres) and others whose public-private management could vary. The second definition is narrower; it was detailed in Chapter 1: in summary it encompasses free access areas from natural and built environment, streets, squares, open spaces and parks and those public and private spaces where people have free access at least during daylight hours.

Carmona, de Magalhães and Hammond (2008) highlight the relevance of management beyond the physical features of public space; many perceptions about public spaces are based on intangible qualities. They found that many individuals (56% of their sample) believe that public space is the exclusive responsibility of local government. They remark on the complexity of public space management, which requires multiple stakeholders; they suggest four main groups should be involved in that dynamic: private, public/private, local government and community. In this regard, de Magalhães (2010:p.572) points out that public spaces are being gradually managed by alternative contractual forms, such as public-private alliances. It could affect the publicness attributes and the general definition of 'public space'; however, the degree of public access depends on 'how governance arrangements are designed, implemented and monitored'. He concludes this is a challenge in planning, design and policies but also an opportunity to explore new management models. In this respect, the integration of various stakeholders might be beneficial to enable, for instance, the community bodies' participation in management of public spaces, as long as local governments provide clear guides to assure free access.

Madanipour (2003:p.235) describes public spaces as both an 'institutional and material common world' where interpersonal relationships take place and individuals have the opportunity to be present in the same place where previous generations experienced the same physical reality. Borja and Muxí (2000:p.8) claim that 'The history of the city is the history of its public space' as the city is where relationships between inhabitants, power and citizenship are materialised and expressed through streets, parks, squares, monuments and places for sharing. They state that a city understood as a system, is composed of open spaces, transportation networks and other types of collective uses, such as commercial areas and cultural facilities; hence, public

space is at the same time a physical, symbolic and politic space. Borja and Castells (1997:p.101) portray the city as:

> Symbiotic area (political power-civil society) and a symbolic area (integrating culturally and lending its inhabitants collective identity, with a trademark value or change value towards the exterior) becomes a sphere of potential responses to the problems to the economic, political and cultural challenges of our epoch.

So, public space might be defined as the place within the city where a large group of diverse people converge and the different scopes of the city life are exercised. Madanipour (2003:p.235) highlights that diversity:

> Public space is a place of simultaneity, a site for display and performance, a test of reality, an exploration of difference and identity, an arena for recognition, in which representation of difference can lead to an awareness of the self and others, and to an examination of the relationship between particular and general, personal and impersonal. It is a place where many-sided truths co-exist and tolerance of different opinions is practised.

Despite all those attributes, public spaces by themselves do not always perform as convergence places. Jacobs (1961:p.119, p.123) warns that some public spaces may cause inconveniences if they are not managed properly; she notes that a neighbourhood's parks are volatile places, they can be in both extremes of popularity and unpopularity:

> In understanding park behaviour, to junk the false reassurance that parks are real state stabilizers or community anchors. Parks are not automatically anything, at least of all are these volatile elements stabilizers of values or of their neighbourhoods and districts.

As she references, unpopular parks cause concern, not only because of missed opportunities but for their unfortunate effects. Similar to Streets without Eyes, there is a spillover effect and areas nearby to those parks get reputations as danger places and are avoided. According to Jacob (1961), a neighbourhood park could develop a passionate attachment or, conversely,

apathy, regardless of the levels of incomes. However, she suggests that, in more deprived neighbourhoods, people tend to exaggerate danger and the emptiness of the parks. She highlights that intensely used parks have some design features in common:

a. Intricacy, related to the diversity of reasons in different moments when people decide to visit a park.

b. Centring, successful small parks commonly have a place identified as the centre.

c. Sun, it upsets people when a building cuts off the sun, it results in unfavourable effects in the park's life

d. Enclosure, presence of buildings around the park, that gives a sort of relevance to the park as an important event.

She finally claims that more successful cities mix the diversity of uses and users; that people support and animate well-located parks.

This dynamism is also mentioned by Lynch (1960:p.1), who describes the city as a temporal art, whose sequences are difficult to control:

> every instant, there is more than the eye can see, more than the ear can hear, a setting or a view waiting to be explored. Nothing is experienced by itself, but always in relation to its surroundings.

Lynch adds that the urban environment is more than the city itself, it is the way people perceive the city. Later Massey (2005:p.55) describes the space as 'discrete multiplicity, but one in which the elements of that multiplicity are themselves imbued with temporality'. She highlights the idea that despite space and time being different; they are correlated, space integrates the dynamics of temporality.

Regarding those spatial dynamics, Harvey (2012) mentions Lefebvre's concept of heterotopia; those bordering social spaces where 'something different' is possible but not necessarily consciously so. It could be actions, feelings or perceptions that people make in order to articulate measures to find a meaning in their everyday life. Likewise, this confluence could create an

irruption, when suddenly heterotopic groups, even for a brief moment, take advantage of a collective action to create something radically different.

There are examples of these types of spaces across the globe. For instance, in Seville, there are a considerable amount of resistance spaces, on a small scale they help to vindicate public land for collective use, those spaces go beyond traditional practices and bring a new order (Sendra, et al., 2015). Those efforts can also be found over Latin America and in the Caribbean, as a response to urban violence and conflicts (ONU-Habitat, 2013b). In Costa Rica, some urban interventions have aimed 'to reverse and renew traditional mechanisms of urban planning, establish itself as an alternative to encourage direct participation' (ONU-Habitat, 2013a:p.10). These interventions aim to promote the activation of public spaces within urban areas and promote intergenerational and intercultural exchanges.

Páramo et al. (2018) in their study about the habitability of public space in Mexico, Colombia, Venezuela, Peru, Brazil, Chile and Argentina, found that overall, people give more importance to physical and spatial aspects of public spaces than cultural expressions. They believe that happens because many citizens do not have access to activities allowing cultural exchanges or the current ones do not satisfy people's needs. The scholars draw attention to the low levels of satisfaction that interviewees showed about public spaces in their cities, which suggest that they might not meet the people's needs.

Public spaces in Latin America are being threatened by new urbanisations patterns losing opportunities for people's socialisation. Carrión (2007) summarises the following causes of this phenomenon:

a. fragmentation: different spaces within the city are disconnected whilst there are slums, gated communities, and new towns in the peripheries.
b. segregation: public spaces are not gathering poor and rich people. Wealthy people visit private spaces for entertainment such as shopping malls (reached by motorways), clubs or gated communities' common areas.
c. dispersion: low density and lack of communication.

d. crime: violence and fear of crime affect people socialisation in public spaces and provoke the spread of enclosure enclaves.

e. privatisation: limitation in using open spaces (fees), parks are fenced and there is a normalisation of malls and clubs as a leisure resource.

The new urbanisation patterns have affected the supply and use of public spaces in Latin America but also the way people share in the city.

The edge: public and private spheres

The transition between public and private spaces has a remarkable significance in how the city is perceived. Madanipour (2003:p.59) has explored the public and private spheres from the spatial scale: body, home, neighbourhood and city, degrees of exclusivity, an openness and type of social encounters and their association with space. He argues that public and private domains within the city strongly depend on the edges between them, 'Both for those who defend the private sphere from public intrusion and those who defend the public sphere from private encroachment'; therefore, the rise of boundaries symbolises an action of protection and demarcation; how those edges are articulated define the character of the space, with many shapes, multilevel configurations and meanings.

The definition of boundaries and borders has been addressed by Sennett (2007:p.9). He understands that boundaries are closed edges, these edges reduce the interchange between different types of racial, ethnic and income communities; hence, they are low-intensity edges. In contrast, the border is a membrane which is 'open porous and resistant at the same time'. It allows some components to flow through the membrane but retains some essential elements at the same time.

Later Sennett (2018:p.220) reaffirms his statement; he holds that this membrane enables the interchange between the inside and outside. This exchange includes sound, invasive noises like traffic but also those intelligible sounds, such as voices or background sound. They could alert people about activities and attract them. In this way, a border is an edge where diverse groups interact, whereas a boundary is an edge where the things end. In his view, closed boundaries are dominating the modern city; they segregate urban

space by torrents of traffic and functional separations between areas for working, living, shopping and the public realm. As an example of boundaries, Sennett holds that 'The most popular form of new residential development internationally, as we observed, is the guarded, gated community inside a boundary wall'; there, residents are isolated without stimulation for interchanging outside.

Gehl (2010) also highlights the impact of edges in cities, especially on the building's ground floor; there, activity inside could be translated outside. For instance, when edges are monotonous and closed, walks seems longer and the whole experience could become tiring, therefore there is no incentive for people to walk. Gehl mentions a study made in Copenhagen's shopping streets (Gehl, Kaefer & Reigstad, 2006), where the researchers found that active facades had seven times greater activities in front of them than passive facades. Gehl (2010) also makes some recommendations to improve the liveliness of the edges:

a. Scale and rhythm: having diverse small units with doors on the pavement where pedestrians can be walking around at a speed of five km/h.

b. Transparency: walking in the city improves the pedestrians' experience if they can see what is happening inside the building.

c. Appeal to many senses: buildings should provide exciting and interactive experiences that activate the senses.

d. Texture and details: facades should show a variety of details, textures and attractions, which keep pedestrians strolling.

e. Mixed functions: small units with a variety of uses and points to exchange between inside and outside.

f. Vertical facade rhythms: when facades have vertical rhythms, walks seem more pleasing and shorter, in comparison with long, horizontal-oriented facades.

Additionally, Gehl (2010) insists on the relevance of soft edges in neighbourhoods, due to semi-private edge spaces in front gardens which are the transition between private and public spheres. He highlights the substantial number of activities and social interactions that take place there, where the private activities indoors transfer to the garden activating the public space in turn. Gehl (2010) highlights some studies about activity in front yards on residential streets, such as the research of Camila van Deurs in 2005 in Copenhagen. It revealed that 55% of outdoor activities on the street took place in semi-private front yards. He also describes a study conducted by the University of Melbourne in 1977; this shows that 69% of outdoor activities were carried out in front yards and close to the door.

As shown, many scholars have reported how transitional spaces between public and private spheres help to keep the streets alive. However, the demarcation of those edges is a planning issue, commonly managed by local governments; thereby, those institutions face the challenges of maintaining active transitional spaces to keep natural surveillance but also responding to the pressure of people who might wish to enclose themselves because they feel it is safer. That dichotomy between permeable and non-permeable edges is palpable within many Latin American cities where neighbourhoods face the building of gated communities just in front of them.

2.2. From the outside to the inside: Open neighbourhoods facing gated communities

Gated communities have arrived in different contexts around the world. In some cases, they have been located in the urban peripheries, others embedded into the urban fabric. This section explores the link between urban fabric and fear of crime, especially the contrast between open neighbourhoods and gated communities.

2.2.1. Urban fabric and open neighbourhoods

Fear of crime has been associated more frequently with urban contexts (Lebowitz,1975; Belyea & Zingraff, 1988; Hale, 1996; Carrión, 2008). Belyea and Zingraff (1988) explored the relationship between fear of crime and

residential locations; they found that rural residents have significantly lower fear of crime than urban inhabitants. After adjusting factors such as gender, race, age and income, the relationship still remains; however, they recognise that such differences are always not linear, mainly among small cities, towns and rural areas. The authors mention that trust might be one reason for those findings; for instance, Amato (1993) suggests that individuals in rural areas are often more willing to help strangers than people from urban areas.

The configuration of urban fabric and the allocation of streets are factors that might influence the likelihood of crime. Hillier (2004) suggests that crime could be inhibited by joining buildings together, avoiding secondary accesses and ensuring that dwelling entrances are part of the public space. According to Loukaitou-Sideris (2012) micro scale elements of urban features such as facades, buildings, streets, windows, physical barriers and other characteristics of the built environment influence territoriality and social control; therefore, the way those features interact with the public space is crucial for its quality.

The analysis of Jacobs (1961:p.157) about the structure of blocks in New York's neighbourhoods indicates that long blocks are typically associated with isolated streets. In contrast, successful street neighbourhoods are shorter and connected in a small scale physically, socially and economically; she compares that structure to a rope 'small scale to be sure, but small scale in the sense that the lengths of fibers making up a rope are small scale'; moreover, the street should have regularity of commerce, interesting uses and vigour to promote a sequence of public street life. Jacobs (1961:p.37) also discusses perceptions of safety on pavements; she quotes that when people refer to the city as a dangerous place, it means that they feel unsafe on the pavements and footpaths. Therefore, pavements and bordering uses have an active part in safety dynamics. She points out that users of pavements play a valuable role in the drama of 'civilization versus barbarism'; when people are uncertain about the incidence of crime in a place, they use its streets less and hence they become even more unsafe.

However, people's movements through the urban fabric might also be affected by factors of urban form such as streets hierarchy and speeds. Marshall (2005) uses the analogy of a tree structure to clarify aspects related to streets hierarchy. He highlights four structural conditions: differentiation (e.g. streets and squares); ordered ranking (e.g. street width); necessary connections (e.g. arteriality); and allowable connections (e.g. access constraint). In the last condition, 'allowable connections', Marshall suggests that neighbourhoods should not be directly connected to a motorway, unless via transitional distributors. But he also remarks on the relevance of stratification by speed as one of the elementary approach of street management. That helps to create allowable connections with a clear rationale; a minor road with slow traffic should not join main streets with fast traffic. Speed might facilitate or limit people's interactions; Marshall (2005:p.200) holds that 'It is only in determinedly low-speed environments that mixed-mode shared surface roads have become more commonplace, where speed differentials are kept to a minimum'. In this respect, traffic speed seems to be a relevant aspect in the neighbourhood's everyday life and residents' own perception of their built environment. Given this picture, heavy traffic on main streets beside neighbourhoods might trigger other effects linked to low community's interactions in those edges, such as particular perceptions of safety. Outcomes from this thesis' empirical data about that issue, will be addressed in Chapter 7.

Neighbourhoods' edges and delimitations, according to Brunton-Smith and Jackson (2012), are conceived as symbolic units, whose boundaries have been created based on individual perceptions which include physical and social characteristics; they could define different types of areas according to social interactions. That suggests that neighbourhood's' configuration should not be forced. Madanipour (2003) holds that urban neighbourhoods are one of the leading manifestations of socio-economic and cultural divisions, where diverse social, ethnic and cultural groups tend to find their place. Despite several initiatives for planning neighbourhoods, he warns about pretending to create a sense of community based on urban configuration: 'subdivision of the city into distinctive neighbourhoods may create further social fragmentation

rather than the planned social cohesion. These factors make the work of building communities difficult, if not impossible' (Madanipour, 2001:p.189).

In some Latin American countries, especially in big urban areas, neighbourhoods have been organised under a residential segregation logic, classified by socio-economic groups. For instance, in Colombia, since 1994, there is in place a stratification system, in which households are classified according to the quality of their dwellings and surroundings. There are six strata, households in Strata 1 have the lowest physical quality and those in Strata 6 hold the highest, the categories are mainly used for taxation and subsidies (Cantillo-García, Guzman & Arellana, 2019). However, Arriagada and Morales (2009) claim that those classifications in Latin America contribute to erode social cohesion and intensify inequalities.

Arriagada and Morales (2009) found in social housing projects in Chile, that absence of attachment to places might affect safety perceptions. In their study participants associate unsafe places mainly to the lack of appropriation of public spaces, more than 70% consider the presence of strangers as the first risk; in second place, they mention physical features of the environment, such as streets without visibility and dark places. Arriagada and Morales (2009) noticed that older adults emphasised fear of crime moreso with the lack of people on the streets; meanwhile, younger generations focused their concerns on aspects related to design and environment. Also, young people did not show a particular intention to stay in contact with their neighbours or community. Arriagada and Morales (2009) point out that behind their fears, there might be an experience of individualisation and anonymity in the community.

Ruiz (2007) conducted a study in Bogotá about the relationship between fear of crime and a social network. He found that people more involved in community participation, who care about city and show respect towards other citizens, were less fearful of crime and more satisfied with the police than people who were less participative. Other studies have found that strong residential ties and satisfaction with the neighbourhood might result in an inverse relation with fear (Hartnagel,1979; Hale,1996). On the other hand, city

size might have a positive relationship with fear of crime (Clemente & Kleiman, 1976; Hale, 1996). Brunton-Smith and Sturgis (2011) reported that fear of crime may have a ‘spillover’ effect into the urban fabric, as adjacent neighbourhoods might share a similar intensity of fear.

Social life and urban fabric have complex dynamics. Lefebvre (1970:p.87) mentions that social relationships have a surface area which encompasses abstract relationships, many of them with 'juxtaposed, superimposed and sometimes conflicting markets for products, capital, labour, works of art, and symbols, housing and land'. His vision of urban phenomenon and urban spaces is that they embrace social relationships but they are also the ground where they converge. Thereby, space organisation cannot be diminished to global ideologies or the institutions which they serve.

According to Harvey (2012), the urbanisation process has been strongly associated with the accumulation of capital. He refers to how, during the financial crisis in 1970 after the bursting of the real estate bubble, the urbanisation process played an important role in rescuing capitalism from its contradictions, as urbanisation could help to absorb the surplus. Harvey (2012) notes the parallelism with the 2008 crisis and how entire neighbourhoods in Cleveland, Baltimore and Detroit were devastated by eviction. To illustrate this, he cites the episode between Jane Jacobs and Robert Moses in New York in the 1950s. Then a valuable urban fabric was at risk, entire communities and their social network might have disappeared due to Moses’ aspirations to build a significant scale infrastructure. Harvey (2012) claims that urbanisation as a mechanism to absorb surplus has been destroying the right to the city of dispossessed masses and their power to change the world, reinventing the city. Those views can be noticed in the speculation property processes carried out in Latin America in the shape of gated communities, which have also disrupted the traditional urban configuration of neighbourhoods (Gómez-Osorio, 2016).

In this regard, Carrion (2008) highlights how some safety policies in residential areas of Latin America have increased the barriers of differentiation, ironically raising the segregation and creating exclusion spaces. Carrion mentions that

while low-income neighbourhoods search for safety through community identity, high-income neighbours do the same through internal homogenisation. Castells (1999) argues that segregation can be visualised as a process where elites create their own society and isolated communities; therefore, when the social tension increases, the city starts to deteriorate and elites shelter themselves in gated communities.

2.2.2. The rise of walls: Gated communities

Gated communities as residential developments arose in the United States in the early 1980s (Blakely & Snyder, 1997) and in Latin American cities in the late 1990s (Castells, 1999; Coy, 2006). Blakely and Snyder (1997) define gated communities as fenced or walled residential areas with restricted access, where public spaces are privatised; Chapter 1 provides a broader definition. Although the United States has contributed to the spreading of this phenomenon, gated communities have expanded rapidly in urbanising countries since the 1980s as part of economic and spatial transformations (Webster, Glasze & Frantz, 2002).

The increment of gated communities could be explained as an answer to social conflict and violence in the cities, however, those developments also reflect how new lifestyles emerge under the globalisation process (Coy & Pöhler, 2002). Under this perspective, developers are seen as providers of both safety and familiarity (Blakely & Snyder, 1997).

The emergence of gated communities in Latin America in 1990 might be a result of several factors. Coy (2006) attributes both external and internal driving forces. The external reasons are structural conditions such as neoliberalism, globalisation and privatisation. In the 1990s, most of the countries in the region followed the precepts of deregulation; reducing their direct interference in socio-economic and land management, the policies were opened to private capital. Consequently, real estate developers and investors were able to display significant control over urban development. Coy (2006) points this out as being the result of internal forces, status, lifestyle and security.

Fear of crime seems to be mentioned as the most important reason for the tremendous success of enclosed housing areas, adopting the Defensible Spaces' concept (Newman, 1973) which states that symbolic barriers can improve natural surveillance because space is under the inhabitants' control. However, the degree of control that gated residents have over their shared territory might be questionable as gated communities typically have rigorous internal rules. Internally, the surveillance system of gated communities has been explored by Obeng-Odoom, Eltayeb ElHadary and Seong Jang (2014), who hold the idea that their surveillance system is based on the notion of 'panopticon' (Foucault, 1977). Foucault develops that concept using Bentham's panopticon principle in architecture for prisons, which consists of a fortified periphery in a ring-shaped building, with a tower in the middle. He argues that the primary function of a panopticon is to provide constant visibility, automatically ensuring a presence of power. Foucault claims that the exercise of this power must be visible: the awareness of being seen and verifiable as the individual does not know when s/he is being observed.

The spread of gated communities might also have been fed by the opportunities that real estate developers found in mass-produced dwellings for the middle class (McKenzie, 2012). McKenzie argues that developers can offer higher densities in private communities, creating their own parks and amenities to compensate for small lots. In this way, they keep their profit margins and maintain relatively affordable prices. From the municipalities' perspective, McKenzie claims that residents in gated communities pay full taxes but receive fewer services, as the internal administration of the development supplies those. He argues that, as a result of these financial benefits, both developers and local government lead in the organisation of the housing sphere, often excluding other sectors.

However, local governments are also subject to pressures from developers and citizens; thus, the spread of gated communities produces an impact (e.g. residential segregation, fear of crime), which accelerates the construction of more gated developments in turn. Landman (2012) suggests using the DPSIR framework (drives, pressures, state, impacts, response) to understand the relationship's loop of multiple actions and reactions involved in urban

fortification. Through the DPSIR, she concludes that two scenarios might be possible within the South African context:

a. ‘City of Fortified Enclaves’ (negative feedback loop): ‘in which each element – crime, increased fear, fortification, segregation – serves to reinforce the next and in an endless cycle of decline.’ Landman (2012:p.262)

b. ‘City of Mixed Developments’ (positive feedback loop): This is an alternative to intervene scenario a. Despite people still prefer living in gated developments because of criminality, they have the opportunity of ‘social and spatial mixing inside and allow people to integrate inside and between these developments.’ Landman (2012:p.262)

Regarding option b., Landman (2012) suggests that internally the gated developments would incorporate a diversity of housing options and land uses for different social groups fostering mixed communities.

Webster (2002) notices similarities among gated communities and conventional open developments, especially in the way they redistribute and use civic spaces. He holds that institutions in charge of allocating property rights over public areas and infrastructure in neighbourhoods have conceived these goods as club realms. Webster (2002:p.403) defined club realm as 'a spatial domain within which de facto or de jure economic or legal consumption rights over a local public good attribute are shared within a group’. He argues that few civil goods and services are really shared uniformly within the city. As neighbourhoods reach some public spaces nearby, people in gated communities do the same in their common areas. Lee and Webster (2006) state that if a shared resource is congested, this situation will generate an excessive cost, such as queues or conflicts between users. This circumstance might increase the pressure to divide the property rights into private domains or smaller public domains. In this sense, they imply that gated communities might release the pressure over public goods. This means that there is a debate about the dichotomy between public and private domain and the scope of each one to the other (Webster, 2002; Garnett, 2012; Ostrom, 2015).

The management of commons has changed with the population growing; according to Hardin (1968:p.1248) the abandonment of commons began when human beings decided to enclose food sources, such as farms, pastures and fishing areas. He argues that 'Every new enclosure of the commons involves the infringement of somebody's personal liberty'. However, Hardin also criticises 'the freedom of the commons' which has created an unlimited use of a limited resource. Consequently, he proposes coercive regulation as an option to avoid the overuse of collective goods.

In Latin America, Coy and Pöhler (2002:p.368) describe gated communities as 'new islands of wealth developed in the suburban area'. However, Janoschka and Borsdorf (2005) indicate that the enclosure process affects all income groups; they identify three types of gated neighbourhoods in Latin America:

a. Urban gated communities: whose target is the middle or lower-middle class in intermediate locations and upper-middle to upper-class in central zones.

b. Suburban gated communities: for middle and upper classes, with a significant range of facilities or lower-middle class without those facilities.

c. Mega-projects with integrated cultural and educational facilities: there are still few examples but this model is showing rapid growth.

In mega Latin American cities, Coy and Pöhler (2002) identified some common characteristics of those developments:

a. Gated communities are frequently developed as large-scale projects.

b. The most significant difference with exclusive housing areas were the advanced safety measures and walled areas.

c. They replace public spaces with privacy and exclusivity.

d. They are new wealthy spaces within the suburban areas.

e. They have arisen as a result of a lifestyle inspired in a globalisation pattern that came from the United States.

They conclude that socio-spatial fragmentation process in Latin America must be controlled by local regulations able to address a 'socially sustainable urban development' (Coy & Pöhler, 2002:p.369).

Understanding the inside

In Latin America, gated residential developments have been commonly conceived under the condominium scheme, as private properties with shared resources. Caldeira (2000:p.258) refers to them as fortified enclaves, responsible for changing the way 'middle and upper class people live, consume, work, and spend their leisure time'. She holds that gated communities, as restricted areas, highlight the value of what is private and closed, while simultaneously devaluating what is public and open. Caldeira holds that fortified enclaves have become status symbols; the surveillance systems, private security, walls and fences denied the rest of the city are a clear testimony of class separation.

Bellet (2007) in her research about gated communities within the metropolitan area of New York, describes the reasons why people decide to live in gated communities as complex and even banal, from concrete fears to abstract insecurities. Among those factors, she mentions fear of crime, concerns about properties losing their value, fear of strangers, fear of the unknown and fear of others. According to Roitman (2010), concerns about the lack of capacity of the state to supply basic services, especially those regarding protection against violence, drive people to solve the problem by themselves, moving to places such as gated communities. She also expands on the idea of internal forces (Coy, 2006) mentioned earlier, calling them subjective causes:

> as resulting from individuals' desires, interests, viewpoints and opportunities. There are five main subjective causes suggested in the literature:
>
> a. increased fear of crime
>
> b. a search for a better lifestyle
>
> c. desire for a sense of community

d. a search for social homogeneity

e. aspirations for higher social status and social distinction within particular social groups. (Roitman, 2010:p.34)

However, those aspirations are not necessarily achieved when people move into a gated community. Wilson-Doenges (2000) carried out a study in California in gated and non-gated communities with similar income levels. It reveals that high-income gated communities' residents reported a significantly lower sense of community than their high-income non-gated neighbours and there was no significant difference between neighbours from gated and non-gated communities in low-income places. Regarding perceived safety, all communities reported similar levels, except for the high-income gated residents, who reported higher perceived safety during the night.

A similar study developed by Galaviz-Mosqueda, Valladares-Anguiano and Chávez (2014) took place in Mexico in high-income gated and non-gated housing developments. The research compared victimisation experiences and the perceived safety of residents. Among the findings, it was identified that 41% of gated communities' residents had been victims of crime in their life and 56% expressed fear or anxiety if a stranger inside their development approached them. In contrast, despite 74% of participants from non-gated areas having been victimised, just 21% of residents expressed worries if someone unknown approached them in their neighbourhood. Overall, they found higher levels of fear of crime in residents from the gated development. However, they noticed that neighbours from non-gated areas blame deprived areas for being a source of criminality but, as their neighbourhood is far from those places, they considered their location as safe. Nonetheless, these views still perpetuate the stigmatisation of marginalised areas as producers of crime.

The sense of community seems to be very specific among residents in gated developments; according to Low (2004) people move to gated communities to recreate the sense of security that they had in the past, which involves children's protection but also to keep out strangers, achieve quality services and improve control over the environment. However, the reasons for living in gated developments have also local variations; during a study made in

Belgrade by Hirt and Petrović (2011), they researched the post-socialist context when the housing production changed. Previously, people used to live in massive housing blocks craving for privacy. However, with the transformation of housing production after the 1990s, the tenure conditions also changed; small, gated developments emerged as well as large, gated communities; real estate developers sold both privacy and safety. Furthermore, the ingress of foreign capital and the re-entry of Serbia into the global economy fostered the rise of 'Western-style gated communities' (Hirt & Petrović, 2011:p.773).

The advertisement of gated communities is another factor that might fuel individual aspirations. Caldeira (2000:p.264) describes that message as an 'image of islands to which one can return every day to escape the city and encounter an exclusive world of pleasure among peers'. Closed condominiums are advertised as ecological, healthy, organised, entertained and safe places (Caldeira, 2000).

The decision to live in a gated community might have variations locally; the search for safety seems to be the most common factor or justification. However, beyond the individual reasons, there are global forces that foster the spread, such as the openness to private markets, globalisation, the increase of inequalities and violence. Those circumstances seem to be exploited and catalysed by private developers to reinforce people's personal aspirations of safety, privacy and exclusivity.

Beyond the wall: The outside

Once in place, gated communities are embedded into the urban fabric taking part of a city's dynamics. Their effects towards the outside have been analysed from different perspectives, mainly focused on spatial segregation. This fragmentation can be both social and physical; socio-economic effects have been also explored. However, there is little research regarding its effects on crime rates and even less about fear of crime.

Spatial segregation

Gated communities' edges might be more than physical barriers. Blakely and Snyder (1997) hold that they are a reflection of tensions between particular aspirations based on fear and the defence of privileges; although the principles of community responsibility are present, the common spaces inside are a manifestation of segregation rather than a jurisdictional construction.

Among the social effects of gated communities in their surroundings, residential segregation seems to be the most commonly cited. This phenomenon has been mentioned broadly in the literature (Blakely & Snyder, 1997; Caldeira, 2000; Low, 2004; Minton, 2009; Roitman, 2010; Sennett 2018). Roitman and Phelps (2011) mention that segregation varies on intramunicipality or intermunicipality scales. For instance, in the United States' suburbs, gated communities seem not to increase the intramunicipality social disparities, due to reinforcing homogenisation; hence, disparity appears in an intermunicipality scale. In contrast, in the Latin American suburbs, the gated communities have increased the social segregation at the intramunicipal level where poor and rich are close to each other but divided by a wall.

In contrast, scholars such as Sabatini and Salcedo (2007:p.596) argue that gated communities help to reduce the scale of segregation in Latin America. They state that after the arrival of gated communities in many marginal areas of Santiago, Chile, those places have changed their segregation patterns from large scale to a 'kind of microsegregation'. For them, that situation reduces the relevance of spatial distance as an obstruction for any contact between both social groups. Their argument is that the appearance of closed developments into a deprived area might contribute to revitalising the surroundings by creating new jobs and small businesses.

Sabatini and Salcedo (2007:p.602, p.592) continue by saying that 'Poor urban ghettos, which are a sociological phenomenon, represent our true enemy—not the walls of gated communities, which are a mere physical artifact'. They support the idea that there is a symbolic integration and people living outside feel the desire to improve their own houses, even their personal appearance,

because of the notion that ‘the pride distinguishes their neighborhoods from other poor areas’. Furthermore, they believe that neighbouring communities have accepted the walls as a reality generated by the crime rates. Despite the closeness between gated and non-gated residents and the apparent normalisation of walls, Sabatini and Salcedo’s (2007) results do not show that residential segregation is less deep, just that it can be allocated in small portions across poor areas. As Sassen (2013:p.216) points out, coexistence within the city ‘does not mean equality and mutual respect’.

Contrary to Sabatini and Salcedo’s (2007) argument, Caldeira (2000) holds that the closeness between gated communities and marginalised groups in Latin America has provoked ‘fortified enclaves’ promoting the separateness instead of any type of integration. Caldeira’s study in São Paulo identifies three patterns of spatial segregation from the last century. First from the 1890s to 1940s: a concentrated and heterogeneous city; when different social groups lived in the centre segregated by the type of housing. Second, from the 1940s to 1970s: the centre-periphery pattern; a dispersed city where middle and upper class lived in the centre and poor inhabitants on the periphery. Long distances separated those populations. The third pattern from the 1980s onwards: the ‘fortified enclaves’ appear when middle and upper classes moved from the centre to the peripheries. This displacement is mainly motivated by fear of crime, therefore those classes are close to each other but separated by physical barriers and control systems. Caldeira argues that those enclaves have transformed the nature of public space and the essence of public interaction, increasing feelings of exclusion and denying the rest of the city. The public space is ‘becoming increasingly marked by suspicion and restriction’ (Caldeira, 2000:p.258).

Vaughan and Arbaci (2011:p.135) claim that urban segregation 'shifts its focus from location to location'. They mention that Europe tends to focus on ethnic differences whereas: in Latin America it is a social class issue; in Australia it is a matter among old and new migrants; in Israel it is part of religious differences; and in the United States it is more likely to be an issue about race and class. In Costa Rica, the urban areas where gated communities are located have increased their social segregation steadily. The closed

condominium's locations are not in high-income areas per se but they tend to avoid the low-income sectors. Additionally, they are in areas with a low interaction between different social groups; where possible, condominiums take advantage of topographic features and rivers to establish natural barriers with the neighbouring communities (Pujol, Sanchez & Pérez, 2011).

Mobility in public spaces and urban fabric.

The alteration of the urban fabric and drawbacks in the road system might be one of the most visible externalities of gated communities towards the outside. Lemanski (2006:p.408), in her research in Cape Town, found that the presence of those developments forced non-gated residents to travel long distances; for instance, almost three kilometres to reach shops located less than 100 metres away. Lemanski holds that the nature of design and land management approved during the post-apartheid era ‘supposed equality and freedom for all’, however, those aims are not achieved by planning authorities. In this regard, Landman (2008) points out that current South African cities despite positive policies, still repeat similar spatial patterns of the early 1990s, such as low-density sprawl, fragmentation and segregation, which are intensified by large, gated communities.

Handal and Irazábal (2019) carried out a research in gated neighbourhoods in Tegucigalpa, Honduras from 2011 to 2019. They focused on the programme ‘safer barrios’, which encouraged communities to gate their neighbourhoods to avoid criminal episodes. Among the most consistent consequences for the outside were the restriction in mobility patterns, some drivers duplicated their time navigating in those areas, traffic had increased and roads required maintenance more often.

Socio-economic effects

Among the economic externalities of gated communities over their peripheries, Roitman (2010) points out the influence in land markets and the local economy. Le Goix (2005) highlights the negative impact on property values of adjacent communities. Other authors refer to the commercial interchange and labour relations between the inside and outside (Salcedo & Torres, 2004; Lemanski, 2006; Boakye Asiedu & Arku, 2009); however, their findings are

mixed regarding the intensity of social ties between gated and non-gated residents.

In South Africa, Lemanski (2006) found that people living outside gated communities in Cape Town felt unwanted by their gated neighbours. The high walls and electric fences had exacerbated the exclusion feelings. She identified a mutual negative perception between those living inside and outside and no friendship ties. Despite the limited contact, she noticed some connections due to employment relations and through a local NGO. Lemanski (2006:p.416) concludes that gated communities' walls and design have replaced 'spatial apartheid with social apartheid as different groups may live in spatial proximity but continue to operate in separate social and functional spheres'. Later, Libertun de Duren (2012) reinforces that view by holding that gated communities in South Africa perpetuate elements of racial discrimination officialised during the apartheid.

In contrast, Salcedo and Torres (2004) found, in Santiago, that inhabitants from a non-gated neighbourhood had a positive perception of their gated neighbours. They hold that most of non-gated residents were glad because gated communities brought modernity, new infrastructure, services and jobs. However, among the criticisms from some non-gated residents was the increase in traffic, drug addiction and crime since gated communities arrived. An intermediate outcome is presented by Boakye Asiedu and Arku (2009) within three communities in Ghana. They found that the nature of interactions between the two groups was mainly economic; gated residents employed people from the outside and also bought goods and items from surrounding communities. Despite those interchanges, Boakye Asiedu and Arku (2009) reveal that personal relationships between both groups were weak.

Crime and perceived safety

As shown earlier, the 'safer barrios' strategy seek gating current neighbourhoods. According to Handal and Irazábal (2019), it has been replicated in other countries in Central America, such as Guatemala and El Salvador, as a response to the growing crime rates. Similar to Honduras, those countries have increased their spatial segregation as a consequence.

Paradoxically, gangs have taken advantage of that model; Handal and Irazábal (2019:p.16) mention an illegal 'mirroring practice of Safer Barrios' operating in Tegucigalpa. Strong criminal gangs have delimited neighbourhoods that they consider their territory, through fake signs and physical features from 'Safer barrios'. They summarise the main effects of residential gating in Honduras as being: drawbacks in connectivity and mobility across the capital; a reiteration of socio-spatial segregation between residents inside and outside; privatisation of open spaces; and abandonment of those outside gated neighbourhoods, inducing actual and perceived insecurity.

Scholars have suggested that gating might provoke a relocation of crime towards the non-gated neighbourhoods (Helsley & Strange, 1999; Low, 2004; Breetzke, Landman & Cohn, 2014). Through a *Model of Gating and Criminal Geography*, Helsley and Strange (1999) examined the externalities of gating in the spatial distribution of crime in adjacent communities. They concluded that gating diverts criminality to other neighbourhoods, affecting the efficiency of the land market and, since crime redistribution occurs, there is a reduction of people willing to live in the areas. Helsley and Strange highlight the fact that developers overlook the impacts of gating over other communities. Another example is the work of Breetzke, Landman and Cohn (2014:p.134); they found that areas surrounding gated communities in Tshwane (South Africa) had up to four times more burglary density than the city overall, suggesting that 'gating does not deter criminal activity, but in fact attracts it'.

Although scholars have addressed the impact of gating over the adjacent communities, there are still limited empirical data in that field (Le Goix, 2005). Le Goix (2005:p.331) contributes to the topic by exploring the sprawl of gated communities in Southern California, the impact on social segregation and dissimilarities associated with their surroundings. As he describes it, homeowners within gated communities are sheltering themselves against crime or the decay in property value. However, the rise of barriers results in a 'two-way relationship between the two adjacent territories, gated communities also produce externalities over their neighbours'.

Le Goix (2005) uses the term ‘discontinuity’ to refer to the discrepancy between gated communities and their surroundings in terms of barriers, segregation and the different processes that are triggered. He found that, in the areas where discontinuities were more representative, gated enclaves also had a double boundary, an additional buffer to protect the gated community from neighbouring communities. Le Goix noticed that gated developments were localised within one municipal boundary, in ethnic homogeneous neighbourhoods but surrounded by a high discontinuity in terms of age and social-economic status. He concludes that the sprawl of gated communities is not only supported by real estate developers but also by local governments which thereby release themselves from providing some public services but are still able to collect taxes from gated residents.

In many contexts, gated communities, despite being a result of particular ownership models such as a condominium scheme, are also urbanisation processes; therefore, they could be controlled through urban codes. However, it seems many local authorities have just legitimised the possibility of enclosing under the rationalisation of fear of crime, neglecting the formulation of planning rules to control the shape and configuration of gated communities. Marshall (2011:p.1) highlights the relevance of urban codes because ‘they significantly shape the character of our urban areas – for better or worse’. Condominium’s scheme and planning regulations vary across countries in Latin America; typically, an ownership model is not intrinsically linked to a particular construction’s form (e.g. condominium does not mean gated). The externalities analysed in this section are the result of social and spatial effects connected to a physical structure. Although local governments are, perhaps, under pressures from the market and real estate developers to facilitate building gated communities, the final outcome in place, will be the result of their planning standards.

2.3. Conclusion

Multidisciplinary perspectives have taken part in the analysis of fear of crime and building of gated communities. This chapter closes by summarising ongoing debates and research gaps identified in those discussions.

The debates about the relationship between victimisation and fear of crime still have mixed outcomes. Some authors claim a limited relationship between both phenomena (Garofalo, 1979; Agnew, 1985) whereas within the Latin American context a positive relationship has been reported (Ruiz & Turcios, 2009; Vilalta Perdomo, 2010). Other scholars suggest that fear of crime might be linked to spatial memories of victimisation or the bad reputation of a place (Koskela & Pain 2000); although victimisation memories in public spaces might be exacerbated by collective narratives (Godfrey, 2017). In this respect, further research is required to explore how individual and collective victimisation narratives in public spaces are spatially connected to the distribution of fear of crime.

Regarding sociodemographic factors, gender seems to be the most consistent predictor (Sacco,1990; Ferraro, 1996). There is a general consensus that women have higher levels of fear of crime than men (Sacco, 1990; Hale, 1996; Falú, 2009; Tandogan & Ilhan, 2016). However, localised perceptions in men and women about features of the built environment might need more investigation. A research gap was found related to particular emotional responses of men and women to physical characteristics of gated communities. Another demographic aspect broadly approached in the literature is age. A significant amount of research points toward people becoming more fearful as they grow older (Lebowitz, 1975; Hale, 1996; Ceccato & Bamzar, 2016). Nonetheless, as Melde (2011) argues, little research has been done to understand the fear of crime in teenagers despite holding high rates of victimisation.

A positive relationship between fear of crime and income inequalities has been widely supported in the literature (Wilkinson & Pickett, 2009; Hummelsheim, et al. 2011; Vauclair & Bratanova, 2017). Many outcomes have been obtained by comparing indices from countries and states or regions; thereby, those data enable comparison across different societies. Those approaches allow obtaining general or macro pictures about fear and income inequality. However, impoverished communities, apart from structural deprivations, might also have inequalities in infrastructure. In this respect, further research is needed to explore whether the physical conditions of neighbourhoods across

different poverty ranges influence safety perceptions; furthermore, it should be explored whether distribution of fear of crime within each neighbourhood has spatial variations (e.g. which streets are considered dangerous and why) and how narratives about those places varies across incomes levels.

The relationship between the built environment and crime prevention has been widely debated. The dichotomy between open and closed environments, surveillance, activity and manipulation of the built environment, seems to dominate the discussion. Although these views overlap, among the most well-known approaches are *Defensible Spaces* (Newman, 1973), *Eyes on the Street* (Jacobs, 1961) and *Crime Prevention Through Environmental Design* (Jeffery, 1971 in Ceccato, 2020). Gated communities have embraced Newman's approach (Coy, 2006) based on territoriality and boundaries.

As a general consensus, gated communities' growth has been mainly fuelled by fear of crime (Caldeira, 2000; Low, 2004; Coy, 2006; Roitman, 2010). External factors have contributed to their spread such as neoliberalism, globalisation and privatisation (Coy, 2006), also there have been specific motives in each society such as ethnic differences, social class, religious reasons or migratory prejudices (Vaughan & Arbaci, 2011). Most of those motives, to some extent, are linked to fear as a cause for living in gated communities. However, a research gap was found regarding the opposite direction: effects of gated communities in the production of fear of crime, especially towards the adjacent open neighbourhoods.

The literature points towards gated communities' effects mainly on spatial segregation (Blakely & Snyder, 1997; Caldeira, 2000; Low, 2004). In addition there are also consequences on alteration of land markets (Roitman, 2010), fragmentation of urban fabric (Landman, 2008), restrictions on mobility (Lemanski, 2006) and crime rates (Helsley & Strange,1999). All of those elements may contribute to the spread of feelings of anxiety. However, further empirical research is required to understand if gated communities are catalysts of fear in their peripheries and if this feeling varies in accordance with socio-economic and physical conditions of surrounding neighbourhoods. Thereby this thesis will contribute to that field by addressing this research gap.

Many authors highlighted the complexity of fear of crime and the multiplicity of factors involved. In literature, scholars have criticised traditional methodological approaches to investigate that phenomenon because of a lack of accuracy or depth (LaGrange & Ferraro,1989). As will be detailed in Chapter 4, the methodological design of this research will incorporate those views. The research is conducted mainly through qualitative analysis and is complemented with quantitative information; the data collection process mixes different techniques encompassing walking interviews, focus groups, in-depth interviews and observations. Finally, the information is analysed through thematic analysis and discourse analysis, combining Geographic Information Systems (GIS) with qualitative software. It is the purpose of this thesis to contribute to a growing body of literature and methods which use GIS to research fear of crime but at the same time incorporating new approaches to spatial representations.

As presented in this chapter, the rise of gated communities worldwide has elements in common but there are also circumstances attached to different contexts. Likewise, fear of crime varies according to geographic realities, despite some common predictors. Therefore, before introducing the methodological approach, Chapter 3 displays Costa Rica's situation within the Latin American context and the general conditions of the study area.

Chapter 3. The Costa Rican context

This chapter provides an overview of the Costa Rican context. It starts with a contextualisation of poverty, health, education, inequalities and violence within Latin America. This nation, as part of Central America, has been affected by the armed conflicts in that region during the 1980s. Despite not having an army or any wars since 1948, Costa Rica was involved in the Central America disputes mainly because of its strategic location. Later, those circumstances led to drug trafficking issues.

Drug transactions within neighbourhoods seem to be a catalyst for fear of crime in Costa Rica; this chapter gives a brief outline of how this issue originated. Furthermore, there is a review of the Central American circumstances related to victimisation and fear of crime, in order to make a comparison between Costa Rica and its neighbours.

After the regional contextualisation, there is a description of the study area (GAM) within the country; that analysis includes poverty and inequality indicators, the planning framework and the role of institutions. The situation of gated communities is addressed from the land management perspective. The chapter closes by describing mechanisms for people's participation in planning and the role of community organisations in the built environment in Costa Rica.

3.1. Costa Rica in the Latin American context

Costa Rica is located in Central America, between Nicaragua and Panama (see Figure 3.1). Its population is approximately 5,111,221 people (INEC, 2020) and its surface area covers 51,100 km^2. This country is the third smallest within Central America (CA) after El Salvador and Belize.

Figure 3.1. Location of Costa Rica in Central America (CA).



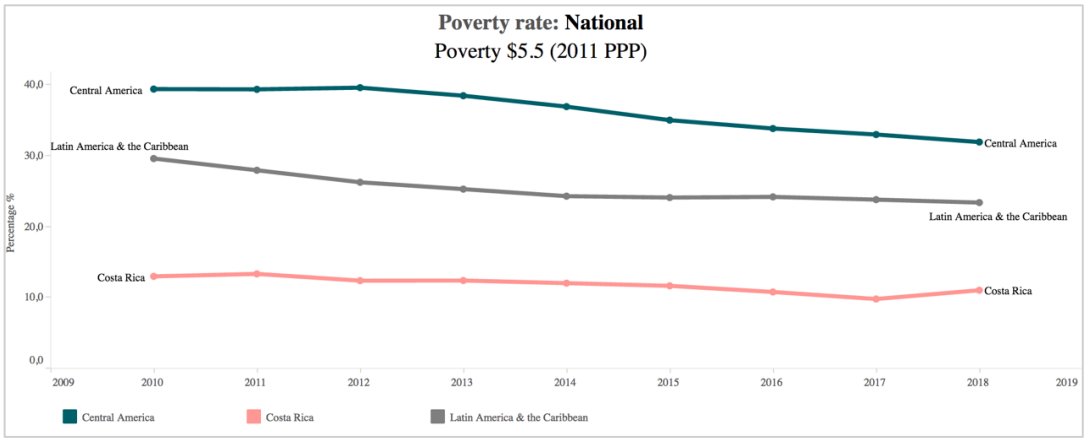
Source: Adapted from Google Earth, Maxar Technologies, 2018.

3.1.1. Poverty and inequalities

Relative to Latin America, Costa Rica seems to have less critical conditions regarding poverty rates. In 2018, according to figures from the World Bank (2020b) the percentage of people living on less than $5.5 (2011 PPP[1]) a day was 10.9%, in contrast to 23.3% for Latin American and the Caribbean and 31.8% in Central America (See Figure 3.2). As shown in the following charts, Central America has many contrasts despite being a small territory. Those differences are reflected in the inequality index, life expectancy, health and education.

[1] PPP (Purchasing power parities) 'are the rates of currency conversion that try to equalise the purchasing power of different currencies, by eliminating the differences in price levels between countries'. (OECD, 2020, para.1).

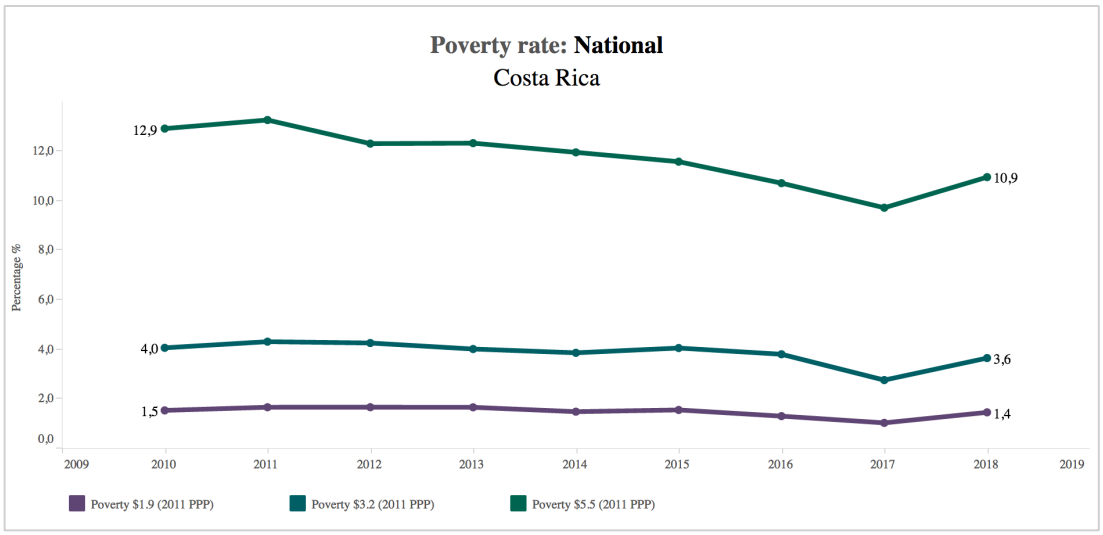
Figure 3.2. Percentage of people living under the poverty line of $5.5 per day in Latin America and the Caribbean, Central America and Costa Rica.



Source: Reprinted from Latin America and Caribbean Equity Lab, electronic dataset, (World Bank, 2020b).

Apart from the data presented in Figure 3.2, the World Bank provides poverty rates such as the percentage of people living under $3.2 and $1.9 per day. Figure 3.3 displays those indicators for Costa Rica and shows that the percentage of people on different levels of poverty might be increasing since 2017.

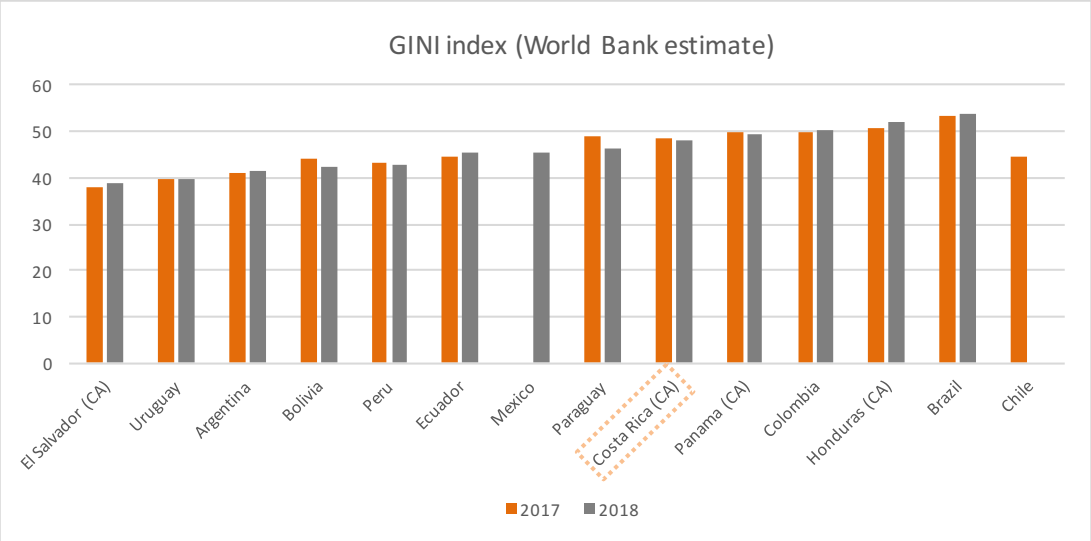
Figure 3.3. Percentage of people living under the poverty line of $5.5, $3.6 and $1.9 per day in Costa Rica.



Source: Reprinted from Latin America and Caribbean Equity Lab, electronic dataset, (World Bank, 2020b).

In 2018, the incomes of almost all Costa Rican households decreased by 3.6%. Groups at both ends of the income distribution, first and tenth decile, suffered the most substantial loss with −6.4% and −5.5% respectively (Morales Aguilar, 2019). Although a high level of inequality has characterised Latin America, most of the countries started to see a reduction in their disparity figures at the beginning of the century. However, it seems Costa Rica has lost its comparative advantage; the country moved from being one of the most equitable towards having ranges similar to the average (PEN, 2019a). In 2019 the Gini coefficient was 0.514; this indicator has been above 0.507 since 2010 (INEC, 2019). Figure 3.4 shows the Gini index estimated by the World Bank for the countries of Latin America; the chart excludes countries from the Caribbean islands and those without information in 2017 and 2018. Although the World Bank's estimations are slightly different from the Costa Rican National Institute of Statistics and Census (INEC), they provide a valuable comparison with other countries from Latin America, including Central America (CA).

Figure 3.4. Gini Index estimated by the World Bank, for some Latin American countries, Central America (CA) included.



Source: Author's elaboration with data from World Development Indicators electronic dataset (World Bank, 2020c).

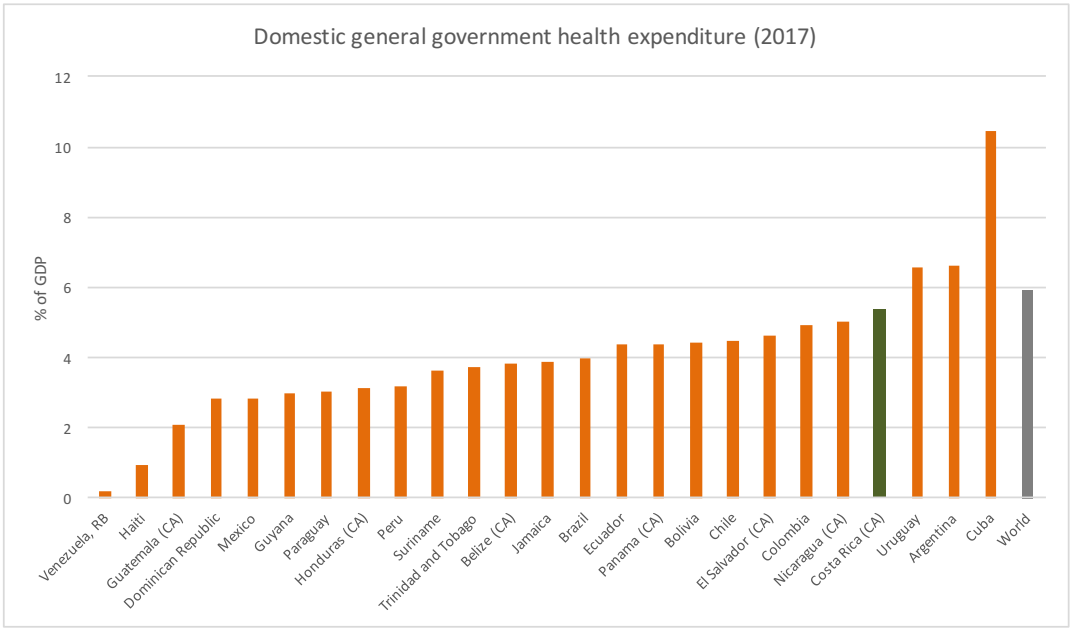
3.1.2. Healthcare

Costa Rica started the universalisation process of its healthcare in 1961. Currently, the system covers all workers (national and residents) and their families, non-workers under voluntary payment, people in poverty sponsored by the state, people under the age of 18, pregnant women regardless of their working condition, all pensioners and the homeless identified by the state (Sáenz, Acosta, Muiser & Bermúdez, 2011).

The country allocates a significant portion of its GDP to the healthcare system –around 5.4% in 2017 (World Bank, 2020c). Figure 3.5 shows the general domestic government health expenditure in 2017 for those countries in Latin America with a population over one million people and for which data is available. As displayed, Costa Rica is amongst the countries with a higher GDP investment in that field.

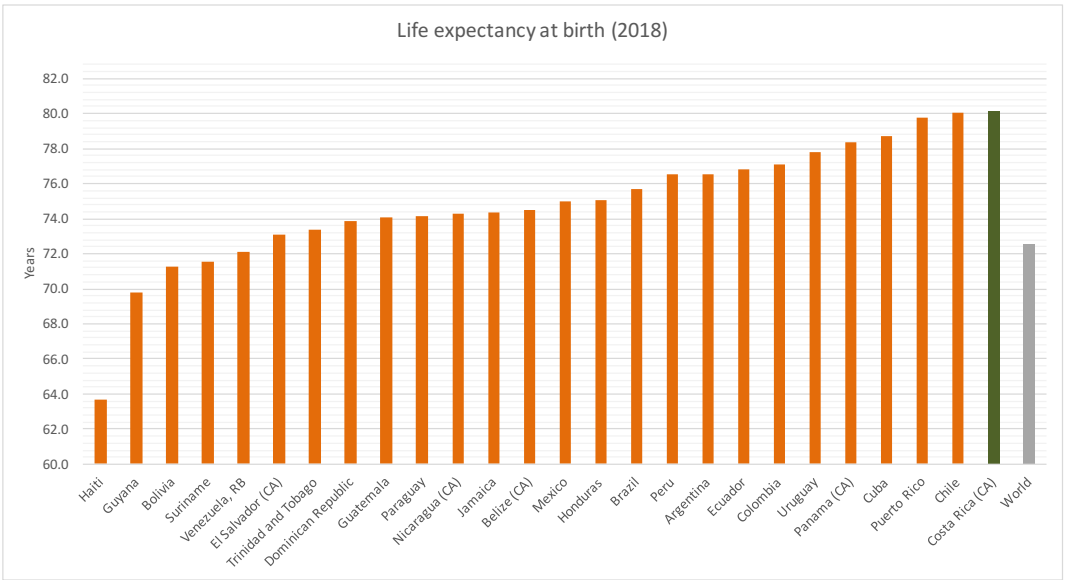
The high level of investment in the healthcare system might explain the figures of life expectancy at birth, which was 80.1 years in 2018 (see Figure 3.6), reaching one of the highest levels in Latin America, alongside Chile (80.0 years). Despite these positive figures, the Costa Rican healthcare system has many challenges. It had significant success between 1950 and 1980 when its coverage expanded but from 1980 onwards the system went into an organisation crisis which had limited investment and had generated concerns about its long-term sustainability (Sáenz, Acosta, Muiser & Bermúdez, 2011).

Figure 3.5. General domestic government health expenditure in 2017 in Latin America. Excluded are Caribbean countries with populations lower than one million and countries without data.



Source: Author's elaboration with data from World Development Indicators electronic dataset (World Bank, 2020c).

Figure 3.6. Life expectancy at birth in 2018 in some Latin American countries. Excluded are Caribbean countries with populations lower than one million and countries without data.

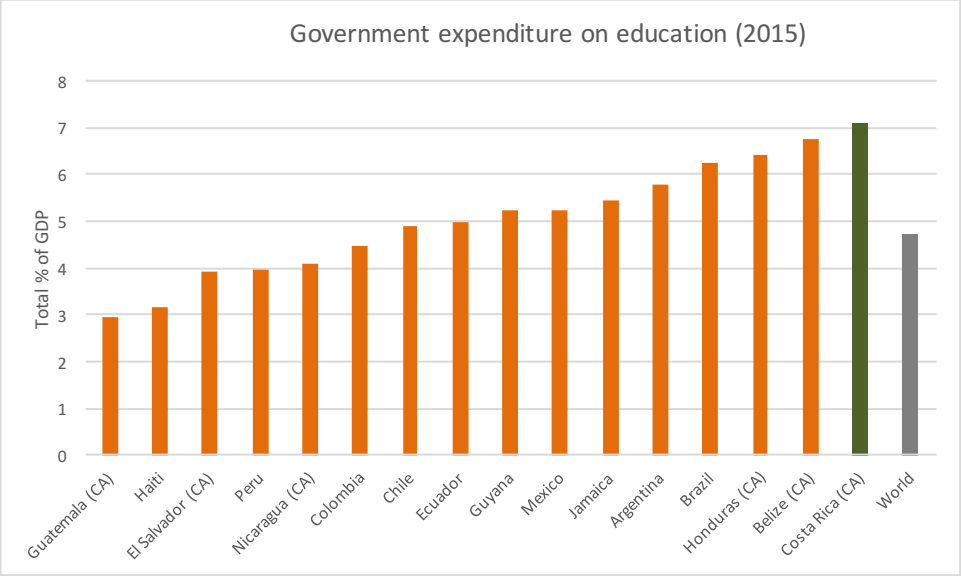


Source: Elaborated by the author with data from World Development Indicators electronic dataset (World Bank, 2020c).

3.1.3. Education

The Costa Rican constitution says that the state must allocate at least 8% of its GDP to education. However, the fiscal sustainability that supports educational funds has had significant problems. Although the 8% GDP has not yet entirely been met, the situation has placed this goal under even further threat (PEN, 2019b). Despite these drawbacks, Costa Rica is one of the Latin American countries that spends a greater percentage of its GDP on education. Figure 3.7 displays the expenditure on education in 2015 for some countries in that region (2015 was the year with the most accurate available data). These figures reinforce the disparity of conditions within Central America.

Figure 3.7. Government expenditure on education in 2015 in Latin America. Excluded are Caribbean countries with populations lower than one million and countries without data.



Source: Author's elaboration with data from World Development Indicators electronic dataset. (World Bank, 2020c).

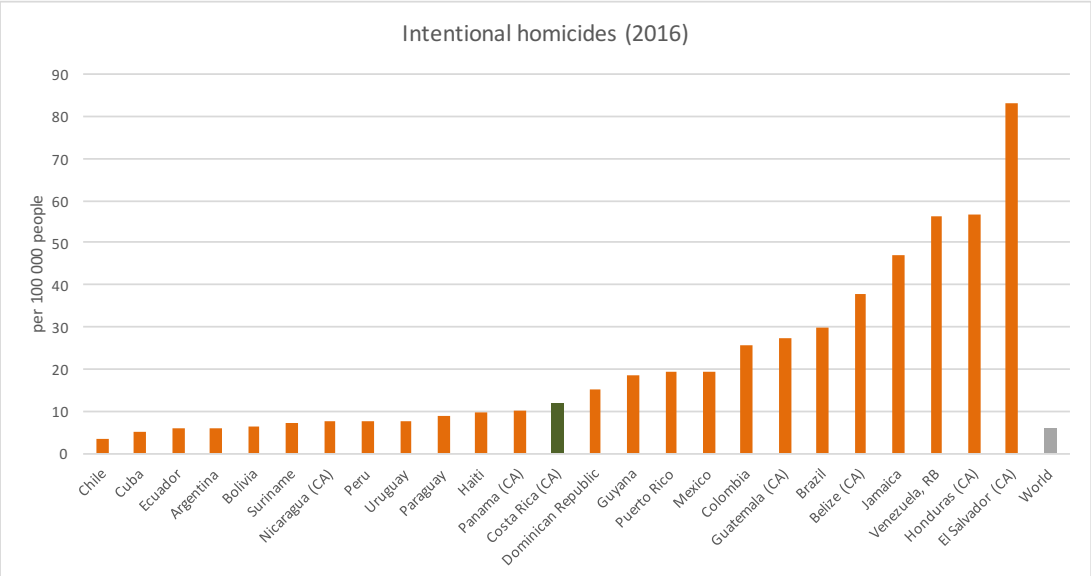
In the last few years, Costa Rica has carried out ambitious educational projects, however, the scheme seems to be entrapped in an inappropriate management structure. Conditions have made it less efficient to operate the system, undermining the swift response to new challenges in human development and democracy (PEN, 2019b).

Although Costa Rica holds an advantageous position in health and education relative to the rest of Latin America, the current situation at this juncture places the country in a fragile position. In 2018, Costa Rica was at risk of not being able to accomplish all the state's commitments because the country was on the edge of a financial crisis. Even though some measures had been taken, the scope for action became much reduced. This meant that economic reactivation might not be reached through higher expenditure and public investment (PEN, 2019a).

3.1.4. Violence

Latin America holds the highest rates of homicide worldwide (Chioda, 2016); it is also the most unequal region in the world (PEN, 2016). A large body of evidence shows a 'clear relationship between greater inequality and higher homicide rates' (Wilkinson & Pickett, 2009:p. 135). Figure 3.8 shows the rates of intentional homicides for some countries in Latin America during 2016. Costa Rica is not among the most violent countries in Latin America, however, it holds a rate of 11.9 homicides per 100,000 people, which is significantly higher than the worldwide average – six homicides per 100,000 people.

Figure 3.8. Intentional homicide rates for Latin America in 2016. Excluded are Caribbean countries with populations lower than one million and countries without data.



Source: Author's elaboration with data from World Development Indicators electronic dataset. (World Bank, 2020c).

The annual publication *Latinobarometro* explored people's perceptions about violence in Latin America. Participants were asked about which forms of violence were most harmful in their countries (multiple-answer questions); 64% of responses indicated domestic violence against women, 63% violence against children and 58% violence on the streets. When they were interrogated about the same threat, but in the place where they lived, the order changed: in first place was violence on the streets 35%, then domestic violence against women 26% and then gangs or 'maras' 25% (Corporación Latinobarómetro, 2018).

The feeling of being always concern about being a victim of a crime in Latin America seems to have fallen slightly, from 43% in 2017 to 40% in 2018. The country where most people admit to never feeling concerned about becoming a victim of crime is Honduras, with a figure of 27.5%; at the opposite end of the scale are the Chilean people where 7.4% share the same feeling (Corporación Latinobarómetro, 2020). Paradoxically, those figures do not concur with the homicide rates, commonly used as the violence indicator. As shown in Figure 3.8, Honduras has one of the highest homicide rates (56.5) in Latin America; meanwhile, Chile has the lowest rate of homicides (3.4) which is even lower than the worldwide average (6). Apparently, fear of crime is a phenomenon that does not necessarily depend on victimisation rates; many factors influence that feeling. Chapter 2 explores those circumstances in more detail.

Table 3.1 displays the concerns about being a victim of a violent crime, addressing the question: 'How often are you concerned about being a victim of a crime with violence?'. As noted, Costa Rica has one of the highest percentage of people who declare 'Always or very often' (42.3%) alongside El Salvador (45.7%); both figures are higher than the Latin American average (40.3%). Although the homicide rates in Costa Rica are significantly lower than El Salvador (See Figure 3.8), the gap of fear between both countries is narrow.

Table 3.1. Concerns about being a victim of a crime in Latin America in 2018.

How often are you concern about being a victim of a crime with violence?

	Latin America including CA (%)	Central America (CA) (%)					
		Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	Panamá
Always or very often	40.3	42.3	45.7	29.8	26.4	30.3	37.7
Sometimes	26.8	21.6	26	27.8	25.8	33.9	29.5
Rarely	15.8	17.1	13.2	15.5	18.8	14.2	13.4
Never	15.9	17.6	14.6	23	27.5	19.6	17.4
No reply	1.2	1.4	0.5	4	1.4	1.9	2
Sample (N)	**20204**	**1000**	**1000**	**1000**	**1000**	**1000**	**1000**

Source: Elaborated by the author with data from Latinobarómetro Database. (Corporación Latinobarómetro, 2020)

As well as the homicides, there are other types of crimes: robbery, assaults and mugging, among others. Table 3.2 shows the general percentage of victimisation in each country of Central America and overall in Latin America. It reveals that 23.4% of people from Costa Rica admit to having suffered some crime, either to themselves or relatives. This figure is higher than the rest of Central American countries and marginally lower than the Latin American average.

Table 3.2. Victimisation in Latin America in 2018 (last 12 months).

Have yourself or any relative been a victime of a crime? (In the last 12 months)

	Latin America including CA (%)	Central America (CA) (%)					
		Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	Panamá
Yourself	5.9	6.1	3.9	3.2	4.4	3.7	4.1
Relative	13.8	15.4	8.4	12.6	9.1	14.3	13.9
Both	3.8	1.9	1.8	2	1.5	2.6	2.3
No	74.4	76.3	85.5	81.4	84.6	78.8	79
I do not	1.2	0.3	0.3	0.8	0.3	0.4	0.7
No reply	0.8	0	0.1	0	0.1	0.1	0
Sample (N)	**20204**	**1000**	**1000**	**1000**	**1000**	**1000**	**1000**

Source: Elaborated by the author with data from Latinobarómetro Database. (Corporación Latinobarómetro, 2020)

Although the homicide rates in Costa Rica are not among the highest within the region, other types of victimisation might also be affecting the general perception of fear.

Central America: A region beaten by armed conflicts

Armed conflicts have dominated Central America's history. War during the late 1970s and the 1980s was one of the leading causes of death and concern (Sandoval-García, 2015). For instance, during the genocide in Guatemala, around 200,000 people were killed and one million were displaced because of military dictatorships, rebel movements and counterinsurgency operations. A

small elite ruled El Salvador, controlling land and the economy and efforts from insurgent groups to change that situation triggered a war with more than 70,000 people killed and millions of internal and external displacements (Manz, 2008).

Nicaragua overthrew the Somoza dictatorship in 1979; as a result of this conflict, between 20,000 and 30,000 people died. Honduras did not have an internal army conflict at that time, nonetheless, it was chosen as a base for the *Contras*, a right-wing Nicaraguan group that served as an opposition force against the government. Honduras also faced the arrival of 30,000 refugees from El Salvador after its own disputes (Manz, 2008).

Those conflicts, apart from numerous deaths, provoked international migrations (Sandoval-García, 2015). In 1987, the peace processes known as *Esquipulas* were signed by the presidents of Guatemala, El Salvador, Honduras, Nicaragua and Costa Rica. In 1988, that agreement allowed refugees to return to their home countries; that return was a challenge for the region. Sandoval-García (2015:p.11) states that contemporary migrations in Central America have structural dimensions and they shape its societies; they result from 'exclusion processes, at the same time supply which neither the State and market provide'.

Costa Rica has one of the most stable democracies within the region, which has lasted more than 100 years. This country was a dictatorship after the First World War, from 1917 to 1919. During those two years, the regime had a strong internal resistance and no support from the United States (Aravena, 2018). Costa Rica also faced a conflict in 1921 with Panamá known as *Guerra del Coto*. This was related to a dispute over the Costa Rica-Panamá border; that situation resulted in the interruption of diplomatic relations between both countries for ten years. The last armed conflict in Costa Rica was a civil war in 1948; later the same year, the army was abolished and in the following year the constitution was reformed. Later in 1994, Panamá also dissolved its army (Aravena, 2018).

Drug traffic

In addition to the fragile political position of Central America in the 1980s, drug trafficking began to have more impact on the region from 1982 during Ronald Reagan's administration in the United States. He used the term 'drug traffic' [narcotráfico] to describe the movement of illegal drugs, mainly cocaine, from those countries considered producers to consumers (Palma Campos, 2018). In this respect, the entire region – not just the producers – was blamed for being, to some extent, permissive in allowing the transit of drugs. Palma Campos (2018) mentioned that, initially, the relationship of Costa Rica with drug trafficking was only because of its geographic location.

The political interventions from the United States in Central American's armed conflict during the 1980s triggered a complex situation, dragging Costa Rica into drug conflicts (Palma Campos, 2018). The United States' interests in the Nicaraguan situation caused it to support counter-revolutionary groups – the *Contras*. Costa Rica, as Nicaragua's neighbour, had a strategic location. Palma Campos (2018:p.43) suggests that, despite the popular knowledge about the presence of *Contras* groups, their funding was not clear. However, in 1987 the US House of Representatives revealed details of the 'Iran-Contras' affair which involved weapons, drugs and geopolitical control. Among their findings was the link of the 'CIA with the drug cartels to fund the Contras in Nicaragua'. Consequently, these scandals also involved Costa Rican politicians who apparently got some benefits to fund their political campaigns with money from those drug transactions.

Currently, Costa Rica acts as a bridge for cocaine traffic from South America to North America and has a role in these illegal international dynamics. During this transfer, quantities of drugs remain in the country as a payment to dealers or for local consumption (Palma Campos, 2018). As a result, 'small' drugs transactions within neighbourhoods affect fear of crime and people's perceptions of the built environment. In Chapter 7, those consequences are analysed alongside their connection to gated communities.

Iron fist

In Costa Rica, fear of crime has provoked a growing presence of devices to ensure private safety in public spaces and an associated infrastructure for security, such as physical barriers to control access to neighbourhoods, fences and closed-circuit television (Huhn, 2012). Those heavy demarcations can increase the gap between the public and private sphere and raise isolation in open spaces. According to Huhn (2009), the discourse of 'iron fist' (strong punishments) in Costa Rica has been continually growing under the assumption that crime rates are increasing. However, although the figures have not exploded in the last 20 years, some of them have steadily grown; others have reached a peak, then decreased (Huhn, 2009). As Chapter 2 addressed, the 'iron fist' measures in Central America do not appear to be helping to reduce the number of murders. Huhn (2008) made a study in Costa Rica, El Salvador and Nicaragua in which people were asked about possible solutions to criminality. Paradoxically, where 'iron fist' has been actively applied, such as in El Salvador, responders show more disposition to implement a social change, with more inclusive solutions favoured instead of punishment. In Costa Rica, in contrast, where those measures have not been widely adopted, there was a higher response for oppressive measures than the alternatives. Furthermore, most responders did not allude to income inequality or social exclusion as an explanation for the rise in violence.

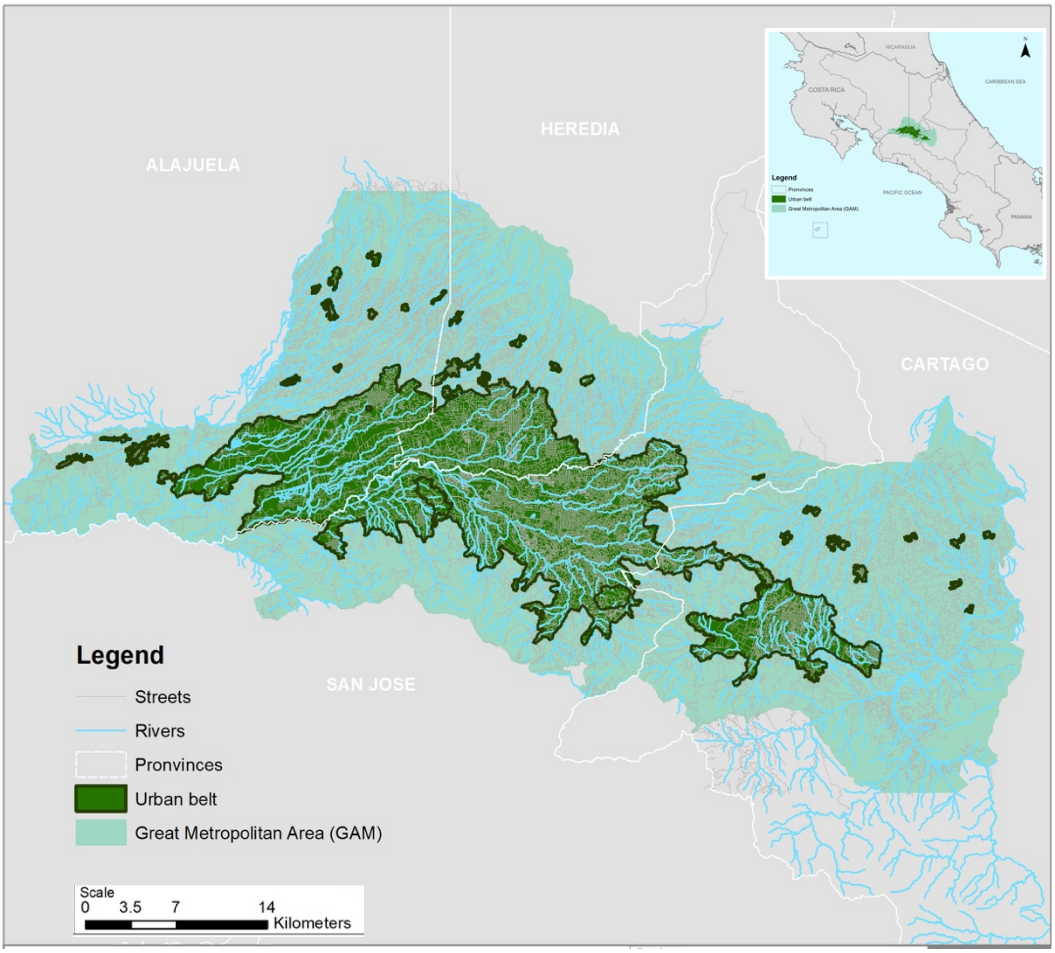
3.2. The study area: The Greater Metropolitan Area (GAM)

This research focuses on the Great Metropolitan Area of Costa Rica (GAM). It is a legal region created in 1982 by the National Institute of Housing and Urban Development (INVU). The GAM was created to demarcate urban development; its total extension is 196,700 hectares. Figure 3.9 shows the GAM's boundary, there is also an internal urban belt of 44,200 hectares for intensive urban activity; around that ring, there is an area for agriculture and environmental protection which covers 152,500 hectares (MIVAH-TEC. 2014).

The main economic activity of the country is concentrated in that area; it encompasses four of the seven province's capitals. The GAM is a polycentric

area which has suffered the consequences of becoming a conurbation in the last 30 years (Martinez, 2015). However, those cities which form the GAM are not efficiently connected; the reduced urban mobility and its disconnection with public transport limit appropriate performance. Therefore, travelling times are growing longer every day (CNPU, 2018).

Figure 3.9. Greater Metropolitan Area of Costa Rica.



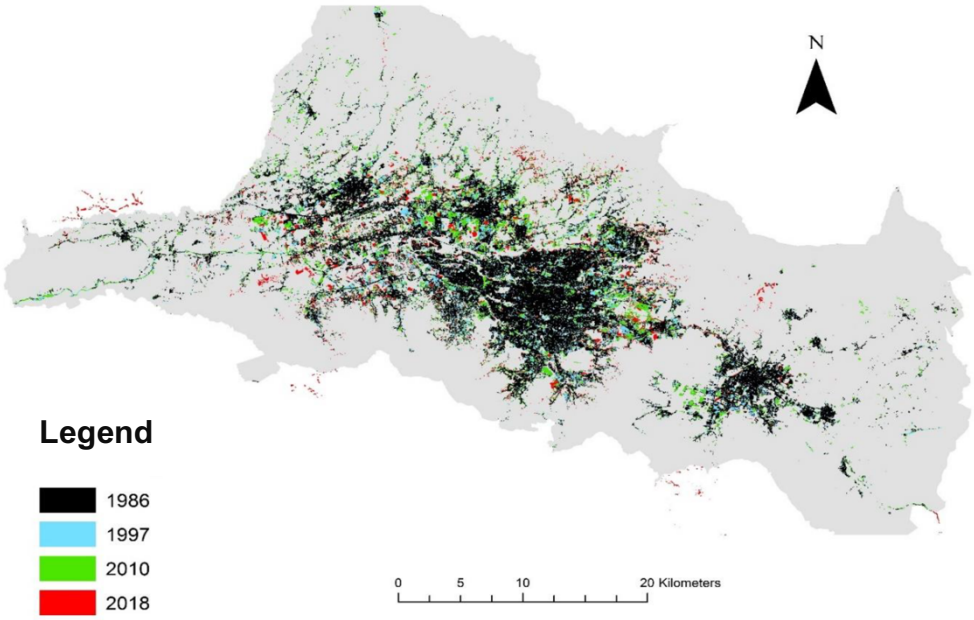
Source: Author's elaboration with cartography from the IGN and ProDUS

According to population projections from the National Institute of Statistics and Census (INEC), this area has around 2,568,462 people; that is 51.3% of the Costa Rican population (Sánchez, 2018) and covers 3.83% of the Costa Rican territory (OUGAM-ProDUS, 2018). The GAM's population growth seems to be decreasing and it is expected by 2050 it will represent 48.8% of the national population (Sánchez, 2018). In general Costa Rica, has reduced its population growth; between 2012 and 2017 the rate declined from 1.30% to 1.16%. In comparison, for instance, the fertility rate in 2017 was 1.67 children per

woman; this figure is in contrast to the global replacement rate of 2.1 children per woman (MIDEPLAN, 2018a). According to the Ministry of National Planning and Economic Policy (MIDEPLAN), it seems the demographic bonus will be concluded in 2025; consequently, the older population might be supported by a highly educated generation but with significant levels of unemployment.

Figure 3.10 shows the urban area of the GAM and its growth from 1986 to 2018. As displayed, the spread speed decreased after 1986; this might be explained by the depletion of urban land. In contrast, vertical buildings and density increased. By 2018 it seems the urban area had covered 34,639 hectares. Between 2013 to 2016 this growth (in square metres) was allocated as 42.15% to individual dwellings, 23.5% to apartments and dwellings under the condominium scheme, 11.97% to commercial buildings, 6.44% to offices, 5.99% to storages and workshops, and others 9.15% (Sanchez, 2018).

Figure 3.10. Growth of the urban area within GAM from 1986 to 2018.



Source: Adapted from *Tendencias y patrones del crecimiento urbano en la GAM, implicaciones sociales, económicas y ambientales y desafíos desde el Ordenamiento territorial* (Sanchez, 2018, p:8)

3.2.1. Poverty and inequality within the GAM

In 2018, the percentage of households living in poverty in Costa Rica was 19.1%, calculated by the Multidimensional Poverty Index –IPM (MIDEPLAN, 2018a). Costa Rica applies different methods to measure poverty; one of the most complete is the IPM (those methods are described in Chapter 4). This index is estimated by planning regions: Figure 3.11 shows those planning divisions.

The study area (GAM) is located within the Central region which is around four times larger than the study area. However, 83% of the population from the Central region is concentrated within the GAM (INEC, 2020).

Figure 3.11. Planning regions of Costa Rica.

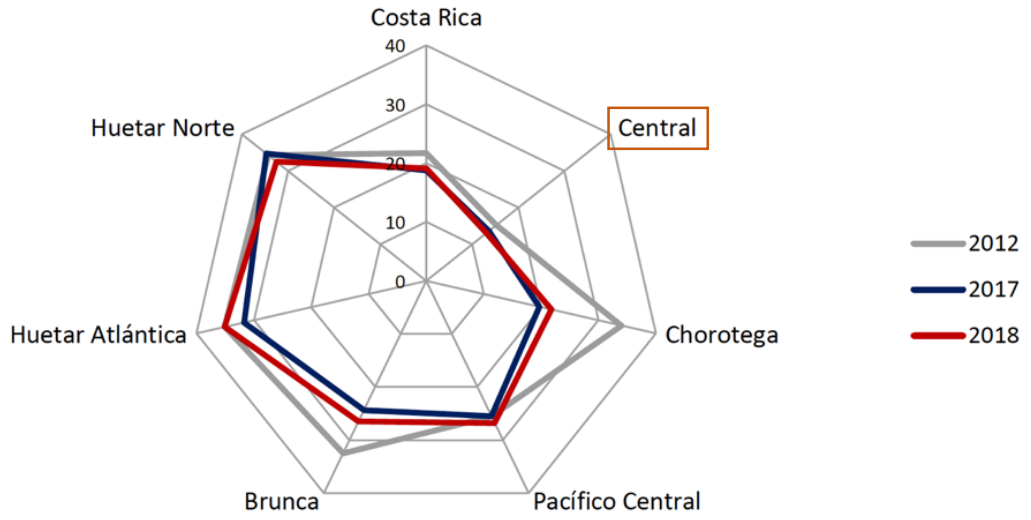


Source: Reprinted from *Mapas Regionales* (MIDEPLAN, 2018b)

Figure 3.12 shows the poverty levels by planning region (according to the IPM). It can be noted that the Central Region has the lowest figures from 2012 to 2018 in contrast to the Caribbean region, *Huetar Caribe*, and the border with Nicaragua, *Huetar Norte,* which are the most deprived areas in Costa Rica.

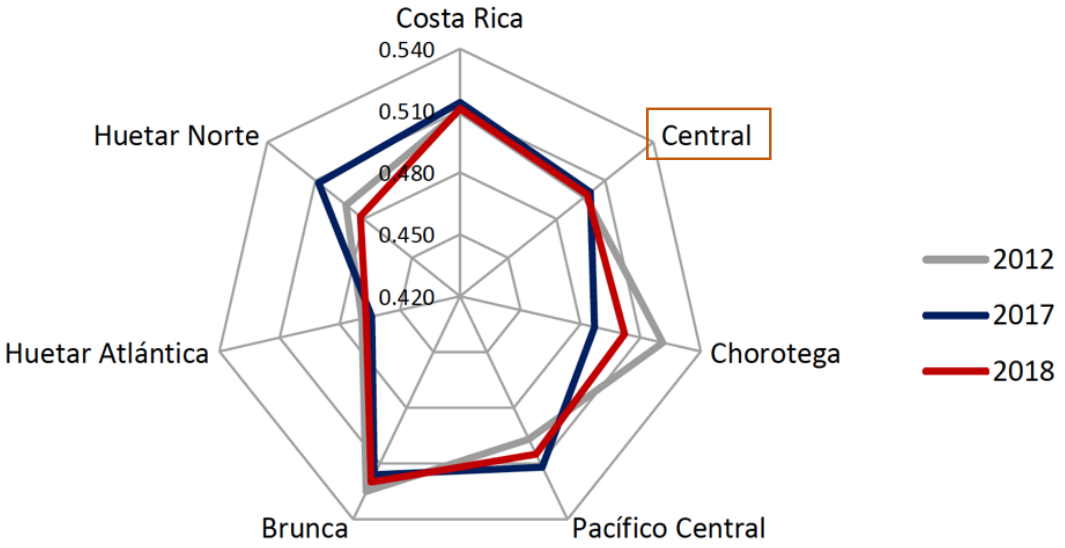
However, regarding the inequality values (see Figure 3.13), the Central region does not keep the same position; its Gini index (0.500) is closer to the national average (0.514) and higher than those regions in greatest poverty.

Figure 3.12. Households in Costa Rica in poverty according to IPM per planning region.



Source: Adapted from Costa Rica Plan Nacional de desarrollo y de inversión pública del bicentenario 2019-2022.(MIDEPLAN, 2018a:p.73).

Figure 3.13. Gini index in Costa Rica per planning region.



Source: Adapted from Costa Rica Plan Nacional de desarrollo y de inversión pública del bicentenario 2019-2022. (MIDEPLAN, 2018a:p.76)

3.3. Planning framework

The Costa Rican planning framework has three main levels: National, Regional and Local (see Figure 3.14). As illustrated in Figure 3.11, the country is divided into six planning regions; which do not coincide with the political division of seven provinces. However, those regions are the geographic structure used for economic planning and land management policies.

Costa Rica has two types of spatial planning regulations for inland areas and coastal zones. Although both share a core of laws, the coastal areas have additional norms, different approval processes and involve more institutions, such as the Costa Rica Tourism Board. As this research takes place within the Greater Metropolitan Area, the planning framework analysed focuses primarily on the inland areas.

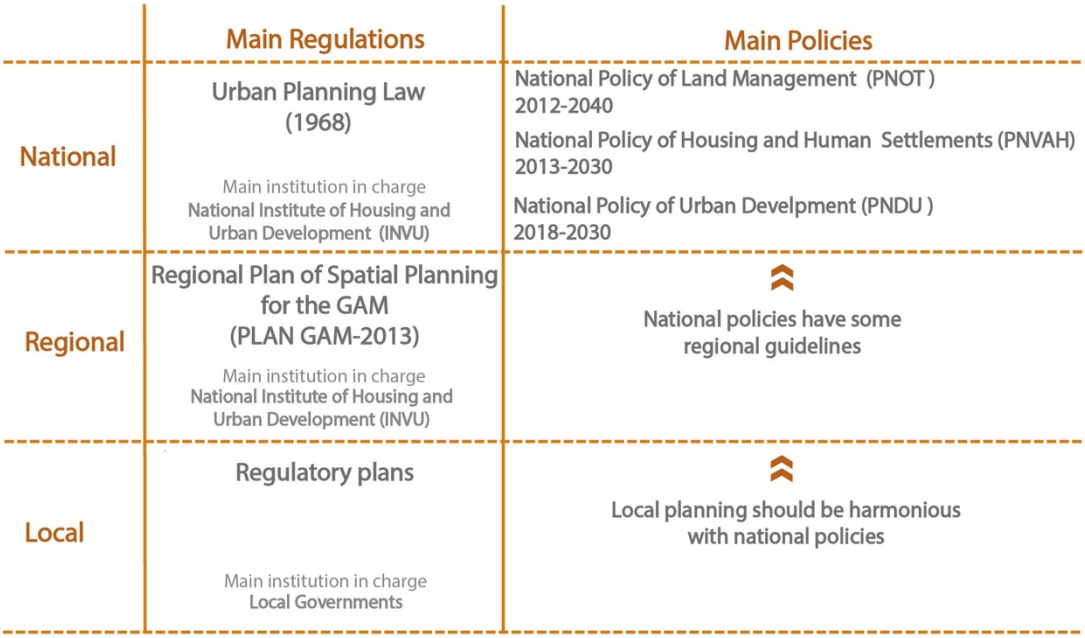
The primary tool for spatial planning in Costa Rica is the Regulatory Plan, which is a set of urban codes to manage human settlements, constructions, street layouts, urban renewal, public lands, zoning and land uses. It must be implemented by local governments, following the national Urban Planning Law #4240. This law also dictates the creation of regional plans for each of the six planning regions. Once those plans had been designed, the regulatory plans (local level) would have developed smoothly. However, those regional plans were not produced, except for the Central region. That region has a partial regional plan which covers the GAM. This was delivered initially in 1982 and updated in 2013. Despite the lack of regional planning in most of the country, some local governments have gone ahead with their planning rules (Regulatory Plans). This situation might have provoked an absence of consistency in regulations between each municipality. Those local governments without their own planning rules must adhere to the general regulations issued by the National Institute of Housing and Urban Development. These are a set of rules which must be followed in the absence of regulatory plans.

The Urban Planning Law was issued in 1968; despite its age, at that time it offered an innovative range of opportunities for urban interventions. However, many of those were not implemented. One reason might be the centralisation

of functions in national institutions which means that local governments have limited independence to intervene in subjects such as public transportation routes, value capture or land deals with other public institutions (Barrantes Chaves, 2014).

In addition to the compulsory laws, there are national policies issued by ministries involved in land management, such as the Ministry of Housing and Urban Settlements, the Ministry of Planning, the Ministry of Environment and Energy, and the Ministry of Public Infrastructure and Transportation. Those institutions are also accountable to the National Board of Urban Planning, along with the National Institute of Housing and Urban Development, the National Committee for Preventing Emergencies and Natural Hazards, the National Institute of Promotion and Municipal Advice, the National Power and Lighting Company, and the Costa Rican Institute of Water Supply and Sewerage Systems (Executive order N° 41136). Figure 3.14 shows the primary core structure for urban planning in Costa Rica, excluding the coastal areas. The institutions mentioned above have also issued complementary legislation regarding urban planning and land management. Furthermore, the approval process for Regulatory Plans encompasses further norms and procedures which are not included in Figure 3.14.

Figure 3.14. General spatial planning framework for urban and rural areas of Costa Rica – excluding coastal planning.



Source: Author's elaboration

3.3.1. Challenges in planning

Every year, the State of the Nation Project (PEN), produces an assessment of the Costa Rican economic, political, social and environmental performance; the PEN belongs to CONARE which is a board integrated by the five public universities. In 2015 this report had a special chapter about land management. Some outcomes from this study include:

- In the last 30 years, the Central Valley had seen a process of conurbation mainly within the GAM.
- From 1982 to 2013, the number of square metres of construction was duplicated.
- By 2012, 27% of urban land use was developed outside of the urban belt.
- From 1986 to 2010, the GAM density increased from 68.3 inhabitants per hectare to 75.4.
- The GAM concentrates the maximum average traffic of the country; between 50,000 to 80,000 vehicles move daily through its main roads.
- Traffic issues within the GAM provoked time losses estimated as 1.9% of GDP in 2005 and 2.0% in 2009.
- Around 25% of people within the GAM take more than two hours every day to reach their destination.
- From the 36 local governments within the Central Valley, only eight have a completed Regulatory Plan and 12 have partial regulations (PEN, 2015).

In the 1990s, the urban patterns were apparently affected by a lack of action from the state. Consequently, residential and commercial developments were built on the peripheries, which included numerous gated communities under condominium schemes; the vehicle fleet increased from 230,304 units (in 1995) to 863,401 (in 2014). Furthermore, some institutional and commercial

activities were removed from San José, Costa Rica's capital, in response to pressures from real estate groups (PEN, 2015; ProDUS-UCR, 2007).

During the last 20 years, Costa Rica has issued new regulations and policies for controlling urban expansion, however, institutional differences delayed the delivery of some of those tools (PEN; 2015). In the 2010s, a group of norms and guidelines were released. Among the most recent is the Costa Rican National Policy of Urban Development 2018–2030, by the National Board of Urban Planning (CNPU). This body highlights four critical challenges regarding urban planning:

a. The lack of an integrated system of cities across the country and the GAM, caused by deficiencies of the transportation system.
b. The lack of appropriate urban mobility, which reduces the efficiency of cities within the GAM.
c. The intermediate cities are small and are expanding inappropriately, due to a lack of urban planning. For instance**,** the emergence of large gated communities along road axes has increased traffic congestion. This situation is exacerbated by dependency on private cars and the weakening of public transport.
d. Many of the canton's capitals show deficiencies produced by small population and production, poor institutional performance and the promotion of dysfunctional urban patterns (CNPU, 2018).

Attempts to address the complex situation about urban mobility have been made since 2000 through norms to modernise public transport (Executive order N° 28337) and later, in 2011, with the National Plan of Transportation 2011–2035 (Executive order N° 37738). However, conflicts during the negotiation between the government and concessionaires of public transport routes, as well as institutional issues, have delayed this process (Barrantes Chaves, 2014).

The mobility issues seem to have been aggravated by the poor planning control over urban developments, such as the construction of large gated communities. In response to this, national planning institutions have addressed the externalities of gated communities, focusing mainly on

drawbacks in the transportation system. However, those ‘less physically visible’ dimensions, such as residential segregation and effects towards neighbouring communities, seem to require more exploration from those bodies. Pujol, Sanchez, & Perez (2011) highlight that the residential segregation phenomenon has not been systematically studied in Costa Rica. As a result, it seems that under the excuse of ‘safety’ some people have decided to self-segregate in gated communities, which might be a response to a ‘status’ reason rather than fear of crime in itself (R2, personal communication, 29 November 2018).

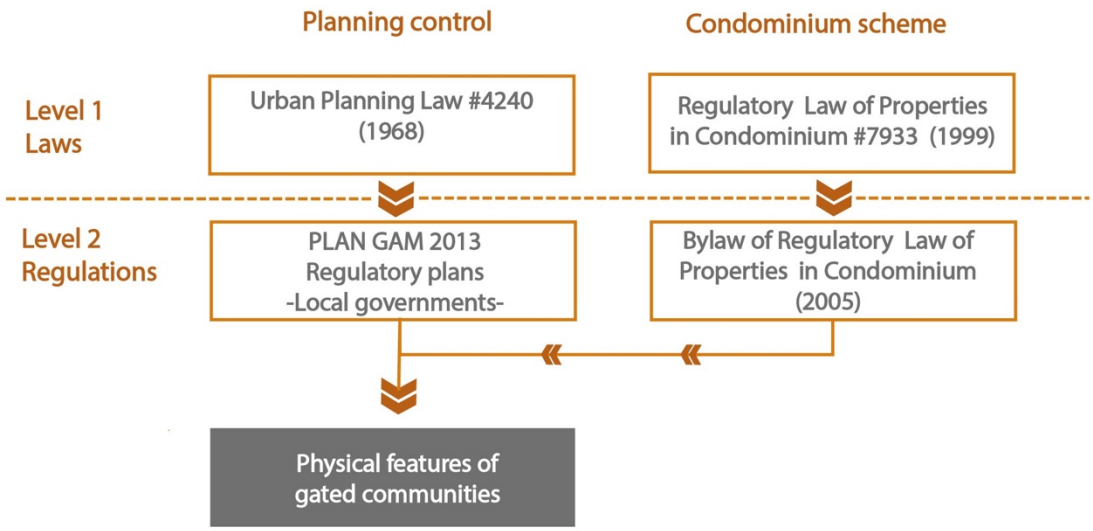
3.4. Gated communities’ background and regulations

Gated communities in Costa Rica commonly adopt the condominium scheme which is an ownership status rather than a construction type. That situation makes the process of obtaining a construction licence complex. Figure 3.15 displays the two legal bodies that rule those developments. The local government is the institution which can legally grant a construction licence. However, within the Costa Rican system, the applications for gated communities (under condominium) go first to the Federated Association of Engineers and Architects, then to the National Institute of Housing and Urban Development and finally to the local government. Through that process, the development under condominium has to fulfil the requirements of both legal bodies (Figure 3.15).

The Regulatory Law of Properties in Condominium is focused mainly on property distribution and administrative matters. However, its bylaw encompasses elements of spatial configuration, construction process, common areas, rights and duties, land use and further administrative considerations (Executive order N° 32303). That norm gives general instructions about the physical structure. Nonetheless, it delegates to the local government the final directions about gated communities’ features, which must be included in the Regulatory Plan. Despite some overlaps between both regulations –Level 2 in Figure 3.15 – the ultimate decision is taken by the local governments. However, as many have not adapted their planning tools to these developments, residential condominiums have been ruled by generic

regulations, with almost no limitations to control their size. Consequently, in the absence of specific norms, the condominium scheme has become a convenient way to build gated communities (Pujol, Sánchez, & Pérez, 2011).

Figure 3.15. General Legal Framework to build Gated Communities under the condominium scheme.



Source: Author's elaboration

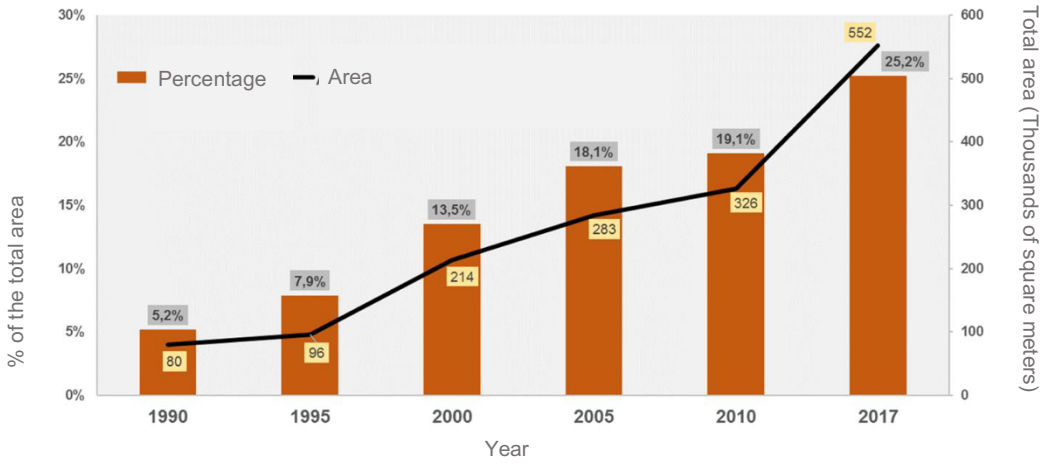
Although some national rules address administrative matters inside the gated communities, each development has internal codes to guide people's behaviour, common areas, aesthetic elements or maintenance. This has resulted in the condominium's administration being complex and sometimes there are internal disagreements among the residents; however, people are prepared to endure those circumstances (R2, personal communication, 29 November 2018).

The increase in the construction of gated communities in Costa Rica might be the result of rationalisations about fear of crime and the weak planning regulations described. Furthermore, once the local government has a proposal for implementing a regulatory plan, that tool must to be approved by national institutions, which take long periods of time (PEN, 2015), it reduces even more the response capability of local governments to the growth of gated developments. Figure 3.16 shows the construction's performance of dwellings under the condominium scheme from 1990, expressed in percentage by square metres. As noticed, those figures have been rising, especially after 1995. It might be explained because of the *Ley Reguladora de la Propiedad*

en Condominio [Regulatory Law of Properties in Condominium] which came into effect in 1999.

As displayed in Figure 3.16, in 2017, 25.2% of all new construction licenses were intended for developments under condominium.

Figure 3.16. Percentage of square metres allocated in dwellings under condominium scheme within Costa Rica.



Source: Adapted from *Tendencias y patrones del crecimiento urbano en la GAM, implicaciones sociales, económicas y ambientales y desafíos desde el Ordenamiento territorial* (Sanchez, 2018: p.18)

3.5. Community organisation and planning

In Costa Rica, community participation is contemplated, to some extent, in the Urban Planning Law. However, it is not seen as a cross-cutting theme along the planning process. This law establishes the performing of a public hearing before the Regulatory Plan's approval (Law N° 4240). Even so, this meeting is not legally binding and it is also carried out when the document is practically finished. Therefore, if the local government decides to extend the community participation, the procedures are determined by this institution without any legal requirement. The official scope of community participation in planning seems to be limited; however, institutional initiatives are trying to involve more citizens in urban development decisions (CNPU, 2018).

3.5.1. Community development associations

Many neighbourhoods in Costa Rica are organised under the modality of community development associations. These are legal bodies guided and sponsored by the National Direction of Community Development (DINADECO). They seek to improve the social, economic, cultural and environmental conditions of their community. Those organisations are funded by the Costa Rican government which allocates 2% of the national income tax to their operation. The funds are assigned annually and they can be spent in general infrastructure –buildings included, land purchase, furniture, equipment and socio-productive projects. These organisations perform a quicker and decentralised response to issues regarding the immediate built environment. The members of these bodies are neighbours; it is required that there are at least 100 people interested (over 12 years old) from the same area to establish this group. These people are represented by a community board which organises assemblies and proposes projects for funding (DINADECO, 2020). By 2020 Costa Rica had more than 3,000 community boards across the country (Presidencia, 2020). Sometimes, when there are not enough people from the same neighbourhood, the community development association can be integrated into more than one neighbourhood. In that case, their members organise subgroups of neighbour's associations which focus on specific issues from each community but share a common budget.

3.5.2. Community policing

As described in Chapter 2, community policing is a surveillance mechanism in neighbourhoods. In Costa Rica, community policing groups are trained by the local police. In the interviews carried out during the fieldwork of this research, one police officer stressed that community policing courses are focused on prevention. Neighbours learn how to identify suspicious situations and how to describe people, vehicles or objects that might be involved in a crime. The training also includes precautionary measures in neighbourhoods, households and schools (P1, personal interview, 23 July, 2018).

Commonly, the neighbourhood's community board coordinates the training with the police; participants receive a certificate if they conclude the course successfully. A warning sign is placed in the neighbourhood after the training. During the fieldwork, some of those signs were identified, the slogan varies depending on the local police; for instance, 'My safe neighbourhood' or 'Community policing, organised neighbourhood'. As addressed in Chapter 6, each community has different outcomes from that training they commonly called the 'safety course'. In Chapter 5, the organisation details of each neighbourhood involved in this research is described.

3.6. Conclusions

Costa Rica, in its Latin America context, seems to show some advantageous indicators, mainly regarding health and education. However, the income inequalities in this country have become closer to the average in Latin America, losing the advantage it once held in the past. Regarding fear of crime, despite a lower rate of homicides, this country has similar levels of anxiety to El Salvador which holds the highest rate of homicides in Latin America. Costa Rica, similar to other countries in Central America, has been affected by drug trafficking. The region has also suffered violent armed conflicts during the 1980s, the consequences of which are still being felt.

The Costa Rican planning framework is structured at national, regional and local levels; however, a lack of regional plans has provoked inconsistencies at local level. Furthermore, most of the local governments within GAM have incomplete planning tools to face the rapid transformations of their territories.

Gated communities have been increasing in the last few decades. Local governments have had limited tools with which to react quickly, either because of a lack of regulatory plans, incomplete plans or because the approval process of those tools by the national institutions has taken a long time. Moreover, in many municipalities with regulatory plans, the lack of awareness about gated communities' externalities could have resulted in little control over them.

Costa Rican policies in planning have discussed the externalities of gated communities by focusing mainly on drawbacks in the road system. However, public policies might evidence a gap in information about the effect of gated communities on residential segregation and fear of crime.

The methods used in this research aim to explore those externalities, mainly those connected to fear of crime. The case studies selection was based on poverty indicators of neighbourhoods adjacent to gated communities but also includes the physical features of these developments. The next chapter addresses that selection process and describes the data collection procedure and analysis techniques.

Chapter 4. Methodology

This chapter presents the methodological approach for researching the effects of gated communities on fear of crime and focuses on the adjacent public spaces outside the gated edge. In order to answer the research questions, this thesis addresses two core concepts: fear of crime and the built environment, both of them with multiple dimensions. To help investigate these, a knowledge gap has been identified mainly related to the distribution of fear outside gated communities. The methodological design of this research explores the relationship between open neighbourhoods and the gated communities next to them, and how structural circumstances, such as poverty or income inequality, might affect that relationship. The research is being conducted in a Latin American context using Costa Rica as its study area.

In addition, this thesis will enrich new methodological approaches about fear of crime and the built environment. Some quantitative methods might previously have experienced difficulties in reflecting the complexity of the way fear affects people's daily routines or the accuracy of determining fear's location; this study applies a qualitative approach supported by Geographic Information Systems (GIS). It seeks to present an innovative proposal using existing tools, such as walking interviews, complemented with particular elements specifically designed for this research. In addition, this methodology proposes a strategy to transfer qualitative data from the NVivo software to GIS, whilst maintaining the iterative process of analysis.

4.1. Research questions and paradigms

4.1.1. Research questions and objectives

The methodological procedure detailed in this chapter is designed to answer the research questions previously presented in Chapter 1. Those core research questions are repeated below:

Main question

- How do gated communities affect the spatial distribution of fear of crime in the neighbouring public spaces?

The objective of this question is to determine patterns regarding the spatial distribution of fear of crime in public spaces, that occurs in neighbourhoods next to gated communities. Also, it seeks to explore if the relationship between people from open neighbourhoods and gated communities affects, to some extent, the sense of safety. For instance, if circumstances such as residential segregation might have any effect on those feelings and under which circumstances this happens.

Secondary questions:

a. Is there any variation in fear of crime in those neighbourhoods with higher levels of poverty?

This question is designed to find any relationship between the neighbourhoods' poverty levels and fear of crime. Because the tool for selecting the case studies is in itself a poverty indicator, the primary information is given by poverty levels. However, those data allow the researcher to contrast the poverty conditions between the gated community and its adjacent neighbourhoods, which permits the exploration of the impact of possible income inequalities at local level. This research question also examines if the neighbours' perception of gated developments varies in accord with those poverty groupings.

b. Which conditions of the built environment within neighbourhoods influence the fear of crime?

The main objective of this question is to determine physical signs associated with fear of crime. This exploration also analyses social relationships and any support networks among neighbours, as the built environment also involves social processes (Hillier, 2008), those relations include any contact between people from open neighbourhoods and gated residents.

Hypothesis

In order to address the research questions, this work proposes three main hypotheses based on the literature review:

- H1. Fear of crime is higher in the study cases where the income inequality between the gated community and the adjacent neighbourhood is notable.
- H2. Residents perceive as unsafe those elements of the built environment without permeability and with a lack of community interaction.
- H3. Residents from neighbourhoods next to gated communities perceive the public spaces beside the gated edges as less safe than those without contact with the gated community.

In Chapter 2 the theoretical basis for the hypothesis above was explored; however, this is a brief summary to theoretically support each statement:

H1. Fear of crime is higher in the study cases where the income inequality between the gated community and the adjacent neighbourhood is notable.

The first hypothesis explores whether Costa Rica reveals similar patterns to the international situation; there is a broad body of literature that associates a positive relationship between income inequality and fear of crime (Franklin, Franklin & Fearn, 2008; Wilkinson & Pickett, 2009; Hummelsheim, Hirtenlehner, Jackson & Oberwittler, 2011; Kragten & Rözer, 2016). Wilkinson & Pickett (2009) also found a direct relationship between income inequality and violence; they detected that homicides and assaults are more common in unequal societies. They claim that in more unequal societies people lack protections and buffers, the level of trust is lower, therefore anxiety is higher.

H2. Residents perceive as unsafe those elements of the built environment without permeability and lack of community interaction.

The second hypothesis seeks to highlight the relationship between the built environment and fear of crime, especially if they are linked to the presence of gated communities. Loukaitou-Sideris (2012) mentions that the physical features of settings could generate stress or contrarily invite some form of outdoor interaction. She associates higher levels of fear to characteristics such as: darkness, desolation and lack of natural surveillance. She mentions that

being alone in a place could generate anxiety but also reports that the presence of others could be threatening. Ceccato (2012:p.14) holds that crime opportunities might be influenced by micro-spaces independently of the context. She defines micro-spaces as:

> types of facades, height and density of buildings, number and types of streets and entrances, whether windows are facing the streets, the connection of backyards with the main streets, alleys, parking spaces, garages, storages, physical barriers between buildings and public places.

Hillier (2004) found that the configuration of urban fabric and the allocation of streets might increase the probability of crime; to prevent this he suggests avoiding secondary accesses and ensuring that public spaces are continuously composed of visible entrances to dwellings. In this regard those places lacking permeability might also be less used by people; reducing the 'eyes on the street' or natural surveillance (Jacobs, 1961). Jacobs claims that usually when people are afraid, they use certain places less which become even more unsafe. Therefore, this hypothesis explores if the physical features of gated communities' peripheries contribute to an increase in the fear of crime.

H3. Residents from neighbourhoods next to gated communities perceive the public spaces beside the gated edges as less safe than those without contact with the gated community.

This final point is important as there is currently only limited evidence specifically about how gated developments affect the perceived safety in their surroundings. This hypothesis was formulated based on diverse studies tackling different components of this situation. For instance, in Latin America, Caldeira (2000) refers to gated communities as 'fortified enclaves' that reduce social interaction around them, as areas where public space is dominated by a feeling of suspicion. Handal and Irazábal (2019) studied the Honduras' programme 'barrios seguros' (safer neighbourhoods) which seek to gate existing neighbourhoods. Amongst the consequences of this model they found: an increase of socio-spatial segregation; neighbourhoods taken by

gangs; increasing commuting times; and abandonment of surrounding areas, which they suggest might increase both the actual and perceived lack of safety. Helsley and Strange (1999) suggest that gating might induce a reallocation of crime towards non-gated neighbourhoods. In Tshwane, Breetzke, Landman and Cohn (2014) found a higher density of burglary in gated communities' peripheries than the city overall. The influence of the externalities of gated developments over the neighbouring communities still needs more empirical data (Le Goix, 2005) but these and further contributions suggest that this discontinuity in the territory provokes consequences for those outside the gate.

4.1.2. Interpretative paradigm of the research

According to Denzin and Lincoln (2011:p.91), a paradigm is a 'set of beliefs that guide action'. Those beliefs define the views of the researcher about the world; Denzin and Lincoln highlight that paradigms are human constructions which embrace four terms:

- Ethics: the researcher as a moral person in the world.
- Epistemology: how the researcher knows the world and his/her relationship with the known.
- Ontology: the sense of reality.
- Methodology: the way of acquiring knowledge about the world.

In this regard, Lincoln, Lynham and Guba (2011) distinguish five major paradigms:

- **positivism** known as 'hard science' where there is a single reality**.**
- **postpositivism** where there is a single reality but hidden variables do not allow it to be fully understood.
- **critical theory**: which tends to create a transformation to benefit those oppressed by power.
- **constructivism**: where reality exists through mental constructions, it is local, specific and both socially and experientially based, and

- **participatory**: where changes are founded on democratic participation between the researcher and their subject.

This last one was added later by Lincoln, Lynham and Guba based on the work of Heron and Reason (1997:p.97). Those authors consider that the hegemony among postmodern paradigms is blurry and methodologies for each paradigm can no longer be considered as a standard set of rules. Despite those 'differences, controversies and contradictions' they outline some main characteristics for each paradigm, which are synthesised in Table 4.1.

Table 4.1. Basic beliefs of alternative inquiry paradigms according to Lincoln, Lynham and Guba.

Issue	Ontology	Epistemology	Methodology
Positivism	Naïve realism	Dualist/objectivist – Findings are true	Experimental /manipulative
Postpositivism	Critical Realism	Modified Dualist/objectivist – Findings are probably true	Modified Experimental /manipulative
Critical Theory	Historical Realism	Transactional/subjectivist – Value-mediated findings	Dialogic/ dialectical
Constructivism	Relativism	Transactional/subjectivist – Co-created findings	Hermeneutical /dialectical
Participatory*	Participative Reality	Critical subjectivity, experimental, propositional, and practical knowing. – Co-created findings	Political participation in collaborative action.

Source: Lincoln, Lynham and Guba (2011) , Heron and Reason (1997)*, adapted by the author.

As shown in Table 4.1, positivist and postpositivist paradigms base their methodologies on experimental processes; their confirmation approach emphasises 'reliability, validity, prediction, control, and a building block approach to knowledge' (Lincoln, Lynham & Guba, 2011: p.91). However, Guba and Lincoln (2005) point out the inability of those paradigms to include the voice of participants, because the data speak for themselves. On the other hand, the critical theory explores the structures of power and oppression – e.g. based on gender, race or socioeconomic status; while critical theorists are

immersed in their research to transform those structures, constructivists are intent on obtaining knowledge through interpretation of the subjects perceiving and connecting to their social context (Lincoln, Lynham & Guba, 2011). The subject and researcher in the participatory paradigm co-created knowledge which leads to political actions, in that sense it is propositional and practical (Heron & Reason, 1997).

This research tilts mainly towards constructivist views, due to its aims to capture people's perception about their built environment and community ties, focusing on fear of crime. However, as mentioned above, the edges between paradigms and their methodologies have intersections. As will be shown later, this research shares some elements from different paradigms; for instance, the initial preselection of the study cases was based on quantitative methods and experimental attempts. On the other hand, the interpretation of some findings portrays how different groups perceive the city; for example, men and women, low and high incomes, which overlaps with elements of critical theory.

4.2. Ontology and epistemologies of space

The innovation in researching the use of space often requires a sharing or overlapping of knowledge. Madanipour (2013) suggests that it can be reached by transgressing the lines that usually define each field of spatial knowledge. He argues that what space means and how it is perceived, by each observer, is determined by specific definitions and ontologies. Those characterisations create epistemic boundaries because each field has its own definitions, which may increase the obstacles in designing new approaches. He suggests relational ontology as a vehicle to cross those boundaries; for reaching that, he mentions two tracks: meta-disciplinary paradigms and dialogical practices.

Regarding relational ontology, Madanipour (2013:p.375) explores the meaning of space, which had formerly had abstract and relative concepts and 'remained within the scope of positive science, without explicit reference to the social context of these spatial phenomena'. He mentions how the epistemology of space was replaced 'by the positive science of spatial analysis' which captures the notion of the world through maps and measures. Therefore, in order to transgress those epistemological barriers it is necessary

to go beyond the positive approaches. Massey (2005:p.59) states that 'Conceiving of space as a static slice through time, as representation, as a closed system and so forth are all ways of taming it'. She claims that space is a 'discrete multiplicity' whose components are impregnated themselves with temporality. The dynamic multiplicity of space might be understood as an ongoing open production, rather than a closed system. That openness can also give way to different paths and voices; therefore, it 'makes room for a genuine multiplicity of trajectories' (Massey, 2005:p.65). In this regard, she says that space is continually reconfigured by political engagement; therefore, the abstract spatial forms in themselves do not provide enough information about the relations which shaped those forms. Those relations might also lead to contradictions. Lefebvre (1991:p.358) argues that:

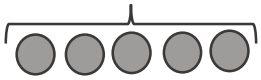
> Spatial practice regulates life – it does not create it. Space has no power "in itself", therefore, space does not establish contradictions; those are contradictions of society, provoked by forces and relations of production.

He exemplifies this argument with cases from countries in rapid development that destroy their historical architecture but, later, those same areas prove to be a source of profit for cultural tourism and they start renovating those parts where the destruction was not total. Also, he describes how Jane Jacobs in 1961 demonstrated the damages of space produced by capitalism (abstract space) in the urban fabric of New York's neighbourhoods. So, the study of space must contemplate all social conflicts and dynamics and not be restricted just to physical features.

On this topic, Madanipour (2013:p.375) suggests that 'abstract and relative concepts of space, therefore, were now substituted by a relational concept of space'; considering it as a relational notion, not just a container that integrates time and space. However, those new approaches have challenges, mainly regarding the ambiguity between the physical and social. Which type of methodologies will be suitable for researching space? Or are they exclusive to space? Madanipour (2013:p.377) agues 'By integrating space into its psychological and social contexts, epistemic boundaries seem to multiply,

rather than crossed', which he considers brings new challenges, such as the epistemic diversity, pluralism and overlapping of knowledge. As mentioned, he suggests two paths to achieve that through relational ontology:

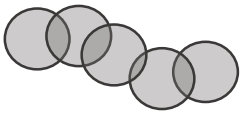
Meta-disciplinary epistemic paradigms: which provide 'structural concepts and umbrella conventions, to which disciplines, professions, and individual researchers and practitioners subscribe' (Madanipour, 2013:p.380). Those shared paradigms facilitate common standards which encompass different disciplines.



Umbrella conventions

- Interpretation of Madanipour's concept by the author -

Dialogic practices: It consists in forms of 'collaboration between disciplines include the overlapping modes of multi-, inter- and transdisciplinary work, each with its own possible impact on epistemic boundaries' (Madanipour, 2013:p.381). He highlights that dialogic practices allow the rethinking of each discipline's own assumptions and that knowledge has various manifestations which have to be considered in order to create new knowledge.



Overlapping knowledge

- Interpretation of Madanipour's concept by the author.

This thesis combines elements of physical space, such as the geometry of neighbourhoods and gated communities, infrastructure, traffic and barriers; furthermore, it includes those related to social context such as community ties, social inequalities, preconceptions, pre-existent fears and feelings. People's perceptions of space seem to be shaped by dimensions both spatial and social.

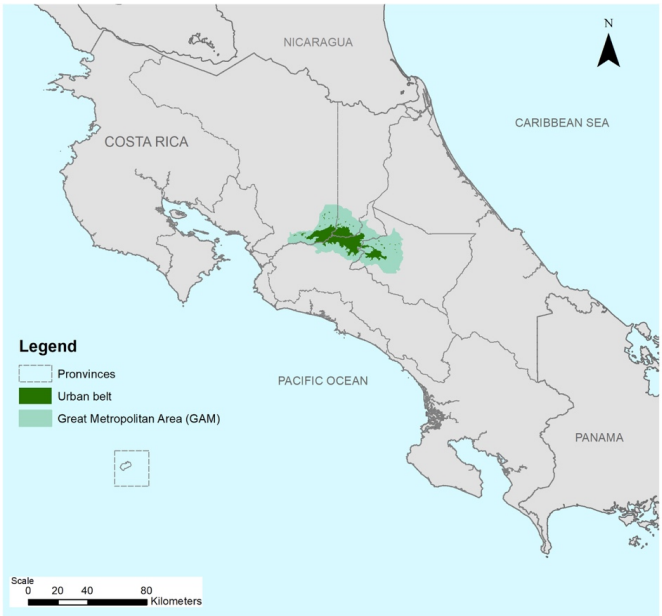
Regarding fear of crime in public spaces, the epistemological boundaries apparently go beyond the purely physical conditions of space. Despite this, some theories broadly disseminated mostly emphasise the physical elements; for instance, *Broken Windows* (Wilson & Kelling,1982) that focused on physical features such as 'incivilities' in public spaces as a catalyst of crime or the *Situational Crime Prevention* perspective (Clarke, 1983) which aims to

reduce crime opportunities mainly by altering the urban space. However, that manipulation of physical features has also the goal of preventing the presence of strangers, fuelling people's preconceptions about what a criminal looks like or who is a dangerous person. Consequently, those theoretical approaches have more determinist views about the relationship between space and fear of crime, where the social dimension seems to be overlooked. In this exploration, this thesis goes beyond those epistemological barriers, as Madanipour proposes, combining elements from different paradigms to understand how the distribution of fear of crime outside gated communities varies according to the particular social, physical or economic circumstances.

4.3. Unit of analysis

The research is focused on the Great Metropolitan Area of Costa Rica – GAM by its acronym in Spanish (see more details in Chapter 3). As Figure 4.1 shows, the GAM is divided into two rings, the area selected for the study cases corresponds to the urban belt; that is because fear of crime has been associated more frequently to urban circumstances (Lebowitz,1975; Belyea & Zingraff 1988; Hale, 1996; Carrión, 2008). Although research about fear of crime in Costa Rica is still limited, this phenomenon is apparently higher in urban areas rather than rural (PNUD, 2005a).

Figure 4.1. Greater Metropolitan Area of Costa Rica.



Source: Author's elaboration with cartography from the IGN.

4.3.1. Case studies

This research was carried out through the strategy of case studies; this approach explores the diversity of details more profoundly. Flyvbjerg (2011:p.314) argues 'the main strength of the case study is depth' because it provides abundance and completeness. Flyvbjerg maintains that a case study is useful when it is required to know a phenomenon with thoroughness and there is a need to identify its causes and how to prevent them. So, study case research provides perspectives from the 'real world' taken from genuine cases, which is crucial when a complex social phenomenon is been researched (Yin, 2014).

Although the general region of study is the Greater Metropolitan Area of Costa Rica, the units of analysis are neighbourhoods next to gated communities. As will be presented, the neighbourhoods are selected according to differing levels of poverty. Scholars suggest that the effect of gated communities on the outside community is deeper on the poorer social classes (Blakely & Snyder, 1997; Caldeira, 2000). In Costa Rica, as explained in Chapter 3, neighbourhoods are organised into community boards; they have a geographic delimitation and particular identities. Those conditions make them practical units of analysis.

The study cases were analysed through a variety of mixed methods. Although the research was carried out through qualitative analyses, it had some quantitative components, such as the initial selection process and outcomes from participant’s individual maps (maps with stickers). Apart from walking interviews and focus groups, there was some work of triangulation, such as in-depth interviews and observations. Morten and Greenwood (2011) promote the relevance of methodological diversity; they suggest that both qualitative and quantitative methods are reciprocally significant in tackling any social issue. Yin (2014) suggests that by achieving a group of tests (see Section 4.4.5), the quality of a study case is reliable and multiple sources are one of the most important resources to fulfil those assessments.

4.3.2. Why outside of gated communities?

A significant amount of research has been done to understand the fear of crime inside gated communities (see Chapter 2. Literature Review). However, evidence about the effects of those developments in the neighbouring communities might still be limited (Blandy & Lister, 2006). Few studies have examined the allocation of crime to their peripheries (Helsley & Strange,1999; Breetzke, Landman & Cohn, 2014); although the consequences of residential segregation in gated communities have been widely discussed (Blakely & Snyder, 1997, Calderia, 2000, Le Goix, 2005, Sennet, 2018). This research, however, helps to fill the gap about understanding the externalities of gated communities in fear of crime outside their walls. Additionally, it tries to collaborate in the systematisation of data about fear of crime in Latin America, which still seems to be insufficient (Dammert, 2012).

To this end, the effects of physical features are explored but so too are their symbolic meanings and how those people outside gated communities live their everyday life next to the wall, with their consequent fears and feelings. Calderia (2000:p.259) suggests that those literal separations (walls), have been produced by real estate advertisements as ‘a symbolic elaboration that transforms enclosure, isolation, restriction, and surveillance into status symbols’. Although the incentive for living in a gated community seems to be driven by fear of crime (Low, 2001), those walls generate ‘two-way relationship between the two adjacent territories, gated communities also produce externalities over their neighbours’ (Le Goix, 2005:p.331). This thesis will contribute to the body of literature about gated communities and their impact on the immediate surroundings.

4.4. Research methods

Fear of crime is a complex topic, Ferraro and LaGrange (1987:p.76) point out that fear of crime has a multidimensional perspective. They argue that a significant research body on this topic could be reproducing conceptual issues which might not reflect the variety of subjective and emotional assessments involved. They doubt the reliability of the common measurement of fear, because they might not correctly capture the fear of crime. For instance, the

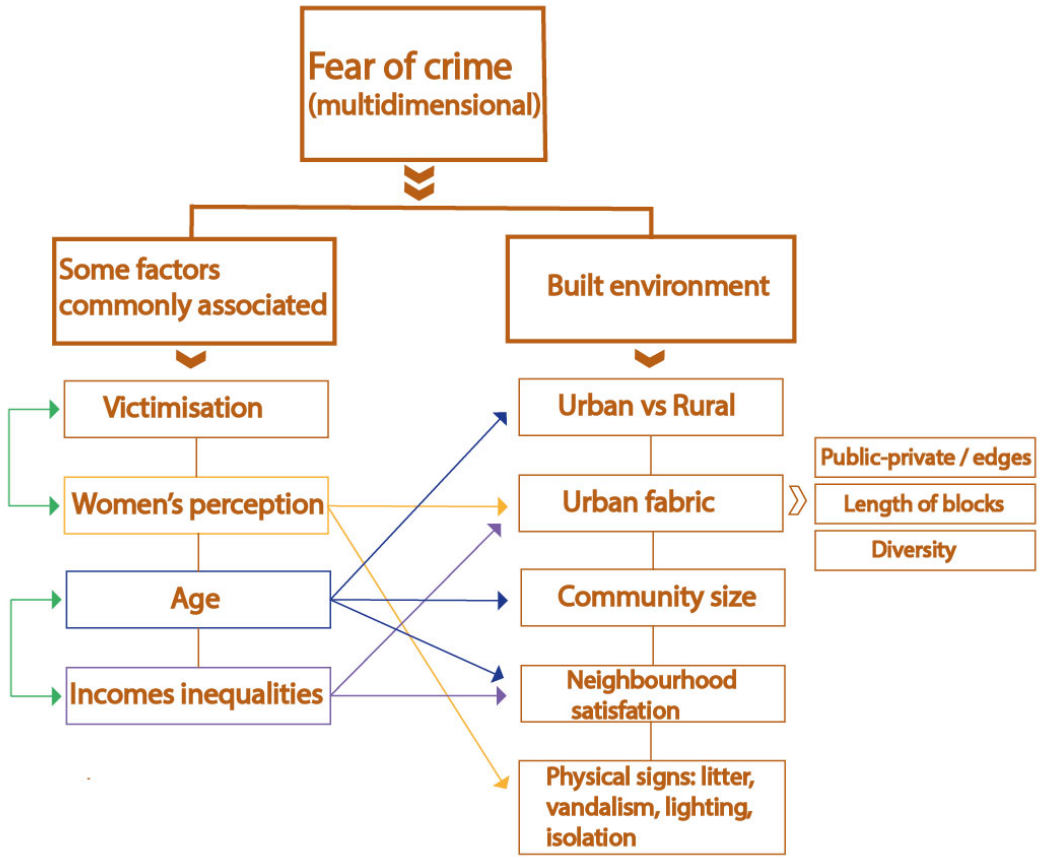
popular question 'How safe do you feel or would you feel being out alone in your neighbourhood at night?'. They criticised that approach as:

(a) There is no clarity about the concept of crime, as it is not mentioned.
(b) The geographical frame is not accurate, because a neighbourhood may have different spatial meaning for different people.
(c) The responders are asked about their safety in the neighbourhood as a whole but there are some specific points where this concern could be higher; finally
(d) The question mixes actual and hypothetical assessments regarding fear.

In the same way, Box, Hale and Andrews (1988:p.343) doubt the validity of similar questions applied in victimisation surveys; such as, 'How safe do you feel walking alone in this area after dark?'. They claim that this question uncovers a wide range of experiences but it does not encompass the emotional complexity of fear. In this regard, O'Mahony and Quinn (1999) mention how, in some quantitative measures, the responders have been forced to use the same expressions to manifest quite different types of feelings.

Taking all of these concerns into consideration, the research design of this thesis deliberately made the effort to obtain broad information about fear of crime but, at the same time, explored how features of the built environment and living space could be interconnected with those feelings, as accurately as possible. Figure 4.2 shows the initial theoretical exploration to select the research methods; this analysis was later expanded and it is shown in the literature review in Chapter 2.

Figure 4.2. Theoretical exploration for the research design.



Source: Author's elaboration

Research design is structured by the components listed in Table 4.2, each element is explained in detail through this chapter.

Table 4.2. Research methods

Research Strategy	**Methods of data collection**		**Methods of analysis**
Case of study	Walking interviews		Thematic analysis
	Focus groups (Adults)		Thematic analysis
	Focus groups (Teenagers)		Discourse analysis
	Interviews		Discourse analysis
	Observations	Non-participant	Time sampling (analysis of quantitative records) and *Ad lib.* sampling (field notes)
		Participant	*Ad lib.* sampling (field notes)

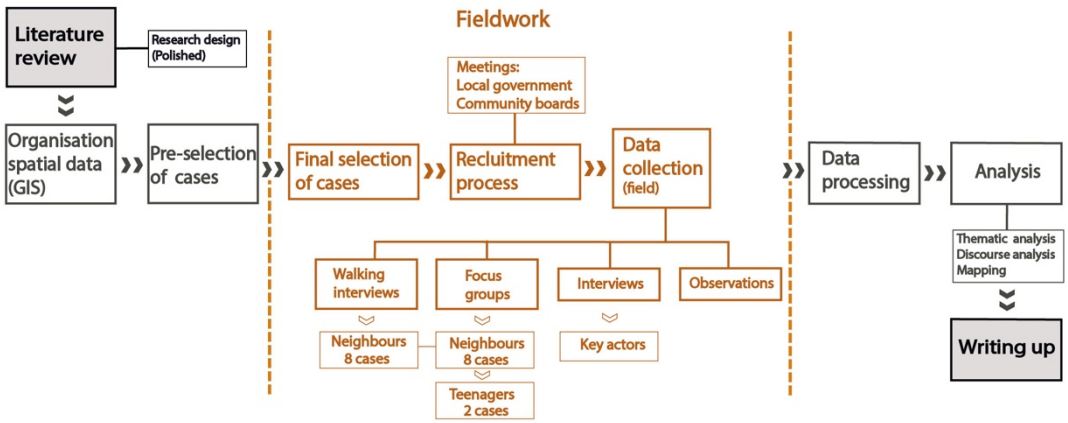
Source: Author's elaboration

In Sections 4.5.5 and 4.5.6 the reasons for choosing each method, and its analysis strategy, is explained in detail. Overall, the core of the empirical data is based mainly on walking interviews and focus groups; those methods are crucial to the response of the research questions because they allow for an understanding of the spatial distribution of resident's perceptions and the reasons why those emotions arise. The data collected from those two methods has been analysed mainly through thematic analysis; the motive for selecting this method is its effectiveness for generating patterns (Braun & Clarke, 2006); to achieve this, the qualitative material can be transferred to codes which can also be georeferenced (those from walking interviews). However, as described further in Section 4.5.6 there are some overlaps between discourse analysis and thematic analysis in both the walking interviews and focus groups (adults), due to the fact that discourse analysis requires a certain level of abstraction from participants' narratives to accomplish the research objectives (Starks & Brown-Trinidad, 2007) and the interpretation of those narratives helps to understand the patterns.

At the same time, the main purpose of interviews and observations was to triangulate the data. According to Yin (2014), the study cases should not rely on individual sources of evidence; therefore, data triangulation improves the overall quality and their reliability. The interviews were analysed through discourse analysis, whereas observations were taken and studied through time sampling: observing the study subject at exact intervals of time and systematising the records (Barner-Barry, 1986). Furthermore, there were pictures and field notes taken. The non-participant observations were also analysed through field notes; Altmann (1974:p.235) calls those informal observations *Ad lib.* Sampling: 'Presumable this is the technique used in most observational studies in which no mention is made of the sampling method'.

Figure 4.3 shows a summary of the entire research process. The thesis is based mostly on empirical data; however, some secondary information was used, such as census data, cartography and institutional documents.

Figure 4.3. Summary of the research process.



Source: Author's elaboration

4.4.1. Criteria of case selection

The selection criteria of the case studies began with the secondary research question: 'Is there any variation in fear of crime in those neighbourhoods with higher levels of poverty'. Afterwards, more layers of selection were incorporated, for instance, the presence of certain elements of the built environment such as public spaces and physical barriers; this process is detailed further in this section.

In Costa Rica, the main methods to measure poverty are divided in unidimensional and multidimensional categories (INEC, 2015b). Those approaches are also used worldwide, making it easier to make international comparisons. However, the unit of analysis and degree of information varies in each case. The main methods used by the National Institute of Statistics and Censuses of Costa Rica (INEC) are summarised below, the acronyms in brackets are given by their Spanish definition:

- **Poverty line (LP)**: It is a unidimensional method based on incomes. It determines what minimum income per person is needed to sustain their basic food requirements and essential services. This indicator is calculated with data from the National Household Survey (ENAHO). The ENAHO is carried out annually; the disaggregation level is regional, urban and rural.

- **Unfulfilled needs (NBI):** This is a multidimensional method. It identifies households in poverty, based on basic needs which must be fulfilled. Those needs are housing, health, knowledge and access to goods and services. The source which generates the NBI is the National Census; therefore, the level of detail is sufficient to allow for the analysis of small units, such as neighbourhoods. The census unit is called Minimal Geostatistical Unit (UGM).
- **Multidimensional Poverty Index (IPM)**. This multidimensional measure is the newest approach adopted in Costa Rica; it aims to complement the information obtained through LP and NBI. The IPM encompasses the following dimensions: education, health, housing, jobs and social care. This index, similar to the LP, is calculated based on the National Household Survey (ENAHO), which means its level of detail is regional, rural and urban.

The investigation for this research explores people's perception within neighbourhoods next to gated communities; therefore, the unit of analysis must be detailed enough to obtain data from each neighbourhood separately. In this respect, the information from the unfulfilled needs (NBI) better suits this purpose. Due to it being calculated with census data, the cartography covers the entire country in detail; in contrast, the LP and IPM methods are estimated based on the ENAHO which is a sample of the Costa Rican population. Despite the geographic accuracy of the NBI, it has the disadvantage of being calculated through the National Census which is carried out approximately every ten years, while the ENAHO is annual. However, so far, neither the LP nor the IPM allow the identification of the degree of poverty in small units such as neighbourhoods.

In order to select the neighbourhoods, the data was taken from the most recent Costa Rican census carried out in 2011 by the INEC. The unfulfilled needs (NBI) are classified into four types, each Costa Rican dwelling is assessed based on the categories shown in Table 4.3:

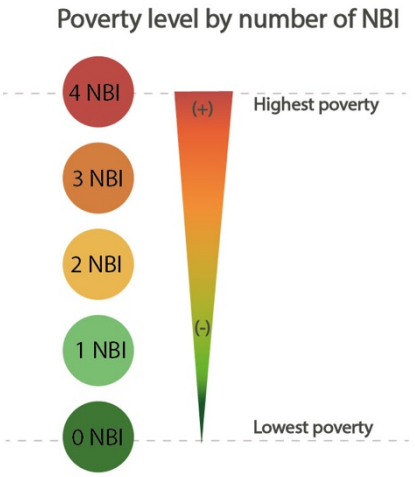
Table 4.3. Types of unfulfilled needs according to the Costa Rican census 2011.

Type of unfulfilled need [NBI] *Lack of appropriate access to:*	**Components**
Housing	Dwelling quality Overcrowded conditions Electricity supply
Health	Sanitary infrastructure
Knowledge	School attendance School achievement
Goods and services	Consumption capacity

Source: Méndez and Bravo (2014), adapted by the author.

Each dwelling could have any of those NBI or none of them. For instance, if a household does not have appropriate access to the four basic needs: housing, health, knowledge, goods and services, that means the dwelling has 4 NBI which is the highest level of poverty, as shown in Figure 4.4.

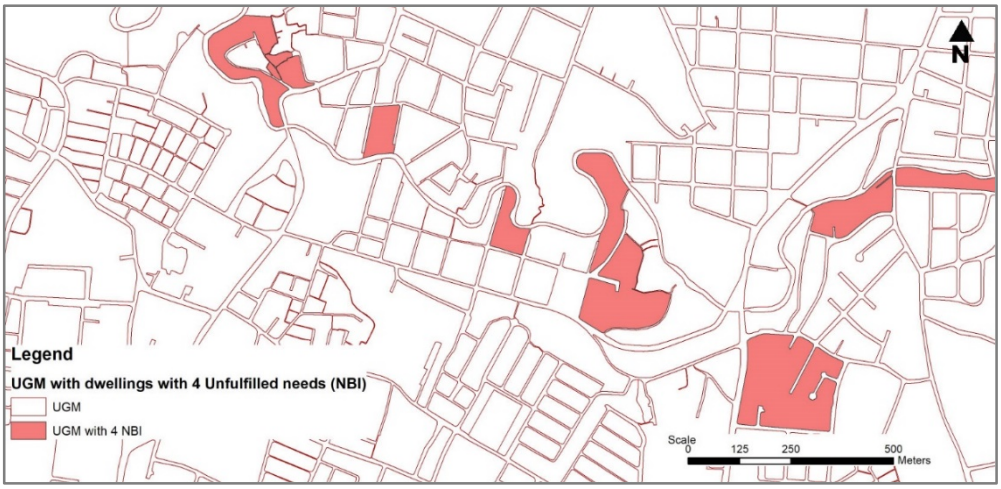
Figure 4.4. Household's poverty level by number of NBI.



Source: Authors' elaboration.

The Minimal Geostatistical Unit (UGM), is the graphic representation of the census cartography, these units are commonly blocks. Sometimes a neighbourhood has more than one UGM; however, when the neighbourhood is very small, the UGM may cover beyond its own boundary. Figure 4.5 shows an example of the UGM size, those UGMs which contain dwellings with 4 NBI have been coloured to better illustrate the scope.

Figure 4.5. Example of UGM size.

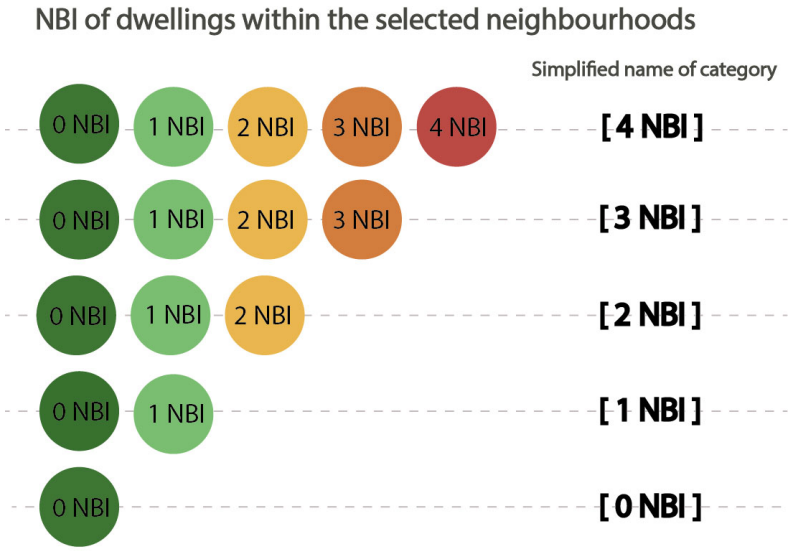


Source: Author's elaboration with data from the National Institute of Statistics and Censuses (INEC).

Each UGM holds households with different numbers of NBI. For example, one UGM could contain dwellings with 2 NBI and 0 NBI. In order to recognise this, one challenge of the selection process was to choose UGMs which consistently reflected the poverty differentiation between neighbourhoods. The strategy to accomplish that objective is illustrated in Figure 4.6. For instance, to select a neighbourhood without poverty (0 NBI), all dwellings within the UGM must have 0 NBI. But, if the purpose was to select a neighbourhood up to 2 NBI, the UGM would need to have dwellings with 0 NBI, 1 NBI and 2 NBI. This is because, within a Costa Rican context, it is very unlikely that there would be the same level of poverty in all households within the same UGM, except for the 0 NBI category. For instance, within the study area there are no UGMs in which all households have 4 NBI.

For the purpose of this research, Figure 4.6 demonstrates the number and variety of NBI in each poverty range, each category name has been simplified by using the highest value of poverty found.

Figure 4.6. Selection criteria of each category of poverty per neighbourhood.



Source: Author's elaboration.

In order to understand the variation of fear of crime at all poverty levels, the eight selected cases included at least one neighbourhood for each category; however, those poverty ranges with a higher representation have more than one study case, Table 4.4 shows the proportion of UGMs per poverty range within the study area, the census provides five levels.

Table 4.4. Distribution of UGMs within the Greater Metropolitan Area per poverty level.

Poverty level	Number of UGMs	Percentage
0 NBI	2605	17.2%
Up to 1 NBI	7466	49.2%
Up to 2 NBI	3889	25.6%
Up to 3 NBI	1073	7.1%
Up to 4 NBI	139	0.9%
Total	15172	100.0%

Source: Author's elaboration with information from census database (INEC, 2011).

Considering those figures shows that UGMs up to 1 NBI and 2 NBI are the most common; therefore, those categories would have one additional study case, reaching at least seven cases overall. However, as it transpired, during the testing process one more case (2 NBI category) was added due to the need to accurately respond to the research questions. This happened in a cluster next to neigbhourhoods with 1 NBI, where three of them surround the

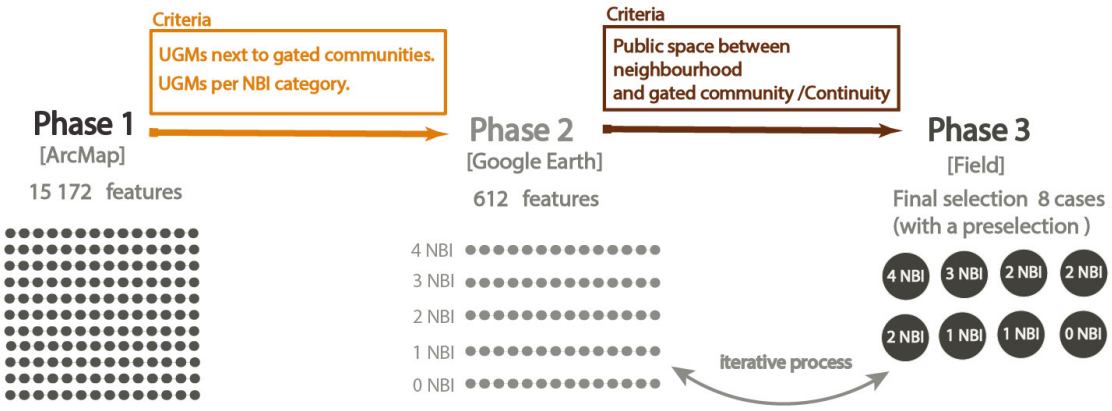
same gated community; that circumstance allowed for a comparison of communities in different poverty levels around the same gated development. Furthermore, this neighbourhood had community parks, which differed from the other two cases within the 2 NBI category. That difference therefore enabled the research to explore if parks might make any difference in communities within those specific poverty ranges. This means that the final number of case studies for this research is eight.

4.4.2. Selection process of study cases

The case selection started by stratifying all UGMs (15,172 features) by the categories described in Figure 4.6. The general procedure is shown in Figure 4.7; overall, in Phase 1 those UGMs next to gated communities were eligible for Phase 2.

Then they were categorised and, at random, those which fulfill the next selection criteria were preselected. Each phase is fully described; the procedure started with a quantitative procedure in ArcMap (GIS), then a discarding process using aerial photographs (Google Earth) and, finally, the definitive selection in the field.

Figure 4.7. Selection process for the eight case studies.



Source: Author's elaboration.

Phase 1. First filter through a quantitative procedure in ArcMap

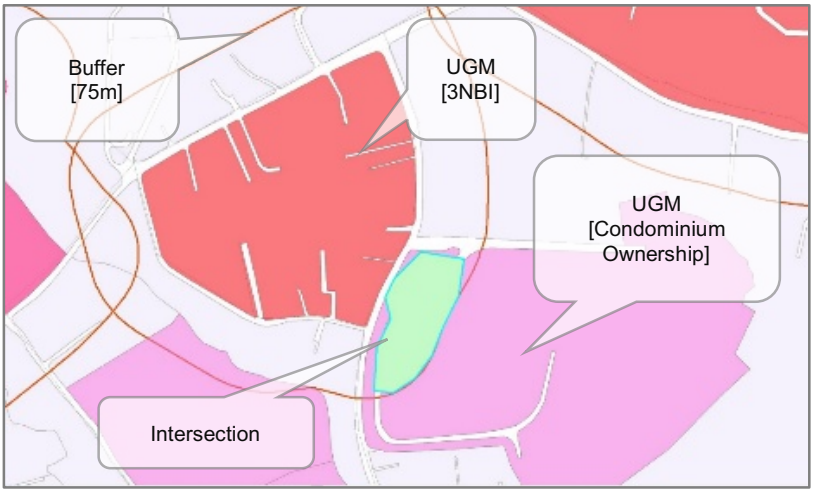
The Costa Rican census database was used for the first stage of the selection process. Only the UGMs from the Greater Metropolitan Area of Costa Rica were used for this task, as explained earlier they correspond to 15,172 polygons. Each UGM is a polygon with its own identifier (ID), which makes it possible to link cartographic information with the census database. That information includes the status of ownership, meaning it is possible to identify those UGM with dwellings under the condominium scheme which is the most common ownership scheme for gated communities. Using Geographic Information Systems (GIS), it was possible to identify those UGMs in open neighbourhoods alongside UGMs with dwellings under the condominium scheme.

The initial selection was made separately in accordance to NBI categories (0 NBI, 1 NBI, 2 NBI, 3 NBI and 4NBI) but under the conditions described in Figure 4.6. Then, a buffer was implemented around the UGM of each category to establish proximity. Figure 4.8 illustrates an example procedure for the 3 NBI category, it shows in red the UGM (3 NBI). For each UGM a buffer of 75 metres was introduced. This value makes it possible to include streets or small parks between the neighbourhood and a gated community, as well as different portions of blocks. Although the urban fabric is irregular in many areas, there are places that still keep the original Costa Rican urban layout of 84 × 84 metres (Obregón, 1886). Therefore, a buffer of 75 metres tolerates an appropriated intersection for regular and irregular sections of the urban fabric.

The UGMs with at least 20 dwellings under the condominium scheme were selectable polygons. This value was decided following the initial attempts when there was no filter in the number of dwellings under condominium per UGM; consequently, the first selections included small properties with two or three properties under condominium, which did not fulfil the research objectives. The purpose of the search was to find gated residential developments of at least three hectares next to neighbourhoods . However, it was not possible to control the size of gated communities (total area) at this

stage because the UGM had both gated and non-gated dwellings. Therefore, setting a minimum number of dwellings in condominium would have increased the chance of obtaining gated communities whose size was larger than three hectares**.** This strategy was effective in all poverty ranges except for the group with 4 NBI, as shown in Table 4.4, the total of UGM with households in extreme poverty is small; therefore, in that case the buffer included UGM with more than 10 dwellings under the condominium scheme. As a result, it was possible to detect gated communities under construction in 2011 which were finalised by 2018 when the fieldwork was undertaken.

Figure 4.8. Geometric process in ArcMap to select the first filter of cases.



Source: Author's elaboration. Census data INEC.

As shown in Figure 4.8, the buffer intersects those UGM under the chosen category (red) with UGM containing dwellings under condominium scheme (pink). As a result, the intersection generates another polygon (green), which keeps the ID of both UGM (red and pink). Summarising, the steps in Phase 1 were:

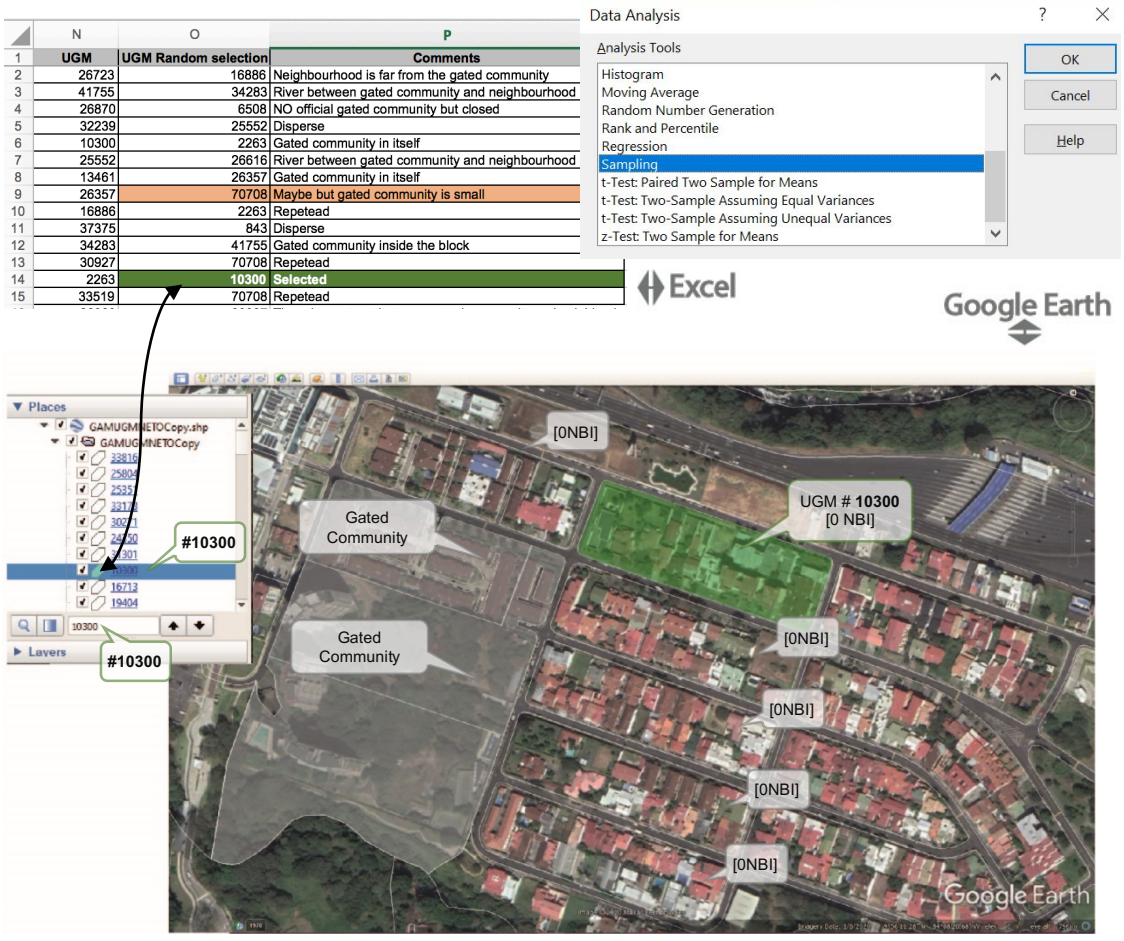
- to select UGMs for each type of NBI category
- to identify UGMs under condominium scheme
- to make an intersection through a buffer
- to export the intersected polygons' database to Excel.

Once the database is exported to Excel, it is ready for the random selection in Phase 2.

Phase 2. Second filter through aerial photographs – Google Earth

During Phase 1, a database and a shapefile (polygons in ArcMap) with the intersections of both UGMs was created – open neighbourhoods and potential gated communities. This process resulted in a database with 612 features. The second filter was carried out exporting the shapefile to Google Earth and using the database in Excel, as shown in Figure 4.9.

Figure 4.9. Second filter through Google Earth.



Source: Author's elaboration. Aerial photograph: Google, Maxar Technologies, 2018; census data INEC.

The procedure started making a random selection in Excel with the 'sampling' tool; the UGMs in that list were tested on Google Earth following the random order given by Excel. The first UGMs within each poverty range which fulfilled

the requirements below were preselected; the criteria were that there should be:

- at least a public space between the open neighbourhood and gated community, such as parks or streets
- continuity between open neighbourhoods and gated communities, those cases with physical elements such as rivers or highways impeding potential communication between them were discarded. That excluded walls of gated communities
- a gated community next to the neighbourhood of a size of at least three hectares.

Due to the research focus on the effects of gated communities in the adjacent public spaces, the physical connection between open neighbourhoods and gated communities was crucial, as was the existence of public spaces between both types of residential developments.

The sizes and shapes of each gated community were also important; for that reason, the gated communities chosen were selected because they provoked discontinuity within the urban fabric. As a starting point, the walking time along one typical block (84 × 84 m = 7056 m^2) was taken into consideration; if at least two blocks were joined, that meant walking four blocks overall (two per side), resulting in almost three hectares. This reference helped to decide a feasible size, although some neighbourhoods did not necessarily have an orthogonal grid.

Under the criteria described, a preselection of 16 cases was made; they would be tested in the field. Summarising, the steps for Phase 2 were:

- to export the intersection shapefile from phase 1 (Arcmap) to Google Earth
- to carry out a random selection in Excel with the database from the intersection shapefile
- to preselect cases manually, analysing the aerial photographs, under the order of the random selection.

Most of the neighbourhoods were composed of more than one UGM; therefore, as shown in Figure 4.9, those UGMs next to the selected polygon were checked to corroborate the homogeneity of the neighbourhood. The census cartography does not identify neighbourhoods as units, so the final delimitation was made on site during the first meeting with the communities. However, a preliminary delimitation was made at this stage. Due to there being no guarantee that the preselected cases would be suitable, after checking in the field, it was necessary to return to the random list and test new cases. In this respect, there was an iterative process between Phase 2 and 3.

Phase 3. Third filter. Checking the cases in the field.

The last step in the selection process was a revision of the preselected cases in the field. During this final filter, the purpose was to confirm if those dwellings under a condominium scheme constituted a gated community; therefore, to see if there was any physical barrier between the open neighbourhood and the gated development, such as walls or fences. Also, the corroboration of any public space between gated communities and neighbourhoods had to be checked and, likewise, the physical/topographic continuity between them. Once the suitable cases were selected, the process of contacting the communities started. Due to some uncertainty about communities' participation, some backup cases were chosen.

4.4.3. Contacting communities

The process of contacting communities and recruiting participants was carried out once Phase 3 was concluded. The methods of data collection required the participation of community groups; therefore, it was essential to contact those communities through official channels in order to build trust. As explained in Chapter 3, many Costa Rican neighbourhoods are organised in community boards. Those bodies generally have a close relationship with local governments, especially the Social Department. Given that, the following steps were carried out to contact communities:

- Step 1. Meeting with the chair of the Social Department from the local government. The eight cases were allocated within four different local governments.

- Step 2. The Social Department provided the contact of the community board or community leaders. On some occasions, the Social Department contacted them directly, working as an intermediary between the researcher and the community.
- Step 3. Once the community board/community leaders were contacted, they were asked for a meeting. In that meeting, the research was explained and they decided whether or not to become involved.
- Step 4. Once the community board/community leaders agreed with the participation, they made an open call to other residents from the neighbourhood. Each community chose the most suitable method to make the recruitment process, for instance, through WhatsApp groups, emails and phone calls among others.
- Step 5. The community chose dates and times for both the walking interview and focus groups

Although the recruitment process had several steps, none of the selected communities declined their participation. Therefore, the eight priority options selected in Phase 3 were definitive and it was not necessary to use the backup cases. Additional to the eight selected cases, there was a pilot case, in order to test tools and message delivery.

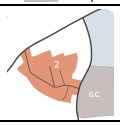
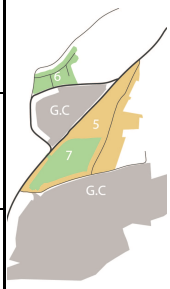
4.4.4. Selected cases

The characteristics of the selected cases are described extensively in Chapter 5. However, a summary of those cases is shown in Table 4.5. The number of dwellings per case were taken from the UGM information – not the neighbourhood boundary; therefore, it is an approximation of the number of dwellings per case. In some cases, the geometry of UGMs did not fit exactly to that of the neighbourhood; those details are given in Chapter 5.

As Table 4.5 shows, the final selection includes at least one neighbourhood in each poverty level; there is a higher representation of cases in groups (2 NBI) and (1 NBI), as previously mentioned. The selection includes a cluster (cases 5, 6 and 7), all of them are around the same gated community. Initially, just one of those cases was selected randomly; however, due to the opportunity of

having different cases (meeting the selection criteria) around the same gated community, the other two cases were adopted.

Table 4.5. Final selection of cases.

	Open neighbourhoods' conditions							Gated community **		
Cases	**Poverty levels per case #dwellings per NBI**					**Community parks**	**Community organisation level**	**Approx. size gated community (hectares)**	**Gated community edge**	**Diagram**
	0 NBI	**1 NBI**	**2 NBI**	**3 NBI**	**4 NBI**					
Case 1 : 67 dwellings [4 NBI]	32	23	5	6	1	No	High two meetings a month	43,4 ha	Strong (wall)	
Case 2: 252 dwellings [3 NBI]	224	23	4	1		No	High two meetings a month	9 ha	Strong (wall)	
***Case 3: 123 dwellings [2 NBI]**	90	29	4			No	High two meetings a month	3,5 ha / 2,2 ha	Strong (wall) both	
Case 4: 335dwellings [2 NBI]	297	30	8			No	High two meetings a month	10 ha / 16 ha	10 ha Semipermeable (fabric- forest) 16 ha Strong (wall)	
***Case 5: 211 dwellings [2 NBI]**	240	26	3			3 Parks good condition	Middle random meetings, whatsapp	9 ha/33 ha	Strong (wall) both	
***Case 6: 139 dwellings [1 NBI]**	132	7				1 Park good condition	Low just whatsapp group	9 ha	Strong (wall)	
***Case 7: 74 dwellings [1 NBI]**	73	1				3 Parks good condition	High two meetings a month	9 ha	Strong (wall)	
Case 8: 275 dwellings [0 NBI]	275					7 Parks good condition	High two meetings a month	5,3 ha / 2,3 ha	Permeable (raillings) both	
Pilot: 78 dwellings [2 NBI]	67	10	1			No	Middle random meetings, whatsapp	9 ha	Strong (wall)	

* They share the same gated community

** There are cases with more than one gated community next to them. More details in Chapter 5.

Source: Author's elaboration.

4.4.5. Methods of data collection

The data collection process, as explained earlier, was carried out through mixed methods. According to Yin (2014:p.114) 'Case studies need not be limited to a single source of evidence. In fact, most of the better case studies rely on a variety of sources'. Yin mentioned four tests to confirm the quality of any empirical social research: construct validity, internal validity, external validity and reliability. For each of those tests, Yin offers some tactics for the study case method. Those tests and many of those tactics were used in the current research, such as the use of multiple sources of evidence and to establish a chain of evidence for constructing validity; to do pattern matching for internal validity; to use theory in single and multiple cases during the research design for the external validity; and, finally, to implement a case study protocol to get reliability. That protocol was designed, tested and improved through a pilot case before the data collection process.

Each data collection method is described in this section; Table 4.6 briefly summarises those processes:

Table 4.6. Data collection methods used during the research, number of events and participants.

Method	Number of events	Number of participants
Walking interviews	8	43
Focus groups adults	8	49
Pilot -Walking Interview *	1	6
Pilot -Focus group *	1	6
Focus groups teenagers	2	10
In-depth interviews	14	14
Non participant observations	36	
Participant observations (informal)	5	
Total	**75**	**128**
* The information obtained during the pilots was used to improve the collection tools, but it was not used during the analysis process.		

Source: Author's elaboration.

As described in Table 4.6, a pilot was used to improve the data collection tools and message delivery. However, the information obtained was not part of the analysis process. The reasons for not using those data were:

- The selection process for the pilot did not follow the same rules as the other cases. It was a direct proposal to community leaders from a neighbourhood next to a gated community. They were aware of being part of the pilot and willing to contribute with their critical views about the procedure. In this regard, Yin (2014:p.96) mentions that 'In general, convenience, access, and geographic proximity can be the main criteria for selecting a pilot case'.
- The original tools, particularly the individual maps from walking interviews, were improved after the pilot, thanks to the participants' recommendations. This change also impeded making comparisons, as the data collection tools were not exactly the same.

Walking interviews

Mobile research methods have been increasing in recent years among social scientists (Evans & Jones, 2011). Carpiano (2009:p.264) called this type of method 'go-along', He describes it as a qualitative interview where the researcher walks along with participants in their familiar environment. Carpiano (2009) implemented this method for his research about the implication of places in health and well-being; walking interviews have also been used to encourage conversations about energy landscapes (Castán, Salazar & Adams, 2014). In Costa Rica, UN-Habitat introduced the 'Safety exploratory walks' (ONU-Habitat, 2013b:p.20) to understand people's perceptions about fear of crime, they defined them as 'Short urban routes, previously defined and carried out by the community. Participants should pay attention and assess some aspects regarding their community's safety while they perform these walks'. (ONU-Habitat, 2013b:p.20). The walks are useful to localise urban elements and perceptions identified by residents in public spaces. Evans and Jones (2011) claim that walked interviews offer a deeper understanding of a place than conventional sedentary interviews; they help to access people's attitudes towards their surrounding environment and daily

routines in the space. However, they have the challenge of transferring those conversations into a spatial link after the walk, during the processing stage. To facilitate this, Evans and Jones (2011) suggest technologies such as Geographic Information Systems (GIS) and Global Positioning System (GPS) to capture those moments and they also make it possible to georeference people's comments.

For this research, walking interviews were chosen due to their accuracy in localising people's perceptions across their neighbourhood, which helps to answer the secondary question: Which conditions of the built environment within neighbourhoods influence fear of crime? That link could be established through the participants' comments reported along the walk. The walks were tracked to obtain that information, as Evans and Jones (2011) suggest.

This work proposes additional methodological resources in order to explore deeper the distribution of fear of crime, which is part of the main research question: How do gated communities affect the spatial distribution of fear of crime in the neighbouring public spaces? Given that, this work extends the walking interview's methods by adding the following two components:

a. Intensity of fear maps: Each participant had an individual map and in that map, they were able to put stickers symbolising different intensities of fear.
b. Talk's track maps: During the walk, there were semi-structured questions to foster conversation and to standardise, to some extent, the walk's information. Each walk was tracked with a GPS and synchronised with an audio recorder, the talk was transcribed and coded in NVivo (qualitative software). Then the codes were georeferenced.

The purpose of 'Intensity of fear maps' was to explore where participants expressed fear of crime more intensely, whilst the objective of 'Talk's track maps' was to show the diversity of those perceptions.

Intensity of fear maps

The goal of the individual maps was to complement the walking interview and to explore the intensity of fear of crime in different places. The individual maps also allowed the researcher to capture opinions of every single participant and classify those views by sex and age, regardless of their participation during the conversation. That tool also helped to foster talk because the participants started to justify their individual thoughts. A sample of an individual map used during the fieldwork is shown in Photos 4.1 and 4.2.





Photo 4.1. Individual map handed to each participant.
Photo 4.2. Individual map once participant finished the walk.
Source: Author.

The eight walks were carried out during daylight hours; however, due to the places visited being part of the participants' daily routines, people could also indicate their feelings when they had to walk in those areas in the dark. As each walk followed the same protocol, the information was comparable. The design of the individual maps and icons had to be easy to understand regardless of the participants' educational level or familiarity with reading maps. The icons using for this task are shown in Figure 4.10. During the pilot, the icons were tested and some changes were made thanks to the participants' suggestions. Those changes included producing a new icon (very safe), improvement in the stickers' materials (wind resistant) and the elimination of unnecessary stickers, such as 'places for gathering'[2]. The maps tested during the pilot can be found in Appendix 4-1.

[2] The icon 'places for gathering' was eliminated because those places were tracked with GPS during the walk; therefore, that information would be obtained. Thus, the icons were focused on the intensity of fear exclusively.

Figure 4.10. Icons used for stickers on individual maps.



Source: Author's elaboration.

Each icon was described to the participants before starting the walk. During the walking interview, there were some stops where participants disclosed their perceptions during day and night. For the purposes of this research, the meaning of each icon was illustrated to participants as follows:

- Very safe: when you feel the chance of being a victim of crime is very low, you almost do not feel any anxiety. For instance, the sensation when you are in your front garden or at your front door.
- Safe: when you perceive that being a victim of a crime is unlikely; however, there is still a small chance.
- Unsafe: when you feel the chance of being a victim of a crime is likely. You increase your walking speed and feel anxious.
- Very unsafe: when you think it is very likely you will be a victim of a crime. You are concerned about your physical safety and your anxiety is very high. If possible, you avoid that route, take a taxi or ask someone to pick you up.

During this task, it was crucial to localise every place on the map, particularly at each stop, as some people might not be familiar with maps. Also, to include enough reference points, such as shops or schools. In those residential areas without commercial or institutional activity, points in different colours were included to facilitate orientation. An example of those maps can be found in Appendix 4-2.

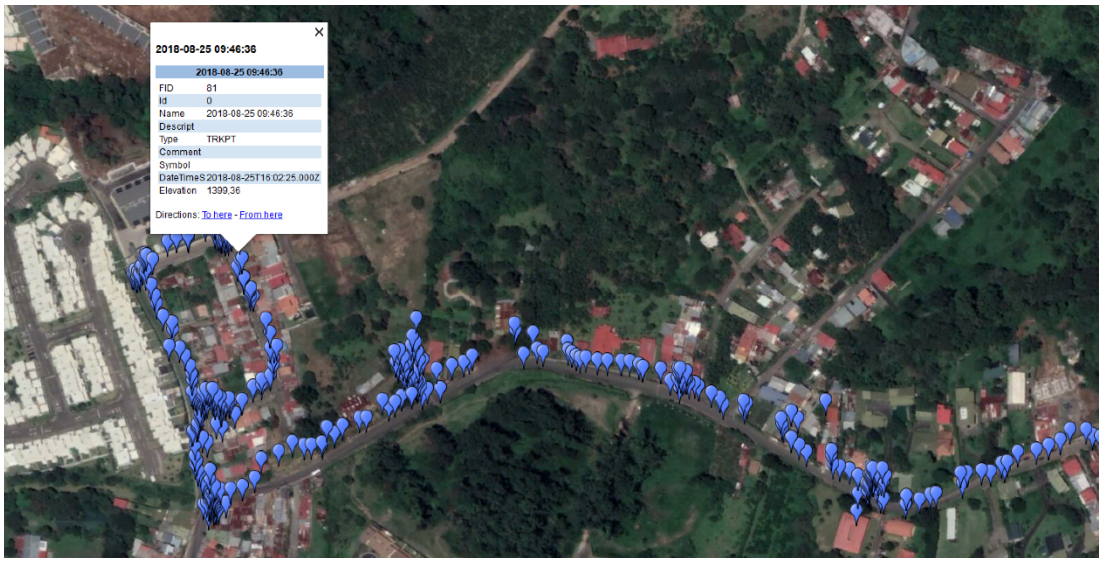
Although the number of participants agreed with community leaders was around ten maximum, most of the time it was difficult to know in advance the

precise figure, as it was a voluntary and open call. For this reason, materials were prepared for 15 people for each walk.

Talk's track maps

The entire walk was tracked with a GPS mobile application (details about the application are in Appendix 4–3) and the talk was captured with an audio-recorder; by synchronising the two devices, it was made possible to georeference the comments. Evans and Jones (2011) suggest this procedure in order to obtain an accurate location of people's perception. Figure 4.11 shows a sample of one track done during the fieldwork. Each point stores time and location. The points are used to localise the comments according to the time when the comment was made.

Figure 4.11. Track made during the walking interview for Case 4.



Source: Author's elaboration. Aerial photograph: Google, Maxar Technologies, 2018.

The semi-structured questionnaire implemented during the walks can be found in Appendix 4-4. This tool explored aspects such as:

- Daily walking routes
- Perceptions about safety and their reasons along the walk.
- Perceptions at specific stops during the walk, such as community parks, vacant lots, places next to gated communities, other areas inside the neighbourhood and points suggested by participants

- Descriptions about public spaces' users (parks and other facilities) and frequency of use
- Gathering areas (included questions about where teenagers meet)

The purpose of the semi-structured questions was to foster the conversation smoothly. The participants spontaneously narrated anecdotes and further details about their perceptions. Although the original questions were the same on each walking interview, the communities had particular issues which emerged during the walk; those special concerns or situations were also coded and georeferenced. The route of the walk was pre-defined because it had to include areas contiguous to gated communities, as well as internal roads of the neighbourhood. This was done in order to compare any distortion of fear in areas with dwellings next to gated communities and those without them. However, in some cases the walk had variations due to suggestions from community members; for example, they wanted to include places such as additional areas considered dangerous or regenerated projects rated as safe places; these last-minute additions enriched the empirical data. The advantage of tracking the route is the flexibility it allows for unexpected changes. Some precautionary measures and safety protocols were applied in order to keep participants and the researcher as safe as possible. These are detailed at the end of this chapter.

Table 4.7 shows a summary of walking interviews and focus group by number of participants, sex and the events' date.

Table 4.7. Summary of number of participants in walking interviews and focus groups –adults.

	Walking Interviews				Focus Groups			
Case	**Date**	**Men**	**Women**	**Total**	**Date**	**Men**	**Women**	**Total**
Case 1	01/09/2018	1	6	**7**	27/10/2018	1	5	**6**
Case 2	23/09/2018	1	0	**1**	30/10/2018	4	2	**6**
Case 3	22/09/2018	2	0	**2**	01/11/2018	4	1	**5**
Case 4	25/08/2018	2	9	**11**	16/11/2018	4	7	**11**
Case 5	03/11/2018	2	2	**4**	29/11/2018	2	2	**4**
Case 6	26/08/2018	6	4	**10**	18/11/2018	3	1	**4**
Case 7	29/09/2018	1	3	**4**	04/12/2018	4	5	**9**
Case 8	14/11/2018	2	2	**4**	10/12/2018	1	3	**4**
Total		17	26	**43**		23	26	**49**

Source: Author's elaboration.

Focus groups

In each selected neighbourhood a focus group was carried out to understand the dynamics of community ties, the relationship with people from the gated community, communal events and routines. During the walking interview, the type of information obtained was mainly related to the built environment, walking routes and feelings in specific places, among others. However, during the walk, it was not possible to probe deeper into other aspects linked to residential segregation, precautionary measures, activities or communal views towards gated communities. Kamberelis and Dimitriadis (2011:p.545) describe focus groups as a:

> fruitful method for 'thinking through' qualitative research today. Basically, focus groups are collective conversations or group interviews. They can be small or large, directed or nondirected.

For this technique, a semi-structured questionnaire was used. In each study case, the focus group was carried out after the walking interview (different date). Although the original questions were the same for each neighbourhood,

during the walk some particular issues emerged, which were resumed during the focus group.

The focus groups also offered the opportunity to explore particular problematics or strengths further. There were two types of focus groups:

a. Focus groups with adults: *For* each study case a focus group was carried out with adults.
b. Focus groups with teenagers: In order to have a broader perspective about views from different members of the community, two focus groups with teenagers were constructed.

Focus groups with adults

As mentioned above, during the focus groups with adults they were asked about aspects regarding community ties. Also, they were consulted about:

- their length of residence
- their relationships with neighbours and people from the gated community
- communal activities
- satisfaction with their neighbourhood
- precautionary measures
- communication channels, and
- general concerns about safety.

A sample of the base questionnaire can be found in Appendix 4-4. The participants in the focus groups could be the same as on the walks but also new people were welcomed. Although on some occasions there were new people, all the focus groups included neighbours who participated during the walking interview as well. Those events took place in community halls when the community had one (two cases). However, due to most of the neighbourhoods not having that infrastructure, the community leaders suggested holding the focus groups in the places where they usually have

community meetings, such as garages or neighbours' houses. Table 4.7 (from the previous section) showed a summary of those focus groups.

Focus groups with teenagers

Although teenagers were welcomed to the walking interviews, they did not participate. During the research design, anticipating that situation, there were planned at least two focus groups with teenagers. Those focus groups would take place just in case this section of the population did not participate in the walks. Melde (2011) mentions that fear of crime in teenagers has been underestimated despite the high rates of victimisation of this population. He argues that most of the research has been done based on adult samples. During the fieldwork of this research two focus groups with teenagers were carried out. They explored teenagers' thoughts about fear of crime and contrast them with the adults' views.

The recruitment process of this population was done originally through the public high school, because most teenagers in groups from 4 NBI to 2 NBI attended public schools nearby. Although the approval from the public high schools was obtained, the focus groups could not take place inside the institution due to a strike (public sector) which lasted three months until the summer break (December). Instead, community leaders from cases 1 and 4 offered help by recruiting teenagers in their own communities. To achieve this, both teenagers and their parents/guardians were willing to participate.

In contrast, many teenagers in groups 1 NBI and 0 NBI, attended a diverse number of private schools (as community leaders suggested). Therefore, the recruitment process for those groups through their high school was less viable, due to the dispersed location of different private schools. An attempt was made with a local school of arts close to Case 8 (0 NBI); however, the coordinator of that institution had difficulties recruiting the students and the focus group had to be cancelled.

The strategy during focus groups with teenagers had variations from those in the adults' focus groups. The questions explored their perceptions about the built environment as well as community ties. It was implemented using a participatory mapping, a collective map in which the teenagers were able to

intervene with stickers and markers. The semi-structured questionnaire used is attached in Appendix 4-4. The advantage of participatory mapping technique is that 'participants are able to share the multidimensional features of collective experiences of place: its perception, representation and how individual and collective histories link to it.' (Castán, Salazar & Adams, 2014: p.195). Photo 4.3 shows one of those maps after the focus group.

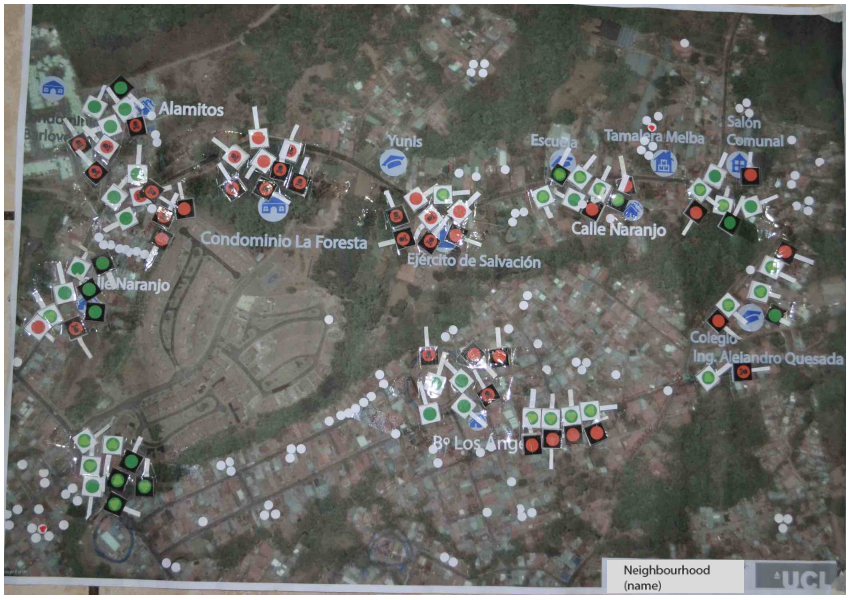


Photo 4.3. Collective map intervened by teenagers during focus group
Source: Author.

The icons used in those collective maps were the same as the ones used in the intensity of fear maps. Each teenager had a group of stickers but they worked on a shared map. The map included neighbourhoods nearby, so as to include their friendship networks. They also indicated those places where they had friends (with a marker) and if there was any relationship with peers in gated communities. That information helped to corroborate if the levels of residential segregation were similar to those with adults. Table 4.8 shows a summary of those meetings.

Table 4.8. Summary of number of teenagers during focus groups

	Focus Groups - teenagers			
Case	**Date**	**Men**	**Women**	**Total**
Case 1	01/12/2018	4	2	**6**
Case 4	22/11/2018	1	3	**4**
		5	5	**10**

Source: Author's elaboration

In-depth interviews

The in-depth interview provides 'a fine-textured understanding of beliefs, attitudes, values and motivations concerning the behaviours of people in particular social contexts'. (Gaskell, 2000:p.39). In this regard, Chase (2011:p.421) argues that narrative research emphasises that it is possible to learn about anything 'by maintaining focus on narrated lives'. She distinguishes a variety of narratives; for instance, those about people's life stories and experiences. Also, narratives as storytelling; in this approach, 'narration is the practice of constructing meaningful selves, identities, and realities' (Chase, 2011:p.422). She highlights that many researchers use in-depth interviews as a method to gather those data, which covers a wide range of topics.

For this research, in-depth interviews were carried out to triangulate some information and to complement some experiences of participants. Those interviews were divided into three types:

- Institutional informers: people from local government and local police.
- Researchers: people who had worked in fields related to the research in Costa Rica.
- Members of community: during the walking interviews or focus groups, there were participants whose personal experiences could help to explore details related to the research questions; for instance, a woman from case 7 (1 NBI) who previously lived in case 1 (4 NBI).

The interviews were carried out with a semi-structured questionnaire (Appendix 4-4). Questions vary according to the type of interviewee and their affiliation. The questions for institutional informers had the same basis; however, they differ among researchers, because of particular fields of expertise. The same situation occurred with community members, whose particularities justified different questions. Table 4.9 shows a summary of those interviews.

Table 4.9. Summary of in-depth interviews.

Affiliation	ID	Date	Position / Reason for interview	Cases involved
Local government	LG1	23/07/2018	Chair Social Department	Case 3 and Case 8
Local government	LG2	28/08/2018	Chair Cultural Department	Case 3 and Case 9
Local government	LG3	08/08/2018	Chair Social Department	Case 2
Local government	LG4	23/08/2018	Vice-Mayor (Social programmes)	Case 1, Case 5, Case 6 and Case 7
Local government - Police	P1	23/07/2018	Chair Municipal Police	Case 1, Case 5, Case 6 and Case 7
Local government	LG5	24/07/2018	Chair Social Department	Case 4
Local government - Police	P2	24/07/2018	Chair Municipal Police	Case 4
Community member	CM 1	26/11/2018	Fear of crime views from immigrant perspective	Case 1
Community member	CM 2	12/12/2018	Female views of about intensity of no women during walks in Case 2	Case 2
Community member	CM 3	25/10/2018	She lives in Case 7, but previously lived in Case 1	Case 7
Community member	CM 4	23/10/2019	Senior person in charge of park regeneration	Case 6
Academia	R1	16/11/2018	Researcher in Fear of crime, media migration	General
Academia	R2	29/11/2018	Researcher in planning, residential segregation / former minister of housing and human settlements	General
Academia	R3	30/10/2018	Researcher in Income inequalities	General

Source: Author's elaboration.

Observations

Observations were carried out as a triangulation method but also to complement some details about the built environment. Angrosino and Rosenberg (2011:p.467) argue that 'Qualitative social scientists are observers both of human activities and of the physical settings in which such activities take place'. They mention that observations take place in those places where the activity is happening naturally. During this research, there were two types of observations: non-participant and participant. The original design of the research contemplated just the non-participant observations; however, members of the community contributed when offered an invitation to the researcher to participate in community events as a guest. Those observations were done within an informal context; however, people from communities were aware about the research and the identity of the researcher.

Non- participant observations

The non-participant observations were carried out in each neighbourhood. The number of observations' points varied according to neighbourhood size or the extent of the gated communities next to it. The systematisation of this process, as described earlier, was carried out through a time sampling (Barner-Barry, 1986) by scanning of episodes with a precise duration of time. Each observation took 20 minutes, at least one of them was taken in peak hours (weekdays between 15:30 and 18:30) and one during the weekends. As shown in Table 4.10, typically between four and seven observations were taken per case, except for case 1 where two observations were carried out[3].

[3] The observations in Case 1 were taken in the area between the gated community and neighbourhood. The participants during the fieldwork recommended avoiding being observed in the north street of the community as it might be problematic because of the drug dealers.

Table 4.10. Summary of non-participant observations.

	Number of observations per date			
Case	**Date**	**Weekday**	**Weekend/ Holiday**	**Total**
Case 1	16/12/2018		1	**2**
	17/12/2018	1		
Case 2	12/12/2018	1		**7**
	19/12/2018	3		
	25/12/2018		3	
Case 3	14/12/2018	2		**4**
	23/12/2018		2	
Case 4	15/12/2018		2	**7**
	18/12/2018	5		
Case 5	13/12/2018*	3		**7**
	16/12/2019*		3	
	17/12/2020	1		
Case 6	13/12/2018	2		**5**
	16/12/2019*		3	
Case 7	13/12/2018*	3		**4**
	16/12/2018*		1	
Case 8	14/12/2018	2		**4**
	23/12/2018		2	
Total		**23**	**17**	**40 ****

* Cases which share observation points
This figure includes 4 observations on common points; therefore total of observations is **36

Source: Author's elaboration.

The observations' points included areas next to gated communities and internal neighbourhood's roads. They also covered particular areas with special issues mentioned by communities during walks or focus groups; for that reason, this process was the last one during the fieldwork. Also, after months of working in the community, the participants had become more familiar with the researcher, therefore, the observations did not generate suspicions.

The purpose of this tool was to obtain information about interactions among neighbours, activities in public spaces, dynamics next to the gated community,

traffic level as well as any particular feature of the built environment. In respect of each observation, a form was filled in; this can be found in Appendix 4-4. In addition to the form, field notes and visual information were recorded. At the observation point, next to gated communities, a 20-minute video was filmed. As well as the video, a series of pictures were taken in each case and those pictures were georeferenced. Once the observation was concluded, it was made into a track with the GPS application (the same procedure as with the walks), this track was synchronised in time with the photos. That procedure was done in ArcMap which allows georeferencing the pictures and linking later to people's comments in each place.

Participant observations

As mentioned, the participant observations were informal invitations to attend community events. Those activities allowed for sharing with community members in a casual environment and to observe the behaviour between neighbours in a typical community activity. As these observations were more informal, the data collection was through '*Ad Lib*. Sampling' which are field notes (Altmann, 1974). Those notes were taking immediately after the activity was concluded.

All the events took place within the neighbourhood. A list of those activities is presented below:

- Case 1 [4 NBI]: Community Assembly for housing project, date 27/10/2018, approximate number of participants 50.
- Case 2 [3 NBI]: Bingo, date 29/09/2018, approximate number of participants 60.
- Case 4 [2 NBI]: Community Assembly for safety project, date 07/09/2018, approximate number of participants 40.
- Case 7 [1 NBI]: BBQ, date: 04/12/2018, number of participants 12.
- Case 8 [0 NBI]: Christmas Concert, date 01/12/2018, approximate number of participants 35.

4.4.6. Methods of data analysis

As described in Table 4.2, the walking interviews and focus groups were analysed through thematic analysis: ‘a method for identifying, analysing and reporting patterns (themes) within data.’ (Braun & Clarke, 2006, p.6). According to Braun and Clarke, thematic analysis should follow these steps:

1. Familiarising with data
2. Generating initial codes
3. Searching for themes
4. Reviewing themes
5. Defining and naming themes

Braun and Clarke (2006:p.14) also suggest that epistemologically ‘thematic analysis can be conducted within both realist/essentialist and constructionist paradigms’ because it guides the meaning of data and informs how to theorise those findings. They also highlight that thematic analysis may overlap to some extent with discourse analysis when it involves ‘latent levels’, although thematic analysis has stages from description where data is organised by patterns and interpretation where those patterns make sense in a broader connotation. ‘The “latent level” goes beyond the semantic content of the data, and starts to identify or examine the underlying ideas, assumptions, and conceptualisations’ (Braun & Clarke, 2006:p.13). Similarly, those overlaps appear at some levels of this research.

On the other hand, some sources of information, such as interviews and focus groups with teenagers, were analysed mainly through discourse analysis. This method seeks ‘to identify the discourses and interpretive repertoires that individuals draw on to make sense of their world, and to examine their consequences and limitations’ (Burck, 2005:p.248). Despite walking interviews and focus groups (adults), where analysed through patterns (thematic analysis), discourse analysis was used to explore some meanings behind those patterns, noting particular circumstances or exceptions.

Data processing for walks and focus groups

In order to process the information obtained in walks and focus groups, the following steps were implemented:

- transcription of all audios
- coding
- organisation of codes (merging duplicates and rename)
- classification per subgroups
- georeferencing – for walking interviews
- interpretation and triangulation.

The audios were transcribed using the software Nvivo. The coding process was carried out using the same software. Each code had a structure which was designed to help in the classification process later (Figure 4.12). Firstly, the main themes were established, as Table 4.11 shows there are general groups. Those themes were based primarily on theory (according to the literature review – Chapter 2) therefore, they were deductive categories. However, those themes were refined by applying all the coding process to an entire case first (included the georeferentiation of codes). Once finished, some new categories were added, such as 'Drugs' and 'Institutions'. The study case used as a model had to be coded again, as the first coding attempt required further detail. Then all the cases were coded under the same standards.

Table 4.11. Main groups of code classification.

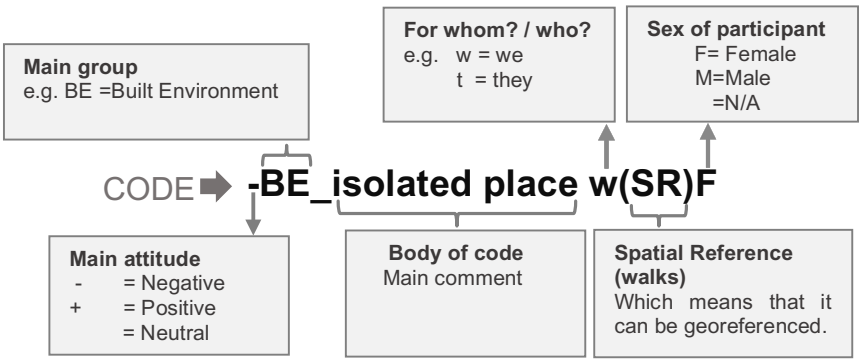
Abbreviation	Main themes
BE	Built environment
F	Feelings
CR	Community relationships
V	Victimisation
Pr	Precautionary measures
P	People
Pl	Places (regional or local)
D	Drugs
I	Institutions
Se	Services
Sm	Smells

Source: Author's elaboration.

Once people's comments were classified under the groups described in Table 4.11, the coding had an inductive process. This meant that the procedure was a hybridisation with deductive (main themes) and inductive coding (code's body). Each code followed the structure shown in Figure 4.12 with the information below:

- The attitude of participant: positive, negative or neutral.
- Main theme: according to groups in Table 4.11.
- Body of code: people's comment, interpretation as descriptive as possible of the main idea.
- For whom: who was the participant talking about (*We*: he/she/neighbours or *They*: people from gated community, strangers, etc.).
- Spatial reference (SR): That means it is possible to localise the comment on the map. This nomenclature was only used for tracked comments made during walking interviews, when people were referring to specific places along the walk.
- Sex of participant: The comments were classified as male and female comments.

Figure 4.12. Code's structure.



Source: Author's elaboration.

Apart from the groups shown in Table 4.11, there is an additional category extracted from the walking interviews' audios, this encompasses the sounds registered by the researcher, such as traffic, birds, people's interactions, among others. As this category is not part of the participants' perceptions, it was included to complement the observations.

After the coding process, there was a cleaning and classification stage where those similar codes were joined under the same topic. Figure 4.13 shows an example of the coding classification. As shown, the original code's names were kept but in the column 'comments' a final name of the code after merging is used. Those comments become practical names for representation in tables and maps in the empirical chapters. This organisation allows the identification of the original code, subgroup, main group and topic.

Below is the description of each component:

- Attitude: positive (+), negative (−) or neutral (0).
- Comment: The reinterpretation of each code once it has been cleaned and merged to those similar.
- Subcategory: It is the categorisation of the main themes. More details in Figure 4.15.
- Main theme: It is the initial general classification showed in Table 4.11.
- Codes: The original codes showed in Figure 4.12; each one has a unique number generated by Nvivo.
- Sex: Female (F) and Male (M).

The column 'Tools' is for illustrative purposes, it is an example of how the information from that code can be used. The entire list of codes can be found in Appendix 4-5.

Figure 4.13. Example of code classification.

Attitude	Comments	Subcategory	Main theme	Codes	Sex	Tools
-	Abandoned cars make the place unsafe	Signs of fear	Built Environment	91: -BE_abandoned car w(SR)F	F	tables/graphs/ maps (SR)*
-	Abandoned cars make the place unsafe	Signs of fear	Built Environment	92: -BE_abandoned car w(SR)M	M	tables/graphs/ maps (SR)*
0	community board and priv sector	Community ties	Community relationships	287: CR_Alliance private sector w(SR)F	F	tables/graphs/ maps (SR)*
0	community board and priv sector	Community ties	Community relationships	288: CR_Alliance private sector w(SR)M	M	tables/graphs/ maps (SR)*
+	Communal intiatives or groups	Organisation	Community relationships	318: CR_community groups wF	F	tables/graphs
+	Communal intiatives or groups	Organisation	Community relationships	319: CR_community groups wM	M	tables/graphs
+	Communal intiatives or groups	Organisation	Community relationships	340: CR_Housing project wF	F	tables/graphs
+	Communal intiatives or groups	Organisation	Community relationships	341: CR_Housing project wM	M	tables/graphs
0	Our community did the 'safety course'	Organisation	Community relationships	466: CR_Safety course wF	F	tables/graphs
0	Our community did the 'safety course'	Organisation	Community relationships	467: CR_Safety course wM	M	tables/graphs
-	Concerns about supply of public spaces	Public spaces	Built Environment	127: -BE_Few public spaces nearby wF	F	tables/graphs
-	Concerns about supply of public spaces	Public spaces	Built Environment	128: -BE_Few public spaces nearby wM	M	tables/graphs
-	Concerns about supply of public spaces for kids	Public spaces	Built Environment	210: -BE_No public spaces children wF	F	tables/graphs
-	Concerns about supply of public spaces for kids	Public spaces	Built Environment	211: -BE_No public spaces children wM	M	tables/graphs
-	There is crime inside gated communities	Gated Communities	Built Environment	140: -BE_Gated Communities -crime inside T(SR)F	F	tables/graphs/ maps (SR)*
-	There is crime inside gated communities	Gated Communities	Built Environment	141: -BE_Gated Communities -crime inside T(SR)M	M	tables/graphs/ maps (SR)*
	[more …]			[more …]		

* Maps with spatial references (SR) from codes

Source: Author's elaboration.

The classification above has also been structured by case and source. It disaggregates the data in detail but also integrates them according to different types of analysis.

Georeferencing codes

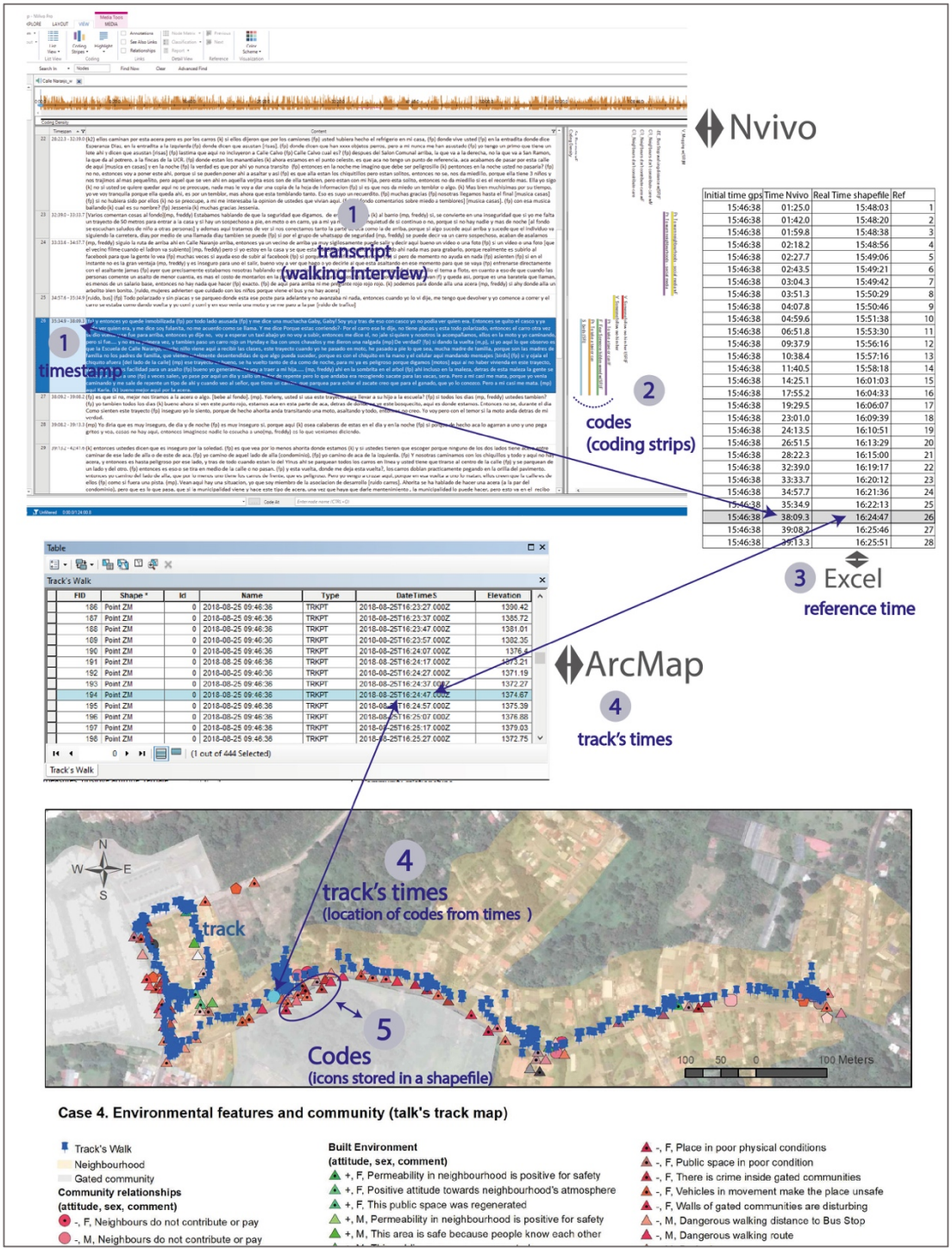
After the coding process in Nvivo, the next step was to georeference those codes with spatial references (SR), which means to link the comments with the place where they were made. As explained earlier, the comments made during walking interviews at a specific location are classified under this category (SR); therefore, the codes from focus groups were not georeferenced, even though they may refer to specific locations. The reason for that is to be consistent with the spatial information collected and their interpretation. The experience was that walking interviews had a strong link

with the built environment and comments about places were made at the same time as the walk, which could mean that the perception about space was different from sedentary methods such as focus groups. Therefore, the talk's track maps (used in Chapter 7) are focused on walking interviews exclusively.

The following procedure is proposed in this research in order to link the qualitative data in Nvivo (codes) with the graphic representations and database in ArcMap (features on maps). Figure 4.14 shows how the software of both Nvivo and ArcMap were used to georeference the comments; that process can be synthesised in five general steps as follows:

1. Nvivo: The transcription in Nvivo is carried out activating *timestamp*; in that way, the conversation could be divided by time lapses. Those lapses can be as short as required, seconds or minutes.
2. Nvivo: Activating the *coding strips* it is possible to see the codes under a time-lapse.
3. Excel: In an Excel sheet, the initial GPS time (when the first point was tracked) is brought together with the Nvivo time. The GPS time is in one column, in another one is added the time lapses in Nvivo (times of audio recording). Both columns are combined to get a reference time to link the track's shapefile in ArcMap to the conversation in Nvivo. The column 'Real time shapefile' (Figure 4.14) is the result of that operation.
4. ArcMap: the GPS track is added to the map (blue points in Figure 4.14), that track has a database which identifies the time when each point was tracked.
5. ArcMap: The codes are transferred to the map. Having the converted time when each comment was made, and having the GPS track with all points and times of walking interviews, a new *shapefile* of codes is created manually. The database for those codes (points of shapefile) has the information shown in Figure 4.13 but also additional data. They were merged through a unique ID. Furthermore, the comments were classified as those made next to a gated community and those within internal roads of neighbourhoods. The database in ArcMap can be exported to Excel to analyse the data in detail.

Figure 4.14. Procedure for transferring the codes in Nvivo to spatial data in GIS.



Source: Author's elaboration.

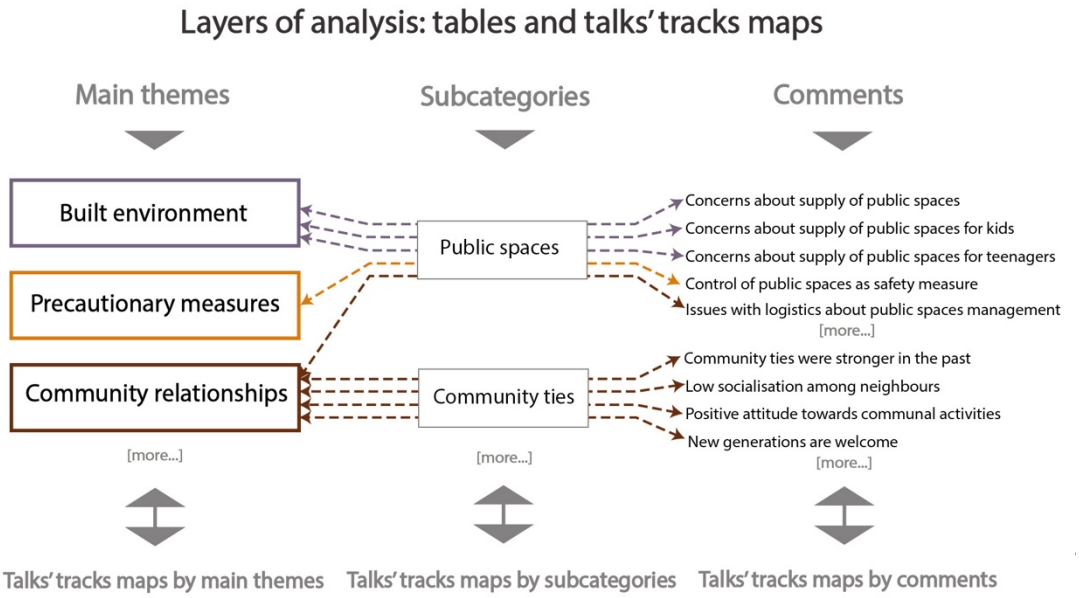
The procedure described allows for mapping the perceptions and classifying them. It was repeated for the eight cases in order to have comparable information.

An example of how the layers of analysis were implemented in the talk's track maps is presented in Figure 4.15. Due to the database being incorporated to the *shapefile* (file of points) different explorations of groups could be used for the analysis; they exist at the same points but with different visualisations, for instance:

- Talk's track maps for main themes
- Talk's track maps for subcategories
- Talk's track maps for comments.

As shown in Figure 4.15 those maps have different levels of details:

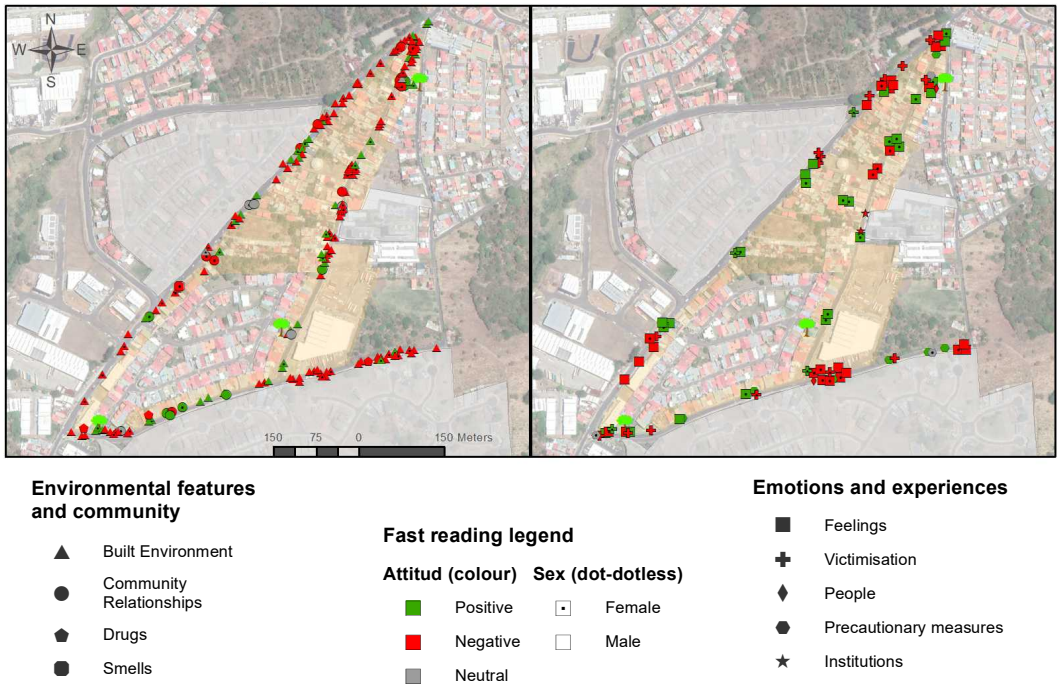
Figure 4.15. Layer of analysis of walking interviews and focus groups.



Source: Author's elaboration.

An example of the outcomes can be seen in Figures 4.16, 4.17, 4.18 and 4.19. Below, in Figure 4.16, is shown the talk's track maps by main themes, divided by those relating to environmental features and community (built environment, community relationships, drugs and smells) and emotions and experiences (feelings, victimisation, precautionary measures, institutions).

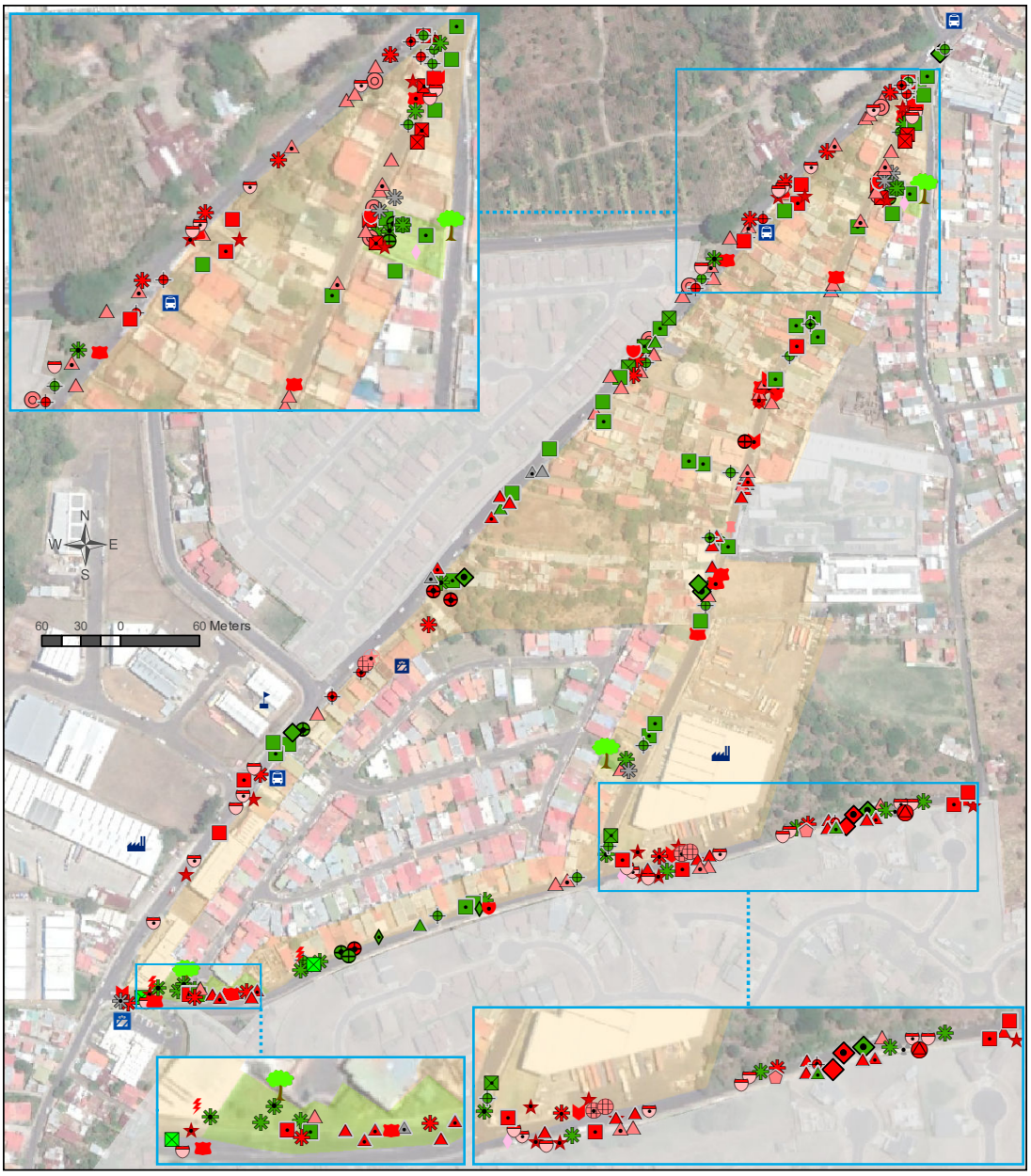
Figure 4.16. Talk's track maps by main themes, example for Case 5.



Source: Author's elaboration. Aerial photograph: Google, Maxar Technologies, 2018.

Figure 4.17 shows the file but classified by subcategories. Although this map has its own legend, it follows the same principles of the 'fast reading legend' from Figure 4.16, where colours illustrate the attitude and dot/dotless in the icon indicates the sex of the participant.

Figure 4.17. Talk's track map by subcategories, example for Case 5.



Case 5. Talk's track map by subcategories.

References
- Shopping centre
- Retail
- Industrial land use
- School
- Bus stop
- Neighbourhood
- Community park
- Gated community

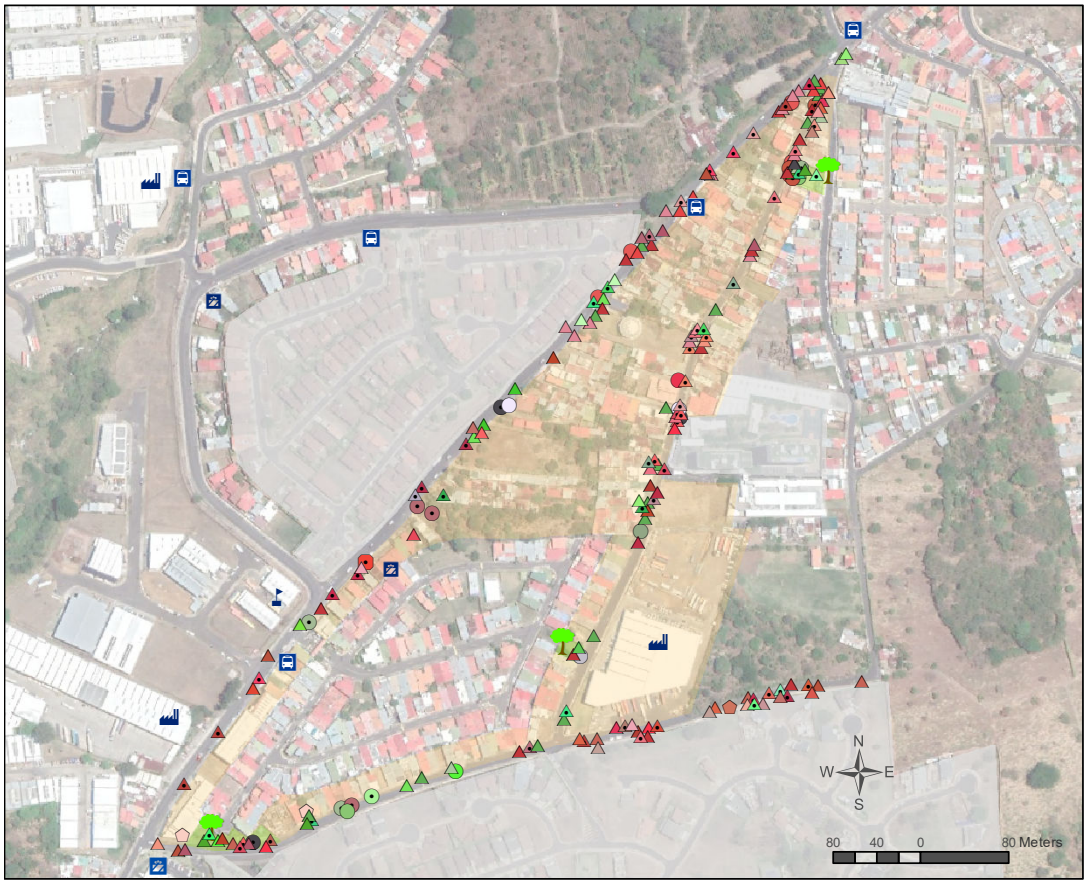
Participant's comments by subcategories
Attitude (- / + / 0), Sex (F/M), Subcategory
- +, F, Community ties
- +, F, Gated Communities
- +, F, Neighbourhood's atmosphere
- +, F, Neighbours
- +, F, Perceived safety
- +, F, Physical features
- +, F, Public spaces
- +, F, Surveillance
- +, M, Community ties
- +, M, Gated Communities
- +, M, Neighbourhood's atmosphere
- +, M, Neighbourhood's perception
- +, M, Neighbours
- +, M, Perceived safety
- +, M, Physical features
- +, M, Public spaces
- +, M, Surveillance
- -, F, Community ties
- -, F, Fear
- -, F, Gated Communities
- -, F, Infrastructure
- -, F, Neighbourhood's atmosphere
- -, F, Noises
- -, F, Perceived safety
- -, F, Physical features
- -, F, Private space
- -, F, Public spaces
- -, F, Signs of fear
- -, F, Smells reported by participants
- -, F, Surveillance
- -, F, Traffic
- -, F, Walking routes
- -, M, Community ties
- -, M, Drug sale
- -, M, Fear
- -, M, Gated Communities
- -, M, Infrastructure
- -, M, Land use
- -, M, National institutions/Local government
- -, M, Neighbourhood's atmosphere
- -, M, Noises
- -, M, Organisation
- -, M, Perceived safety
- -, M, Physical features
- -, M, Public and private spaces
- -, M, Public spaces
- -, M, Signs of fear
- -, M, Surveillance
- -, M, Traffic
- -, M, Uncomfortable behaviours
- -, M, Walking routes
- -, M, alcohol consumption
- 0, F, Gated Communities
- 0, F, Public spaces
- 0, F, Weapons
- 0, M, Gated Communities
- 0, M, Public spaces

Source: Author's elaboration. Aerial photograph: Google, Maxar Technologies, 2018.

Finally the talk's track maps by comments, are shown in Figures 4.18 and 4.19; they follow the same grouping as the talk's track maps showing main

themes (environmental features and community; emotions and experiences) but detailed by comments.

Figure 4.18. Talk's track map by comments about environmental features and community, example for Case 5.



Case 5. Talk's track map by comments: Environmental features and community

References
- Shopping centre
- Retail
- Industrial land use
- School
- Bus stop
- Neighbourhood
- Community park
- Gated community

Community relationships
(attitude, sex, comment)
- +, F, Positive attitude towards communal activities
- +, F, Positive attitude towards neighbours
- +, M, Positive attitude towards communal activities
- +, M, Positive attitude towards neighbours
- +, M, Safe area people have lived here for many years
- -, F, Issues among neighbours
- -, F, No relationship with contiguous neighbourhood
- -, M, Low socialisation among neighbours
- -, M, The community board is overwhelmed
- 0, F, No relationship with people from gated community
- 0, M, Issues with logistics about public spaces management
- 0, M, No relationship with people from gated community

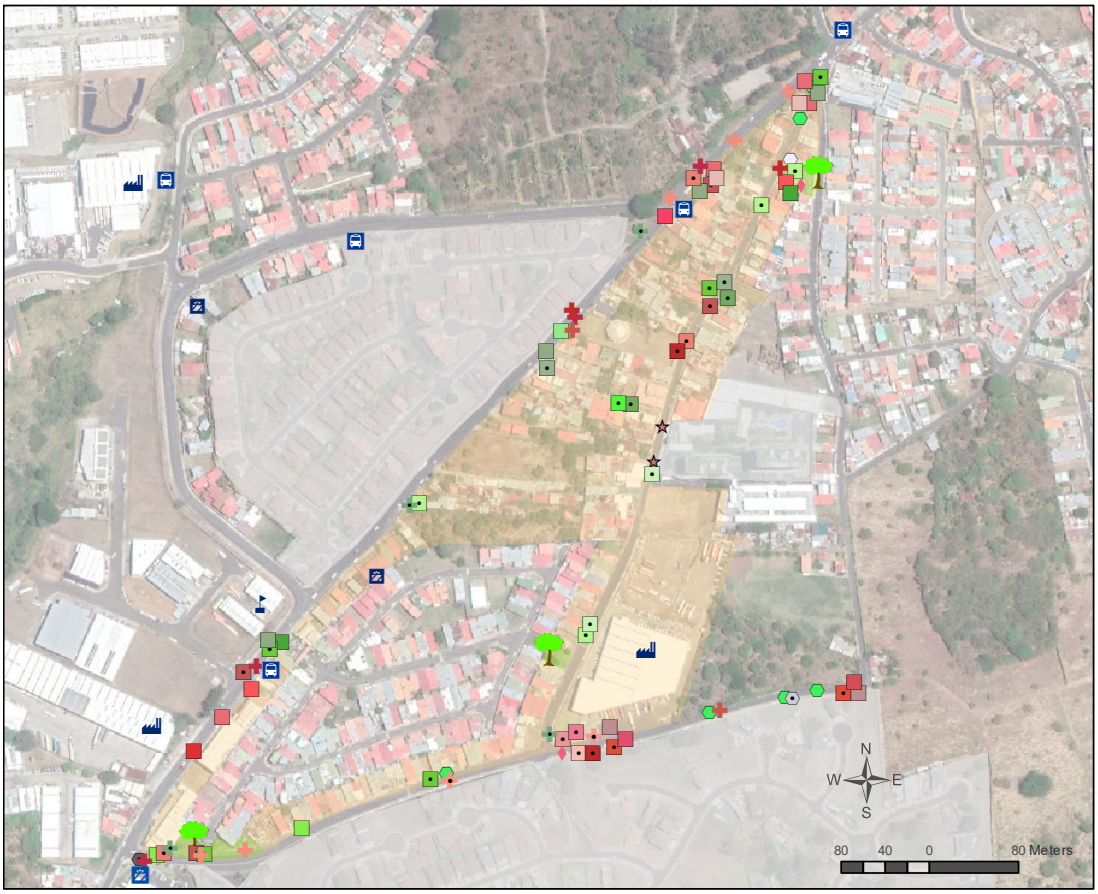
Drugs
(attitude, sex, comment)
- -, M, This place has alcohol consumption
- -, M, This place has drug sale

Smells
(attitude, sex, comment)
- -, F, Unpleasant smells

Built Environment
(attitude, sex, comment)
- +, F, Good supply and diversity of uses in current parks
- +, F, Permeability in neighbourhood is positive for safety
- +, F, Positive attitude towards contiguous neighbourhood
- +, F, Positive attitude towards neighbourhood's atmosphere
- +, F, Positive attitude towards physical features
- +, F, Positive attitude towards private security
- +, F, This area is safe because people know each other
- +, F, This public space was regenerated
- +, F, Walls and Safety resources of Gated Communities are positive
- +, M, Good supply and diversity of uses in current parks
- +, M, Permeability in neighbourhood is positive for safety
- +, M, Positive attitude towards closing/fencing public spaces as safety measure
- +, M, Positive attitude towards neighbourhood's atmosphere
- +, M, Positive attitude towards physical features
- +, M, Positive attitude towards private security
- +, M, The place is safer now
- +, M, This area is safe because people know each other
- +, M, This public space was regenerated
- +, M, Vehicles in movement help safety
- +, M, Walls and Safety resources of Gated Communities are positive
- -, F, Dangerous Bus Stop
- -, F, Dangerous walking distance to Bus Stop
- -, F, Dangerous walking route
- -, F, Dark place
- -, F, Disturbing sounds/noises
- -, F, Gated Communities do not contribute to our neighbourhood
- -, F, Gated communities brings issues such as connection/landscape /land value
- -, F, Gated communities did not change our safety levels
- -, F, General infrastructure issues
- -, F, Heavy traffic
- -, F, Issues with geometry of roads
- -, F, Lack of pavement or pavement in poor conditions
- -, F, Negative attitude towards houses for rent
- -, F, Negative attitude towards private security
- -, F, Parked cars are obstacles for traffic
- -, F, Parked vehicles are scary
- -, F, Place in poor physical conditions
- -, F, The building process of gated communities was disturbing
- -, F, Vehicles in movement make the place unsafe
- -, M, Dangerous Bus Stop
- -, M, Dangerous walking distance to Bus Stop
- -, M, Dangerous walking route
- -, M, Dark place
- -, M, Disturbing sounds/noises
- -, M, Gated Communities do not contribute to our neighbourhood
- -, M, Gated communities brings issues such as connection/landscape /land value
- -, M, Gated communities did not change our safety levels
- -, M, Gated communities make the place more insecure
- -, M, General infrastructure issues
- -, M, Heavy traffic
- -, M, Isolated place
- -, M, Issues with geometry of roads
- -, M, It is expensive to live in a gated community
- -, M, Lack of pavement or pavement in poor conditions
- -, M, Negative attitude towards houses for rent
- -, M, Negative attitude towards private security
- -, M, Parked cars are obstacles for traffic
- -, M, Parked vehicles are scary
- -, M, Place in poor physical conditions
- -, M, Public space in poor condition
- -, M, The building process of gated communities was disturbing
- -, M, This place is a former coffeee plantation-livestock
- -, M, Vacant lots are scary
- -, M, Vehicles in movement make the place unsafe
- -, M, Walls of gated communities are disturbing
- 0, F, I have met someone from the Gated community
- 0, M, Neighbours' requests about more opening hours in community parks

Source: Author's elaboration. Aerial photograph: Google, Maxar Technologies, 2018.

Figure 4.19. Talk's track map by comments about emotions and experiences, example for Case 5.



Case 5. Talk's track map by comments: Emotions and experiences

References
- Shopping centre
- Retail
- Industrial land use
- School
- Bus stop
- Neighbourhood
- Community park
- Gated community

Institutions
(attitude, sex, comment)
- -, M, Law allows to gated communities do not supply public areas

People
(attitude, sex, comment)
- -, M, Public display of affection (P.D.A.) is disturbing

Victimisation
(attitude, sex, comment)
- +, F, There is no previous victimisation in this place
- -, F, Burglary
- -, F, Shooting
- -, M, Fatal traffic accident
- -, M, Mugging
- -, M, Murder
- -, M, Stolen items

Precautionary measures
(attitude, sex, comment)
- +, M, Control of public spaces as safety measure -CCTV
- 0, F, Do not walk alone as safety measure
- 0, F, To have a stick or gas
- 0, M, To fence and lock parks

Feelings
(attitude, sex, comment)
- +, F, This place is safe during day
- +, F, This place is safe during night
- +, F, This place is safe most of the time
- +, F, This place is very safe during day
- +, F, This place is very safe during night
- +, F, This place is very safe most of the time
- +, M, Proud about our neighbourhood image
- +, M, This place is safe during day
- +, M, This place is safe during night
- +, M, This place is safe most of the time
- -, F, Concern about someone else safety
- -, F, Fear of being mugged
- -, F, Fear of immigrants
- -, F, Fear of strangers
- -, F, This place is unsafe during night
- -, F, This place is unsafe most of the time
- -, F, This place is very unsafe all the time
- -, M, Concern about someone else safety
- -, M, Fear of being attacked
- -, M, Fear of being mugged
- -, M, Fear of someone might be hidden -weed
- -, M, Fear of strangers
- -, M, This place is unsafe during night
- -, M, This place is unsafe most of the time
- -, M, This place is very unsafe all the time

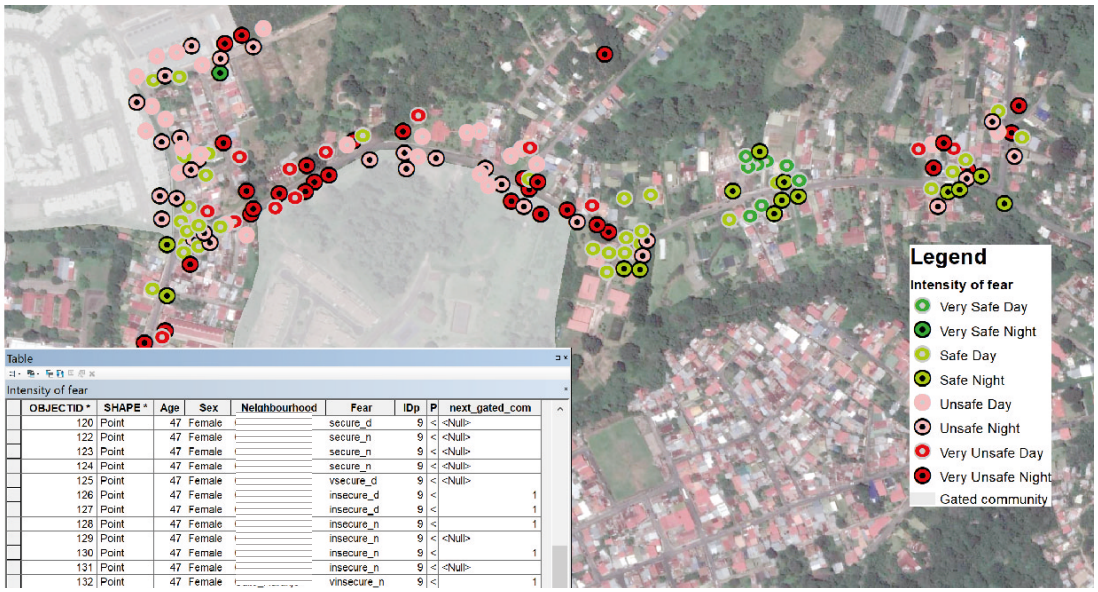
Source: Author's elaboration. Aerial photograph: Google, Maxar Technologies, 2018.

Transferring the intensity of fear maps to GIS

As indicated earlier, each participant had an individual map with stickers. Those data were transferred to ArcMap manually. Figure 4.20 shows the transferred data from individual maps to ArcMap; those points have the information of each participant (sex and age). The database also had the distinction between points next to a gated community and the internal roads of

neighbourhoods, it can also be exported to Excel to contrast information and cases. This database is different from the talk's track maps.

Figure 4.20. Example of outcomes of individual maps.



Source: Author's elaboration.

Data processing of in-depth interviews and focus group with teenagers.

The main method for analysing in-depth interviews and focus groups with teenagers was discourse analysis. However, as shown earlier, teenagers also intervened in a collective map, whose information was processed in the same way as individual maps from adults (through GIS). The focus groups were also transcribed in detail to analyse the narrative.

The concept 'discourse' has been used mostly as a linguistic term connecting passages and speech (Hall, 2001:p.72, 73). When talking about this, Hall refers to Foucault's approach of discourse as 'system of representation', which means a series of statements building knowledge. That construction of knowledge goes beyond the linguistic aspect. Hall states that 'physical things and actions exist, but they only take on meaning and become objects of knowledge within discourse, is at the heart of the constructionist theory of meaning and representation', which supports Foucault's thoughts that knowledge happens when things have a meaning.

In order to facilitate this, the research includes a variety of physical descriptions and spatial references. However, those features are not determinant in themselves; there is a meaning behind them given by each community; for instance, gated community's walls could mean safety to some communities or exclusion to others. For that reason, the discourse analysis is not just used to interpret in-depth interviews and teenagers' focus groups; it also complements the data obtained in walking interviews and focus groups.

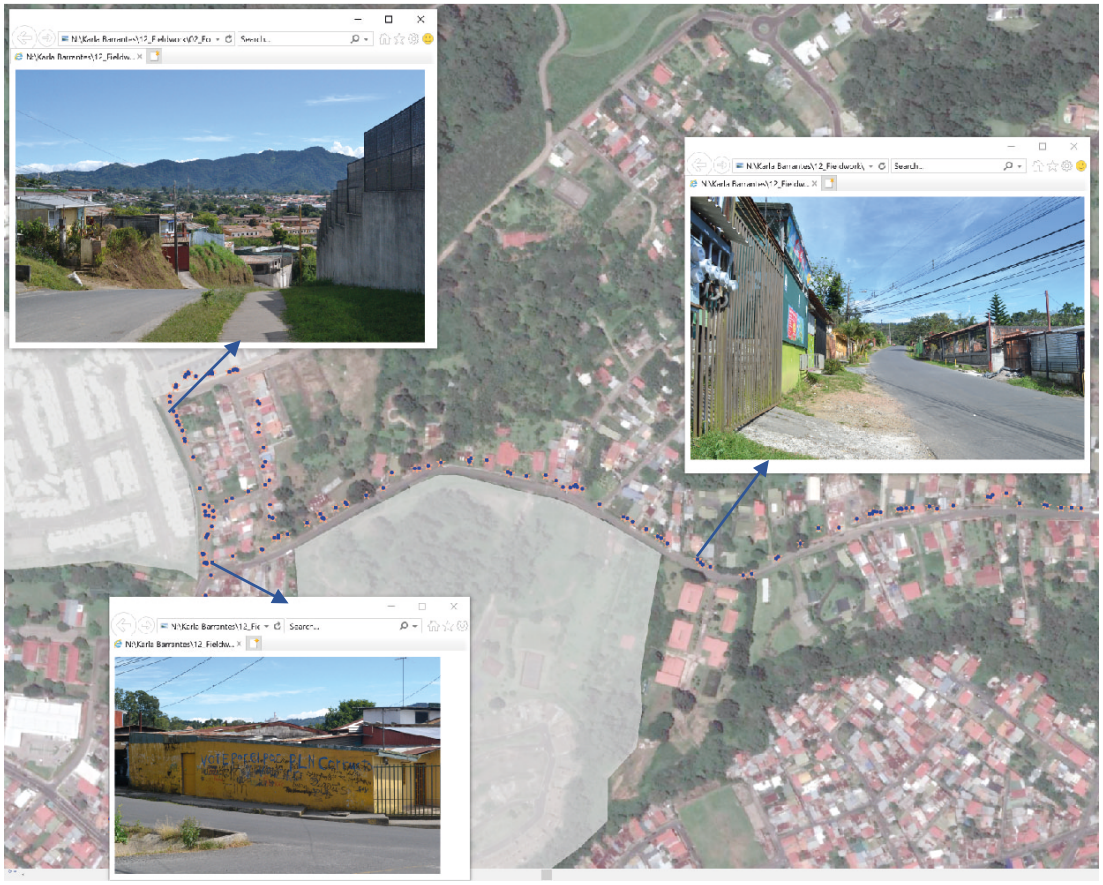
Data processing of observations

The observations were systematised through a form (see Appendix 4-4). That form collects information about traffic intensity, pedestrian movements, people interactions and physical features. Those measurable data are summarised in Chapter 7.

They are complemented with visual information such as photographs and videos. The pictures were georeferenced, Figure 4.21 shows an example of that process made in GIS as follows:

- A track with a GPS was made the day of observation, similar to the walking interviews' track.
- The camera was synchronised with the GPS. This is done by taking a picture of the screen with the time given by satellites in hours, minutes and seconds (h:mm:ss).
- All pictures have an 'EXIF' file which stores the same format of time: h:mm:ss. However, the time could be different from the GPS time.
- If there is any difference between the time of GPS and camera, that difference is calculated.
- In ArcMap, the tool '*Match photos to rows by time*' links the shapefile generated by the track (GPS) and pictures. That tool also allows bridging the gap when times are different.
- When the process is finished, a shapefile is generated. It has points with hyperlinks to pictures.

Figure 4.21. Example of some georeferenced pictures during observations.



Source: Author's elaboration.

The data obtained from that process was crucial to the analysis of the physical features of places and comparing them through maps of perceptions and intensity of fear.

In contrast, the data processing from participant observations did not have a systematised pattern; some notes were taken after finishing each activity. The reasons were firstly with respect to the nature of the event and secondly to manage a better engagement into community life. Angrosino & Rosenberg (2011:p.472) argue that the major benefit of 'naturalist observation has always been that we have immersed ourselves in the ebb and flow, in the ambiguities of life as it is lived by real people in real circumstances'.

In this regard, observations of both participants and non-participants helped to triangulate the information obtained from walking interviews and focus groups. Also, those observations were useful to contrast some of the data obtained from in-depth interviews.

4.5. Organisation of empirical chapters

The empirical chapters were organised in order to respond to the core research questions from different viewpoints. The main goal of those questions is to know if gated communities might affect the distribution of fear of crime in their peripheries and if that distribution varies in those areas with higher poverty levels or by particular features of the built environment.

> *Main research question:* How do gated communities affect the spatial distribution of fear of crime in the neighbouring public spaces?
>
> *Research question #2:* Is there any variation in fear of crime in those neighbourhoods with higher levels of poverty?
>
> *Research question #3:* Which conditions of the built environment within neighbourhoods influence fear of crime?

The secondary questions about poverty levels and built environment help to respond to the main question. The spatial distribution of fear of crime might be not a linear approximation; it is a situation which might fluctuate with social inequalities, physical features and other types of social circumstances of neighbourhoods.

Due to the complexity of fear of crime, elements from questions two and three can be found at different scales and both are cross-cutting topics of the research. Therefore, it may be not convenient to analyse poverty levels and built environment separately in different chapters. Because poverty levels were among the criteria selected in the study cases, some physical features of neighbourhoods are already linked to poverty levels. With this in mind, the two empirical chapters were organised by scope (macro and micro), considering both topics poverty and built environment. For purposes of analysis, this research classified the effects of gated communities in neighbouring communities by macro and micro dimensions as follows:

Macro dimension (neighbourhood as a whole): It encompasses people's general perceptions about their neighbourhood, gated communities nearby and safety. However, it does not detail the location of each feeling, as many of those perceptions are not associated with a particular place. This dimension

explores the presence of residential segregation and if it could affect the fear of crime. It addresses the major concerns or positive aspects raised by communities about the main themes presented earlier in table 4.11. The discussion about the built environment is focused on the spatial distribution of fear (intensity) into the urban fabric rather than specific physical features linked to this feeling.

Micro dimension (physical details of built environment): It explores people's perceptions about the built environment by localising places where those emotions emerge. This dimension addresses the relationship between physical features o micro elements of the built environment and fear of crime; for instance, walls, lighting or infrastructure. Because the level of detail is higher in this dimension, the differences between men and women perceptions are explored.

Although the two scopes address different ranges of exploration, they include aspects from both built environment and poverty disparities; therefore, the boundaries between macro and micro dimensions have also overlaps. As mentioned, the empirical chapters are set by dimensions as follows:

Chapter 6 (macro). This chapter summarises the general outcomes from focus groups and walking interviews, giving a general picture of each study case. It explores the spatial distribution of fear reported (intensity of fear maps) and its relationship with those general results. It compares the variation of intensity by poverty ranges. The chapter seeks to find patterns about the macro dimension by comparing people's comments (codes) about community ties, precautionary measures, general perceptions, experiences and feelings across the eight case studies. It discusses whether or not there is residential segregation. A significant amount of information for this chapter was taken from the focus groups; however, the walking interviews also complemented it. The outcomes were triangulated with in-depth interviews (local government) and participant observations.

Chapter 7 (micro). This chapter analyses the diversity of fears and their links with 'micro' elements of the built environment, most of them are physical features, such as gated communities' walls or edges, conditions of public

spaces, drug traffic spots, darkness, isolation, among others. This chapter also explores the differences between male and female perceptions. One of the primary sources of information for this chapter were the talk's track maps (walking interviews), as they display a rich diversity of feelings associated with different places. The chapter closes by summarising patterns of micro elements of the built environment associated to fear of crime within the eight case studies. These outcomes were triangulated mainly with non-participant observations.

Finally, the discussion chapter brings together the findings from the 'macro' and 'micro' dimensions. It is organised to respond to the research questions; then connects those results with the state of knowledge. Figure 4.22 summarises that structure.

Figure 4.22. Organisation of empirical chapters and discussion.



Source: Author's elaboration.

4.6. Ethics considerations

The research design of this thesis has had a group of ethical considerations since its initial formulation. Clifford (2011:p.65, 66) suggests four main guidelines for directing qualitative research within ethical standards:

> Informed consent: Each participant must be fully informed about the scope of the research and consequences. They must agree to participate voluntarily without any type of coercion.

Deception: Clifford highlights that social science codes consistently reject deception, even in children. In this regard, informed consent has to be clear and 'free of active deception' (p.65).

Privacy and confidentiality: People's identities must be kept anonymous; confidentiality is crucial to avoid unwanted exposure.

Accuracy: The veracity of information is a crucial principle in social sciences. 'Fabrications, fraudulent materials, omissions, and contrivances are both non-scientific and unethical' (p.66).

Those principles were considered during the research design and at every step of the execution of the thesis. Because this work required focus groups with teenagers and participants (adults and teenagers) might share sensitive information, it was necessary to apply for the High-Risk Ethical Approval at the UCL Research Ethics Committee. That approval was obtained satisfactorily after fulfilling the requirements regarding personal safety, safety of participants, consent forms, institutional authorisations and confidentiality.

4.6.1. Consent

Full consent was obtained from participants in each activity; the model of consent form can be found in Appendix 4-6. Before each group event, information sheets and consent forms were read aloud; each participant followed the reading in his/her own sheet. In the case where someone could not read, his or her consent would be taken orally and recorded. However, all participants were able to read and sign without any inconvenience. It was an iterative procedure where participants asked questions and the researcher clarified each inquiry. If they agreed, they signed the consent forms. For those activities which involved teenagers, the consent form was filled out by both the teenager and their parent/guardian.

All activities were carried out in an atmosphere of respect. Cannella and Lincoln (2011:p.82) highlight that 'researcher actions must avoid the perpetuation or maintenances of inquirer-oriented power'. To highlight this, Clifford (2011) emphasis the principles of the Belmont Report which define moral principles for research involving human subjects; the U.S National

Commission issued that report under the name Protection of Human Subjects in Biomedical and Behavioural Research in 1978 (Clifford, 2011). Those principles emphasise voluntary participation, adequate information about the consequences of experiment and, at a deeper level, that people should be considered as autonomous agents. For this reason, all the study cases had the same recruiting process as mentioned in Section 4.4: official channels of communication for the first contact and then a preliminary meeting with the community board to discuss all the research details.

All participants cooperated voluntarily; there was no economic compensation. However, as a sign of gratitude, the researcher gave participants an aluminium bottle (with a customised design), snacks and refreshments at the end of the walks and focus groups. The eight cases received the same bottle design and the same food menu. This detail is also part of the principles mentioned by Clifford (2011:p.66) in the Belmont Report, it highlights the principle of justice as a 'fair distribution of both the benefits and burdens of research'. He mentions that injustice happens when a group is overused because it can be easy manipulated with some benefits.

4.6.2. Anonymisation

The anonymisation of participants was crucial in this research; mainly because people shared some sensitive information about their experiences of victimisation, personal feelings and they also indicated locations of possible illegal activities in their neighbourhoods. In order to ensure confidentiality, people's names were anonymised. Their names were neither stored on databases nor used during the writing-up process of the thesis. The neighbourhoods' names were also anonymised; for this reason, a number was assigned to each place as an identifier. By hiding the neighbourhood name within texts, any web search will become more difficult; reference's points were also deleted from the outcomes' maps. This work did not contain any pictures of the participants and in the case of in-depth interviews, an ID was assigned to each participant.

4.6.3. Safety

Safety was an important concern during the fieldwork, both for the participants and the researcher. For that reason, there was a safety protocol for each activity as follows:

Walking interviews: as walks were physical activities, the length and route were discussed previously with participants; they were aware they could leave the walk at any time. Apart from the researcher, there was a helper who, in case someone felt unwell, could escort this person home. The Costa Rican emergency line (911) was available in case something serious happened. It was also important to keep participants safe from traffic, especially in those places without a pavement. To ensure this, each participant had reflective equipment. As explained above, a bottle was given to each participant; the carrying bag had reflective strips which were crossed over the torso and shoulders. The bottle also had clean and cold water to keep the participants hydrated during the walk, sun blocker was provided and there was an emergency kit in case someone fell. All walks were carried out during the day, in a group, across places familiar to the participants. There were no emergencies during the walks and all of them were carried out satisfactory.

Focus groups: Similar to walking interviews, there was a helper in case someone felt unwell or overwhelmed. There were no emergencies during focus groups either.

Observations: Many of them were carried out with company and all of them were done during daylight hours. The observations took place days after finishing the fieldwork with members of the community, which allowed for advanced warning of those places where precautions had to be higher (as mentioned earlier). At that point, some neighbours were already familiar with the researcher and during the walks and focus groups they were informed about the observations; this helped to conduct the observations smoothly. For safety reasons, the observations were limited exclusively to areas regarding the research questions, such as next to gated communities and one internal street of the neighbourhood. In this respect, the observations for case 1 were more limited, due to participants ranking their north street as very dangerous,

because of the presence of drug dealers during day and night. That street was avoided for the observations, being aware that the presence of someone (the researcher) taking notes might be seen as a provocation. However, the south street in this neighbourhood (next to the gated community) was observed without any issue.

Interviews: The interviews were carried out during daylight hours. As much as possible, they took place in public areas, such as institutional offices or parks. Three of them took place at the interviewee's house or corridors; previously, those people participated during the walks or focus groups. However, as a precautionary measure, the information about the meeting point and interviewee was given to the walking interview's helper. Nevertheless, there was no inconvenience during the interviews; people were friendly and willing to contribute. Culturally, Costa Ricans very often invite people to their houses; indeed, it was the interviewees' initiative to carry out the interviews there.

4.7. Conclusions

The methodological approach of this research attempted to address the complexity of fear of crime and its performance outside of gated communities in Costa Rica. Some challenges were faced, especially during the fieldwork. For instance, the uncertainty about people's participation during the recruitment process, the safety of the participants and the researcher and a national three months' strike in the educational sector, which forced the researcher to implement an alternative strategy to recruit teenagers.

Among the methodological limitations, was the size of the UGM (census unit), in some cases it did not necessarily match with the boundary of neighbourhoods or gated communities; therefore, some data might include dwellings from the contiguous neighbourhood (See Chapter 5 for more details). However, this situation only happened in the initial stage (selection process of case studies), during the empirical data collection, the delimitation was accurate and all participants were from the neighbourhood under study. Another limitation was the lack of control over the amount, age and gender of participants, as the recruitment process was an open call from the community

leaders. Despite those drawbacks, there was a robust and gender-balance participation.

Before starting to present the empirical data, in Chapter 5 there is a description of each study case in detail, which includes secondary data from census, cartography and information collected during the fieldwork.

Chapter 5. The study cases: Description and details

This chapter describes the eight study cases selected for obtaining the empirical data. The information was collected from the Costa Rican census and the author's fieldwork. The chapter also compares physical and demographic circumstances between open neighbourhoods and the gated communities next to them.

The latest Costa Rican census was carried out in 2011 and the fieldwork for this research took place in 2018, therefore some demographic information may have changed since the census data was collected. As explained in Chapter 4 (Methodology), despite the fact that some national surveys are carried out annually, their units of analysis are regional; hence, their data are not disaggregated by neighbourhood. In contrast, the census units have a more accurate approximation, giving the conditions of each neighbourhood separately. Chapter 4 has already explained that the Minimal Geostatistical Unit (UGM) are those census units. Although the geometry of a UGM is not based on its neighbourhoods' boundaries, their small size simplifies the identification of those communities; for instance, one neighbourhood may have one, two or more UGMs. It is also possible that one UGM includes dwellings from two different neighbourhoods.

As Chapter 4 described, the eight study cases were sorted by poverty ranges. The indicator employed was the Unfulfilled Needs (NBI). Therefore, Case 1 has the highest level of poverty (with dwellings up to 4 NBI) and Case 8 does not have shortcomings (all dwellings have 0 NBI). Again, this information is based on census data from 2011. However, as shown in this chapter, the spatial configuration of neighbourhoods has not changed substantially; also, physical features and people's testimonies suggest that conditions have remained approximately the same.

In each case, demographic information and data about housing conditions are studied from both open neighbourhoods and the gated communities next to them. In order to show the information transparently, historical aerial

photographs from 2011 and 2018 have been adjusted by the author, to show the perimeters of each case study; these boundaries were identified during walking interviews with residents of each site. The aerial photographs are displayed as evidence, along with the UGM to illustrate the area's conditions during the census and fieldwork dates, respectively.

As explained in Chapter 3, gated communities in Costa Rica have been increasing rapidly. Some developments were under construction in 2011 but concluded before the fieldwork took place in 2018; that means that some UGMs may not contain data from dwellings completed between those years. Although that omission is a limitation for description purposes, it does not affect the outcomes of the thesis. Indeed, the fieldwork's timeframe was an opportunity to portray people's thoughts about those transformations, as well as their perceptions before and after gated communities' construction. Those findings will be presented in Chapters 6 and 7.

This chapter also introduces some visual information about neighbourhoods and gated communities. Data about open neighbourhoods, such as boundaries and physical features, were collected during the fieldwork; the participants gave some details about the community organisation and any infrastructure issues during the walking interviews and focus groups. The implications of physical and social conditions are addressed in the appropriate chapters.

In addition, images from inside the gated communities and information about physical features were obtained from secondary sources, such as cartographic viewers from local government sites and real estate and developers' web pages. As this research focuses on the outside of gated communities, the observed information prioritised the open neighbourhoods adjacent to those gates.

Each study case is described separately. However, there is one section devoted to a cluster of three neighbourhoods around the same gated community. The chapter closes with a summary of the main characteristics of the eight cases.

5.1. Case 1 [4 NBI]

5.1.1. General context

Case 1 holds the highest level of poverty of all the cases studied. Figure 5.1 shows the neighbourhood's boundaries described by participants during the walking interview. According to the UGM used as reference (See Figure 5.2), this neighbourhood contains dwellings within all poverty categories; the 67 dwellings belong to a unique UGM. Its poverty indicators are distributed as follow:

- 0 NBI = 32 dwellings
- 1 NBI = 23 dwellings
- 2 NBI = 5 dwellings
- 3 NBI = 6 dwellings
- 4 NBI = 1 dwelling

The neighbourhoods surrounding Case 1 share similar conditions for poverty, particularly those towards the east and southeast. However, the neighbourhood to the west has sectors up to 1 NBI and 3 NBI, which is slightly lower than Case 1. On the other hand, the gated community in the Westside (shown as 'G.C.' in Figure 5.1) was still under construction in 2011; at that time the UGM had only 11 dwellings, one with 1 NBI and another with 2 NBI.

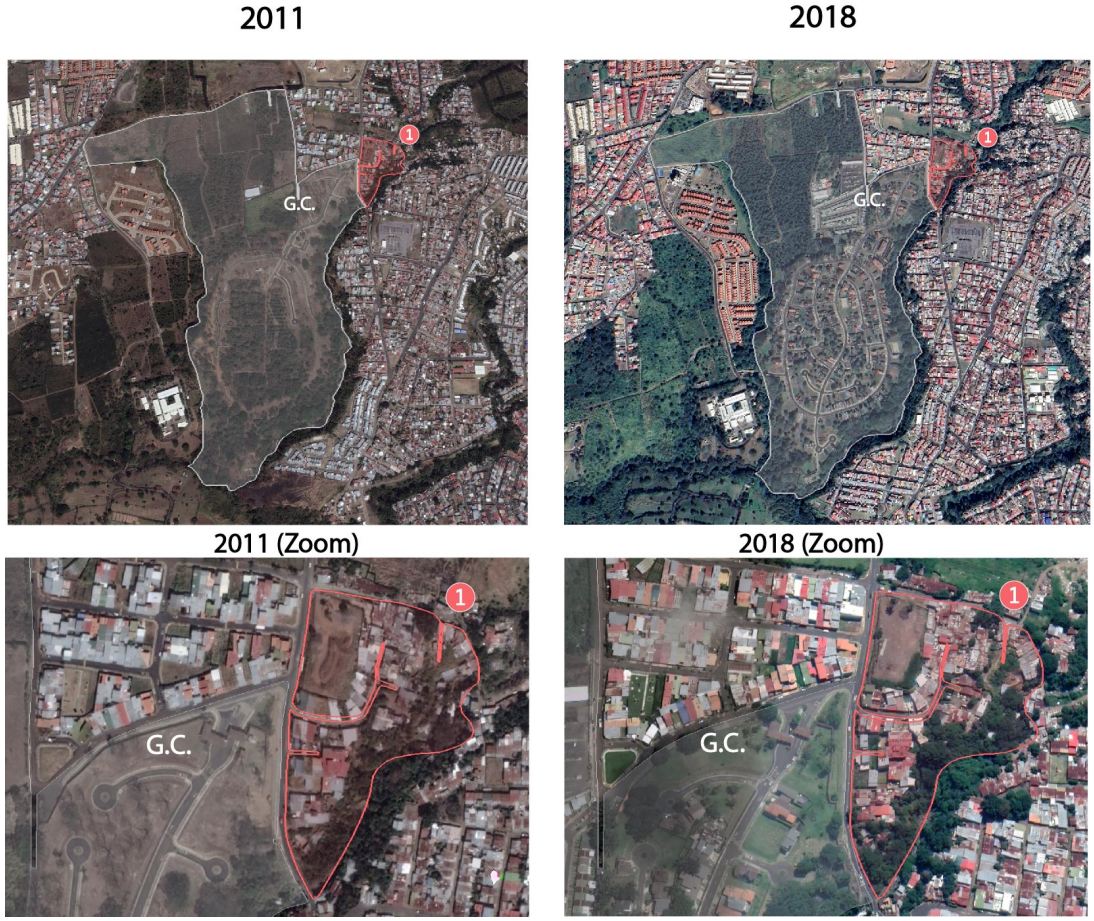
Figure 5.1. Boundary of Case 1 defined by participants during the walking interview.



Source: Author's elaboration with data from fieldwork. Aerial photograph: Google, Maxar Technologies, 2018.

Figure 5.2 displays the UGM taken as references during the selection procedure; that process has been described in Chapter 4. The image shows the UGMs for both Case 1 and the gated community beside it. Although in 2011 there were few dwellings within the gated community, by 2018 it was highly consolidated. The neighbourhood has not changed substantially in that period of time but this community was first established c.1984 as part of a larger residential development (Ureña et al.,2011).

Figure 5.2. UGM used as reference during the selection process. Images from 2011 (census year) and 2018 (fieldwork year).



Source: Author's elaboration with data from INEC (INEC, 2011). Aerial photograph: Google, Maxar Technologies, imagery years 2011 and 2018.

Table 5.1 shows the population and size of households for the UGMs used as a reference. This information has been taken from the 2011 Costa Rican census. At that time, Case 1 held 286 people and 76 households which makes the average size of 3.76 people per family. It should be noticed that there are

more households than dwellings, which suggests some households shared the same house.

Table 5.1. Inhabitants and households for Case 1 and the gated community next to it. According to UGM used as reference from the 2011 census.

	Number of dwellings from UGMs used as reference	
Total of Dwellings	**Case 1 (1 UGM)**	**Gated community (1 UGM)**
	67	**11**
Total of households	76	11
Total of people	286	37
Men	149	17
Women	137	20

Source: Author's elaboration with census' cartography (INEC, 2011).

The housing conditions for Case 1 are shown in Table 5.2. It seems the 67 dwellings were occupied, however, eleven of those dwellings were hovels. The tenure status was distributed between 'own dwellings totally paid', 'rented dwellings' and 'squats'. The presence of squats might be one of the main differences in comparison with the other seven cases.

Table 5.2. Housing conditions for Case 1 and the gated community next to it. According to UGMs used as reference from 2011 census.

		Number of dwellings from UGMs used as reference	
	Total of Dwellings	**Case 1 (1 UGM)**	**Gated community (1 UGM)**
		67	**11**
Type	Individual dwellings	48	11
	Individual dwellings under condominium	0	0
	Apartment buildings	8	0
	Apartment buildings under condominium	0	0
	Hovels	11	0
	Others	0	0
Occupation	Occupied individual dwellings	67	11
	Unoccupied individual dwellings for rent	0	0
	Unoccupied individual dwellings under construction or repair	0	0
	Others	0	0
Tenure status	Own dwelling totally paid	26	4
	Own dwelling with a mortgage or payment process	1	1
	Rented dwelling	21	5
	Squats	12	0
	Others	7	1

Source: Author's elaboration with census' cartography (INEC, 2011).

The majority of the dwellings (see Table 5.3) had one, two or three bedrooms. The overall size was between two and four rooms: the census defines a room as those spaces separated by a wall or any element of division, that includes

bedroom, kitchen, living room, rooms for watching TV, among others. However, spaces such as rooms for laundry, balconies, terraces, garages and storage are excluded from that definition.

Table 5.3. Size of dwellings for Case 1 and the gated community next to it. According to UGM used as reference from 2011 census.

		Number of dwellings from UGMs used as reference	
	Total of Dwellings	**Case 1 (1 UGM)**	**Gated community (1 UGM)**
		67	**11**
Number of bedrooms	Dwellings with 0 bedrooms	3	0
	Dwellings with 1 bedroom	20	0
	Dwellings with 2 bedrooms	27	3
	Dwellings with 3 bedrooms	12	7
	Dwellings with 4 bedrooms	5	1
	Dwellings with 5 or more bedrooms	0	0
Number of rooms (including bedrooms)	Dwellings with 0 rooms	0	0
	Dwellings with 1 room	3	0
	Dwellings with 2 rooms	11	0
	Dwellings with 3 rooms	23	0
	Dwellings with 4 rooms	18	3
	Dwellings with 5 rooms	7	7
	Dwellings with 6 rooms	4	0
	Dwellings with 7 or more rooms	1	1

Source: Author's elaboration with census' cartography (INEC, 2011).

5.1.2. Organisation

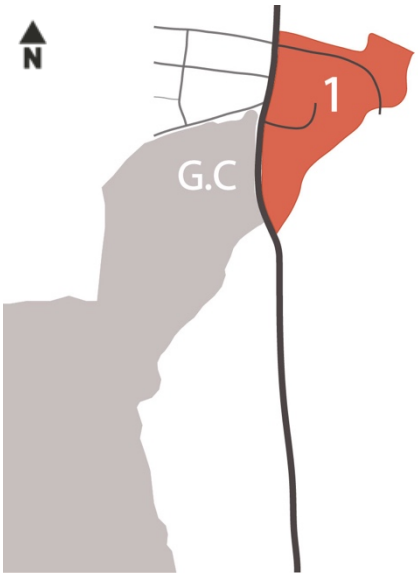
People from Case 1 are organised under a community board[1] which meets at least once every two weeks, sometimes weekly, depending on the project's urgency. During the fieldwork, its members mentioned some initiatives led by them, such as a housing project towards the north of the neighbourhood. Also, they are pressing public institutions to acquire or borrow a vacant lot in the middle of the neighbourhood, in order to create a public space for them and other surrounding neighbourhoods. They believe that initiative could reverse the lack of greenspace provision in their community and it would encourage people from other places nearby to visit the area. The community board highlighted this last point because they believe that coexistence could help to diminish stigmas about their community.

[1] The description of a community board is provided in Chapter 3.

5.1.3. Physical features of Case 1

Case 1 is a neighbourhood shaped by two streets North and South (see Figure 5.3). Those streets are not connected internally; therefore, it is necessary to pass through the main street to reach the other part of the neighbourhood.

Figure 5.3. Scheme of Case 1



Source: Author's elaboration

The width of both roads makes it difficult for two cars to pass in opposite directions; some segments on North street are narrower and more irregular than South and none of them has pavements or drainage. Other infrastructure issues are poor lighting conditions and a lack of urban furniture and road signs. As mentioned, this community does not have community parks either. Photographs 5.1 to 5.6 show a general view of those areas; further photos can be found in Chapter 7.







Photos 5.1, 5.2, 5.3. North Street from Case 1.
Source: Author





Photos 5.4, 5.5, 5.6. South Street from Case 1
Source: Author

5.1.4. Physical features of gated community next to Case 1.

The construction of this development started around 2010 (Municipalidad de Heredia, 2020). The property covers approximately 43.4 hectares; this figure is based on Google Earth measuring, using as a guide the master plan provided by the real estate developer on its website (see Figure 5.4).



Photo 5.7. Entrance of gated community and wall between the development and Case 1.
Source: Author



Figure 5.4. Master plan of gated community next to Case 1.

Source: La Laguna (2020a)

The gated community has a unique entrance; it is divided into several properties ranging upwards from 220m^2; the development has various facilities such as a clubhouse, barbecue areas, fields for different sports, bikeways, skate park, children's playgrounds, gym and 24/7 hours of private security (La Laguna, 2018). Outside views of this place are presented in Photos 5.8 to 5.10.



Photos 5.8, 5.9, 5.10. Overall views of gated community next to Case 1. Source: La Laguna (2020 b)

5.2. Case 2 [3 NBI]

5.2.1. General context

Case 2 has the second highest poverty level of the eight neighbourhoods selected; Figure 5.5 shows its boundary defined by the participants during the fieldwork. Next to the gated community (G.C.) there is a walled property of approximately 4 hectares; although it is not under the condominium scheme, its walls give continuity to the enclosure from the gated community. The census information displayed in this section focuses on Case 2 and the gated community beside it. However, the presence of that walled property can not be ignored. Chapter 7 includes people's perceptions next to this area as part of the analysis of the built environment's features.

Figure 5.5. Boundary of Case 2 defined by participants during the walking interview.



Source: Author's elaboration with data from fieldwork. Aerial photograph: Google, Maxar Technologies, 2018.

Although Case 2 seems a small area, it has required two UGMs to cover it due to each side of the main street belonging to different UGMs. Both UGMs are shown in Figure 5.6, along with the UGM from the pertinent gated community.

The two UGMs from Case 2 hold 252 dwellings in total; the information about their NBI is presented below:

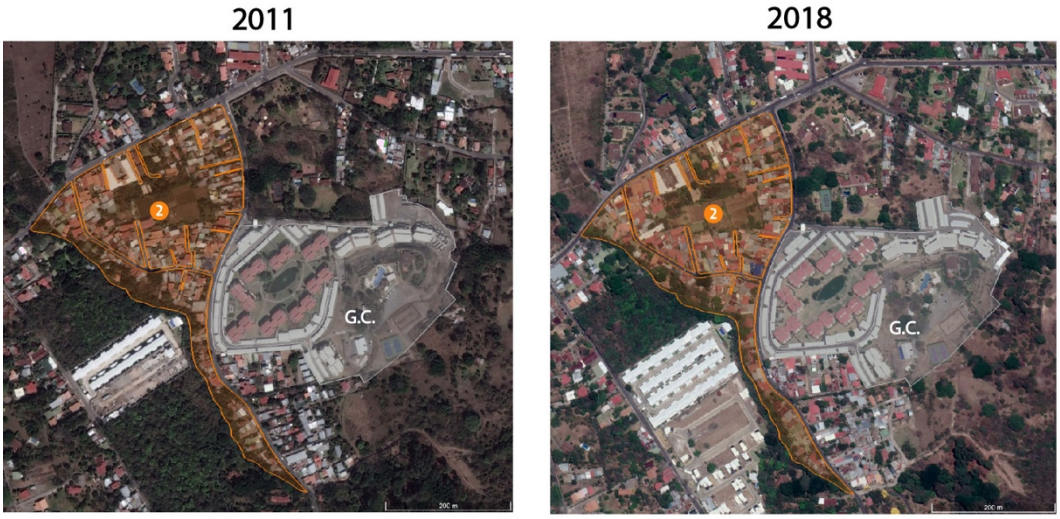
- 0 NBI = 224 dwellings
- 1 NBI = 23 dwellings
- 2 NBI = 4 dwellings
- 3 NBI = 1 dwelling

Most of the areas around this neighbourhood towards the north, northwest and south have slightly lower conditions of poverty, with a predominance of UGMs with zero, one and two NBI. However, the physical features and type of dwellings are very similar.

As shown in Figure 5.6, there is no substantial difference in the physical configuration of both Case 2 and the gated community from 2011 to 2018. Case 2 is particular in that it has been consolidated as a neighbourhood for

more than 50 years; some of the participants have lived there since they were born, e.g. 45 years ago. The gated community is also among the oldest of the eight study cases, as will be described.

Figure 5.6. Case 2. UGMs used as reference during the selection process. Images from 2011 (census year) and 2018 (fieldwork year).



Source: Author's elaboration with data from INEC (INEC, 2011). Aerial photograph: Google, Maxar Technologies, imagery years 2011 and 2018.

Table 5.4 displays the number of dwellings, households and people living in Case 2 and the gated community next to it. The size of the households in the neighbourhood is approximately 3.36 members per family, whereas that figure inside the gated community is significantly lower with 2.1 members per family.

Table 5.4. Inhabitants and households for Case 2 and the gated community next to it. According to UGMs used as reference from 2011 census.

	Number of dwellings from UGMs used as reference	
Total of Dwellings	**Case 2 (2 UGM)**	**Gated community (1 UGM)**
	252	**117**
Total of households	245	117
Total of people	823	246
Men	414	116
Women	409	130

Source: Author's elaboration with census' cartography (INEC, 2011).

The housing conditions for both communities are contrasting (see Table 5.5); in Case 2, most of the residences are individual dwellings, while inside the gated community most of them are apartments under a condominium scheme. The proportion of rented dwellings in the gated community reaches 50% which

is significantly high in comparison to the open neighbourhood, where around 20% of dwellings are rented.

Table 5.5. Housing conditions for Case 2 and the gated community next to it. According to UGMs used as reference from 2011 census.

		Number of dwellings from UGMs used as reference	
	Total of Dwellings	**Case 2 (2 UGM)**	**Gated community (1 UGM)**
		252	**117**
Type	Individual dwellings	248	2
	Individual dwellings under condominium	0	0
	Apartment buildings	4	0
	Apartment buildings under condominium	0	115
	Hovels	0	0
	Others	0	
Occupation	Occupied individual dwellings	245	117
	Unoccupied individual dwellings for rent	4	0
	Unoccupied individual dwellings under construction or repair	3	0
	Others	0	0
Tenure status	Own dwelling totally paid	175	38
	Own dwelling with a mortgage or payment process	9	18
	Rented dwelling	51	59
	Squats	0	0
	Others	10	0

Source: Author's elaboration with census' cartography (INEC, 2011).

The size of dwellings for Case 2 and the gated community are shown in Table 5.6. It can be noted that inside the gated community, most of the residences have less than five rooms; in contrast, Case 2 has more than 12% of dwellings with seven rooms or more.

Table 5.6. Size of dwellings for Case 2 and the gated community next to it. According to UGMs used as reference from 2011 census.

		Number of dwellings from UGMs used as reference	
		Case 2 (2 UGM)	Gated community (1 UGM)
	Total of Dwellings	**252**	**117**
Number of bedrooms	Dwellings with 0 bedrooms	15	0
	Dwellings with 1 bedroom	42	30
	Dwellings with 2 bedrooms	79	67
	Dwellings with 3 bedrooms	94	19
	Dwellings with 4 bedrooms	20	1
	Dwellings with 5 or more bedrooms	2	0
Number of rooms (including bedrooms)	Dwellings with 0 rooms	7	0
	Dwellings with 1 room	6	0
	Dwellings with 2 rooms	16	17
	Dwellings with 3 rooms	34	34
	Dwellings with 4 rooms	54	27
	Dwellings with 5 rooms	70	31
	Dwellings with 6 rooms	34	7
	Dwellings with 7 or more rooms	31	1

Source: Author's elaboration with census' cartography (INEC, 2011).

5.2.2. Organisation

People from Case 2 are legally organised under a community board, which covers an area beyond their own neighbourhood and includes other communities. This anomaly results in a lack of independence over their boundaries. For that reason, they created a neighbours' association, which is a smaller body from the community board but with a limited budget.

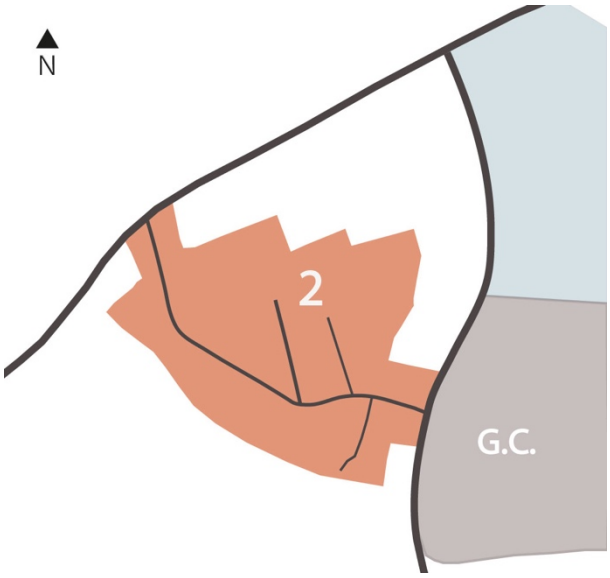
The association meets around twice a month but in addition they keep in communication with neighbours through a WhatsApp group; the local police are also members of this communication channel. This community has an annual schedule of social activities, such as parties on the street and bingo; also, they carried out initiatives for improving the physical features of the neighbourhood, such as cleaning vacant lots and erecting neighbourhood signage. Bingo sessions are regular fund-raising events that they hold to raise finance the installation of CCTV along their streets. This activity is scheduled every three months and the money is obtained from selling bingo cards and food sales. During one observation of the fieldwork it was possible to see around sixty people playing bingo.

This community does not have a community park, therefore, the neighbours are pressing the local government to buy a vacant plot inside the neighbourhood in order to build a community hall and create a small park (see Photo 5.14).

5.2.3. Physical features Case 2

Case 2 is shaped by one primary street and three dead-end roads. Photos from 5.11 to 5.16 show the physical features of the neighbourhood. It has few pavements, the primary street is irregular in width and the two dead-end roads are without asphalt.

Figure 5.7. Scheme of Case 2.



Source: Author's elaboration

Photo 5.12 shows a sign which translates as 'my safe neighbourhood'. This refers to a programme of safety community training given by the local police (more details about those trainings are in Chapter 3). Photo 5.11 shows a CCTV camera on the post surveying the area. There is light throughout the neighbourhood but it is more sparse towards the north entrance.







Photo 5.11, **5.12.** Primary street from Case 2.
Photo 5.13. Street with land (at the back) for a planned gated community.
Source: Author





Photo 5.14. Land for a planned public space.
Photo 5.15. Dead-end road.
Photo 5.16. Primary street, at the back is the gated community
Source: Author

5.2.4. Physical features of gated community next to Case 2

This development was registered in 2007 (Administración Vecinos ACC S.A.,2013). The property covers nine hectares distributed among twelve buildings, each of three floors. It also has a shopping centre outside its walls. Its internal facilities are clubhouse, restaurant, golf range, green areas, fields for different sports, bikeways, running tracks, gym and 24/7 hours of private security and perimeter surveillance (Avalon, 2020).

The wall around this gated community is shown in Photos 5.17 and 5.18. It has some graffiti facing the entrance to the open neighbourhood (Case 2).




Photo 5.17, 5.18. Gated community's wall in front of Case 2
Source: Author





Photo 5.19. Gated community's entrance. Source: Author.
Photo 5.20. Gated community' facilities. Source: Avalon (2020b)

This development has two types of residential buildings (see Photos 5.22 and 5.23). The shared facilities are located in individual buildings and in open and semi-open spaces (see Photos 5.20 and 5.21).







Photo 5.21. Shared facilities from the gated community.
Photo 5.22, 5.23. Residential buildings and green spaces from the gated community.
Source: Avalon (2020b)

5.3. Case 3 [2 NBI]

5.3.1. General context

Four gated communities surround Case 3, also there is one more under construction; two of these developments are over two hectares. The boundaries of the neighbourhood are shown in Figure 5.8; they were defined during the walking interview. The information about the households was obtained from two UGMs (see Figure 5.9). Similar to Case 1, the geometry of the UGMs are very close to the actual size of the neighbourhood. The two UGMs register 123 dwellings; the residences fall into the following NBI classification:

- 0 NBI = 90 dwellings
- 1 NBI = 29 dwellings
- 2 NBI = 4 dwellings

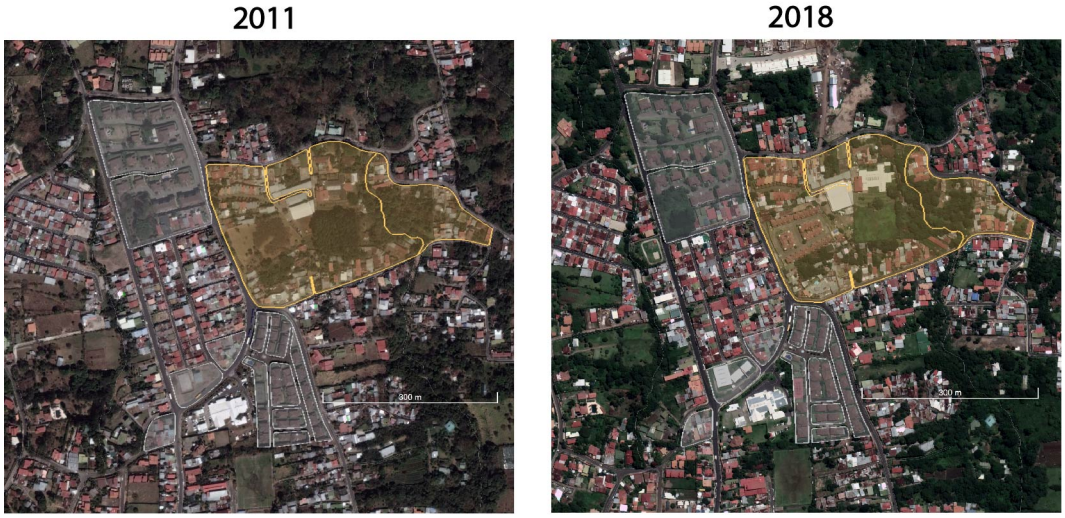
Figure 5.8. Boundary of Case 3 defined by participants during the walking interview.



Source: Author's elaboration with data from fieldwork. Aerial photograph: Google, Maxar Technologies, 2018.

This neighbourhood and the gated communities around has not changed its configuration significantly since the census was carried out, except for the gated community inside the yellow polygon, which had not been built by 2011. By then, the future gated community to the north had also not started construction (see Figures 5.8 and 5.9).

Figure 5.9. Case 3. UGMs used as reference during the selection process. Images from 2011 (census year) and 2018 (fieldwork year).



Source: Author's elaboration with data from INEC (INEC, 2011). Aerial photograph: Google, Maxar Technologies, imagery years 2011 and 2018.

Table 5.7 shows the number of households in Case 3 and Gated Communities 1 and 2. According to Figure 5.8, Gated Community 1 is the grey polygon towards the northwest and Gated Community 2 is the one towards the south. The average size of families in Case 3 is approximately 3.94 members per household, which is higher than Gated Community 1 whose family size is around 3.5 members. The UGM for Gated Community 2 includes dwellings beyond the gated community, which makes it difficult to know the size of those households accurately.

Table 5.7. Inhabitants and households for Case 3 and the gated communities next to it. According to UGMs used as reference from 2011 census.

	Number of dwellings from UGMs used as reference		
Total of Dwellings	**Case 3 (2 UGM)**	**Gated community 1 (1 UGM)**	**Gated community 2 (1 UGM)**
	123	**37**	**56**
Total of households	123	32	50
Total of people	485	112	195
Men	216	51	84
Women	269	61	111

Source: Author's elaboration with census' cartography (INEC, 2011).

The housing conditions for those residential areas are displayed in Table 5.8. About 84 dwellings in Case 3 (69%) were occupied by their owners who had bought them already. This might be explained by the antiquity of the neighbourhood, which seems to be older than 70 years, according to anecdotes received from the community board. There were almost no unoccupied residences in the neighbourhood and few unoccupied dwellings within the gated communities waiting to be rented.

Table 5.8. Housing conditions for Case 3 and the gated communities next to it. According to UGMs used as reference from 2011 census.

		Number of dwellings from UGMs used as reference		
	Total of Dwellings	**Case 3 (2 UGM)**	**Gated community 1 (1 UGM)**	**Gated community 2 (1 UGM)**
		123	**37**	**56**
Type	Individual dwellings	111	11	28
	Individual dwellings under condominium	6	26	28
	Apartment buildings	3	0	0
	Apartment buildings under condominium	1	0	0
	Hovels	1	0	0
	Others	1	0	0
Occupation	Occupied individual dwellings	122	31	48
	Unoccupied individual dwellings for rent	0	6	6
	Unoccupied individual dwellings under construction or repair	0	0	1
	Others	1	0	1
Tenure status	Own dwelling totally paid	84	18	25
	Own dwelling with a mortgage or payment process	6	12	18
	Rented dwelling	23	1	5
	Squats	0	0	0
	Others	9	0	0

Source: Author's elaboration with census' cartography (INEC, 2011).

The size of the dwellings within Case 3 is very diverse; however, it is mostly fewer than six rooms; in contrast, the dwellings in the gated communities tend to be more than seven rooms.

Table 5.9. Size of dwellings for Case 3 and the gated community next to it. According to UGMs used as reference from 2011 census.

		Number of dwellings from UGMs used as reference		
	Total of Dwellings	**Case 3 (2 UGM)**	**Gated community 1 (1 UGM)**	**Gated community 2 (1 UGM)**
		123	**37**	**56**
Number of bedrooms	Dwellings with 0 bedrooms	4	6	8
	Dwellings with 1 bedroom	22	1	3
	Dwellings with 2 bedrooms	39	6	5
	Dwellings with 3 bedrooms	41	7	20
	Dwellings with 4 bedrooms	16	12	16
	Dwellings with 5 or more bedrooms	1	5	4
Number of rooms (including bedrooms)	Dwellings with 0 rooms	1	6	8
	Dwellings with 1 room	3	0	0
	Dwellings with 2 rooms	10	0	0
	Dwellings with 3 rooms	20	1	2
	Dwellings with 4 rooms	18	3	2
	Dwellings with 5 rooms	31	2	14
	Dwellings with 6 rooms	24	3	8
	Dwellings with 7 or more rooms	16	22	22

Source: Author's elaboration with census' cartography (INEC, 2011).

5.3.2. Organisation

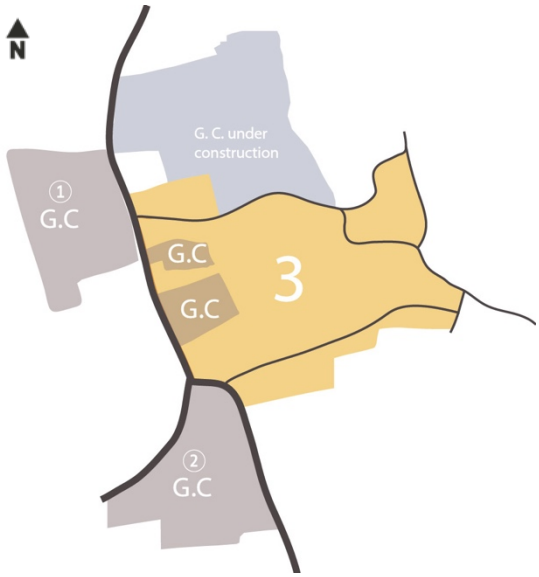
Case 3 is organised under a community board, which meets twice a month. This neighbourhood has its own community hall; it is used for diverse purposes such as community board meetings, workshops or training. Neighbours and people from other places carry out private activities such as weddings or parties there. The administration struggles to attract people from the neighbourhood to participate in managing this body; consequently, the community board has taken on that role for many years.

The neighbourhood does not have community parks and the common hall seems to be mostly used for the private activities mentioned above. Although there are some community events there, people from the community board recognise that the frequency of them has diminished through the years.

5.3.3. Physical features of Case 3

The neighbourhood's shape is an irregular block facing two large gated communities towards the main street –West street (see Figure 5.10).

Figure 5.10. Scheme of Case 3.



Source: Author's elaboration

As shown in Photos 5.24 to 5.29, the site has infrastructure issues, such as narrow streets and lack of pavement. During night hours, it also has poor lighting in some areas, such as in the segment displayed in Photo 5.28.

The neighbours have to walk to the main street to take the bus, many of the bus stops are beside the gated community's walls (see Photos 5.30 to 5.32); these stops do not have any lighting and many of them do not have a physical structure for seating either.



Photos 5.24, **5.25**, **5.26.** Views from the internal roads of Case 3.
Source: Author



Photo 5.27. Views from internal road of Case 3.
Photo 5.28. Internal road facing a future gated community (black fabric).
Photo 5.29. Main street, neighborhood facing gated community wall.
Source: Author



Photo 5.30, 5.31, 5.32. Bus stops next to the gated communities' walls for Case 3.
Source: Author

5.3.4. Physical features of gated communities next to Case 3

As shown in this section, Case 3 is surrounded by one gated community over three hectares –Gated Community 1, another over two hectares –Gated Community 2 and one under construction. There are also two gated communities less than one hectare, as shown in Photo 5.30, those smaller developments reproduce some of the same patterns of the larger ones, such as high walls.

Features of Gated Community 1 (North) are shown in Photos 5.33 to 5.35. The development was started in 2008 and covers around 3.5 hectares (Municipalidad de Escazú, 2020); that information was obtained from the cartographic viewer from the local government complemented by Google Earth measures. The development is distributed in twenty-four individual dwellings, with internal facilities such as BBQ areas, gym, swimming pool and children's playgrounds (Kwcostarica, 2020).





Photo 5.33. Wall of Gated Community 1. Source: Author
Photo 5.34, 5.35. Views inside Gated Community 1. Source: Kwcostarica (2020)

As mentioned, there is another gated community nearby, identified as number two. It started its construction earlier, around 2003, it is smaller than number one; it covers around 2.2 hectares (Municipalidad de Escazú, 2020). Their facilities are tennis courts, Jacuzzi, gardens, children's playground, swimming pool, barbecue areas and terraces. It also has 24/7 hours of surveillance (KSA, 2020).





Photos 5.36, **5.37.** Views inside Gated Community 2.
Source: American-European (2020).
Photo 5.38. Fountain and views from gated community.
Source: KSA (2020)

5.4. Case 4 [2 NBI]

Case 4 has similar characteristics to Case 3, with dwellings ranging up to 2 NBI. Figure 5.11 shows the boundary of the north section of the neighbourhood. Participants in the fieldwork mentioned that its two sections are administratively independent – north and south. The fieldwork focused on the north section, which is the one next to the gated communities. This neighbourhood alongside Case 8 are larger than the rest of the cases; therefore, they require a more significant number of UGMs.

The information from Case 4 is allocated in five UGMs (see Figure 5.12) and there are 335 dwellings in those census units; the NBI information is:

- 0 NBI = 297 dwellings
- 1 NBI = 30 dwellings
- 2 NBI = 8 dwellings

Figure 5.11. Boundary of Case 4 defined by participants during walking interview.

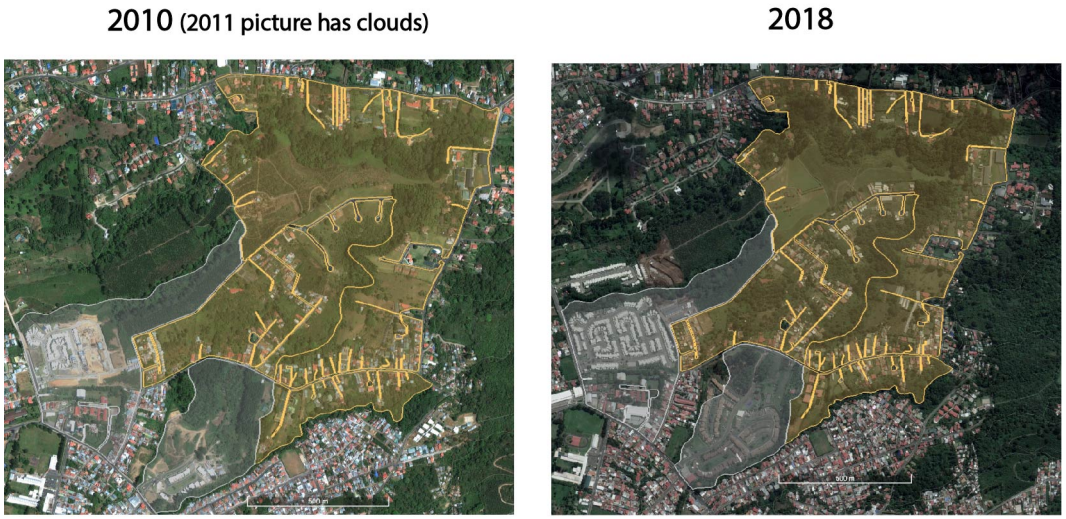


Source: Author's elaboration with data from fieldwork. Map data: Google, Maxar Technologies, imagery year 2018.

As Figure 5.12 shows, the surface covered by the UGMs is significantly larger than the size of the neighbourhood, however, the UGM towards the north edge is mostly conformed by vacant lands, which suggests that most of the

households of those UGM are concentrated in Case 4. As displayed, when the census was carried out both gated communities were under construction; nevertheless, by the time of the fieldwork both of them were consolidated.

Figure 5.12. Case 4. UGMs used as reference during the selection process. Images from 2010 (year before census) and 2018 (fieldwork year).



Source: Author's elaboration with data from INEC (INEC, 2011). Aerial photograph: Google, Maxar Technologies, imagery years 2011 and 2018.

Table 5.10 shows the census information for the neighbourhood and both gated communities (number one and two). As explained, those developments were under construction in 2011 therefore their UGMs do not include all of the current dwellings. The UGM for Gated Community 1 also covers part of the south portion of the neighbourhood, as Figure 5.12 shows, therefore the data for this UGM might include more dwellings beyond the gated community. The configuration of Case 4 has not changed significantly between the census' date and fieldwork's year; this might be because the neighbourhood was established many years ago, some of the participants have lived there for between 40 and 53 years.

Table 5.10. Inhabitants and households for Case 4 and the gated community next to it. According to UGMs used as reference from 2011 census.

	Number of dwellings from UGMs used as reference		
	Case 4 (5 UGM)	Gated community 1 (1 UGM)	Gated community 2 (1 UGM)
Total of Dwellings	**335**	**246**	**45**
Total of households	328	186	30
Total of people	1258	523	84
Men	596	250	42
Women	662	273	42

Source: Author's elaboration with census' cartography (INEC, 2011).

The housing conditions are displayed in Table 5.11. The tenure status in Case 4, reveals that 319 occupied dwellings have been bought and paid – 61%. The percentage of rented dwellings, and those occupied by owners but with a mortgage, are both around 16% and 17% respectively. On the other hand, the size of dwellings in Case 4 is dominated by two and three bedrooms (see Table 5.12); which is similar to the conditions in Case 3. Also, it appears that the proportion of dwellings under construction or unoccupied is higher in Gated Communities 1 and 2, which concurs with the information displayed in aerial photographs regarding the consolidation process of those developments.

Table 5.11. Housing conditions for Case 4 and the gated communities next to it. According to UGMs used as reference from 2011 census.

		Number of dwellings from UGMs used as reference		
	Total of Dwellings	Case 4 (5 UGM)	Gated community 1 (1 UGM)	Gated community 2 (1 UGM)
		335	**246**	**45**
Type	Individual dwellings	330	53	2
	Individual dwellings under condominium	2	188	27
	Apartment buildings	2	5	1
	Apartment buildings under condominium	0	0	15
	Hovels	0	0	0
	Others	1	0	0
Occupation	Occupied individual dwellings	319	186	30
	Unoccupied individual dwellings for rent	3	29	4
	Unoccupied individual dwellings under construction or repair	7	30	11
	Others	6	1	0
Tenure status	Own dwelling totally paid	193	51	4
	Own dwelling with a mortgage or payment process	51	106	18
	Rented dwelling	53	23	7
	Squats	5	0	0
	Others	17	6	1

Source: Author's elaboration with census' cartography (INEC, 2011).

Table 5.12. Size of dwellings for Case 4 and the gated communities next to it. According to UGMs used as reference from 2011 census.

		Number of dwellings from UGMs used as reference		
		Case 4 (5 UGM)	Gated community 1 (1 UGM)	Gated community 2 (1 UGM)
	Total of Dwellings	**335**	**246**	**45**
Number of bedrooms	Dwellings with 0 bedrooms	27	60	15
	Dwellings with 1 bedroom	31	10	2
	Dwellings with 2 bedrooms	120	49	4
	Dwellings with 3 bedrooms	122	110	22
	Dwellings with 4 bedrooms	23	13	1
	Dwellings with 5 or more bedrooms	12	4	1
Number of rooms (including bedrooms)	Dwellings with 0 rooms	16	60	15
	Dwellings with 1 room	11	0	0
	Dwellings with 2 rooms	9	0	0
	Dwellings with 3 rooms	39	11	4
	Dwellings with 4 rooms	83	14	3
	Dwellings with 5 rooms	80	63	5
	Dwellings with 6 rooms	35	62	12
	Dwellings with 7 or more rooms	62	36	6

Source: Author's elaboration with census' cartography (INEC, 2011).

5.4.1. Organisation

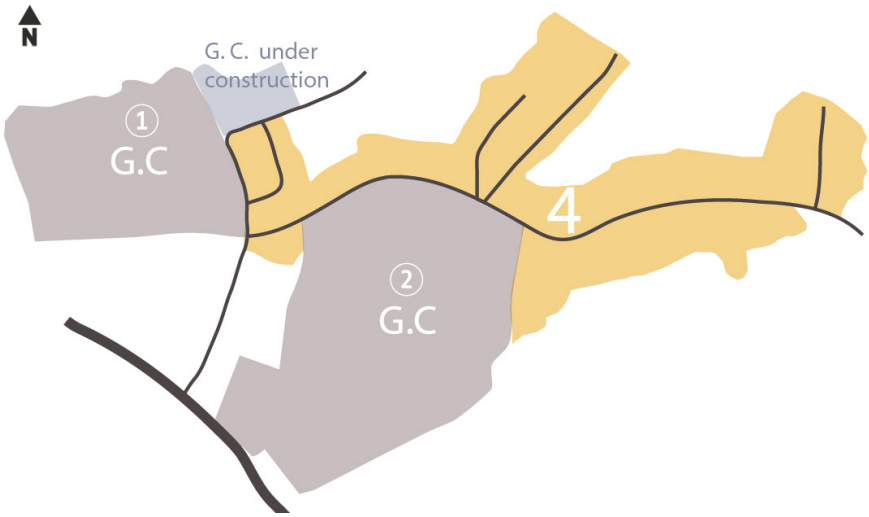
Neighbours from Case 4 are organised under a community board, which meets every two weeks. This neighbourhood, similar to that in Case 3, has its own community hall where they organise meetings and community events. Despite its strong organisation, during the focus groups the neighbours revealed that there is a low participation in community affairs and participation in the activities from people in general. This neighbourhood does not have a community park. Although there is an abandoned small park (around 150 m^2) towards the northwest edge, the neighbours mentioned that it was permanently closed.

This community is involved in initiatives such as safety groups and environmental associations. The main channels of communication among neighbours are WhatsApp groups and Facebook pages.

5.4.2. Physical features of Case 4

The configuration of this neighbourhood is lineal; it is approximately 1.2 kilometres in length. Also, it contains some dead-end streets off the main street. As Figure 5.13 shows, in addition to the two gated communities next to Case 4, there is one more under construction.

Figure 5.13. Scheme of Case 4.



Source: Author's elaboration

The Photos 5.39 to 5.44 show views of the neighbourhood. As displayed, there are many sectors without pavements, also, the area next to Gated Community 2 (Photo 5.44) does not have enough lighting.



Photo 5.39, **5.40.** Roads from the northwest sector of Case 4.
Photo 5.41. Wall of Gated Community 1, next to dwellings from Case 4.
Source: Author



Photos 5.42, **5.43**. Main road from Case 4.
Photo 5.44. Edge of Gated Community 2 (green fence) next to dwellings from Case 4.
Source: Author

5.4.3. Physical features of gated communities next to Case 4

Both consolidated gated communities – number one and two, have their main entrance facing other neighbourhoods. Photos 5.45 to 5.46 illustrate the edges between those developments and Case 4; those margins are walls and railings with fabrics. The fence shown in Photo 5.46 corresponds to Gated Community 2; even though it looks like a soft border, there is a wall behind the trees closer to the condominium dwellings (all belong to the same property). That green area is one of the attractions offered by the development, it is also part of the expansion plan (M&J Inmobiliaria, 2020).



Photos 5.45, **5.46**, **5.47.** Edges between gated communities and Case 4, the photos show Gated Community 1, Gated Community 2 and Gated Community under construction respectively.
Source: Author.

Images from Gated Community 1 are shown in Photos 5.48 to 5.50. This development was finished in 2007 (Vivicon, 2020); it covers approximately 10 hectares[2]. Among its facilities are pool, jacuzzi, gym, a sports field, children's playground and dog's park and 24/ 7 hours' surveillance (Olx, 2020).



Photos 5.48, **5.49**, **5.50**. Views inside Gated Community 1.
Source: Oxl (2020)

[2] According to author's measurements using Google Earth.

Gated Community 2 has a surface of 16 hectares. As Figure 5.12 shows, by 2010 there were few dwellings built, however, in 2018, the first stage of the condominium was consolidated. The property has green areas, paths, children's playground, common hall, sports areas and 24/7 hours of surveillance (M&J Inmobiliaria, 2020). Photos 5.51 to 5.53 display some internal views of this development.



Photos 5.51, **5.52**, **5.53**. Views inside Gated Community 2.
Source: M&J Inmobiliaria (2020)

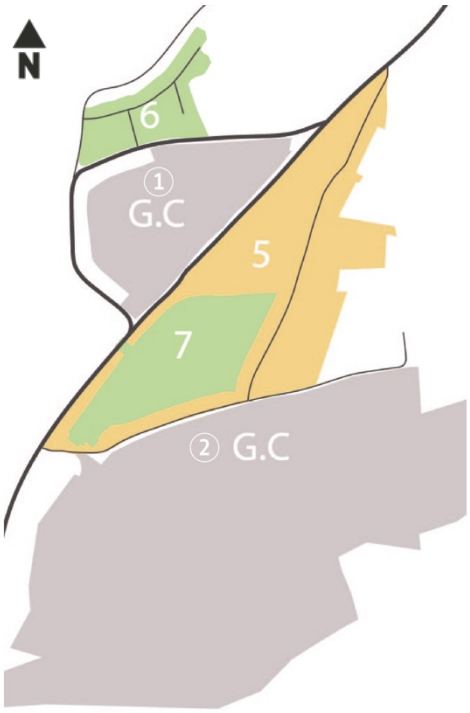
5.5. The cluster: Case 5, Case 6 and Case 7

Among the study cases selected, there is a group of neighbourhoods surrounding the same gated community. Figure 5.14 illustrates that group. Cases 5, 6 and 7 are located next to Gated Community 1 (Figure 5.14). That circumstance is an opportunity for exploring if different communities share their feelings about the same gated community.

There is another development: Gated Community 2 (Figure 5.14), which is below Cases 5 and 7, towards the south; however, only the dwellings of Case 5 have direct contact with its edges.

Cases 6 and 7 have similar levels of NBI (1 NBI); those cases alongside Case 8 (0 NBI) have the lowest levels of poverty from the eight cases, whereas Case 5 is classified within the category of 2 NBI.

Figure 5.14. Scheme of Cases 5,6 and 7.



Source: Author's elaboration

5.5.1. Case 5 [2 NBI]

The poverty levels for dwellings within Case 5 are similar to those in Case 4 and Case 3; all of them have dwellings up to 2 NBI. Its boundary is illustrated in Figure 5.15. According to the UGM used as reference (see Figure 5.16) the distribution of NBI for this case is:

- 0 NBI = 240 dwellings
- 1 NBI = 26 dwellings
- 2 NBI = 3 dwellings

The neighbourhoods next to this place, towards the east, have similar and slightly higher poverty ranges than Case 5 (up to 2 NBI and 3 NBI).

As shown in Figure 5.16, just one UGM was required to cover most of Case 5, which has almost the same geometry. It did not have any significant transformation between 2011 and 2018. However, the conditions of the gated communities around it have changed throughout that period. For instance, Gated Community 1 was not fully covered by 2011 and Gated Community 2 was just starting the building process. In fact, the census did not contemplate

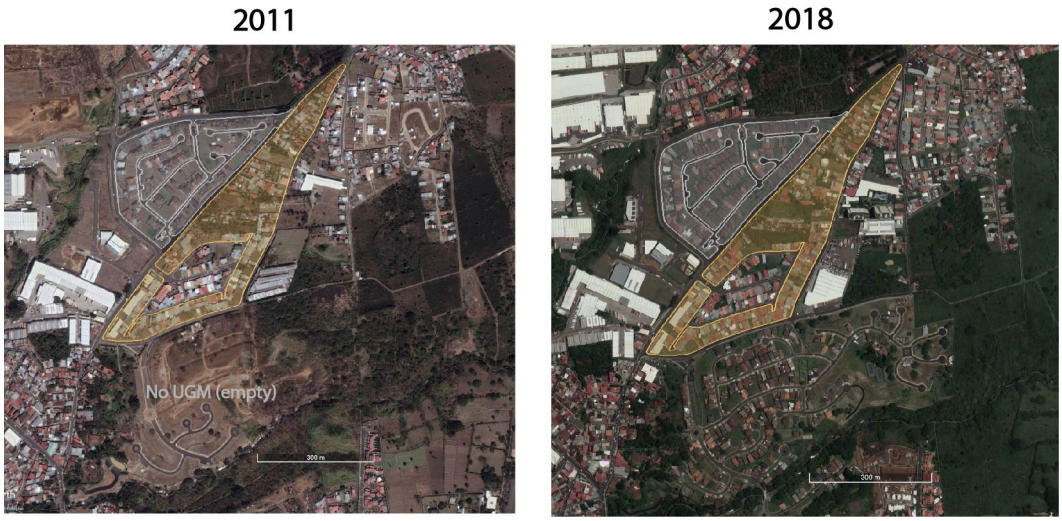
that portion of land as one UGM, which means there were zero dwellings in that property area by 2011.

Figure 5.15. Boundary of Case 5 defined by participants during the walking interview.



Source: Author's elaboration with data from fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

Figure 5.16. Case 5. UGMs used as reference during the selection process. Images from 2011 (census year) and 2018 (fieldwork year).



Source: Author's elaboration with data from INEC (INEC, 2011). Aerial photograph: Google, Maxar Technologies, imagery years 2011 and 2018.

Table 5.13 shows the number of people living in Case 5 and Gated Community 1, both of them have 3.46 people per household on average. Although Gated Community 1 is smaller than Case 5, three UGMs were required to cover its surface; all dwellings from its internal UGMs have 0 NBI. However, one of the west's UGM contains a few external dwellings from another neighbourhood, that UGM has three dwellings with 1 NBI.

Table 5.13. Inhabitants and households for Case 5 and the gated communities next to it. According to UGMs used as reference from 2011 census.

	Number of dwellings from UGMs used as reference		
Total of Dwellings	**Case 5 (1 UGM)**	**Gated community 1 (3 UGM)**	**Gated community 2 (NO UGM)**
	211	**83**	**N/A**
Total of households	204	71	N/A
Total of people	706	246	N/A
Men	325	120	N/A
Women	381	126	N/A

Source: Author's elaboration with census' cartography (INEC, 2011).

The housing conditions of those areas are presented in Table 5.14. Although the neighbourhood is more than 50 years old (according to the participant's testimonies), the proportion of households still paying their mortgage (32%) is significantly higher than Cases 3 and 4. Around 55% of dwellings in Gated Community 1 are in the same condition; however, as will be explained, this development started its consolidation process around 2006.

Table 5.14. Housing conditions *for Case 5 and the gated community next to it. According to UGMs used as reference from 2011 census.*

		Number of dwellings from UGMs used as reference		
	Total of Dwellings	**Case 5 (1 UGM)**	**Gated community 1 (3 UGM)**	**Gated community 2 (No UGM)**
		211	**83**	**N/A**
Type	Individual dwellings	206	12	N/A
	Individual dwellings under condominium	0	64	N/A
	Apartment buildings	5	5	N/A
	Apartment buildings under condominium	0	2	N/A
	Hovels	0	0	N/A
	Others	0	0	N/A
Occupation	Occupied individual dwellings	203	71	N/A
	Unoccupied individual dwellings for rent	7	6	N/A
	Unoccupied individual dwellings under construction or repair	0	5	N/A
	Others	1	1	N/A
Tenure status	Own dwelling totally paid	90	25	N/A
	Own dwelling with a mortgage or payment process	64	39	N/A
	Rented dwelling	37	7	N/A
	Squats	0	0	N/A
	Others	12	0	N/A

Source: Author's elaboration with census' cartography (INEC, 2011).

The size of dwellings varies in Case 5 and Gated Community 1 (see Table 5.15); in Case 5, dwellings have between two and four bedrooms. Those inside the gated community mostly have three and four bedrooms. Regarding the total number of rooms, it seems more than 54% of dwellings of the gated community have more than seven rooms, in contrast to 18% from the open neighbourhood.

Table 5.15. Size of dwellings for Case 5 and the gated community next to it. According to UGMs used as reference from 2011 census.

		Number of dwellings from UGMs used as reference		
	Total of Dwellings	**Case 5 (1 UGM)**	**Gated community 1 (3 UGM)**	**Gated community 2 (NO UGM)**
		211	**83**	**N/A**
Number of bedrooms	Dwellings with 0 bedrooms	12	12	N/A
	Dwellings with 1 bedroom	16	1	N/A
	Dwellings with 2 bedrooms	58	5	N/A
	Dwellings with 3 bedrooms	105	36	N/A
	Dwellings with 4 bedrooms	11	26	N/A
	Dwellings with 5 or more bedrooms	9	3	N/A
Number of rooms (including bedrooms)	Dwellings with 0 rooms	8	12	N/A
	Dwellings with 1 room	4	0	N/A
	Dwellings with 2 rooms	7	0	N/A
	Dwellings with 3 rooms	15	0	N/A
	Dwellings with 4 rooms	33	4	N/A
	Dwellings with 5 rooms	66	11	N/A
	Dwellings with 6 rooms	40	11	N/A
	Dwellings with 7 or more rooms	38	45	N/A

Source: Author's elaboration with census' cartography (INEC, 2011).

Organisation

Case 5 is organised under a community board along with other communities; however, similar to Case 2, members of the neighbourhood created a small group (a neighbours' association) to have more autonomy in certain decisions. This body does not meet regularly, only when there are critical situations to address. The main communication channel between members is a WhatsApp group, which, according to the participants, is a very effective way to handle community affairs.

As shown in Figure 5.15, Case 5 has three community parks; those spaces are managed by the neighbours' association. They are open from 6 a.m. to 6 p.m. every day. This group also recruits volunteers to keep those places open during the scheduled hours. Photos 5.54 to 5.56 show some features of those parks.



Photos 5.54, **5.55**, **5.56**. Community parks from Case 5, located at south, east and north respectively.
Source: Author

Physical features of Case 5

The shape of this neighbourhood is a triangle with a void (see Figure 5.15). That void corresponds to Case 7. None of the triangle's sides are connected internally, also, this neighbourhood is over a steep slope, as shown in Photos 5.57 to 5.59. That circumstance provokes some drainage issues, particularly during the rainy season (nine months of the year). Another infrastructure problem is the lack of pavements in some segments of the neighbourhood, which is more common in sectors where the streets are narrow.

Photos 5.60 to 5.62 show the edges between Case 5 and the gated communities surrounding it and Photo 5.60 illustrates the sector facing Gated Community 1. There are some apartment towers in the middle of the neighbourhood, which are also gated; they cover a surface of approximately 1.4 hectares (see Photo 5.61). At the south of the neighbourhood, there is Gated Community 2, whose walls are shown in Photo 5.62.



Photos 5.57, **5.58**, **5.59**. Views from Case 5.
Source: Author



Photos 5.60, **5.61**, **5.62**. Edges of gated communities next to Case 5: Gated Community 1, a vertical gated community in the middle of the neighbourhood and Gated Community 2 respectively. Source: Author

Physical features of gated communities next to Case 5

Gated Community 1 – shared with Case 6 and 7

Gated Community 1 is surrounded by Case 5, Case 6 and Case 7. This residential development started its construction around 2004 (Municipalidad de Heredia, 2020). Its property covers approximately nine hectares, according to measures taken from Google Earth based on the cartographic viewer from the local government (Municipalidad de Heredia, 2020). Gated Community 1 offers to its residents a children's playground, green spaces and 24/7 hours' surveillance (Zona Plus, 2020). Photos 5.63 to 5.66 show some views inside this gated community.



Photos 5.63, **5.64**, **5.65**, **5.66**. Views inside Gated Community 1
Source: Zona Plus (2020).

Gated community 2

The property of Gated Community 2 covers approximately 33 hectares, according to its masterplan (see Figure 5.17). Although this property was registered since 2006 (Municipalidad de Heredia, 2020), the historical aerial images from Google Earth reveals that its construction started after 2011. This residential development has facilities such as tennis and basketball courts, a common hall, children's playground, soccer field, barbecue areas, gym and 24/7 hours' surveillance (La Laguna, 2020c).



Figure 5.17. Masterplan of Gated Community 2.
Source: La Laguna (2020c)



Photo 5.67. Entrance to Gated Community 2.
Source: Author

Internal views of Gated Community 2 are shown in Photos 5.68 to 5.70. They illustrate some common areas and the type of dwellings.



Photos 5.68, **5.69**, **5.70**. Internal views of Gated Community 2.
Source: La Laguna (2020c)

5.5.2. Case 6 [1 NBI]

Case 6 has a low poverty level; this case along with Case 7 have few households with 1 NBI. Figure 5.18 illustrates the boundaries of this neighbourhood. Participants provided those limits during the fieldwork. The neighbourhood to the north of Case 6 has slightly higher poverty conditions; it has dwellings up to 2 NBI but also dwellings in 0 NBI and 1 NBI.

Figure 5.19 shows the UGM used as reference to illustrate the conditions of Case 6 and Gated Community 1 (described already in Case 5). It requires two UGMs to cover the neighbourhood; although it seems the surface covered by those UGMs is substantially larger than Case 6 limits, most of the east portion corresponds to vacant land.

According to its two UGMs, the poverty conditions for Case 6 are:

- 0 NBI = 132 dwellings
- 1 NBI = 7 dwellings

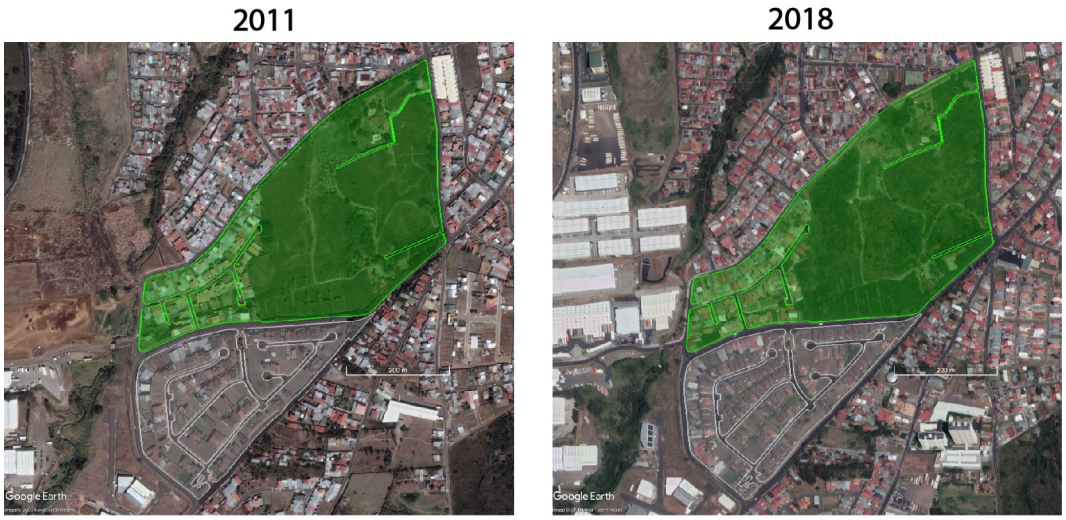
Figure 5.18. Boundary of Case 6 defined by participants during walking interview.



Source: Author's elaboration with data from fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

As shown in Figure 5.19, the neighbourhood's configuration had no significant changes between 2011 and 2018. However, there is a factory towards the west, which was not built when the census was carried out. As noticed during the description of Case 5, Gated Community 1 had some changes, mainly in the increase of dwellings completed.

Figure 5.19. Case 6. UGMs used as reference during the selection process. Images from 2011 (census year) and 2018 (fieldwork year).



Source: Author's elaboration with data from INEC (INEC, 2011). Aerial photograph: Google, Maxar Technologies, imagery years 2011 and 2018.

Table 5.16 shows the number of residents in Case 6 and Gated Community 1; the size of the household in both cases is practically the same, approximately 3.46 people per family.

Table 5.16. Inhabitants and households for Case 6 and the gated community next to it. According to UGMs used as reference from 2011 census.

	Number of dwellings from UGMs used as reference	
	Case 6 (2 UGM)	Gated community 1 (3 UGM)
Total of Dwellings	**139**	**83**
Total of households	128	71
Total of people	443	246
Men	216	120
Women	227	126

Source: Author's elaboration with census' cartography (INEC, 2011).

The housing conditions shown in Table 5.17 reveal that the proportion of dwellings with a mortgage or being rented are similar between Case 6 and the gated community. Two main reasons might explain that circumstance. First, the poverty conditions between the neighbourhood and gated community are similar; second, the starting date of construction of both developments is close, the neighbourhood began in early 2000 (according to its neighbours) and the gated community started in 2004 (Municipalidad de Heredia, 2020).

Table 5.17. Housing conditions for Case 6 and the gated community next to it. According to UGMs used as reference from 2011 census.

		Number of dwellings from UGMs used as reference	
	Total of Dwellings	**Case 6 (2 UGM)**	**Gated community 1 (3 UGM)**
		139	**83**
Type	Individual dwellings	128	12
	Individual dwellings under condominium	0	64
	Apartment buildings	11	5
	Apartment buildings under condominium	0	2
	Hovels	0	0
	Others	0	0
Occupation	Occupied individual dwellings	127	71
	Unoccupied individual dwellings for rent	3	6
	Unoccupied individual dwellings under construction or repair	2	5
	Others	7	1
Tenure status	Own dwelling totally paid	37	25
	Own dwelling with a mortgage or payment process	63	39
	Rented dwelling	21	7
	Squats	0	0
	Others	6	0

Source: Author's elaboration with census' cartography (INEC, 2011).

Regarding dwelling size (see Table 5.18), the data indicate those inside the gated community are larger than those in Case 6. Houses with three and four bedrooms dominate the gated development whereas the neighbourhood mostly has residences with two and three bedrooms. Overall, the proportion of dwellings with more than seven rooms is higher inside the gated community.

Table 5.18. Size of dwellings for Case 3 and the gated community next to it. According to UGMs used as reference from 2011 census.

		Number of dwellings from UGMs used as reference	
	Total of Dwellings	**Case 6 (2 UGM)**	**Gated community 1 (3 UGM)**
		139	**83**
Number of bedrooms	Dwellings with 0 bedrooms	12	12
	Dwellings with 1 bedroom	3	1
	Dwellings with 2 bedrooms	32	5
	Dwellings with 3 bedrooms	81	36
	Dwellings with 4 bedrooms	7	26
	Dwellings with 5 or more bedrooms	4	3
Number of rooms (including bedrooms)	Dwellings with 0 rooms	12	12
	Dwellings with 1 room	0	0
	Dwellings with 2 rooms	1	0
	Dwellings with 3 rooms	6	0
	Dwellings with 4 rooms	27	4
	Dwellings with 5 rooms	41	11
	Dwellings with 6 rooms	18	11
	Dwellings with 7 or more rooms	34	45

Source: Author's elaboration with census' cartography (INEC, 2011).

Organisation

Case 6 has no formal organisation; it is the only neighbourhood from the eight cases that is without a community board or neighbours' association. It had this body in the past but, due to some conflicts, it is not currently in operation. Despite that, there are community leaders who safeguard the infrastructure and its community park (see Photos 5.71 to 5.73). The most popular communication channel between neighbours is a Telegram group; however, during the fieldwork, they revealed that each neighbourhood's area also has its independent communication channel.



Photos 5.71, **5.72**, **5.73**. Features of the community park in Case 6.
Source: Author

Physical features of Case 6

In general, Case 6 has good quality infrastructure (see Photos 5.74 to 5.76); the entire neighbourhood has pavement with green stripes; its streets have a regular width – between eight to ten metres – good lighting and its community park is maintained regularly.

Case 6 also has a CCTV surveillance system, which is monitored by the local government; some households also pay for private security. In the past, this neighbourhood had a physical mechanism to control the entry and exit of vehicles. Photo 5.74 shows the area where the device was placed – between the two brown arches. Disagreements about safety devices and private security divided the community and consequently the devices were removed and the community board was dissolved.



Photos 5.74, **5.75** and **5.76**. Roads of Case 6.
Source: Author

As explained earlier, this neighbourhood is part of the cluster around Gated Community 1; this development has its entrance facing Case 6 (see Photo 5.77). However, the rest of its perimeter is fortified with a wall and CCTV (see Photo 5.78). One of the bus stops frequented by neighbours from Case 6 is located beside the gated community wall (see Photo 5.79). As shown in the aerial image (Figure 5.18), there is vacant land facing the gated community, that sector is illustrated in Photo 5.78.







Photos 5.77, **5.78**, **5.79**. Entrance of Gated Community 1, the gated community's wall and bus stop next to the gated community wall, respectively.
Source: Author.

5.5.3. Case 7 [1 NBI]

This neighbourhood is located inside a block (see Figure 5.20). According to reports from people from Case 5, the dwellings around Case 7 were initially part of that neighbourhood; however, they were excluded because the neighbours inside decided to erect a gate. This neighbourhood is the only one (from the eight cases) with a gate at the entrance; although this property is not under the condominium scheme (see Table 5.20), the local government authorised them to put up the gate.

According to the census data, Case 7 seemed to have an almost complete absence of poverty in 2011. Figure 5.21 shows the two UGM used as reference in this neighbourhood; the NBI conditions of their dwellings:

- 0 NBI = 73 dwellings
- 1 NBI = 1 dwelling

Those data suggest that Case 7 is the neighbourhood with the most favourable situation from the cluster.

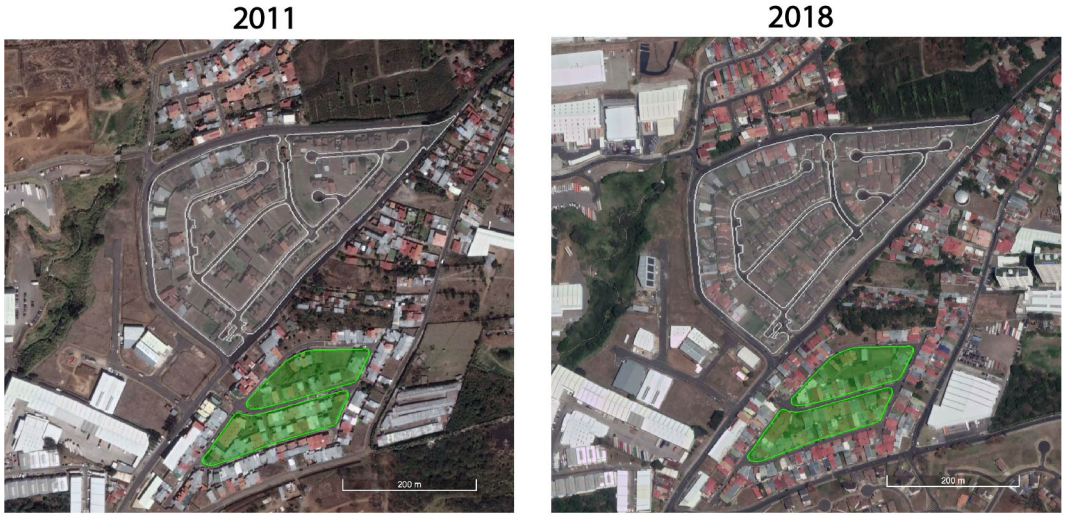
Figure 5.20. Boundary of Case 7 defined by participants during walking interview.



Source: Author's elaboration with data from fieldwork. Aerial photograph: Google, Maxar Technologies, 2018.

As shown in Figure 5.21, the neighbourhood had no significant changes in the number of dwellings from 2011 to 2018. Case 7, similar to Case 6, was founded early in 2000 – according to its neighbours. This place is 'wrapped' by Case 5. During the walking interview with people from Case 5, they mentioned that, although people from Case 7 live gated, they consider those residents as part of their community.

Figure 5.21. Case 7. UGMs used as reference during the selection process. Images from 2011 (census year) and 2018 (fieldwork year).



Source: Author's elaboration with data from INEC (INEC, 2011). Aerial photograph: Google, Maxar Technologies, imagery years 2011 and 2018.

The average size of households in Case 7 is approximately 2.7 people per family, which is smaller in comparison to the gated community – 3.46 people; it contrasts with the other neighbourhoods which have households the same size or larger than the gated communities. Table 5.19 shows the number of households and people from both residential areas.

Table 5.19. Inhabitants and households for Case 7 and the gated community next to it. According to UGMs used as reference from 2011 census.

	Number of dwellings from UGMs used as reference	
	Case 7 (2 UGM)	**Gated community 1 (3 UGM)**
Total of Dwellings	**74**	**83**
Total of households	61	71
Total of people	165	246
Men	82	120
Women	83	126

Source: Author's elaboration with census' cartography (INEC, 2011).

As noticed in Table 5.20, most dwellings in Case 7 are not under a condominium scheme; therefore, the neighbourhood's streets and community parks are public. However, because the place has been gated, there is private

security controlling entrance and exit to the neighbourhood. The neighbours are aware that it might be possible that the local government will ask them to remove the gate at some point.

The tenure status between the neighbourhood and gated community is similar; this might be as a result of the same situation seen in Case 6 – comparable poverty levels and close construction start date.

Table 5.20. Housing conditions for Case 7 and the gated community next to it. According to UGMs used as reference from 2011 census.

		Number of dwellings from UGMs used as reference	
	Total of Dwellings	Case 7 (2 UGM)	Gated community 1 (3 UGM)
		74	83
Type	Individual dwellings	55	12
	Individual dwellings under condominium	3	64
	Apartment buildings	16	5
	Apartment buildings under condominium	0	2
	Hovels	0	0
	Others	0	0
Occupation	Occupied individual dwellings	60	71
	Unoccupied individual dwellings for rent	9	6
	Unoccupied individual dwellings under construction or repair	5	5
	Others	0	1
Tenure status	Own dwelling totally paid	10	25
	Own dwelling with a mortgage or payment process	34	39
	Rented dwelling	16	7
	Squats	0	0
	Others	0	0

Source: Author's elaboration with census' cartography (INEC, 2011).

Regarding the size of dwellings, similar to Case 6, most of the houses have two and three bedrooms, in contrast to the gated community with three and four bedrooms. Likewise, the overall size of dwellings is larger for those inside the gated community.

Table 5.21. Size of dwellings for Case 7 and the gated community next to it. According to UGMs used as reference from 2011 census.

		Number of dwellings from UGMs used as reference	
		Case 7 (2 UGM)	Gated community 1 (3 UGM)
	Total of Dwellings	**74**	**83**
Number of bedrooms	Dwellings with 0 bedrooms	14	12
	Dwellings with 1 bedroom	1	1
	Dwellings with 2 bedrooms	15	5
	Dwellings with 3 bedrooms	41	36
	Dwellings with 4 bedrooms	3	26
	Dwellings with 5 or more bedrooms	0	3
Number of rooms (including bedrooms)	Dwellings with 0 rooms	14	12
	Dwellings with 1 room	0	0
	Dwellings with 2 rooms	0	0
	Dwellings with 3 rooms	1	0
	Dwellings with 4 rooms	12	4
	Dwellings with 5 rooms	15	11
	Dwellings with 6 rooms	17	11
	Dwellings with 7 or more rooms	15	45

Source: Author's elaboration with census' cartography (INEC, 2011).

Organisation

The neighbours of Case 7 are organised under a community board; members from that body mentioned during the fieldwork that the group meets twice a month. It also has sub-committees for different affairs such as environmental issues and safety. Similar to other places, the main communication channels are WhatsApp groups which are formed by different members, depending on the subject.

This community has private security which is paid by its neighbours monthly; those guards are in charge of regulating the entrance and exit of people to the neighbourhood. There are three community parks (see Photos 5.80 to 5.82) which have children's playground, exercise machines and a recycling centre; there is also land available for future projects such as a community hall and a sports field.



Photos 5.80, **5.81**, **5.82**. Community parks from Case 7.
Source: Author

Physical features Case 7

The neighbourhood has good quality infrastructure in general; similar to Case 6, it has pavements with green stripes along almost the entire neighbourhood (see Photos 5.83 to 5.85). The streets are in good condition and they have road signs and lighting. The neighbourhood also has a CCTV system, although some cameras were not working at the time of fieldwork visits.



Photos 5.83, **5.84**, **5.85**. Gate at the entrance of the neighbourhood and internal roads, respectively.
Source: Author.

As shown in Figure 5.20, the overlap between Case 7 and the gated community's wall is reduced just to the neighbourhood entrance; from there, the gated community is evident (see Photos 5.86 to 5.88).





Photos 5.86, **5.87**, **5.88**. Walls of Gated Community 1 seen from the entrance of Case 7.
Source: Author.

Outside the neighbourhood, in the northeast part, there is a row of buildings facing the gated community; they are commercial developments included in the Case 5 configuration, however, they are also frequented by people from Case 7.



Photo 5.89. Commercial development outside Case 7. Source: Author

5.6. Case 8 [0 NBI]

Case 8 is the neighbourhood with the lowest poverty levels. It seems to have been founded more than 25 years ago, according to reports from participants during the focus groups. It is also the largest and most populated place of all the eight study cases and for that reason, just the portion next to the gated communities was explored during this research. Figure 5.22 shows the area where the walking interview was carried out, that boundary represents approximately half of the entire neighbourhood, which has around 474 dwellings in total (according to the 2011 census). This place also has seven community parks, one of them next to a gated community, others in adjacent blocks and some farther afield. Figure 5.22 displays the closest parks to the gated community.

Because Case 8 is large, it was divided into two areas: those blocks beside the gated communities and those immediately behind. Figure 5.23 shows both sectors, the UGM with green points are those used as reference during the selection process – seven in total.

The seven UGMs adopted as primary reference have 275 dwellings, all of them have 0 NBI; that suggests there is no poverty in that area. The rest of the neighbourhood has similar conditions. Figure 5.23 displays the UGM beyond the primary reference in green without points; they contain five UGMs with 199 dwellings, of which 197 have 0 NBI and two have 1 NBI. Despite that small difference between two sectors, the infrastructure quality and neighbourhood configuration are almost the same.

Figure 5.22. Boundary of Case 8 defined by participants during walking interview.

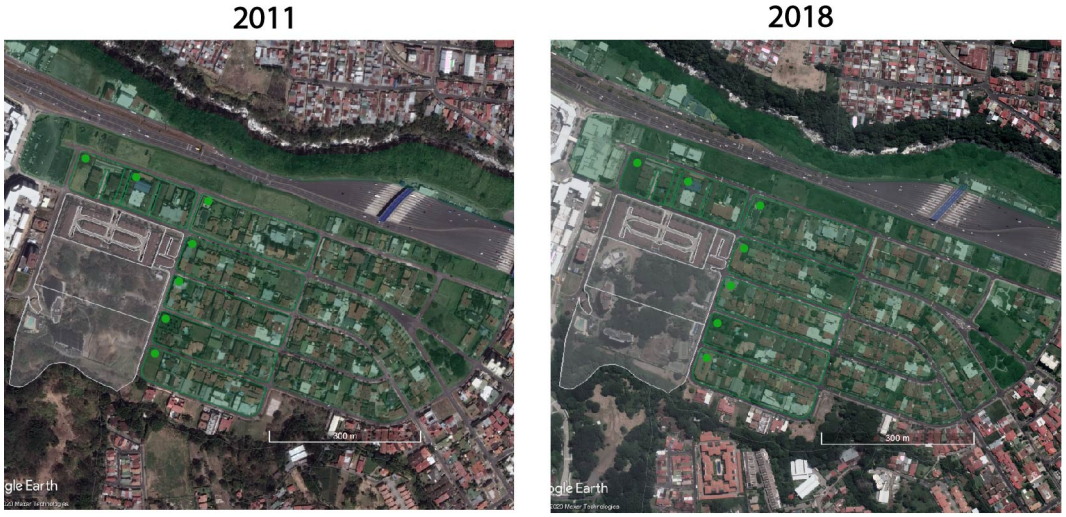


Source: Author's elaboration with data from fieldwork. Aerial photograph: Google, Maxar Technologies, 2018.

As Figure 5.22 shows, Case 8 is delineated by a highway – northeast, a shopping centre – northwest and one river – south. There are two large, gated communities towards the east – number one and two; additionally, this neighbourhood has small properties inside the blocks under a condominium

scheme (Municipalidad de Escazú, 2020). Inside Gated Community 1, there are seven dwellings with 1 NBI but in Gated Community 2 all dwellings have 0 NBI.

Figure 5.23. Case 8. UGMs used as reference during the selection process; those with green points are the primary reference. Images from 2011 (census year) and 2018 (fieldwork year).



Source: Author's elaboration with data from INEC (INEC, 2011). Aerial photograph: Google, Maxar Technologies, imagery years 2011 and 2018.

Figure 5.23 displays the situation in 2011 and 2018. As shown, conditions of Case 8 and Gated Community 1 did not change significantly; however, Gated Community 2 was under construction when the census was taking place.

The tables below were made based on the seven UGMs selected as a primary reference for Case 8 plus those from the gated communities. Table 5.22 displays the number of people and households in the neighbourhood and Gated Communities 1 and 2. It is noted that the households' size varies in each place; in Case 8, there are approximately 2.54 people per household, while Gated Community 1 and Gated Community 2 have 3.54 and 1.96 people per household respectively. Although Gated Community 2 has the smallest household size of all cases analysed, their dwellings are among the largest, around 84% of them have more than seven rooms in total (see Table 5.24).

Table 5.22. Inhabitants and households for Case 8 and the gated communities next to it. According to UGMs used as primary reference from 2011 census.

	Number of dwellings from UGMs used as reference		
Total of Dwellings	**Case 8 (7 UGM)**	**Gated community 1 (3 UGM)**	**Gated community 2 (2 UGM)**
	275	**55**	**25**
Total of households	207	51	25
Total of people	526	189	49
Men	236	83	29
Women	290	106	20

Source: Author's elaboration with census' cartography (INEC, 2011).

As shown in Table 5.23, when the census was carried out in 2011, Case 8 had a substantial number of dwellings under the condominium scheme, around 47% of the total. As mentioned, these are small, gated communities inside blocks (see Photo 5.95). In this respect, Case 8 has a different pattern from Cases 6 and 7, especially in the number of properties under condominium inside the neighbourhood. On the other hand, Case 8 also has the largest percentage of unoccupied dwellings waiting to be rented, approximately 19% of the total (52 from 275 dwellings). Additionally, almost 33% of the occupied dwellings are currently rented (68 of 207 dwellings). Again, Case 8 has a different pattern from the rest of the cases in terms of the overall proportion of houses for rent (occupied and unoccupied). The residents are aware of this situation and it has influenced the way they perceive their own neighbourhood; these perceptions will be addressed in Chapters 6 and 7.

Table 5.23. Housing conditions for Case 8 and the gated community next to it. According to UGMs used as reference from 2011 census.

		Number of dwellings from UGMs used as reference		
	Total of Dwellings	**Case 8 (7 UGM)**	**Gated community 1 (3 UGM)**	**Gated community 2 (2UGM)**
		275	**55**	**25**
Type	Individual dwellings	126	0	0
	Individual dwellings under condominium	94	55	0
	Apartment buildings	19	0	0
	Apartment buildings under condominium	36	0	25
	Hovels	0	0	0
	Others	0	0	0
Occupation	Occupied individual dwellings	207	51	25
	Unoccupied individual dwellings for rent	52	4	0
	Unoccupied individual dwellings under construction or repair	1	0	0
	Others	15	0	0
Tenure status	Own dwelling totally paid	91	9	10
	Own dwelling with a mortgage or payment process	46	4	15
	Rented dwelling	68	38	0
	Squats	0	0	0
	Others	2	0	0

Source: Author's elaboration with census' cartography (INEC, 2011).

Both Gated Community 1 and 2 have different tenure status between them. In Gated Community 1, most of the occupied dwellings are rented – approximately 75% – whereas in Gated Community 2 dwellings are occupied by their owners.

Table 5.24. *Size of dwellings* for Case 8 and the gated community next to it. According to *UGMs used as reference from 2011 census.*

		Number of dwellings from UGMs used as reference		
	Total of Dwellings	Case 8 (7 UGM)	Gated community 1 (3 UGM)	Gated community 2 (2 UGM)
		275	55	25
Number of bedrooms	Dwellings with 0 bedrooms	68	4	0
	Dwellings with 1 bedroom	13	3	1
	Dwellings with 2 bedrooms	60	10	1
	Dwellings with 3 bedrooms	71	10	3
	Dwellings with 4 bedrooms	55	22	18
	Dwellings with 5 or more bedrooms	8	6	1
Number of rooms (including bedrooms)	Dwellings with 0 rooms	68	4	0
	Dwellings with 1 room	0	0	0
	Dwellings with 2 rooms	5	0	0
	Dwellings with 3 rooms	15	3	0
	Dwellings with 4 rooms	43	3	2
	Dwellings with 5 rooms	32	3	0
	Dwellings with 6 rooms	27	14	2
	Dwellings with 7 or more rooms	85	28	21

Source: Author's elaboration with census' cartography (INEC, 2011).

Regarding dwelling size, Case 8 has a broad range, which encompasses almost 25% of residences with zero bedrooms (probably studio flats), 25% with three bedrooms, around 22% with two bedrooms and 20% with four of them. In contrast, Gated Community 2 has less diversity, most of its dwellings have four bedrooms. Gated Community 1 is composed mostly by dwellings with two, three and four bedrooms.

5.6.1. Organisation

People from Case 8 are organised under a community board. As mentioned, the neighbourhood where this case is located has a broader boundary (see Figure 5.24). Despite those dimensions, there is a strong community organisation which covers the entire neighbourhood. The community board meets twice a month; the meeting agenda is sent in advance by email to its members.

This body has sub-committees for different affairs, such as parks maintenance, safety and events. Also, the community board has organised

charity events, food drives and other campaigns to help victims of natural disasters in places nearby.

In contrast to the other seven cases, this is the only one where people from gated communities contribute to the community board. That includes Gated Community 1 and 2. Neighbours pay a monthly fee; in this case, most of this money goes to parks' maintenance. Case 8 does not have any gate, except by the gated communities themselves, therefore, surveillance is not centralised, some streets have security guards but the community board does not manage that localised organisation.

Figure 5.23. Approximate boundary of the entire neighbourhood where Case 8 is located.



Source: Author's elaboration with data from fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

Members of the board explained that most efforts of the community organisation are given to parks and infrastructure. This place has seven community parks in total; those closer to the gated communities were taken into account for inclusion in the walking interview. As shown in Photos 5.90 to 5.94, they are kept in good conditions. One of those parks is located next to Gated Community 2 (Photo 5.90) although that development has railings on most of its edges, the sector next to the park has walls instead. Those parks have a diverse infrastructure inside, such as exercise machines, children's

playground, green areas, sports' courts, benches and paths, which allows for different age groups to benefit from them.







Photos 5.90, **5.91**, **5.92**, **5.93**, **5.94**. Five community parks within the route of walking interview for Case 8.
Source: Author

5.6.2. Physical features of Case 8

Case 8 has a good quality infrastructure in general, almost the entire neighbourhood has pavements with green stripes (see Photos 5.95 to 5.97). As mentioned, there are small, gated communities inside the blocks (Photo 5.95). They usually do not have green areas inside; presumably, their residents use the neighbourhood parks.

Photo 5.97 shows the street parallel to the highway; there is some vacant land between that road and the highway. At the end this street –towards the north, there is a shopping centre; according to neighbours, many visitors park their cars on that street during their shopping time, they also mentioned that this sector has poor lighting and some pavement issues.



Photos 5.95, **5.96**, **5.97**. Street views from Case 8.
Source: Author.

The edges of Gated Communities 1 and 2 are mostly permeable; although it is not possible to go inside without authorisation, dwellings and infrastructure are easily visible from the pavement. Photos 5.98 to 5.101 display those borders and areas around them. In Photo 5.101 there is one community park – red wall, next to the gated community fence (the same than photo 5.90).



Photos 5.98, **5.99** (above). Edge of Gated Community 1 and Gated Community 1 facing the neighbourhood.
Photos 5.100 and **5.101** (below) Edge of Gated Community 2 and Gated Community 2 next to a Community Park
Source: Author.

5.6.3. Physical features of gated communities next to Case 8

Gated Community 1

This gated community was built around 2000; among its facilities are green areas, pool, barbecue areas, CCTV and 24/7 of private surveillance. It has dwellings between 100m^2 to 350m^2 (Alma Inmobiliaria, 2016). Photos 5.102 to 5.104 show some features of the place. The property has approximately 2.3 hectares[3] and it is adjacent to gated community 2.



Photos 5.102, **5.103**, **5.104**. Views of Gated Community 1.
Source: Alma Inmobiliaria (2016).

[3] According to estimations made by the author from the cartographic viewer of the local government (Municipalidad de Escazú 2020) and Google Earth measures.

Gated Community 2

This gated community is still under construction; the entire project consists of seven towers of 13 floors each (Villas de Pasadena S.A, 2020). In 2018, when the fieldwork was taking place, three towers were completed. The development has a property of 5.3 hectares in total; three hectares are dedicated to green areas, pools, tennis court, children's playground, gym and a hall (Villas de Pasadena S.A, 2020). The development has 24/7 surveillance, also maintenance and management offices.



Photos 5.105, **5.106**, **5.107**, **5.108**. Views of Gated Community 2.
Source: Villas de Pasadena S.A. (2020)

5.7. Summary

This chapter has described the eight study cases selected. As explained, there are cases of all poverty levels. Table 5.25 summarises characteristics of those places, as well as the gated communities explored in this research. The table is organised by poverty levels, from the highest to the lowest (an extended version of this table is shown in Chapter 4). As displayed, most of the neighbourhoods have formal community organisations; those bodies usually carry out meetings twice a month.

It can be noticed that those neighbourhoods in highest poverty do not have community parks, except in Case 5. Those cases (including Case 5), also have infrastructure issues, mainly regarding pavements. The size of gated communities next to them vary; however, the largest is located next to the most impoverished neighbourhood (Case 1), – that development has 43.4 hectares. On the other hand, the gated communities' edges are mostly walls or elements which do not allow seeing through them. The only exception is Case 8, where both gated communities have permeable edges facing the open neighbourhood's residences.

Table 5.25. Synthesis of main characteristics of study cases and features of the gated communities next to them.

	Open neighbourhoods							Gated communities	
	Poverty levels per case #dwellings per NBI					Community parks	Organisation level	Approximate size gated community (hectares)	Gated community edge
Case number	0 NBI	1 NBI	2 NBI	3 NBI	4 NBI				
Case 1 : 67 dwellings [4 NBI]	32	23	5	6	1	No	High : two meetings/month	43,4 ha	Strong (wall)
Case 2: 252 dwellings [3 NBI]	224	23	4	1		No	High : two meetings/month	9 ha	Strong (wall)
Case 3: 123 dwellings [2 NBI]	90	29	4			No	High : two meetings/month	3,5 ha / 2,2 ha	Strong (wall)
Case 4: 335 dwellings [2 NBI]	297	30	8			No	High : two meetings/month	10 ha / 16 ha	Strong (wall) / Semipermeable (fabric-forest)
***Case 5: 211 dwellings [2 NBI]**	240	26	3			3 Parks -good condition	Middle: random meetings, whatsapp messages.	9 ha / 33 ha	Strong (wall) - both
***Case 6: 139 dwellings [1 NBI]**	132	7				1 Park -good condition	Low: no meetings, just social media groups.	9 ha	Strong (wall)
***Case 7: 74 dwellings [1 NBI]**	73	1				3 Parks -good condition	High : two meetings/month	9 ha	Strong (wall)
Case 8: 275 dwellings [0 NBI]	275					7 Parks-good condition	High : two meetings/month	2,3 ha / 5,3 ha	Permeable (raillings)-both

* Cluster

Source: Author's elaboration

Table 5.26 summarises the housing conditions of the eight study cases; the figures are expressed in percentage to enable comparisons to be made between them. Those values, notably different from the rest, have been highlighted; for instance, the significant percentage of dwellings and apartments under a condominium scheme for Case 8 and the percentage of hovels and squats in Case 1. It may also be noted that those cases with almost no poverty have lower levels of occupation; many of those houses are empty waiting to be rented. Paradoxically, the percentage of rented dwellings is very similar at both extremes – Case 1 and Case 8. However, the reasons are different, as will be addressed in the empirical chapters. The ownership status also varies; most of those people from neighbourhoods with a long history of

foundation have finished paying for their dwellings and they are still living there (cases 2, 3 and 4).

Table 5.26. Synthesis of housing conditions of the eight study cases.

		Case 1 (1 UGM)	Case 2 (2 UGM)	Case 3 (2 UGM)	Case 4 (5 UGM)	Case 5 (1 UGM)	Case 6 (2 UGM)	Case 7 (2 UGM)	Case 8 (7 UGM)
Total of Dwellings		**67**	**252**	**123**	**335**	**211**	**139**	**74**	**275**
Type (% from total dwellings)	Individual dwellings	72%	98%	90%	99%	98%	92%	74%	46%
	Individual dwellings under condominium	0%	0%	5%	1%	0%	0%	4%	34%
	Apartment buildings	12%	2%	2%	1%	2%	8%	22%	7%
	Apartment buildings under condominium	0%	0%	1%	0%	0%	0%	0%	13%
	Hovels	16%	0%	1%	0%	0%	0%	0%	0%
	Others	0%	0%	1%	0%	0%	0%	0%	0%
Occupation (% from total dwellings)	Occupied individual dwellings	100%	97%	99%	95%	96%	91%	81%	75%
	Unoccupied individual dwellings for rent	0%	2%	0%	1%	3%	2%	12%	19%
	Unoccupied individual dwellings under construction or repair	0%	1%	0%	2%	0%	1%	7%	0%
	Others	0%	0%	1%	2%	0%	5%	0%	5%
Number of Occupied individual dwellings		**67**	**245**	**122**	**319**	**203**	**127**	**60**	**207**
Tenure status (% from occupied dwellings)	Own dwelling totally paid	39%	71%	69%	61%	44%	29%	17%	44%
	Own dwelling with a mortgage or payment process	1%	4%	5%	16%	32%	50%	57%	22%
	Rented dwelling	31%	21%	19%	17%	18%	17%	27%	33%
	Squats	18%	0%	0%	2%	0%	0%	0%	0%
	Others	10%	4%	7%	5%	6%	5%	0%	1%

Source: Author's elaboration with census' cartography (INEC, 2011).

Table 5.27. Synthesis of dwellings' size of the eight study cases.

		Case 1 (1 UGM)	Case 2 (2 UGM)	Case 3 (2 UGM)	Case 4 (5 UGM)	Case 5 (1 UGM)	Case 6 (2 UGM)	Case 7 (2 UGM)	Case 8 (7 UGM)
Total of Dwellings		**67**	**252**	**123**	**335**	**211**	**139**	**74**	**275**
% dwellings by number of bedrooms	Dwellings with 0 bedrooms	4%	6%	3%	8%	6%	9%	19%	25%
	Dwellings with 1 bedroom	30%	17%	18%	9%	8%	2%	1%	5%
	Dwellings with 2 bedrooms	40%	31%	32%	36%	27%	23%	20%	22%
	Dwellings with 3 bedrooms	18%	37%	33%	36%	50%	58%	55%	26%
	Dwellings with 4 bedrooms	7%	8%	13%	7%	5%	5%	4%	20%
	Dwellings with 5 or more bedrooms	0%	1%	1%	4%	4%	3%	0%	3%
% dwellings by number of rooms (including bedrooms)	Dwellings with 0 rooms	0%	3%	1%	5%	4%	9%	19%	25%
	Dwellings with 1 room	4%	2%	2%	3%	2%	0%	0%	0%
	Dwellings with 2 rooms	16%	6%	8%	3%	3%	1%	0%	2%
	Dwellings with 3 rooms	34%	13%	16%	12%	7%	4%	1%	5%
	Dwellings with 4 rooms	27%	21%	15%	25%	16%	19%	16%	16%
	Dwellings with 5 rooms	10%	28%	25%	24%	31%	29%	20%	12%
	Dwellings with 6 rooms	6%	13%	20%	10%	19%	13%	23%	10%
	Dwellings with 7 or more rooms	1%	12%	13%	19%	18%	24%	20%	31%

Source: Author's elaboration with census' cartography (INEC, 2011).

As might be expected, the size of the dwellings varies according to the poverty levels (see Table 5.27); however, it is noticeable the percentage of dwellings with zero bedrooms in neighbourhoods with higher incomes, which may correspond to studio flats, as mentioned. Except in Case 1, it seems the most

common size is a three-bedroomed house, especially in Cases 5, 6 and 7. Despite Case 8 having the broadest diversity in the number of bedrooms per house; overall, this neighbourhood has the largest dwellings: 31% of them have more than seven rooms.

This chapter showed some demographic characteristics, housing conditions, physical features and community organisation details of the eight study cases. That information is useful not only to become familiar with the study cases but to interpret some findings displayed in Chapters 6 and 7.

Additionally, this information visualises inequalities in public infrastructure across the eight cases, which also helps to understand the complaints and comments from participants; those outcomes are analysed in Chapter 7.

Although this research is focused on the exterior of gated communities, this chapter showed some internal features of those developments (from secondary sources). The contrast of physical features, facilities and poverty levels between gated communities and neighbourhoods illustrate the degree of social inequalities observed in many cases. Those differences, alongside residential segregation, are valuable information to interpret the findings in Chapter 6. The evidential chapters in each case also provide a broader view about some specific conditions and if those features have any incidence in people’s perceptions of crime

Chapter 6. Spatial intensity of fear of crime and macro factors associated.

6.1. Introduction

This chapter explores the self-reported intensity of fear in each study case and its link to macro factors regarding effects of gated communities in the neighbourhood as a whole. For the purposes of this thesis, those macro factors encompass residential segregation, consequences in community ties, precautionary measures, general perceptions, experiences and feelings. This has emerged from the literature review due to the relationship between fear of crime and perception of neighbourhood (Sampson, 2009), sense of belonging (Gray, Jackson & Farrall, 2011) and community ties (Hale,1996). As Caldeira (2000) states, gated communities provoke the fracturing of some groups within the city, changing the features of public spaces; this is fuelled by lack of trust. The analysis in Chapter 6 searches for any pattern that exists between self-reported intensity of fear and those macro factors described.

As fear of crime is a multidimensional phenomenon (Gray, Jackson & Farrall, 2011) and it seems to be higher in those societies that are more unequal (Wilkinson & Pickett, 2009), this chapter keeps the classification by poverty indicators as cross-cutting themes. In this way, it will be able to compare how those macro factors vary according to poverty levels.

The chapter is divided into four main sections. The first one shows the main topics mentioned by each community during the fieldwork (all themes together), those general views are contrasted with the intensity of fear reported in the walking interviews. The purpose of that section is to give an overview of each neighbourhood's outcomes by building a general profile which will be further analysed in the rest of the thesis. The second part details the teenagers' views; as age is a factor commonly associated with fear of crime this work separately explored the perceptions of youth, especially as they seem to have been less well researched (Melde, 2011). The third part shows views from local governments about the communities involved and their perceptions regarding the relationship between those neighbours and the people from

gated communities. The fourth part explores possible patterns associated with the perception of the institutions' performance, their image of themselves and of people from gated communities, their communication channels, feelings and precautionary behaviours. The conclusion section identifies possible patterns amongst those four parts.

The data from this chapter was processed through Thematic Analysis and Discourse Analysis, further detail about those processes can be found in Chapter 4.

6.2. Distribution of fear: An overview by case

6.2.1. Self-reported intensity of fear and main topics raised by communities

Across the eight study cases, there are variations in the spatial distribution of fear of crime. As described in Chapter 4, for each of the eight study cases, walking interviews and focus groups were conducted. The route of the interview pathways included diverse sections of the neighbourhood, such as internal streets, parks, areas next to a gated community as well as transition spaces between the neighbourhoods and their surroundings.

This section displays ‘Intensity of fear’ maps. As described in Chapter 4, these were made from the stickers that participants put on their individual maps during the walking interview. Also, there is an overview of the main topics raised by the communities both in the focus groups and walking interviews. The graphs show the fifteen most mentioned topics; however, there are fluctuations in the number of topics per case, as some comments had the same number of mentions. Therefore, the graphs present a range of between twelve and twenty topics per case.

The intensity of fear in each case fluctuates by poverty levels, social conflicts, community relationships, the neighbourhood’s shape and the type of previous victimisation, among others. Many community affairs were highlighted during the focus groups where participants talked about community relationships, local organisation and their ties with people from gated communities.

Features of the built environment may also affect the perceived safety, such as localised victimisation, lighting, lack of permeability or places identified as a source of illegal activities. The details of the microscale variation are described in Chapter 7.

Before starting this analysis, it is important to recall the classification by poverty levels of the eight study cases, which were previously described in Chapters 4 and 5.

Table 6.1. Poverty classification of case studies, from the highest (4 NBI) to the lowest (0 NBI)

Poverty level	Cases
4 NBI	Case 1
3 NBI	Case 2
2 NBI	Case 3 – Case 4 – Case 5
1 NBI	Case 6 – Case 7
0 NBI	Case 8

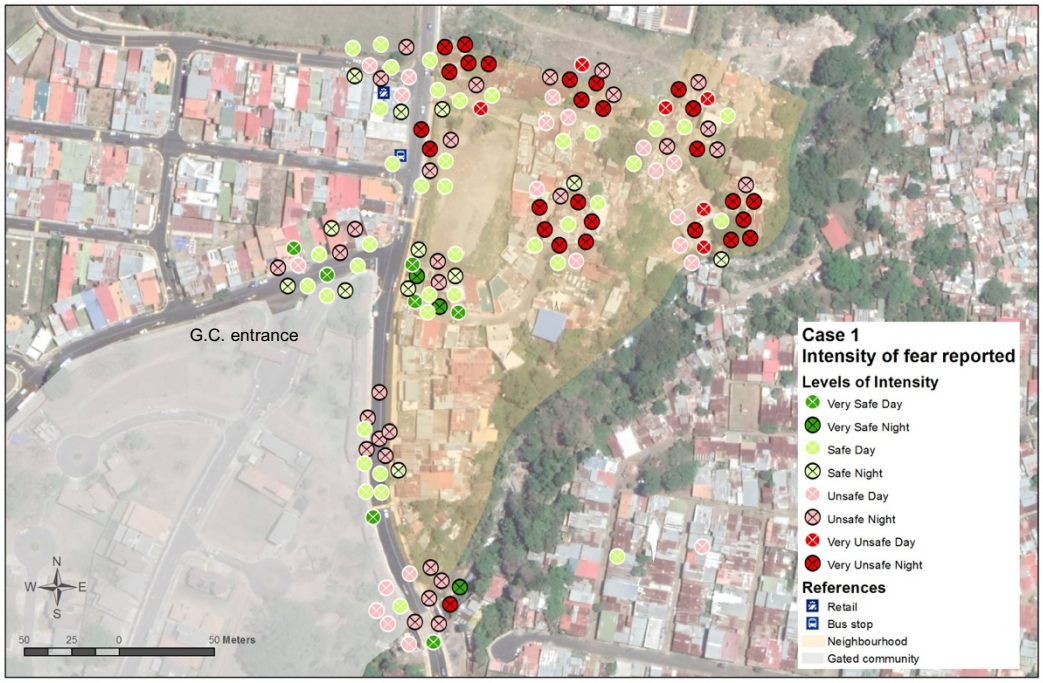
Source: Author's elaboration

6.2.2. Case 1 [4 NBI]

Case 1 is the neighbourhood in the highest state of poverty of all the eight cases, as described in Chapter 5. Figure 6.1 shows the intensity of fear reported by participants during the walking interview. The highest levels of fear reported were concentrated in the internal roads of the neighbourhood. Participants considered there was a high risk of being a victim of a crime in this area. In contrast, the external roads beside another neighbourhood and next to the gated community were classified as less dangerous. In the transition's corner between the neighbourhood and the gated community the perception of safety was more positive. As will be discussed later, the spatial distribution of fear in Case 1 differs substantially from the rest of the study cases.

This particular situation might be explained by the high levels of violence reported by the participants. They expressed their deep concern about issues regarding the sale and consumption of drugs within their neighbourhood and that violence was mainly produced by conflicts among drugs dealers.

Figure 6.1. Case 1: Intensity of fear reported in walking interview.



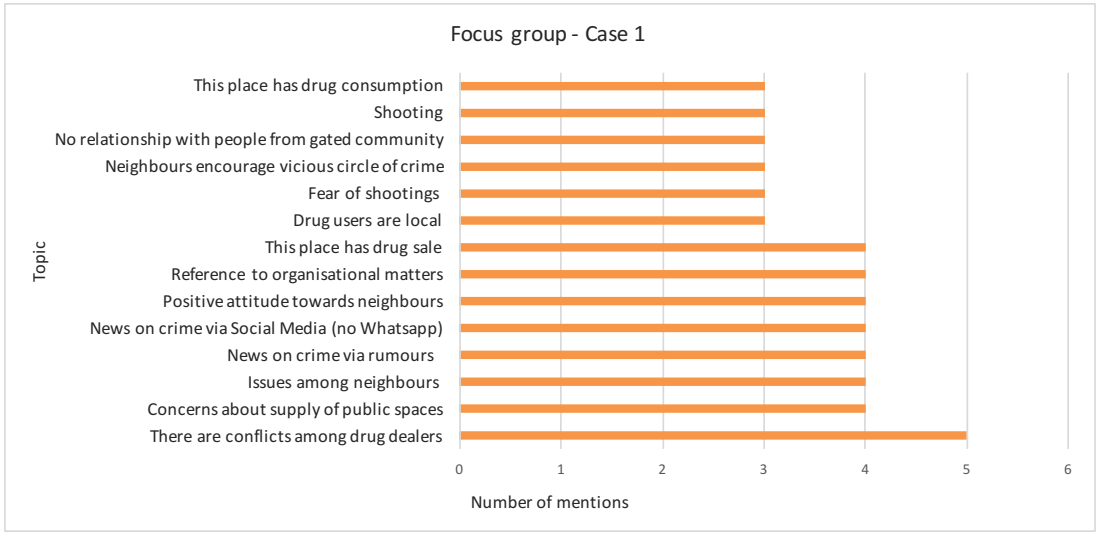
Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

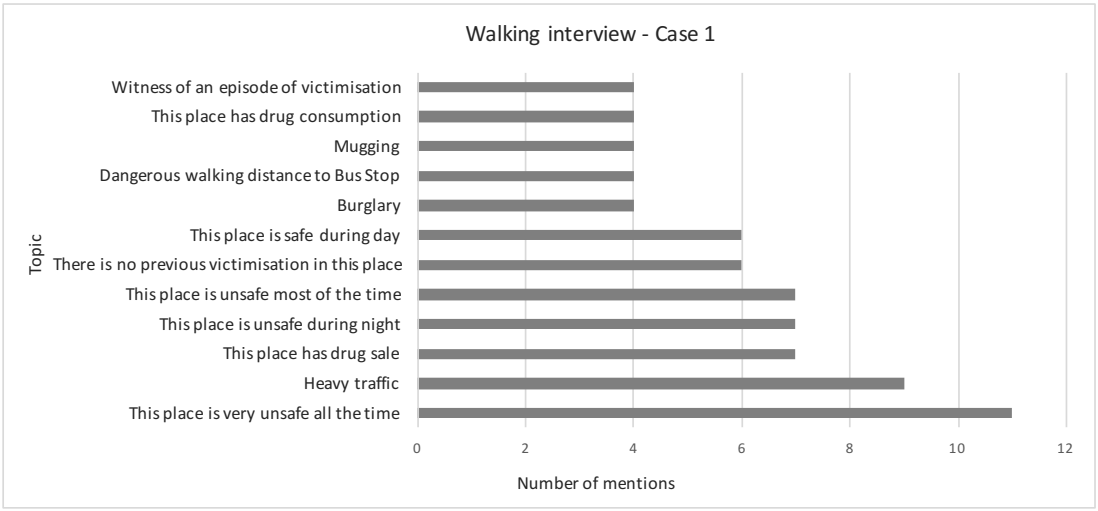
Figure 6.2 shows the most cited topics during the walking interview and focus group. As noticed, there are topics which emerged on both occasions, such as the sale and consumption of drugs. These residents have been witnesses of violent episodes of victimisation, for instance they stressed the frequency of shootings in their neighbourhood as a result of drugs dealers' disputes. The neighbours' anxiety lies in the possibility that a stray bullet could reach them or there could be other accidental consequences for them or their relatives. To illustrate one of those episodes, a participant recounts a violent situation suffered three weeks before the focus group:

> Early morning, twenty-two days ago, a guy was shot next to our place… It seems that he was insisting on buying drugs on tick because he wanted more. So, for scaring him, they [sellers] shot him twice in his knee…Hardly someone wanted to help him, you know in those cases it is tough for people to intervene. He was asking for help … So, a girl got courage, went out and called an ambulance. As usual, it took longer, so the guy was yelling, and it is true he was bleeding, a little bit more time and he loses his bone. The ambulance came, and three police patrols behind it. (Female, 39)

The participants recognised that those dangerous people are part of their neighbourhood, which makes it more difficult to tackle the issue, mainly due to the fear of possible reprisals. However, they admited that sometimes they help to feed the vicious circle of crime by buying stolen items from the drug consumers who have most likely taken them from another neighbour.

Figure 6.2. Topics with highest number of mentions during focus group and walking interview and for Case 1.





Source: Author's elaboration

In this scenario, the presence or absence of gated communities nearby might not be their main concern. However, participants highlighted that residents from gated communities have no interest in their surroundings; there is no relationship between people from the neighbourhood and those from the gated development. Those feelings of exclusion are fuelled by their own notions

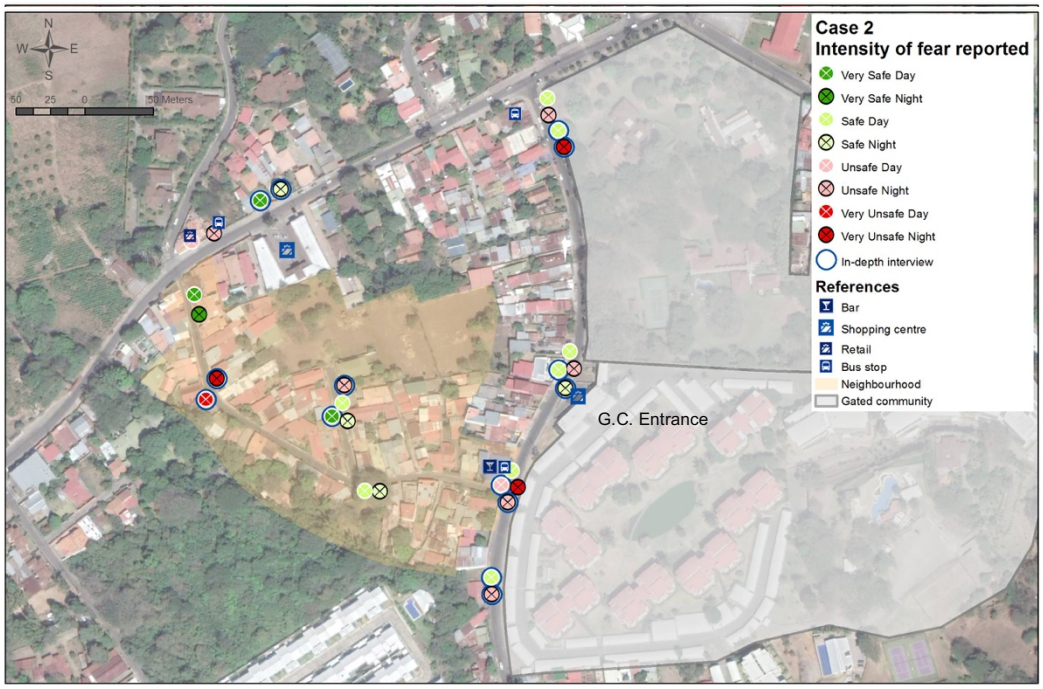
about those who live behind the wall. For instance, they suspect there are people linked to organised crime (drugs' traffic) living in the gated community next to their neighbourhood. The participants stressed this concern because they believe it brings consequences to their neighbourhood and their young people, who are in a vulnerable position. A male participant pointed out 'Unfortunately, the drugs dealers are here [neighbourhood], and people who contact them are there [gated community]'. As explained in Chapter 3, in Costa Rica during the illegal drug traffic transactions (South to North America), a certain amount remains in the country for local consumption. As part of this illegal market, there are organised crime networks that recruit people to sell drugs on a small scale. The neighbours from Case 1 consider that their young people have been recruited for that purpose, therefore they blame residents from the gated community for that situation.

However, the participants mentioned that the physical presence of a gated community beside them does not present a safety issue. In fact, they consider it could attract more police presence and surveillance elements such as CCTV; therefore, it might bring some benefits to their community. Nevertheless, the exclusion feelings and the concerns explained above, imply that the consequences related to residential segregation might affect the perception of their neighbourhood and its perceived safety.

6.2.3. Case 2 [3NBI]

Case 2 has the second-highest level of poverty. Although it has dwellings with 3 NBI, its infrastructure and housing quality are closer to the 2 NBI group rather than the 4 NBI. Figure 6.3 shows the self-reported intensity of fear during the walking interview. In this case, there was a problem with the nature of the participants due to the fact that there was just one male on the walk. This situation was countered by an in-depth interview with a female participant (inside the neighbourhood with a map). The points with a blue circle correspond to that interview which was used to complement the intensity of fear reported in Case 2[4].

Figure 6.3. Case 2: Intensity of fear reported in walking interview



Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

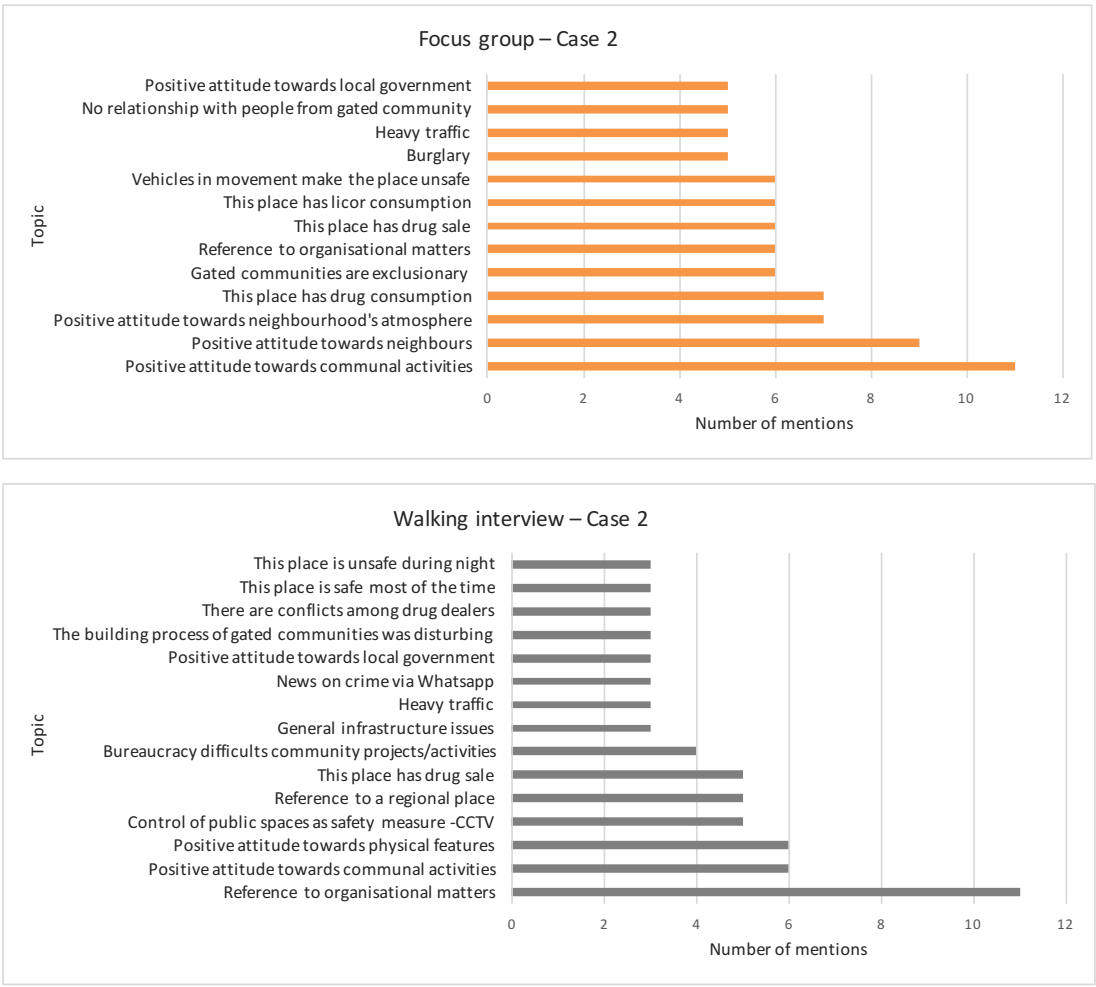
The map shows how there is a general concern about safety during the night, especially along the gated community wall. However, the perception is slightly

[4] For the 'Talk's track' maps in Chapter 7 this interview was not included as it did not have a track; however, its narrative was part of the analysis.

safer at the entrance of the gated community, which has retail shops. In the internal streets of the neighbourhood, the anxiety increases when the geometry of the roads changes and they become narrower.

As shown in Chapter 4, this neighbourhood's participation during the focus group was higher (six participants), than is allowed to triangulate the information obtained in the walking interview and to record new details. Figure 6.4 reveals the most cited issues during the focus group and walking interview. In this case, there were many positive comments about community activities and the neighbourhood's atmosphere. Case 2 has a strong community organisation and the local government has supported their initiatives; consequently, there is a positive association towards that institution. Indeed, this case presents the highest trust in local government among the eight cases. However, during the walking interview a concern was expressed about the tedious bureaucracy process needed to carry out activities in public spaces.

Figure 6.4. Topics with highest number of mentions during focus group and walking interview for Case 2.



Source: Author's elaboration

Sale and the consumption of drugs and alcohol provoke more significant concerns around safety. The residents believe this situation aggravates due to the presence of strangers in the neighbourhood and it could explain the increase in the incidence of burglaries. For that reason, the participants justified the use of CCTV. This neighbourhood is covered by those devices which have been bought by the residents through community activities such as bingo. Although the main objective of those bingo events is collecting funds for the CCTV system, it seems that they have reinforced the social attachment among neighbours, due to them being carefully programmed.

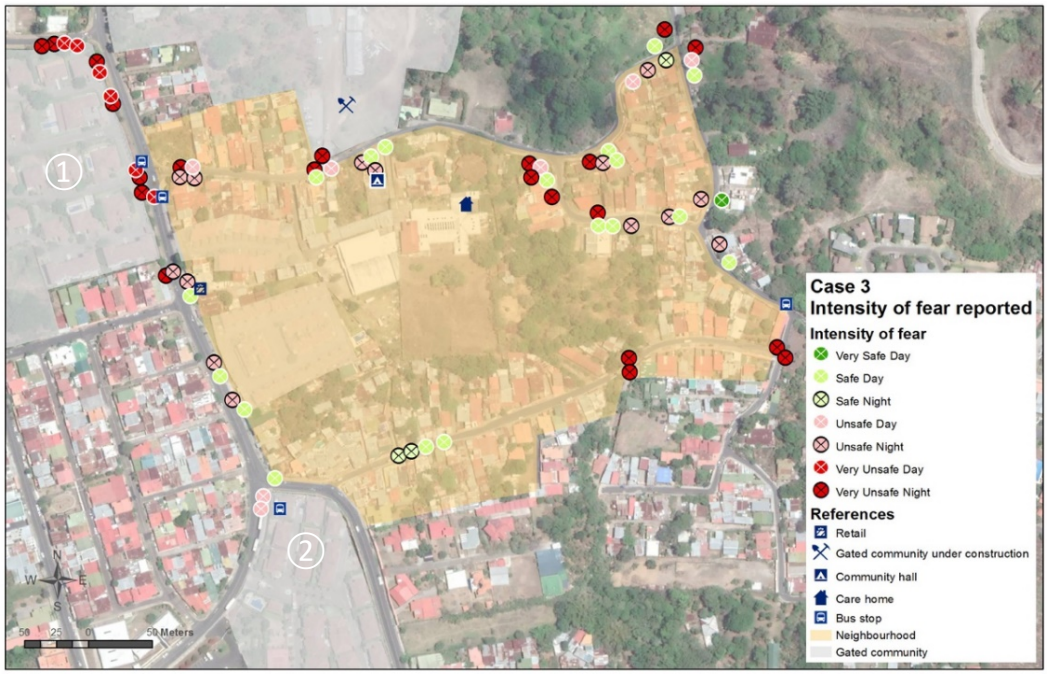
Regarding the relationship with residents from the gated community, participants expressed that they have no ties with those people. They do not know who lives there, they believe those places to be exclusive and that

private security makes it even more difficult to make any contact. They think the only place where they could probably meet them is the church: ‘Even the priest says those people who live in condominiums never go outside; it is hard to ask for help to them; however, they go to church’ (Female, 45). Nevertheless, in the time since the gated community was built more than 20 years ago, they could not remember any approach by them towards their neighbourhood. Participants also referred to the area next to the gated community, a male participant said: ‘I walk looking behind me, to see if somebody is coming if someone is following me’. Likewise, a female participant mentioned: ‘That sector scares me more; I do not want to come across with a motorcycle, a car, anything. It is too isolated’. However, that perception was not homogeneous; two male participants, with more than 20 years’ experience of living there, felt that this sector does not represent a significant security issue. One of those male participants said: ‘I do not feel in that way, maybe because we have many years living here’. Although it might suggest that settlement time could affect fear perception, that outcome was not consistent across the study cases, especially in the area next to the gated community edge.

6.2.4. Case 3 [2NBI]

Gated communities have been increasing rapidly in the area where Case 3 is located. As described in Chapter 5, this neighbourhood is surrounded by two gated communities larger than two hectares, plus one more under construction. It also has two smaller ones inside the main block of the neighbourhood (see Figure 6.5).

Figure 6.5. Case 3: Intensity of fear reported in walking interview



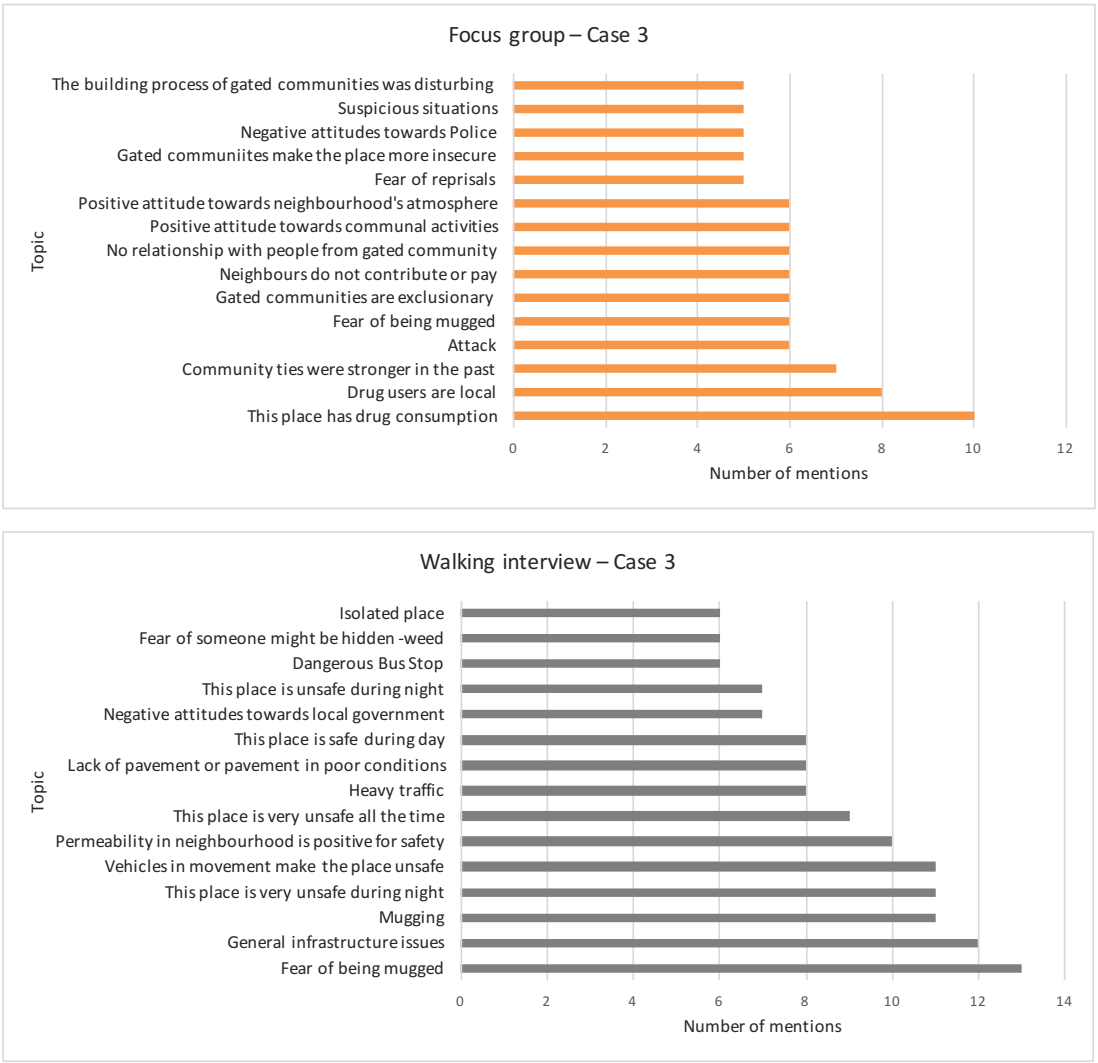
Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

As shown in Figure 6.5, this neighbourhood reveals a high concentration of fear along the largest gated community wall (Gated Community 1). Residents highlighted that edge as the most dangerous sector covered on the walk. As will be addressed in Chapter 7, those perceptions arise as a result of specific features of the built environment in that area and some localised events of victimisation. However, beyond the physical characteristics, there is a social dimension; the participants' negative emotions towards gated communities suggest that feelings of exclusion and residential segregation might be affecting the overall sense of fear. As shown in Figure 6.6, the top comments during focus groups reveal that segregation, alongside a decline in the community ties, were the main areas of concern, although the two factors

might not necessarily be related. The arrival of new people, and especially the uncertainty about who they are, seems to increase their anxiety about the future. Participants mentioned that there is no relationship with people from gated communities; they believe there is no interest from those residents towards their neighbourhood. Also, the neighbours suspect that people linked to organised crime might live in the gated development, especially drugs traffickers. A woman participant said: ‘I do not know anybody there [gated community], it might be living the biggest drug trafficker, and we would never realise’ (Female, 71). This assumption was also found in Case 1, as has already been noted.

Figure 6.6 shows that drugs issues arose many times during the focus group. Those concerns were linked to crimes like mugging and physical attacks. According to them, many of those problems appear next to the gated community’s walls (Gated Community 1 in Figure 6.5). Although they have presented formal complaints to the police and local government, their trust in the justice system is low. They justify their distrust by citing past events of apparent police corruption. Subsequently, they mentioned a fear of reprisals if their complaints are leaked (from the police to the criminals), which, in turn, increases their feeling of vulnerability. One of the participants claimed: ‘If I call the police, they [criminals] would come against me. So, I go to the police, stick up for that, and receive the beating later’ (Male, 58).

Figure 6.6. Topics with highest number of mentions during focus group and walking interview and for Case 3.



Source: Author's elaboration

Participants made it clear that the fast growth of gated condominiums has been overwhelming for them and they felt they were involuntarily enclosured. They suggest that gated communities' safety measures, such as walls and private security, paradoxically, could intensify the crime in their neighbourhood. According to their views, gated condominiums bring together upper-class people who become a magnet for crime. They believe that criminals might not be able to gain entry through the walls, due to sophisticated security systems, and they would attack their neighbourhood instead.

Despite having a strong organisation and a Community Hall in Case 3, participants feel there is no interest from other neighbours to get involved, which affects the attendance at community activities. Residents miss how

vigorous their community relationships were in the past and regret how they have been damaged in the last few decades.

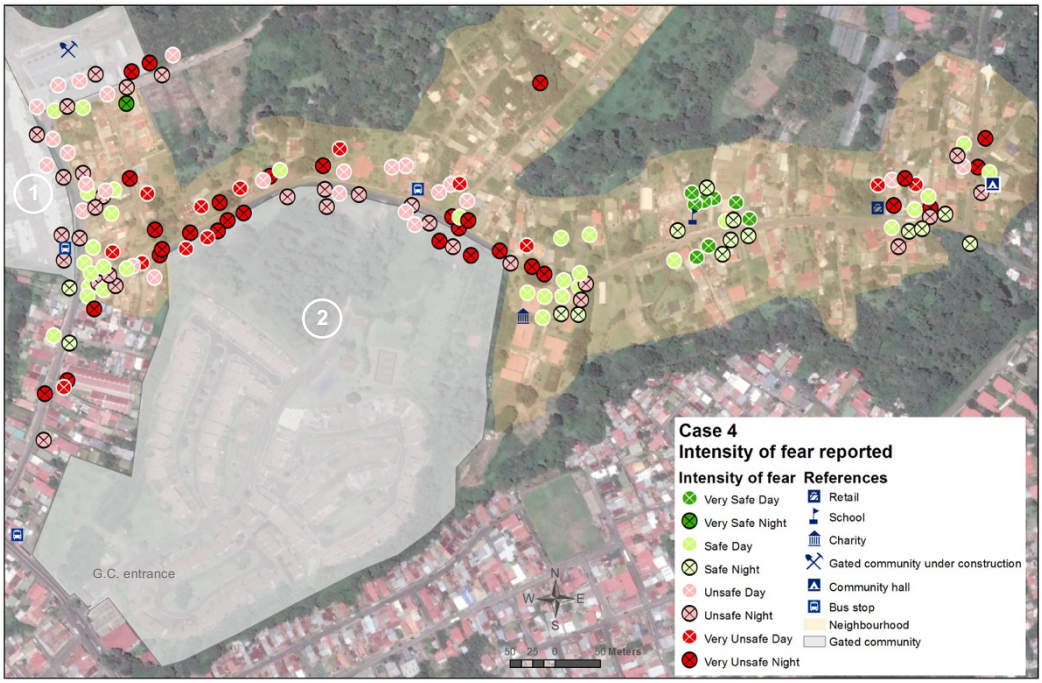
6.2.5. Case 4 [2 NBI]

Case 4 shares similarities with Case 3, for instance, it belongs to the 2 NBI group, it is surrounded directly by two gated communities and one more under construction (see Figure 6.7), it has a Community Hall and an active community organisation. This neighbourhood does not have Community Parks (similar to Cases 1, 2 and 3); however, there is a small plot for that purpose (150 m^2), which was in poor condition and was closed at the time of the walk.

In the area there has been a rapid development of gated condominiums; in fact, there is another one to the south west which does not appear on the map, it has approximately 70 hectares. The overall findings of the distribution of fear are also analogous to Case 3; as Figure 6.7 shows, there is a dominant sense of fear along the gated communities' edge, mainly next to Gated Community 2.

The distribution of fear varies between the edge of Gated Communities 1 and 2. In case number 1, the route next to the gated community is used only by people who live nearby, they can avoid some segments by using internal streets. Although there is a general feeling of unsafety, mainly during the night, in comparison to the area next to Gated Community 2, this feeling is slightly lower. The sector beside Gated Community 2 is a daily journey for most of the participants, because it is the walking route to the main bus stop (south west corner on Figure 6.7) and the route to the public school for people from the west sector. Participants linked the high level of fear in that area to isolation, elements of the built environment and past occurrences of victimisation, such as sexual assault, harassment and muggings (more details in Chapter 7). As they cannot avoid that route, the residents manifested feelings of frustration. In contrast, the safer area reported was that around the public school which has dwellings on both sides and there are no incidents of issues with drugs.

Figure 6.7. Case 4: Intensity of fear reported in walking interview



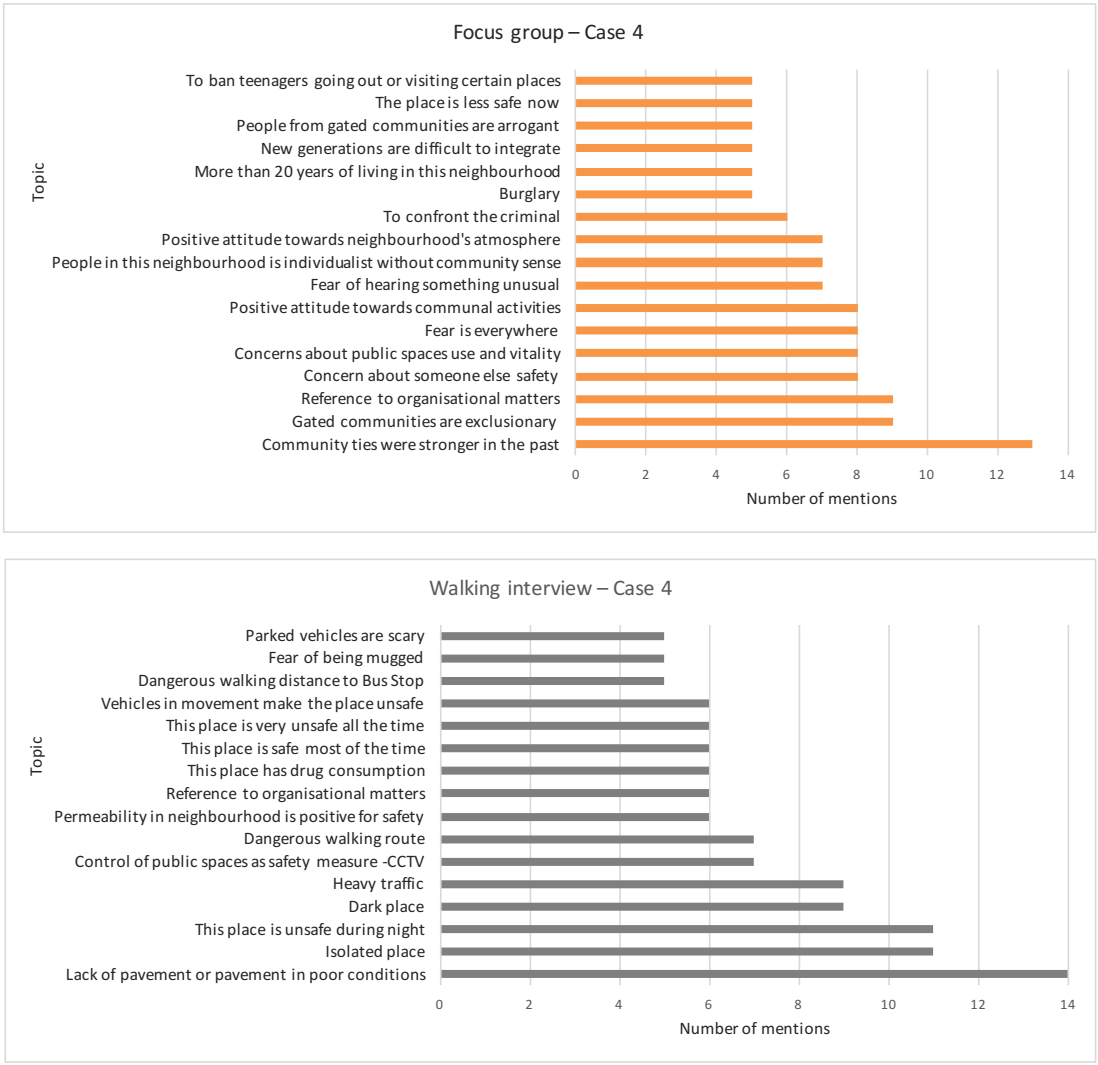
Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

The most prevalent comments from the focus group (Figure 6.8) reveal tensions against gated communities, which might exacerbate the feelings of exclusion. Participants think there is no interest from the people of the gated communities in their well-being or in any neighbourhood issues, nor was there any from the real estate developers. Besides which, they blame the local government for allowing its construction without asking for any communication route, such as adjacent roads. Residents from Case 4 expressed discomfort towards Gated Community 2. They blame the gated development for the lack of pavement along their edges, the serious traffic issues and the cutting down of trees. They have made approaches to the condominum administration to tackle these problems. However, beyond that contact, the participants did not have any acquaintances there, except for one community leader who met someone from that gated community in a regional environmental group.

Similar to Case 3, there is a lack of trust in the justice system and a longing for the old times. There was a consensus that community ties were stronger in the past as there were many needs to be solved. A participant said: 'In that time the community was united, because there were a lot of needs, we did not

have electricity, the road had poor conditions and bad water supply' (Female, 72). The participants who had lived there for more than 20 years missed the feeling of safety they enjoyed in those times.

Figure 6.8. Topics with highest number of mentions during focus group and walking interview for Case 4.



Source: Author's elaboration

Their anxieties include the fear for someone else's safety – usually female relatives, children and teenagers. This neighbourhood also has issues with drugs, both consumers and sellers. They believe that strange sounds during the night are linked to those illegal activities. On the other hand, there is a positive attitude towards community activities and hope that the situation could

improve in the future. They try to organise activities and meetings in order to tackle their issues about safety.

6.2.6. Case 5 [2NBI]

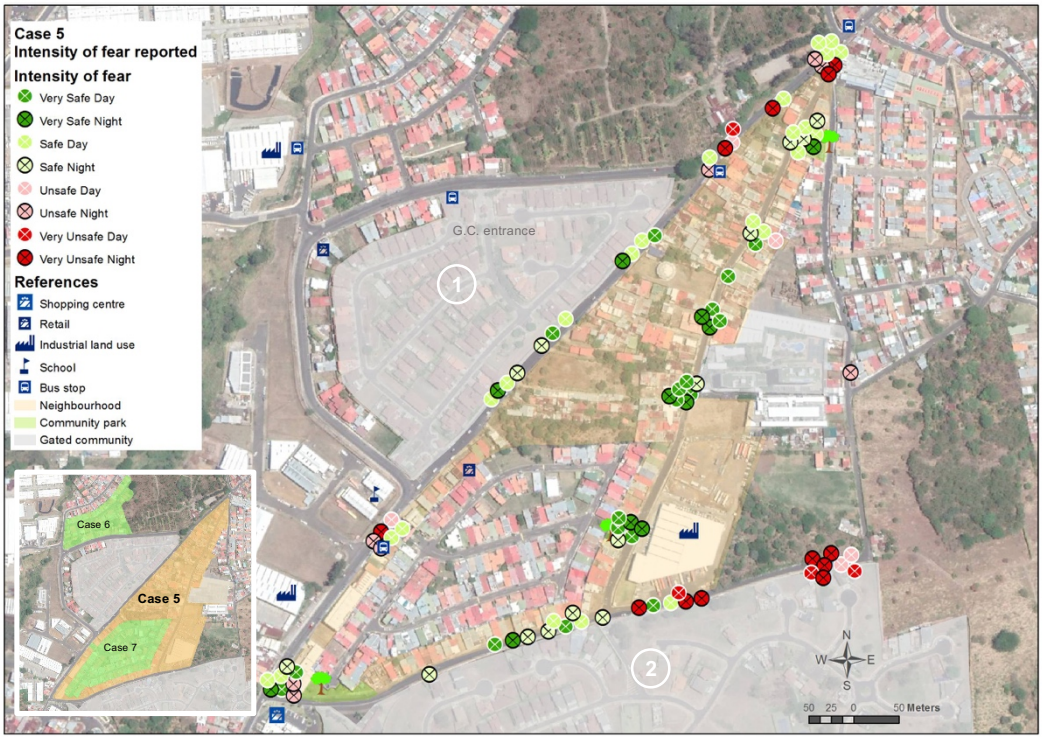
Case 5 shares Gated Community 1 with Cases 6 and 7 (see the small frame in Figure 6.9). This neighbourhood has the same poverty level as Cases 3 and 4; it is surrounded by gated communities, three in total, one tower and two horizontal developments with individual lots. However, this neighbourhood has some differences from Cases 3 and 4. First, Case 5 has three Community Parks which are in adequate condition and equipped to be used by people of all ages, whereas Case 3 and 4 have Community Halls but a lack of parks or open spaces with public access. Parks from Case 5 are fenced and controlled by the Community Board which keeps them open daily from 6 a.m. to 6 p.m. The second difference is the absence of drug issues inside the neighbourhood; although they had them in the past, now it is has been solved and there is just a small segment, beside the neighbourhood, that might have this problem (northeast corner of gated community 2 - Figure 6.9). Finally, the participants voiced a higher level of satisfaction with their neighbourhood which they considered a beautiful place to live. Even though they recognised a reduction in the number of social activities, they consider their community as united and showing solidarity (see Figure 6.10). They have actually organised events for children from their neighbourhood and nearby communities. Those events have taken place in their Community Parks. During the focus group, one participant recalled:

> ‘there were 80 kids, most of them from the other side, few from this neighbourhood … one mother come to us to say thank you, she was almost crying, she had three kids and one baby, she told us that they had never had such a beautiful party. That motivates us even more’ (Male, 46).

Figure 6.9 shows the sense of safety in most of the walk, even next to Gated Community 1. This outcome might be explained by a consolidated sense of community and a limited experience of victimisation in that sector (more details will be given on this in Chapter 7); the participants have lived there for many

years, since their childhood. During the walk, there were many neighbours outside on the street, they were briefly approached by the participants and those neighbours reinforced the participants' statement about the few cases of victimisation next to that wall. People from Case 5 considered that the gated community had not changed their safety levels because that place has been safe all the time.

Figure 6.9. Case 5: Intensity of fear reported in walking interview

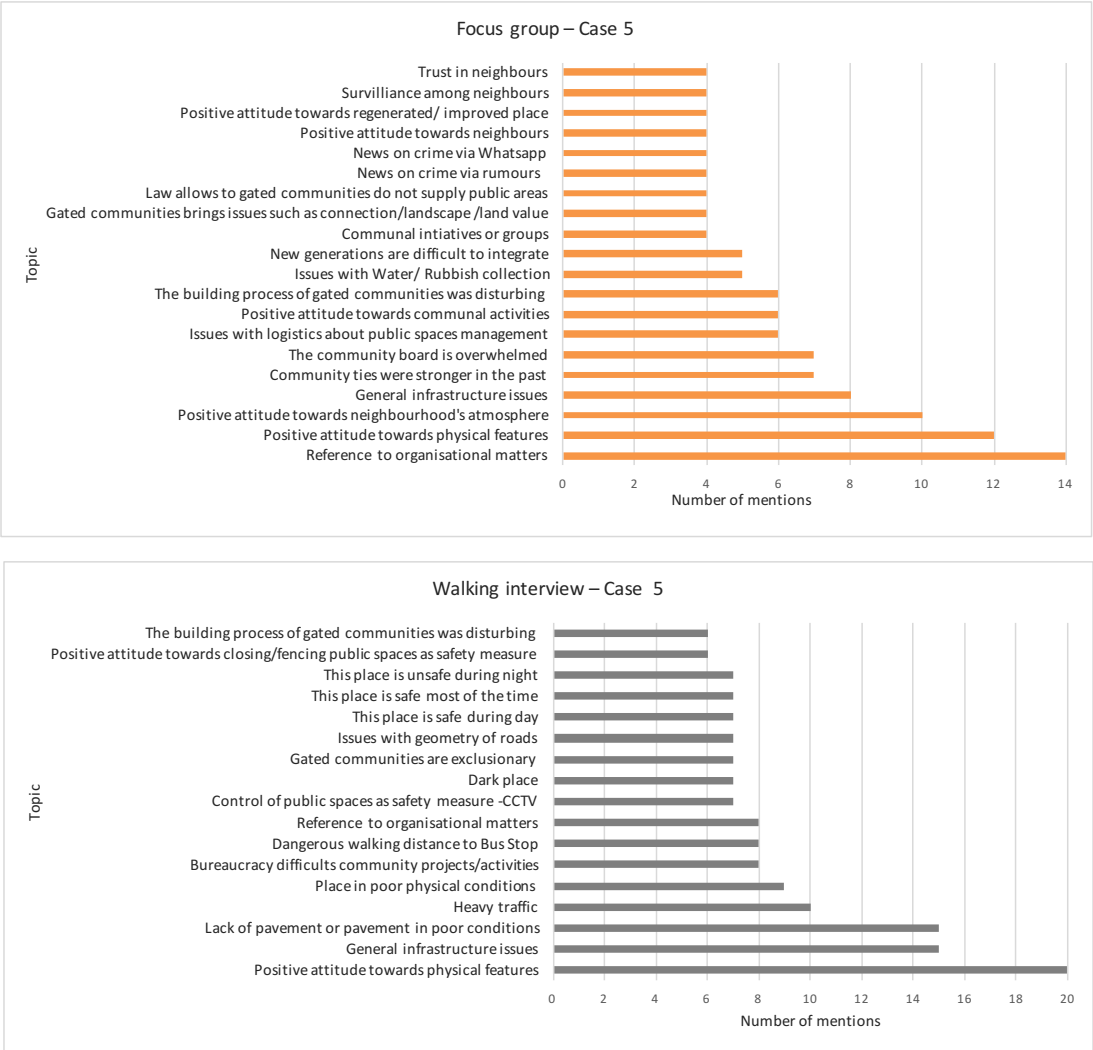


Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

In the middle of the neighbourhood, at east, there is a smaller gated community, which is embedded into the neighbourhood. It does not have a wall and it is a vertical development. Similar to Gated Community 1, it seems there is no concern about safety levels there. However, there were a lot of tensions during the process of its construction. The community complained because the construction operations destroyed their road, which they had built following many efforts by community activities to obtain funds. Something similar happened with Gated Community 2. In this case, in addition to the same issue with road damage, they blamed the construction company for using their parks for storage of materials. Additionally, the tensions increased

when the real estate company promised infrastructure to improve their community public spaces and then did not provide it. Along Gated Community 2, the intensity of fear varies on the periphery, the west side facing houses are perceived as safer, whereas the east end facing industrial land use and vacant lots was seen as very unsafe; this was the only segment of the walk linked to drugs issues, the participants stressed their concern for the isolation of that area.

Figure 6.10. Topics with highest number of mentions during focus group and walking interview and for Case 5.



Source: Author's elaboration

Despite strong community ties, participants expressed feelings of exclusion (see Figure 6.10). They mentioned that people from gated communities are not interested in mixing with them; also, there is no benefit to the community from their construction. They believe those gated communities must contribute

to the neighbourhoods nearby. They blamed the local government and its planning regulations for being permissive with those developments, especially because they are not forced to supply public spaces such as parks and roads or any benefit to the communities nearby.

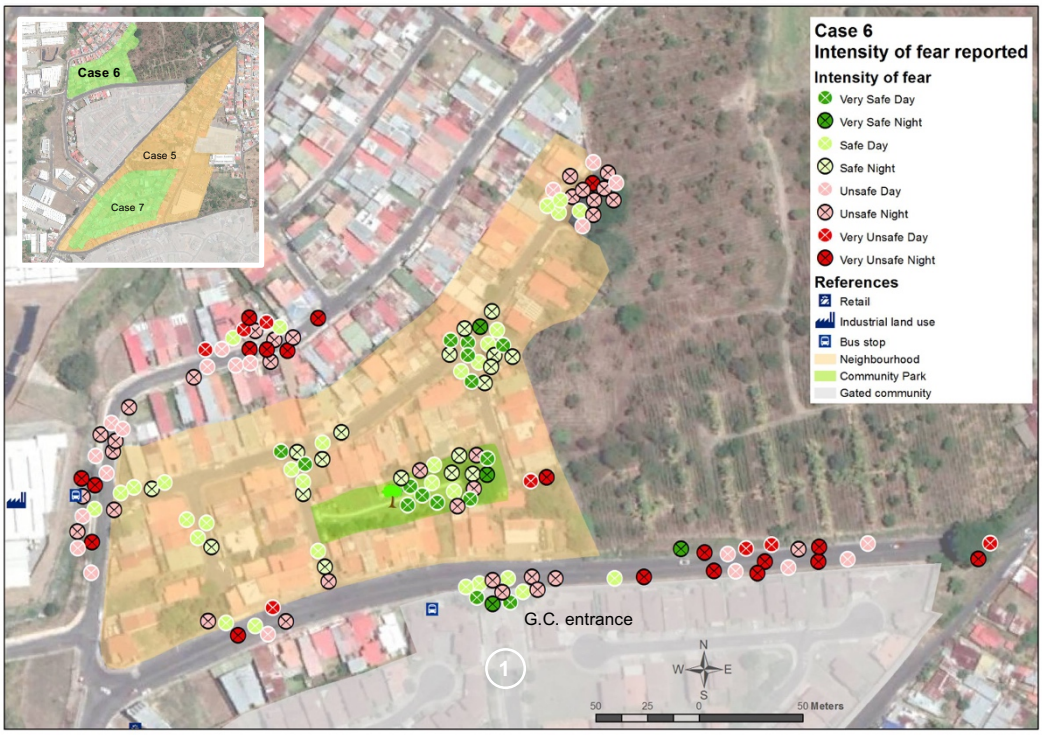
6.2.7. Case 6 [1 NBI]

This case shares Gated Community 1 with Cases 5 and 7. Case 6 faces the north wall (see Figure 6.11). As mentioned in Chapter 5, this place, along with Case 7, has low levels of poverty; that suggests that their incomes are enough to cover their needs.

This neighbourhood has a Community Park in excellent condition, which is fenced and controlled by community leaders. It is open daily from 7 a.m. to 7 p.m. This park was identified as a safe place, especially during daytime hours (see Figure 6.11). Overall, the internal streets of the neighbourhood were considered safe, except by the north street towards the east, next to a vacant lot where, according to neighbours, many strangers come during the night hours. The west side of the same road is also considered dangerous; it has a bus stop next to a factory's fence.

The intensity of fear increases towards the external roads. There is a concentration of red and pink points in the northern neighbourhood beside Case 6. That place, according to the participants, is known for the sale and consumption of drugs and for conflicts among drugs dealers. The side facing the gated community also concentrates high levels of fear in most of the participants, except by the gated development's entrance during the day; the presence of private security there was mentioned as something that reduces their anxiety. However, that main street was pointed out as a place for illegal car racing and that situation causes them much irritation.

Figure 6.11. Case 6: Intensity of fear reported in walking interview



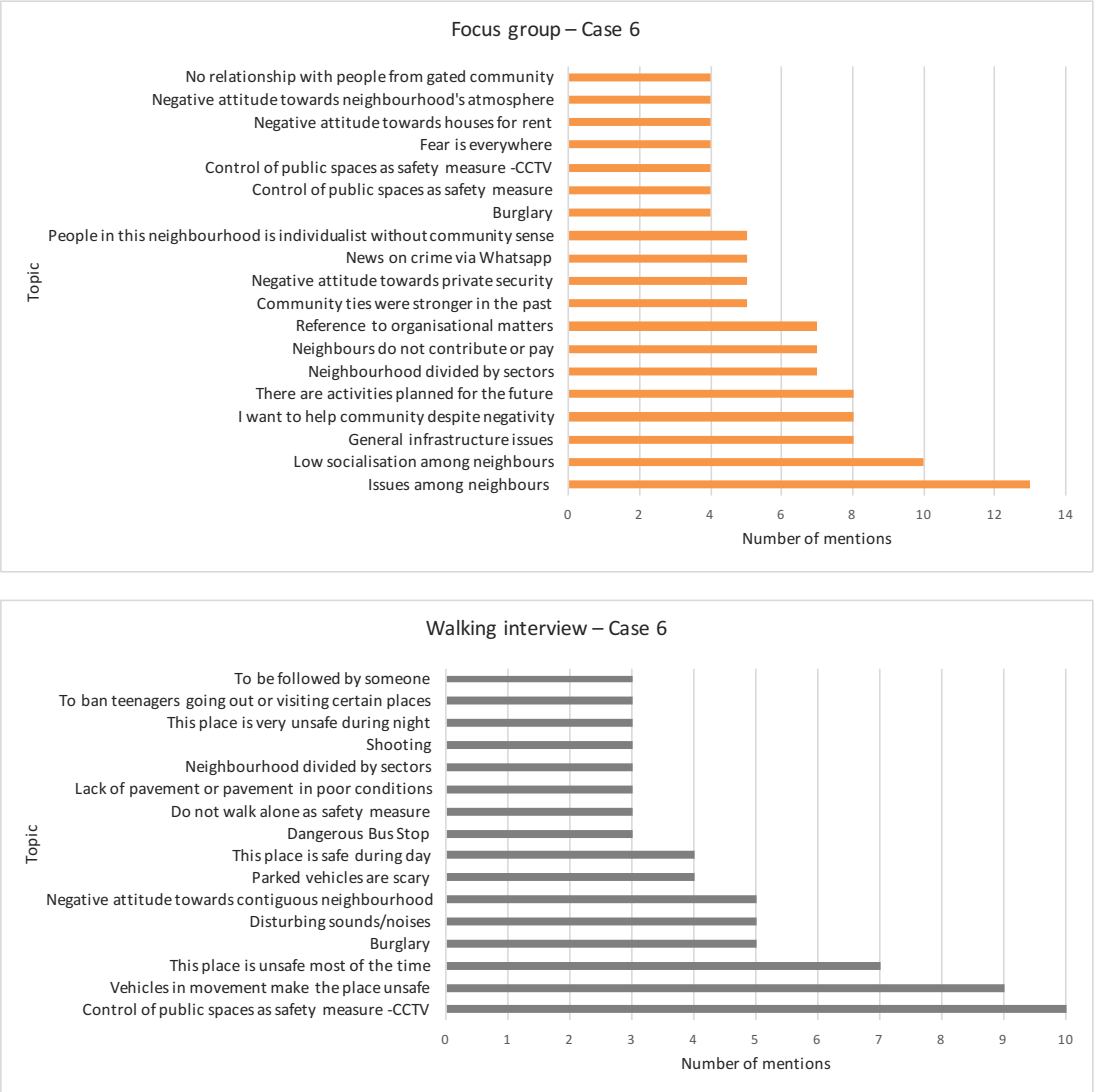
Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

The residents indicated that the neighbourhood was founded around 16 years ago and, over that time, has faced different disputes linked to safety and community organisation. In the past, this place was gated, not with a wall but with an entrance controlled by private security. However, the logistics of keeping that system working provoked many tensions between neighbours. Some of them were against the installation of gates, others refused to pay the monthly fee for security. Against this background, they decided to substitute those gates with CCTV, the private security is been paid for by just some of them and does not control the entrance of people. As they explained, the conflicts regarding safety measures led to a deterioration in the community ties:

> 'There were people who did not like the gates, so they decide to have security guards. One at the upper side and another at the lower side. In this way, the division started, some people disagreed with the private security allocation and monitoring route. We began to create different groups… and we started to divide each other.' (Male, 66)

During the focus group, those differences arose (see Figure 6.12). They emphasised how conflicts among neighbours affect their daily cohabitation. Although it is a small neighbourhood, the participants recognised it is divided by geographic sectors and that they have their own ways of communication. On the other hand, they concurred that there is no relationship with people from the gated community, who they believe are upper-class residents.

Figure 6.12. Topics with highest number of mentions during focus group and walking interview for Case 6.



Source: Author's elaboration

Among the more frequent forms of victimisation, the participants highlighted burglary which they tried to tackle through a CCTV system. During the walk, some neighbours admitted that this measure does not prevent crime but at least helps them to identify criminals later. Actually, in the focus group, there

was not a consensus of opinion about the best approach to improve safety. Some ideas, apart from CCTV, were to get insurance, to avoid going out and to improve the community ties. One of the community leaders insisted that it is possible to recover the positive relationship among neighbours, despite the apparent general lack of interest.

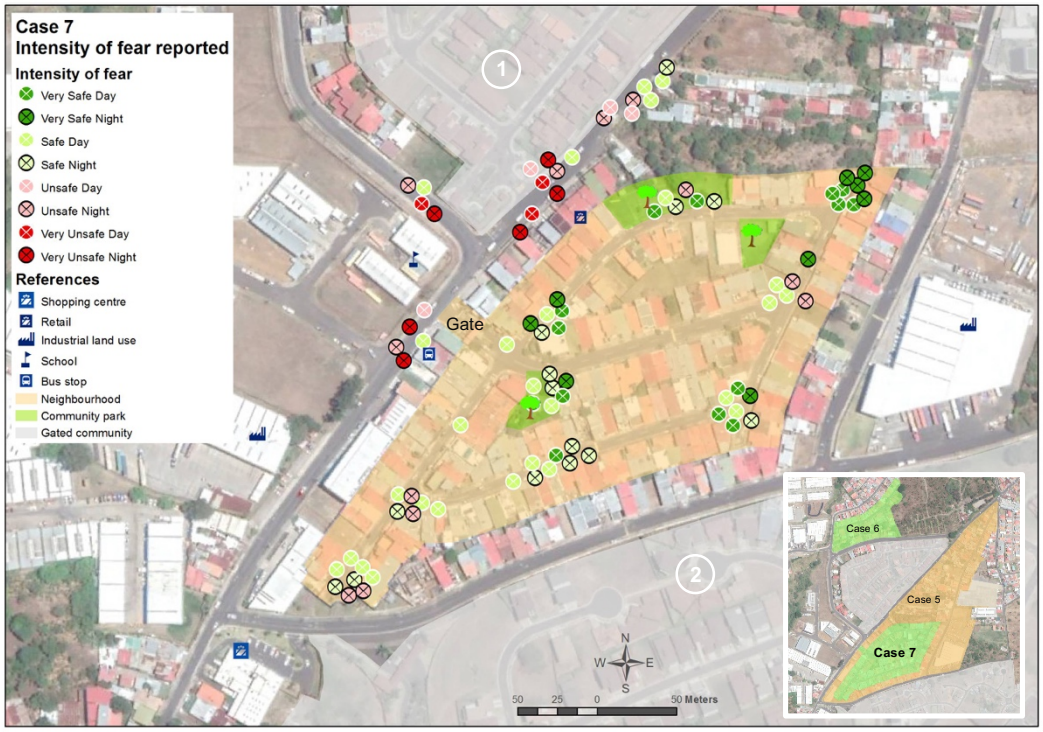
6.2.8. Case 7 [1 NBI]

This neighbourhood, as mentioned in Chapter 5, is the only case with gates at the entrance. The residents commented that originally this place was open, however, they decide to install gates and private security to control access. Despite those gates, streets and parks inside are still public assets as this residential development is not under a condominium scheme but their use from people outside is limited as visitors need to be reported in advance to the security guards.

As shown in Figure 6.13, inside that neighbourhood there is a general feeling of safety during the day. At night, participants considered one place unsafe, where they suspect the sale of drugs is taking place. Although they admit that this issue does not generate a significant daily disturbance, the fact of having unknown cars and strange people entering their neighbourhood raises their anxiety. They also expressed worries at night in those sectors where there is any opportunity to enter clandestinely, for instance, jumping a fence or wall. Those areas are located at the edge of the neighbourhood.

The distribution of fear changes significantly once behind the gate. Participants argue that they feel safer inside their neighbourhood (see Figure 6.13). They consider their community as a safe place for living. Paradoxically, despite the gates, neighbours reported repeated cases of burglary and they blame their own private security which they accuse of negligence and being absent when a criminal is entering. Among their major concerns are the presence of strangers within their community. Sometimes, they believe burglars are complicit with their security guards. Despite that, they still consider it is better to keep the gates and private security, a neighbour claimed: ‘It is quiet, isn’t it? Even when we come by car, stressed, we cross the gate and then it is joy.’ (Female, 51).

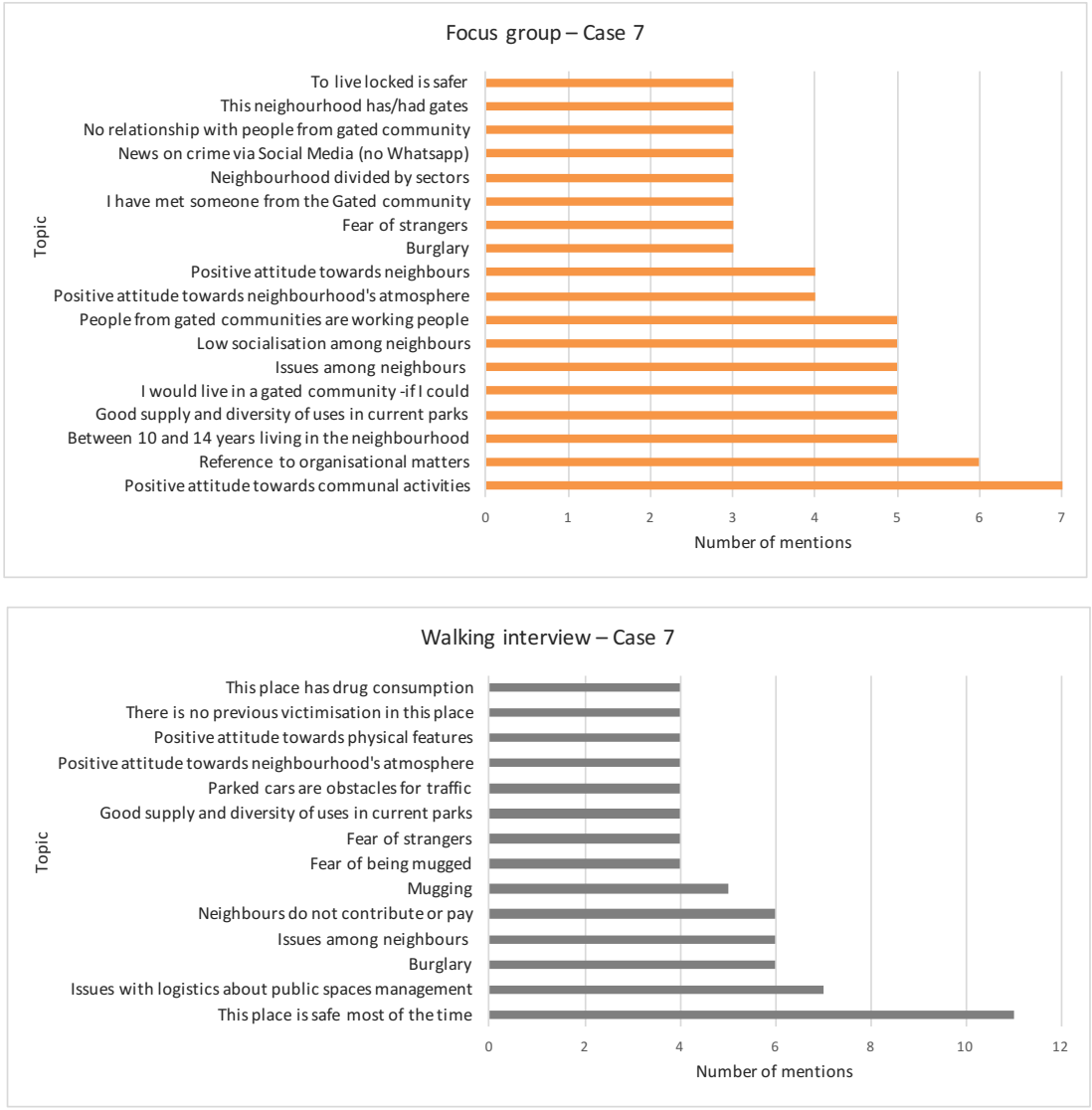
Figure 6.13. Case 7: Intensity of fear reported in walking interview



Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

As the map shows, immediately after the neighbourhood's entrance, next to Gated Community 1, there is an increase in the perception of fear. Some properties facing the gated community have a commercial land use. In that sector, they recalled cases of mugging and robbery. Their impressions along the wall improved as soon as they approached the dwellings of Case 5, which they consider as a safe neighbourhood. Figure 6.14 displays the top topics mentioned by participants during focus groups and walking interviews.

Figure 6.14. Topics with highest number of mentions during focus group and walking interview for Case 7.



Source: Author's elaboration

Case 7 has a strong community organisation which arranges around two or three social or religious activities a year; they also have different types of groups, such as a recycling body and residents who do sports together. However, they reported issues among neighbours, especially with those linked to illegal activities or those who host parties until late. Additionally, they complain about those people who do not pay the monthly fee for maintenance and security, which is not compulsory as they are not under a condominium status. This neighbourhood, similar to other cases, keep their Community Parks fenced, however, they are open until 10 p.m. which allows teenagers and other users to stay there.

In this case, the attitude towards people living in gated communities was more positive compared to the other six neighbourhoods. Although most participants do not have a relationship with people from Gated Community 1, some participants have met them at work or because they are friends of relatives. They also believe that people from the gated community belong to upper-middle class and, most likely, they are working people and professionals who can afford to live there. Despite the overall satisfaction with safety levels inside the neighbourhood, some of them confessed that they would prefer to live in a gated community or in a better place than their current neighbourhood.

6.2.9. Case 8 [0NBI]

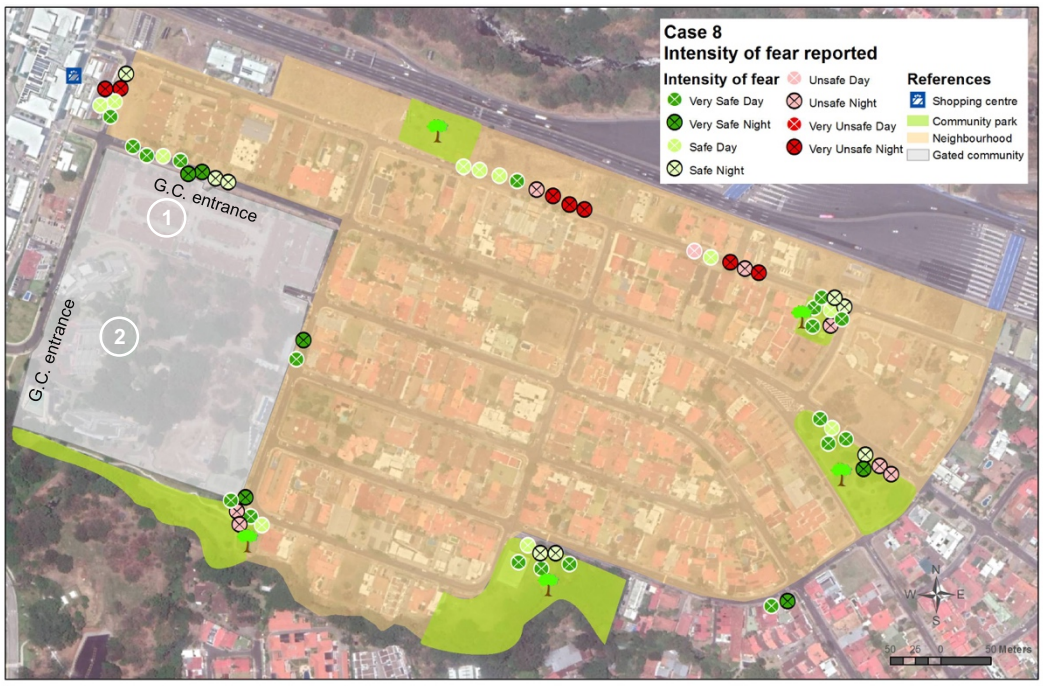
This case is at the bottom of the NBI; which means there is no poverty registered. Its size is considerably larger than the other cases. The walking interview included five of its seven Community Parks; most of them are fenced with a user schedule and they remain open from 8 a.m. to 7 p.m., except for one park which is completely open. This neighbourhood has commercial land uses and one shopping mall; this economic activity is one of the most critical in terms of the participants expressing concerns over safety.

During the walk, residents said that their neighbourhood is, overall, safe (see Figure 6.15). However, the shopping mall (north west corner on the map) has brought anxieties to their community. They mentioned that their north street, beside vacant lots and one Community Park, is being used by customers of the commercial centre for parking their cars. That situation has meant that unknown people are continually coming to their neighbourhood; moreover, this has encouraged some other activities associated with parking. In Costa Rica, when a street is consolidated as an official or non-official place for parking, some informal workers safeguard cars, they are paid by tips from the car's owners. The participants commented that, with the opening of the shopping mall, many streets were used for informal parking. Consequently, the number of informal workers increased and, as they do not have a place for their basic needs, such as toilets or spaces for eating, they use areas within the neighbourhood. That situation provoked much irritation, especially among

residents from Gated Community 1, whose edges were used for the purposes mentioned above.

They clarified that the issues with parked cars next to Gated Community 1 was solved; however, they still persist on north street. As the map shows, there is a higher concentration of fear in that area. Participants stressed that it was the result of their community having that parking, especially the arrival of unknown people and the discomfort mentioned concerning the situation with informal workers. This issue featured highly in both the focus group and the walk; as Figure 6.16 shows, 'issues with land uses' is among the most frequent comments on both occasions. Originally, the shopping mall contemplated access for vehicles from the neighbourhood's side. This was closed thanks to formal complaints and efforts from the Community Board. Currently, the physical routes between the shopping centre and the neighbourhood are just pedestrian.

Figure 6.15. Case 8: Intensity of fear reported in walking interview



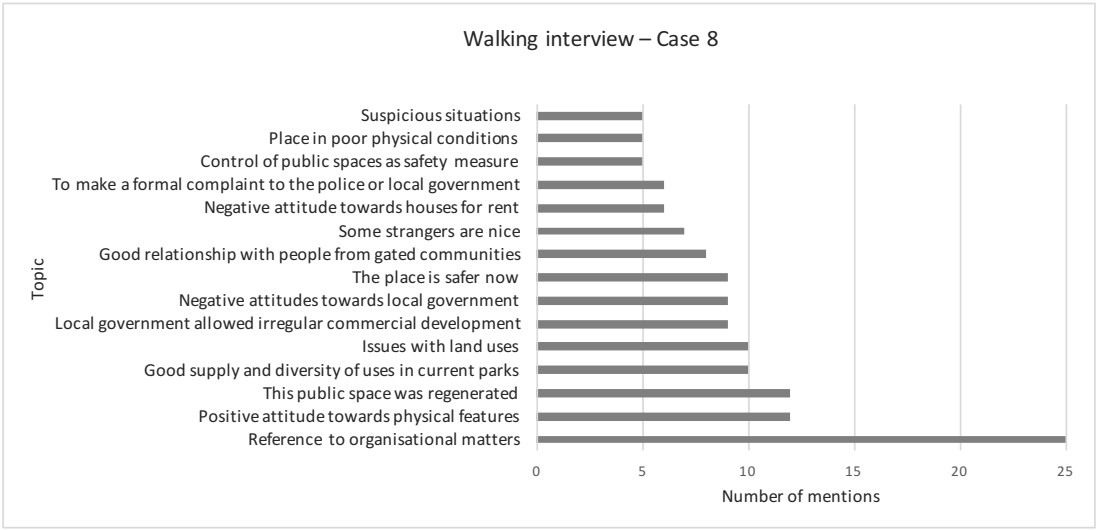
Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

As shown in Figure 6.15, next to Gated Communities 1 and 2 there is a general feeling of safety except during the night at the Community Park next to Gated Community 2. However, the sector next to Gated Community 1 was classified

as one of the safest places during the walk. As shown in Chapter 5, that edge has physical characteristics significantly different from that of the other study cases, such as permeability and green spaces between border and pavement (these details are analysed further in Chapter 7). In addition to these particularities in the built environment, this case contrasts with the other cases because of its ties with residents from the gated developments, as shown in both charts from Figure 6.16 a good relationship with people from gated communities is among the most often mentioned comments. That relationship goes beyond casual encounters, there are friendships and both are members of the community organisation (as described in Chapter 5). They contribute to the monthly fee and they have worked along with the Community Board in managing the neighbourhood's affairs.

Figure 6.16. Topics with highest number of mentions during focus group and walking interview and for Case 8.





Source: Author's elaboration

This case has other particular characteristics. The CCTV systems were not often mentioned as a precautionary measure against crime. Instead, they emphasised the use of formal channels for reporting incidents, such as letters or meetings with senior officials. A participant recalled: ‘Once, the most wanted criminal in Costa Rica was here…For that reason, the Minister of Safety came. We did strong work ...Those things have strengthened this place, but safety issues are delicate’ (Female, 51).

Despite those strategies, there is dissatisfaction with the performance of local government, as noticed in the walking interview chart. They mentioned that years ago the Community Board had to struggle to make objections to impending urban interventions in their neighbourhood, which they considered favoured commercial interests supported by the local government.

All those actions suggest a structured community organisation. According to some members of that group, the board has been in charge of managing the improvement of parks and other elements of the neighbourhood. This community also has clear regulations over their public spaces. Their parks are larger than the rest of the cases and they encompass diverse sport and leisure activities for all age groups. This situation attracts people from outside the neighbourhood, who come for training, to play with their children or even to film advertising shoots. Contrary to the situation portrayed at the commercial condominium, the strangers who come for recreation purposes seem to be welcome. In fact, the participants from this neighbourhood apparently have a broad openness towards unknown people in their public spaces.

> ‘See that girl running, even if it is dark already. You can see people running at 7 pm, 8 pm. I have run at 9 pm. Why do you see this place so calm?. Because traffic was controlled, so, this place remains as a neighbourhood. Here, we have run groups, cycling groups for training, people from companies. That it is very nice!’ (Male, 37)

In the same way as in other neighbourhoods, there is a concern about houses for rent. As shown in Figure 6. 16, this is a safety issue for participants. They argue that many people from their neighbourhood want to move into a gated community and put their neighbourhood’s house for rent, but they own big

dwellings, therefore they struggle to find someone who can afford to pay the lease. This situation means that those houses might be let to anyone, regardless of their criminal background. They suspect that many of those leased houses have been occupied by people doing illegal business. The participant's perceptions about the significant proportion of houses for rent was corroborated in Chapter 5, as this neighbourhood has the highest proportion of dwellings for rent or already rented.

In spite of that, participants admitted feeling grateful for living in a beautiful place which has been enhanced over the years. For those with less than five years living there, the safe conditions of the area are significantly better than the metropolitan average. However, some of the participants, mainly those with more than twenty years living there, mentioned that they would prefer to live in a gated community because they feel the physical openness of the neighbourhood puts them in a vulnerable position.

6.2.10. Could gated communities provoke a distortion in fear intensity?

Across the eight study cases, it was possible to identify pre-existent fears which might be independent from the presence of gated communities. Those fears were described by participants as general national problems, as someone mentioned 'crime is everywhere'. On the other side, there are specific fears linked to gated communities directly; for instance, in Cases 3 and 4 participants blame residents from gated communities for attracting delinquency and creating isolated places. Other fears are connected to perceptions of illegal economic activities, apparently linked to people living within gated communities. As mentioned, in Cases 1 and 3 people believe that drugs traffickers live there. In Case 8, residents connect their perceived lack of safety to the presence of properties for rent, as the neighbourhood has been losing inhabitants because they believe residents prefer to move into a gated development. Drugs issues were a general concern, as will be addressed in Chapter 7, in many cases, the gated community wall facilitates those activities. This means that some pre-existent fears, related to the perceived national

situation, are amplified by the presence of gated developments, as will be detailed later.

People from Cases 2, 3, 4, 6, 7 and 5 (partially) pointed out the indifference from gated communities' residents towards their surroundings. In Cases 3, 4 and 5 the lack of contribution from gated community developers to the physical features of the neighbourhoods nearby was highlighted.

Tables 6.2 and 6.3 summarise the intensity of feelings revealed by participants on the individual maps; the intensity of colours are proportional to the values, green is linked to security and red to insecurity. The percentages correspond to the proportion of stickers by case per sector. Table 6.2 shows the figures in the internal roads of the neighbourhood and immediate surroundings without any contact to the gated community's edge. Table 6.3 displays those sectors from the neighbourhood and surroundings in direct contact to gated communities.

Table 6.2 might encompass those pre-existent fears independent from the existence of the gated community nearby but also some are indirectly attributed to the gated developments. Table 6.3 reveals how those fears fluctuate when the walk was carried out next to the gated community.

Table 6.2. Percentage of stickers allocated by participants on individual maps indicating perceived safety along neighbourhoods and their surroundings without contact with gated communities.

No contact with gated communities' edge								
Intensity of fear perceived	**Case 1**	**Case 2**	**Case 3**	**Case 4**	**Case 5**	**Case 6**	**Case 7**	**Case 8**
Very secure -DAY	2.9%	21.4%	2.2%	9.5%	17.3%	11.0%	22.2%	30.2%
Very secure -NIGHT	1.9%	7.1%	0.0%	1.2%	11.5%	1.7%	14.3%	4.7%
Secure - DAY	26.7%	14.3%	33.3%	28.6%	28.8%	22.0%	28.6%	20.9%
Secure - NIGHT	8.6%	21.4%	6.7%	16.7%	11.5%	15.3%	19.0%	14.0%
Insecure - DAY	14.3%	7.1%	8.9%	7.1%	5.8%	13.6%	1.6%	2.3%
Insecure - NIGHT	15.2%	14.3%	20.0%	14.3%	13.5%	22.9%	9.5%	11.6%
Very insecure - DAY	5.7%	7.1%	0.0%	8.3%	1.9%	4.2%	1.6%	0.0%
Very insecure - NIGHT	24.8%	7.1%	28.9%	14.3%	9.6%	9.3%	3.2%	16.3%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total of stickers n=524	n=105	n=14	n=45	n=84	n=52	n=118	n=63	n=43

Source: Author's elaboration

Table 6.3. Percentage of stickers allocated by participants on individual maps indicating perceived safety along neighbourhoods and their surroundings in direct contact with gated communities.

	Next to gated community's edge							
Intensity of fear perceived	**Case 1**	**Case 2**	**Case 3**	**Case 4**	**Case 5**	**Case 6**	**Case 7**	**Case 8**
Very secure -DAY	10.0%	0.0%	0.0%	0.0%	20.5%	6.5%	0.0%	37.5%
Very secure -NIGHT	2.5%	0.0%	0.0%	0.0%	11.4%	6.5%	0.0%	25.0%
Secure - DAY	27.5%	42.9%	11.5%	11.6%	20.5%	16.1%	32.1%	12.5%
Secure - NIGHT	7.5%	7.1%	0.0%	0.0%	18.2%	0.0%	10.7%	12.5%
Insecure - DAY	15.0%	7.1%	11.5%	27.5%	4.5%	16.1%	10.7%	0.0%
Insecure - NIGHT	35.0%	28.6%	19.2%	26.1%	2.3%	19.4%	21.4%	12.5%
Very insecure - DAY	0.0%	0.0%	23.1%	8.7%	6.8%	9.7%	10.7%	0.0%
Very insecure - NIGHT	2.5%	14.3%	34.6%	26.1%	15.9%	25.8%	14.3%	0.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total of stickers n=268	n=40	n=14	n=26	n=69	n=44	n=31	n=28	n=16

Source: Author's elaboration

Those figures suggest a distortion in the intensity of fear with the physical proximity to the gated community. In Cases 2, 3, 4 and 7 participants did not use any 'very secure' stickers next to the gated community wall, which contrasts with the perception on the internal roads of the neighbourhood. Although participants in Case 3 considered few areas 'very safe' in general, there is a notable difference in the proportion of 'safe' places next to the gated community and away from it. Also, next to the wall, it can be noticed there is an increase of 'very insecure-NIGHT' in most cases, except for at the ends of poverty distribution (Case 1 – 4 NBI and Case 8 – 0 NBI).

As shown, Cases 1, 5 and 8 have results different to the rest. Case 5 attracts attention as it belongs to the same poverty group as Cases 3 and 4 (2 NBI) but, as Table 6.2 and 6.3 display, participants felt 'very secure' almost in the same proportion, or slightly more so, next to the gated community wall. As mentioned earlier, it may be happening because they do not have issues with drugs inside the neighbourhood, the community ties are strong and overall there are positive opinions about the neighbourhood environment (this last one might be a cause as well as a consequence).

On the other hand, Case 1 which has the highest level of poverty, shows a notable level of fear during the night, next to the gated community; however, the level of anxiety inside the neighbourhood is still more substantial, as participants acknowledged, the level of violence inside was chief of their concerns and they feel that next to the gated community there are more possibilities of surveillance. In Case 8, which has no poverty, the gated communities nearby have the same NBI conditions (0 NBI) than the

neighbourhood. This case has the lowest residential segregation of all cases; the participants described a sense of trust in both directions: from the gated communities to the neighbourhood and vice versa.

6.3. Teenagers: Community ties and residential segregation.

This section explores whether teenagers' perceptions have similarities with adults' feelings in two of the study cases. Melde (2011) points out that research on fear of crime have been focused mainly on adult samples; having this in mind, two focus groups with teenagers were carried out. As detailed in Chapter 4, the walking interview was open to anyone older than 14 years; however, there was no attendance of teenagers, perhaps because they do not share the same community communication channels as adults. These additional focus groups were performed with teenagers from Case 1 (4 NBI) and Case 4 (2 NBI).

6.3.1. Adults views about teenagers' behaviour

Before showing the teenagers' perceptions, during both focus groups and walks adults made some comments about the teenagers from their neighbourhoods. Table 6.4 shows some of those thoughts classified by theme.

The data from this and the other tables of this chapter follow the legend displayed below:

Colour legend Attitude			Number of mentions
Positive	Neutral	Negative	
			0
			1 to 3
			4 to 6
			7 to 9
			10 or more

Table 6.4. Adult views about teenagers from their community

Comments from adults about teenagers	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Public Spaces								
Concerns about supply of public spaces for teenagers and kids								
Public Spaces are used by teenagers								
People from other neighbourhoods do not want our kids in their parks								
Socialisation take place on the street -teenagers								
Social life								
Teenagers from this neighbourhood entertain with mobile and tech								
Teenagers from this neighbourhood do not like go out								
Teenagers from this neighbourhood do sports and socialise								
Use of alternative spaces for socialisation - teenagers								
Warning from adults								
To ban teenagers going out or visiting certain places								
To warn teenagers								
Others								
There are few teenagers in this neighbourhood								

Source: Author's elaboration

In general, adults from Cases 1 to 6 highlighted the lack of public spaces for teenagers. They mentioned that sometimes young people visit alternative places such as private football fields to do sports or socialise. Some believe that teenagers might not be interested in going out or socialising. The infrastructure of Cases 5, 7 and 8 seems to be used by teenagers, as shown in Chapter 5, these neighbourhoods have more diversity of facilities than the rest of the cases.

Many participants had teenage sons and daughters, therefore they confirmed the need for precautionary measures and for warning this population; for instance, banning teenagers staying in some areas of the neighbourhood without supervision. Many of those prohibited places were located next to a gated community. The adults expressed their concern about isolation, drugs and alcohol consumption as well as previous victimisation episodes in those areas, mainly in Cases 2, 4 and 6. Residents from Case 3 mentioned that, because of the drug conflicts there, teenagers cannot gather in public spaces because it is very likely that the police will arrest them, particularly if they meet at the corner next to the gated community which is a place associated with the sale and consumption of drugs. In Case 1, apart from the lack of spaces for the young, the adults mentioned the hostility expressed by people nearby when their children want to use parks from their neighbourhoods. In this regard, the inequality in infrastructure might be aggravated by the stigmatisation of belonging to a low-income community.

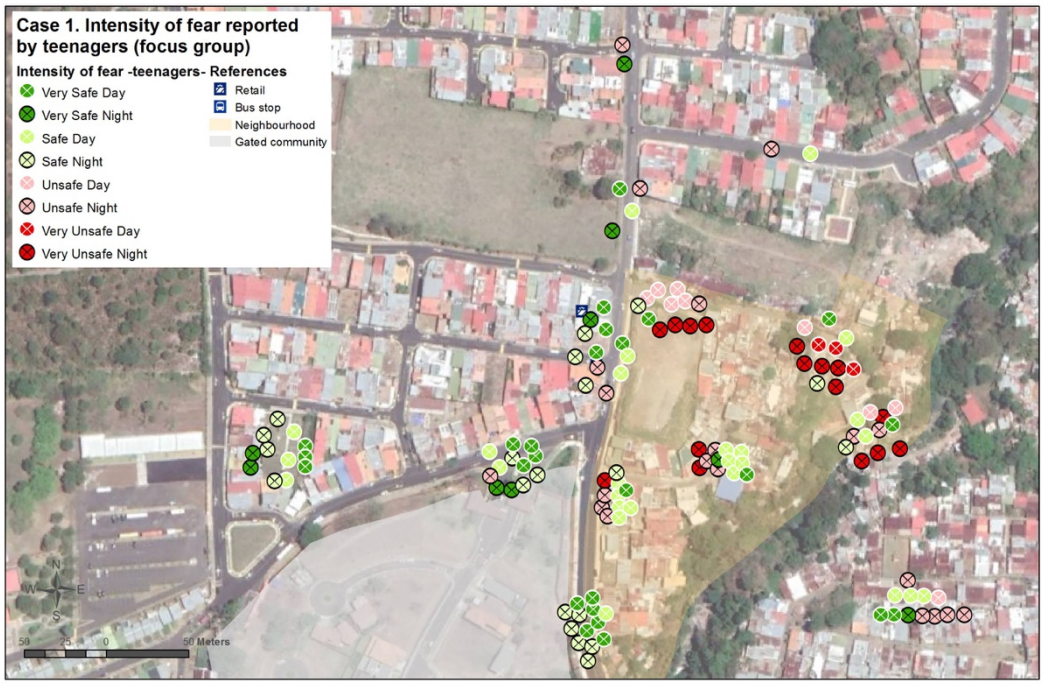
6.3.2. Teenagers' views: Fears and segregation

As mentioned, the focus groups with teenagers were carried out for Cases 1 and 4. For this activity the young people had a map and the same type of icons previously used during the walk with adults (more details about methods in Chapter 4).

6.3.3. Case 1

In the focus group for Case 1, six teenagers participated, two girls and four boys. As shown in Figure 6.17, their perception about safety and unsafety was not very different from the adult's views. In fact, they classified some parts of their neighbourhood as more insecure than the adults did, mainly the corner located between an internal road and the gated community. In contrast, outside of the neighbourhood they reported more safe places than the adults, including next to the gated community. However, it is important to recall that, methodologically, this approach is different from the one for adults who performed a walking interview.

Figure 6.17. Intensity of fear reported by teenagers from Case 1 during focus group.



Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

The teenagers said that they feel safe outside their neighbourhood because there are many people outside and cars passing constantly. Contrary to the adult's perspective, the police presence on the main street (next to the gated community) does not give them any sense of security. In fact, on several occasions, they expressed their distrust of the police, as shown in the following comments:

> Boy 1: The police do nothing.
>
> Boy 2: Instead, the police could mug me! [laughs], I think they pass through the neighbourhood once a year.
>
> Boy 1: No, they pass a lot, but they do nothing. See, the police pass in front of the guys smoking [marihuana] and they say: Hello, everything fine? [laughs].
>
> Girl 1: Anyway, the police never do anything.

Given this situation, the teenagers feel even more unprotected inside of their own neighbourhood. They are aware of the sale and consumption of drugs during both day and night, a boy said: 'I have seen how they sell it [drug] in small boxes of Tic Tac [Mint Drops]'. After 8 p.m. they describe the situation as even worse, a girl said: 'During the night if you are walking, in each stop you can hear a … [sound of someone aspiring cocaine]'; to that a boy replied: 'But it is not just that, everybody has a gun'. Each young person manages in a different way when confronted by people considered as dangerous. The girls prefer to avoid any eye contact and try to stay away, a boy said that he just runs away when he sees dealers. The rest prefer to ignore them or occasionally greet them.

Similar to adults, the north part of the neighbourhood was considered as the most violent. This situation causes a lot of anxiety in these young people especially because they have been witness to many dangerous situations, a boy said: 'One day someone was shot in front of my house', another boy replied: 'So, if you go out, you come back with four bullets stuck to you'.

The teenagers mentioned that they also discovered when a crime had happened through the news and social media, mainly Facebook, YouTube and Skype.

Regarding community relationships, both boys and girls noticed some hostility towards young people; they reported some experiences of verbal abuse and physical fights. They mentioned that boys use the street as a soccer field. That situation led them to constant confrontations with upset neighbours. In contrast, the girls expressed that they never use the neighbourhood's streets for socialising or playing; they prefer to stay at home using their mobiles. In fact, they seem to be more active in social media than boys.

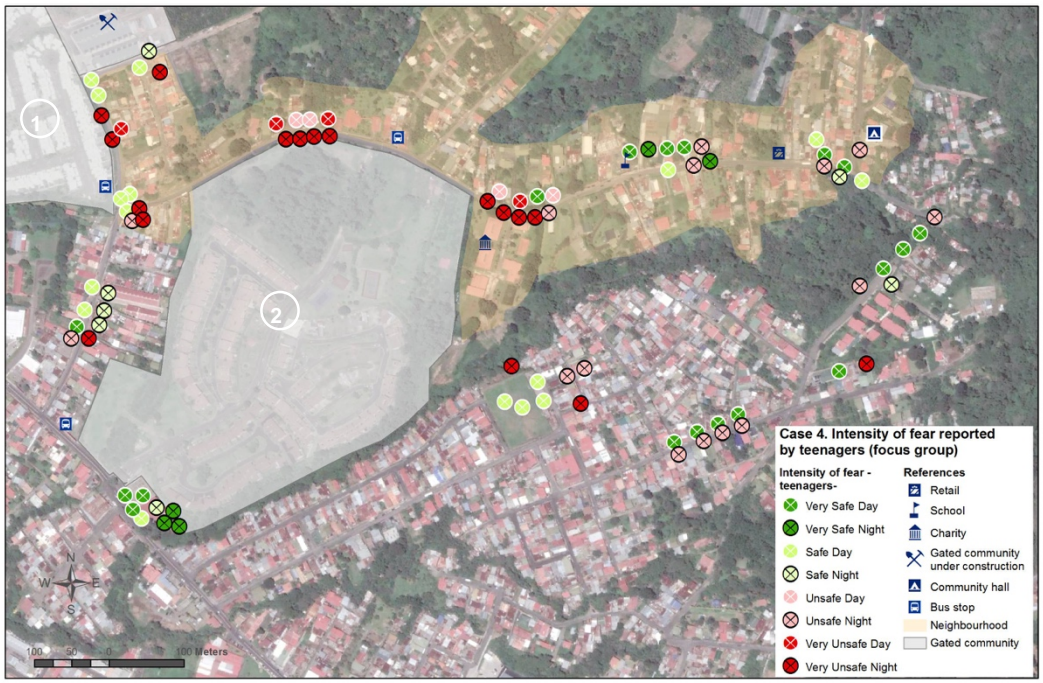
Away from the neighbourhood, the youths entertain themselves in a variety of ways. Sometimes they use the parks nearby, mainly during the school break. However, most of them agreed that frequently they go to the shopping mall for socialising. They also enjoy using the school facilities after classes, mainly the green spaces which they use for listening to music and picking fruits from trees. At this point, they shared positive memories about their childhood, especially when they played in the parks nearby. Although during the walks with adults they noticed the lack of public spaces for young people, there was no clarity about what the teenagers did for entertainment, neither did they discuss the level of exposure of this population to violence; however, as mentioned, there was a general concern about young people being recruited for organised crime.

6.3.4. Case 4

The second focus group with teenagers was carried out in Case 4. Four young people participated, three girls and one boy. The intensity of fear of crime reported is shown in Figure 6.18. Similar to adults, there is a substantial degree of fear next to the Gated Community 1, whereas, next to Gated Community 2, the fear intensity is slightly higher than for adults. They attribute those feelings to the place's isolation and the possibility of seeing an unknown car or motorcycle. The association of those vehicles to potential crimes such as muggings or abduction were also manifested by the adults from the same neighbourhood (see Chapter 7). These teenagers have almost the same

communication channels as adults for inquiring about crimes, such as rumours and social media, especially Facebook pages.

Figure 6.18. Intensity of fear reported by teenagers from Case 4 during focus group.



Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

Along the internal streets of the neighbourhood, the young people had a perception of fear close to that of the adults but the teenagers did not make any significant distinction among those sectors identified by adults as points for selling drugs. However, they recognised that they only visit those places accompanied by an adult.

Most of the places that the teenagers found dangerous are related to the presence of people who can be either drug consumers, dealers or thieves. In order to avoid any encounter with those people, the participants mentioned that they hide their belongings, change walking routes, cross the street or avoid eye contact with them. A girl mentioned: 'Apart from avoiding those places, do not show the cell phone, to walk fast and do not make any eye contact with anybody'. They said that their main fears are related to any type of physical harm, as a boy expressed: 'Obviously, I am concerned about someone stealing my cell phone, but even more that someone hurts me'. They expressed that they feel safer in close proximity to friends' houses.

In contrast with Case 1, these teenagers describe their community relationships as positive. They also mentioned having friends and relatives in the neighbourhood. However, they share with Case 1 similar opinions towards the police. Mainly about its efficiency, despite having a police station very close, a girl said: 'If they come, it is half-hour late, you call them and, they come half-hour late', the boy replied: 'Unless it is a murder, so they come a bit faster, but they delay all the time'. Given this scenario, the teenagers made it clear that they do not feel that the work of the police is something that improves their safety.

This neighbourhood, similar to Case 1, does not have a Community Park. Teenagers mentioned that their favourite places for gathering are shopping malls, also they attend parks in neighbourhoods nearby and some of them are part of church groups. Both girls and boys expressed the need to spend time with their mobiles on social media, as well as many hours in friends' houses. Despite the fact that some of their parents were in the adults' focus group and said that youths did not go out, these young people mentioned that they do but they come back home walking in a group, as they feel a little scared, especially if it is dark. They stressed the hope of someday having a park in their own neighbourhood, with spaces for doing sports and gathering.

6.3.5. Residential segregation in teenagers

Teenagers of both neighbourhoods showed similar residential segregation to the adults. They do not know people from the gated communities nearby. During the focus group, using a map, the teenagers were asked to put a point on each friend's house. As shown in Figure 6.19, although their friendship network goes beyond their own neighbourhood, there is no contact with young people from the gated communities under consideration. The only exception corresponds to a teenager from Case 4, whose mother is a hairdresser with a client in the gated development but in that case his friend was an adult.

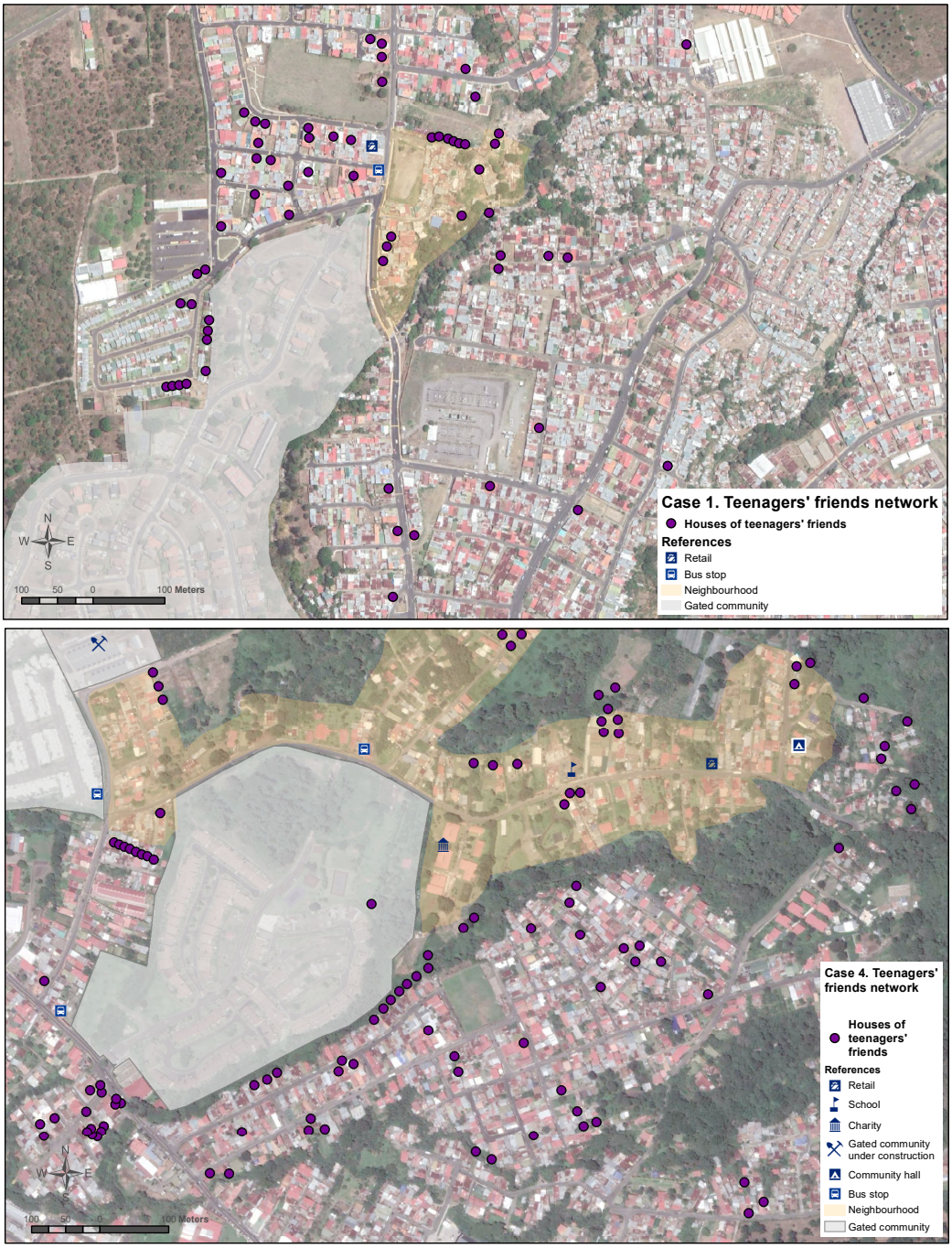
Their attitude towards people who live inside those gated communities was very similar to the adults in both cases. In Case 1 the young people said that many 'narcos' [drug traffickers] lived there; a girl said: 'I have been told that supposedly it is a very expensive condominium…people said that it is there

where narcos live, and I said oh God! [laughs]', a boy replied: 'You never see anyone coming in or coming out [from the gated community]'. When they were asked about those residents, they believed that they were upper-class people, as the adults also mentioned. However, the teenagers show a more intensified opinion of those people, 'they are thieves, thieves who are in freedom' one boy mentioned.

In Case 4, similar to Case 1, the young people believe that those from gated communities are wealthy 'I think they are people with money… I do not think they are nice' a boy said. On this subject they expressed the same excluded feelings as the adults. They think those people are not interested in sharing with them, therefore, they do not want to meet them either. A girl said: 'Those people from condominiums almost never go out, they just socialise among themselves'. A boy replied: 'If they would go out to this street, I would not talk to them. The truth is that I prefer my friends from this side'.

Both the young people from Case 1 and Case 4 attend public schools; they mentioned that their friendship network outside the neighbourhood is composed mostly of their classmates. If young people from those gated communities attended private schools, that residential segregation might be sharpened even more, as they would not have any space in common with those from these neighbourhoods. The lack of permeability between the gated communities and these open neighborhoods and the absence of public spaces might make it difficult for youths from both places to have the opportunity to meet each other.

Figure 6.19. Teenagers' friends network. Above friends' houses for Case 1 and below for Case 4.



Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

Summing up, the data about teenagers in these neighbourhoods suggest that fear of crime in those young people are close to the adults' perceptions. They also have similar attitudes towards the gated communities' residents and share the same degree of residential segregation. Furthermore, the lack of Community Parks seems to make it more difficult to socialise with their peers

in their own neighbourhood, mainly for girls who prefer to stay at home using their mobiles. In both cases, the teenagers enjoy visiting private spaces, such as shopping malls, as a social option. This preference was not mentioned by any adult, either during walks or focus groups, from all eight cases. On the other hand, the absence of parks nearby forces them to walk further to find a place for meeting which also might increase their parent's anxiety as well as their own precautionary measures.

6.4. A view from outside: Institutional perspectives

This section shows some institutional views, mainly from those departments which are a bridge between communities and local government. This institution is responsible for the land planning in Costa Rica (see Chapter 3 for further details). The municipalities often have a social department which is a link between local government and communities. Some local governments also have a municipal police, in contrast to the national police, hoping that these would have more contact with communities. These interviews were carried out to triangulate views from communities about general issues and performance of their local governments and the way in which those institutions address their safety concerns.

The eight study cases belong to four different local governments; people from those municipalities were interviewed in this research. The list of those institutional interviews is reproduced below to facilitate reading (The complete list of interviews is presented in Chapter 4). Each person has an ID for the purpose of identification in the text.

Table 6.5. List of Interviews from Local governments and Municipal Police.

Abbreviation (ID)	Institución	Position	Cases envolved
LG4	Local government 1	Vice-Mayor (social programmes)	Cases 1, 5, 6 and 7
P1	Municipal Police 1	Police chief	Cases 1, 5, 6 and 7
LG1	Local government 2	Chair Social Department	Cases 3 and 8
LG2	Local government 2	Chair Cultural Department	Cases 3 and 8
LG3	Local government 3	Chair Social Department	Case 2
LG5	Local government 4	Chair Social Department	Case 4
P 2	Municipal Police 4	Police chief	Case 4

Source: Author's elaboration

6.4.1. Views of local government 1 – Cases 1, 5, 6 and 7

The community perceptions towards Local government 1 was mostly positive, except for the neighbourhood with the highest poverty (Case 1). During the interview, the Vice-Mayor (LG4) recognised that inequality is one of the daily challenges for her institution. She mentioned that communities such as Case 1 are in a vulnerable position as they might be an easy target of organised crime networks, especially young people. She also pointed out that households from Case 1 are mainly led by women who have to work and who also struggle to find childcare. For that reason, this institution is supporting the National Network of Childcare (CECUDI) in order to provide help to vulnerable households under its jurisdiction. Furthermore, the local government encouraged the construction of the Civic Centre for Peace which is a place located very close to Case 1, which focuses on providing opportunities for children and teenagers to enjoy different skills such as arts, technology and sports, among others.

Her concerns were confirmed by community members during the fieldwork, as detailed earlier, the participants expressed similar worries. Although there are positive views from residents to those programmes, they also aim to have a

space for sharing inside their own neighbourhood. For that reason, those residents are trying to convince national institutions to donate a piece of land nearby for building a park.

In general, she believes that teenagers have low participation in safety affairs because they are not interested in those issues. That statement was also shared by the Municipal Police; P1 thinks that the major concern of teenagers is to avoid someone stealing their mobiles. He recalled that once, a group of young people created a surveillance committee but episodes of abusive behavior were reported, the group blamed people who they did not like or even hit them with sticks. Facing that situation, the group had to be closed.

LG4 points out that installation of CCTV systems is the most common request from communities, which concurs with the information given by those neighbours. She indicated that the improvement of lighting is frequently mentioned as well, although lighting did not feature highly as a precautionary measure for the participants. LG4 describes the municipal CCTV system as sophisticated. It has a monitoring centre and speakers next to the cameras, which are used to warn suspicious people 'those people in public spaces who seems suspicious are warned through speakers: If you do not leave the place we will send the police' (LG4, personal interview, 23 August 2018). Residents from Cases 6 and 7 have this system in operation and people from Case 5 are waiting for it. Although during the walk, there were no comments about the speakers, overall, the perception was positive towards the monitoring system.

The police officer mentioned that usually communities ask for patrols, in order to evacuate the homeless and people consuming drugs, alcohol or having sex in public spaces. That request was verified as a precautionary measure in all cases (see Table 6.17 Section 6.5). He also mentioned the Community Policing programme which this local government calls 'Eyes and Ears'; he emphasised that the course is focused on prevention 'People learn not to talk to strangers' (P1, personal interview, 23 July, 2018). The presence of strangers is one of the most common fears mentioned by participants during the fieldwork (see Table 6.16 in Section 6.5).

On the other hand, regarding the presence of gated communities, the Vice-Mayor has not heard complaints from people living next to those developments. She thinks this is because 'For people from neighbourhoods next to condominiums, the only affectation is the walls because people who live inside do not bother them' (LG4, personal interview, 23 August 2018). However, during the fieldwork, among the main complaints from residents of Case 5 was the lack of contribution of gated communities' developers to places nearby. She stressed the current residential segregation and she blames the construction of walls bordering gated condominiums; in fact, she has not seen any situation where gated communities and nearby neighbourhoods coexist 'People who live in condominiums enter and forget the rest of the world' (LG4, personal interview, 23 August 2018).

In contrast, the interviewed police official believes that gated communities can be a partner in crime prevention, as they provide CCTV and lighting. He gives the example of the main street next to the gated community from Case 1, which has few crimes because this area is highly controlled. Members of that neighbourhood corroborated that surveillance. However, he made the following statement:

> 'There is a slum there [Case 1]. So, what does happen? Those people, if they go out to that street, the place is lighted and there are cameras. So, they do not offend there, they go to commit the crime to other places nearby.' (P1, personal interview, 23 July, 2018)

Therefore, he implies that one of the main reasons for surveillance systems in that gated community is precisely to persuade and control people living nearby. Although, people from Case 1 perceive that street as safer than the neighbourhood's internal roads, they manifested the lack of trust in the police's performance. This perception might be the result of preconceptions from that institution toward their community.

Regarding the cluster (Cases 5, 6 and 7) which are located beside the same area of gated communities, the police officer mentioned that there are almost no complaints about criminality. He thinks that is because those gated communities have a very advanced CCTV system and good lighting. He

believes the principal concern in those neighbourhoods is traffic issues, mainly in Case 6, as the gated community has just one entrance and the traffic is canalised through the neighbourhood roads. As will be shown in Chapter 7, that is precisely one of the complaints from neighbours of Case 6.

6.4.2. Views of local government 2 – Case 3 and 8

The views from this local government were very close to the community perceptions. The chair of the social department (LG1) stressed the depth of residential segregation between Case 3 and gated communities and the safety issues linked to the isolation of the place:

> 'The first complaint from communities when the condominiums started, it was the isolation given to the neighbourhood with those gates, not to know the neighbours who live there. Then, suddenly, the myth that could be a criminal who lives there and they do not know'. (LG1, personal interview, 23 July, 2018)

She also mentioned the nostalgia from communities for the past customs, such as talking to people on the bus stop. She said that in Case 3, people stopped having chats on the street and that situation is affecting their safety perception. That situation was confirmed during focus groups and walks (see Table 6.11 in Section 6.5), the participants mentioned that community's ties were stronger in the past.

Similar to local government 1, she said the main petition from communities is lighting. She pointed out that the isolation of bus stops located next to the gated community walls increases the neighbour's fears, despite CCTV monitoring 24/7 hours there by local police. As a result of that surveillance system she explained that local police are able to clear suspicious parked cars along that wall; parked cars are sources of fear in many communities (see Chapter 7). She also highlighted the lack of interest from people in gated communities to be involved in community affairs 'they live in the district, they are in the neighbourhood, but they do not belong to it' (LG1, personal interview, 23 July, 2018).

This local government has initiatives to reinforce community ties; one of them is named ‘Neighbourhoods for sharing’: The chair of the cultural department (LG2) indicated that this activity is carried out five times a year. People from neighbourhoods can apply to be selected (once a year). It consists of games, dancing and concerts. Also, neighbours agree to open their semi-private spaces (gardens) for sharing something with their neighbours, for instance, photographs or food. She says that this activity is co-designed with the community. In 2018, Case 3 was chosen. During the focus group, the community mentioned how glad they were for this event. However, they regret that once a year (or less) is not enough to repair their community ties.

Regarding Case 8, the Chair of the Social Department (LG1) stressed its strong community organisation. The main concern expressed to her by those neighbours was the issues provoked by the shopping mall next to them, which attracts a lot of unknown cars and informal workers, as corroborated in Section 6.2. She also said that this community asked for a special CCTV system, able to track cars entering into the neighbourhood but the municipality could not afford that system. However, during the fieldwork the residents did not mention that petition. According to her views, in both Cases (3 and 8) the presence of strangers causes worries; although commonly people think criminals belong to other places or districts, she claimed that criminals are local people, as shown in the local police statistics.

6.4.3. Views of local government 3 – Case 2

Neighbours from Case 2 showed a positive attitude towards their local government (see Table 6.6 in Section 6.5). The Chair of the Social Department (LG 3), mentioned that this municipality is very supportive of community initiatives. He said that this institution is an advocate in empowering communities to create their own coalitions and groups. The local government also has educational modules about the effects of drugs on young people, training for parents and approaches to drug takers for reducing their consumption gradually. He also mentioned the Municipal School of Arts which is affordable and has a scholarship system, the students are also allowed to borrow the instruments and take them home. He highlighted that this local

government is a pioneer within the country in the implementation of vegetable gardens in municipal land.

This local government also supports the Community Policing Programme which is held by the municipal police. A person from Case 2 had concluded the course a few weeks before the interview. He detailed that in the module people learn how to make petitions for security issues to be included in the Municipal Participative Budget. In respect of this, LG3 mentioned that the most common request from communities to local government are CCTV systems and lighting. According to him, in the last two years, the rise of petitions for CCTV has increased dramatically.

Another request is public infrastructure for Community Parks. However, he feels there is not enough appropriation of public spaces from residents. Sometimes after municipal improvement in those places he listens to comments such as 'Now that they [local government] made this park looks prettier, more people will come to drink, use drugs and have sex' (LG3, personal interview, 8 August 2018). He believes that many communities are expecting to have police in each neighbourhood.

He also referred to the fenced public spaces. He has seen many conflicts around the logistics of opening and closing every day.

> 'Once, we built and fenced a park, 15 days after the fence had a hole. It was made for people who used to come there for smoking…Thus we fenced it again and, the keys we delivered to a community leader. Next day, the windows of her house were broken, her car's windows were broken as well, and she was threatened' (LG 3, personal interview, 8 August 2018).

The management of public spaces in communities will be addressed in Chapter 7. Although the community leaders keep the parks in very good conditions, issues with the logistics, such as the example above were mentioned repeatedly.

6.4.4. Views of local government 4 –Case 4

In this municipality, the social office belongs to the Socio-economical Department. The person in charge (LG 5) mentioned that they do not intervene in issues regarding safety in communities. However, she has noticed how violence has increased in that district, especially the number of shootings in different locations. She highlights that some shootings have been done in the Central Park of the district, which makes it easier to spread the news across the area, consequently, the overall sense of insecurity rises.

This view is shared by the police officer (P 2). He also mentioned that drug trafficking is the reason why people from all across the country feel unsafe, he says this situation has increased the number of murders in the district, provoking worries among inhabitants. Although he claims that this type of violence has specific targets, people are fearful of becoming a victim by accident. Among the most common complaints received by the police are complaints about unemployed youths from low-income families who are involved in selling drugs, also the presence of abandoned cars on the streets, he thinks that the unattended places reinforce the premise of the 'Broken Windows Theory' about safety.

Regarding Case 4, he mentioned that the area next to Gated Community 1 (Figure 6.7 in Section 6.2) is quiet and there is almost no criminality there. In fact, he thinks that the gated community may help the adjacent neighbourhood's safety 'To have this type of condominium behind, I imagine, gives them more security because it is like someone is covering your back' (P2, personal interview, 24 July 2018). However, during the fieldwork the community has the opposite perception, they complain about having the back of the gated community and a high wall, where, they also believe drug dealing is taking place.

On the other hand, the officer mentioned that dwellings next to Gated Community 2 are more problematic due to some criminals belonging to that neighbourhood. Furthermore, he claims that sometimes those people help to feed the vicious cycle of crime, using illegal taxis because they are cheaper than the official taxis. This district seems to have a problem with illegal taxis,

according to this officer those taxi drivers are also drug dealers; this is the reason why shootings occur at the Central Park because the illegal taxi stops are located there. However, during the walking interview, people from Case 4 mentioned that they take taxis because the walking distance from the bus stop to their households is dangerous (1.7 kilometres the longest) particularly the segment behind Gated Community 2.

The officer recognised that inequality increases safety issues. They are trying to implement an urban regeneration process in slums, destroying the 'bunkers' where drugs are sold and creating green open areas instead. Furthermore, the police are working on mechanisms of prevention, such as training in high schools and elementary schools.

Overall, the institutional views show an alternative perception of fear in communities. As a result, most of the social departments have a close reading about the communities' concerns, except for Case 4. Furthermore, the precautionary measures mentioned by participants in the fieldwork match to the common requests pointed out by both police and social departments. However, the police views seem to be far removed from some community worries or feelings, although both police officers shared the same position about gated communities and their contribution to safety.

6.5. Patterns associated with macro dimension of gated communities' effects and neighbourhoods' attitudes.

This section explores possible patterns between the intensity of fear reported in Section 6.2 and community views about the macro dimension of gated communities' effects; as mentioned earlier these components are more linked to community behaviours and attitudes than physical elements of the built environment. The general perceptions about the following themes have been included:

- Institutions
- People
- Community relationships

- Feelings
- Precautionary behaviours
- Victimisation
- Drugs issues

Many of those themes were stressed in the focus groups; although during the walking interviews the participants also made reference to some of them. For instance, the theme ‘feelings’ was also a crucial topic during the walking interviews. Chapter 7 will be addressing all the themes with spatial references in a micro level but also it will be giving an overview of the perceptions about built environment.

This section includes some tables, they classify the participants’ comments by the themes above but also in subcategories when the comments address different circumstances from the same topic. The themes, subcategories and comments of this chapter keep the same hierarchy as the spatial information (maps) presented in Chapter 7.

In order to find patterns, a process of prioritisation of comments was carried out. Some comments were removed from the table but the entire list can be found in Appendix 6-1. The exclusion criteria adhere to the following rules:

- The comments mentioned just in one neighbourhood were removed, except for:
    - Those from Case 1, 5 and 8. As shown in Section 6.2, the distribution of intensity of fear shows particular performances in these cases. Therefore, to keep the comments might help to understand their peculiarity.
    - Those comments explicitly related to gated communities, as they are directly connected to the core research question.
- Topics regarding teenagers were excluded, because this analysis was done in Section 6.3.
- Topics regarding Community Parks were removed, because Chapter 7 is focused on details of the built environment at micro level. However, comments regarding precautionary measures taken in Community

Parks and public spaces are included, as they are part of the overall surveillance system.

The colour code of the next tables follows the same rules as Section 6.3.

6.5.1. Perception about institutions' performance.

The attitude from participants towards different institutions is diverse (see Table 6.6). However, those sharing the same local government have a similar opinion regardless of the level of poverty, except for Case 1, whose reaction was negative all the time.

Table 6.6. Attitudes towards institutions recorded during walks and focus groups

Comments about institutions	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Positive attitude towards local government								
Positive attitude towards the police								
Negative attitudes towards local government								
Bureaucracy difficults community projects/activities								
Distrust in the Justice System								
Negative attitudes towards Police								
Local government allowed irregular commercial development								
Law allows to gated communities do not supply public areas								

Source: Author's elaboration

Cases 1 (4NBI), 5 (2 NBI), 6 (1 NBI) and 7 (1 NBI) share the same local government. In Case 1, there are no positive opinions about the local government performance nor the police role. In Cases 6 and 7, both in the range of 1 NBI, there are positive associations towards the municipality, without complaints or particular attitudes about other institutions. In Case 5, despite some positive associations towards that institution, there are some negative postures as well. For instance, complaints about the lack of contribution of gated communities to the neighbourhoods nearby and the bureaucracy needed to carry out community projects; part of these responsibilities correspond to the local government. Those concerns were equally expressed by people from Case 4 (2 NBI). Although Cases 5 and 4 belong to different local governments, both accuse their local governments of being negligent in those tasks.

Cases 3 (2 NBI) and 8 (0 NBI) belong to the same municipality. Both have almost the same complaints about its efficiency. Despite people from Case 3 mentioning a lot of negative experiences with police, they also recognised some positive interventions. In Case 8, one of the most significant complaints

was the spread of commercial land uses inside the neighbourhood, mainly because of issues with a shopping mall (discussed in Section 6.2). They consider there is a lack of control and some negligence from the local government in implementing the planning regulations.

People from Case 2 have had more positive experiences with the local government and the police. However, they blame national institutions for having many requirements for community activities in public spaces. They mentioned how difficult it is to organise community parties on the street; in response to this problem, they have had to transfer some activities to private spaces. In fact, five of the eight cases had the same complaint.

6.5.2. Communities looking to themselves and those inside the gated community.

This section highlights attitudes from participants towards people from the same neighbourhood and gated communities. Table 6.7 shows the self-reported length of residence from the participants in the walks and focus groups. In all cases, there were residents with more than 15 years living in their communities.

Table 6.7. Length of residence in the neighbourhood reported by participants of walks and focus groups.

Length of residence	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Less than 5 years of living in this neighbourhood								
Between 5 and 10 years living in the neighbourhood								
Between 10 and 14 years living in the neighbourhood								
Between 15 and 19 years living in the neighbourhood								
More than 20 years of living in this neighbourhood								

Source: Author's elaboration

Tables 6.8 and 6.9 display the participants' opinions about people from gated communities and their own neighbourhood. Many participants believe that people from gated communities are wealthy and people from Cases 1, 2, 3, 4 and 7 have negative associations with them, although they recognise they do not have any relationship with those residents. It can be noticed that negative comments about these people are mostly concentrated in the neighbourhoods with higher poverty without Community Parks. From the neighbourhoods with lower poverty, paradoxically, people from Case 7 (which is gated itself) also made some negative observations.

Table 6.8. Participants' comments about gates communities' residents from their area. Information from walks and focus groups.

Perceptions about people from gated communities	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
People from gated communities are working people								
People from gated communities are foreigners								
People from gated communities are upper-class								
People from gated communities are upper-middle-class								
People from gated communities have small families								
People from gated communities are arrogant								
People from gated communities are Narcos -organised crime								
People from gated communities do not care about us								
People from gated communities have many debts								

Source: Author's elaboration

Table 6.9. Participants' comments about people in their neighbourhood (residents and non-residents). Information from walks and focus groups

Comments about people (excluding gated residents)	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Drug dealer/user								
Drug users are local								
Drug dealers are local								
Drug dealers are from outside								
Neighbours								
To live locked makes the place unsafe								
Neighbours do not appreciate social activities								
People are leaving dwellings to live in gated communities								
People linked to crime								
Criminals are from other neighbourhood								
Someone was arrested in this place								
There are people with guns in this place								
Criminals are from our neighbourhood								
Uncomfortable behaviours								
Public display of affection (P.D.A) is disturbing								
Skateboarders are disturbing								
Other groups								
Some strangers are nice								
Real State developers belong to our neighbourhood								
Real State developers could help our community								
There are homeless in this place								

Source: Author's elaboration

Regarding visitors and residents from their own neighbourhood, many of the comments were focused on drug dealers, consumers and people linked to crime. In Cases 1, 2, 3 and 4 the drugs issues were mostly related to the sale and consumption on the streets. There were situations where the transactions also happened in private houses; these occurred in Cases 2, 7 and 8. Those dwellings were easily identified by the participants during the walking interview. The effects of those operations in the public space will be addressed in Chapter 7.

Participants from six of the eight cases recognised that themselves and their neighbours live locked in and this situation might make the place become even more unsafe. Except for Case 2, in the rest of cases the people knew about someone in their neighbourhood who owns or uses a gun.

The public display of affection (P.D.A) was one of the most uncomfortable behaviours, especially in those cases with Community Parks, followed by the presence of skateboarders. As will be addressed ahead in Table 6.16 the sale and consumption of drugs in public spaces provokes a lot of anger.

Tables 6.10, 6.11 and 6.12 emphasise the matters regarding community relationships. Most of the participants voiced positive attitudes and trust in neighbours, although there were also some negative comments in connection with these.

Table 6.10. Positive comments about community relationships made during walking interviews and focus groups

Community relationships -positive attitudes-	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Community ties								
Positive attitude towards communal activities								
Good relationship with people from gated communities								
Good relationships with other communities								
This neighbourhood is united								
New generations are welcome								
Neighbourhood's atmosphere								
To live locked is safer								
Neighbours								
Positive attitude towards neighbours								
Trust in neighbours								
Organisation								
Communal intiatives or groups								
Social activities have increased in this neighbourhood								
There are activities planned for the future								
Perceived safety								
Safe area people have lived here for many years								

Source: Author's elaboration

Table 6.11. Neutral comments about community relationships made during walking interviews and focus groups

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Community ties								
Community ties were stronger in the past								
Neighbourhood divided by sectors								
Alliance between community board and private sector								
Gated Communities								
No relationship with people from gated community								
I would live in a gated community -if I could								
I have met someone from the Gated community								
Communication channel with gated community: church								
Neighbourhood's atmosphere								
I would live in another place								
Neighbours								
I am not originally from this neighbourhood								
Organisation								
Reference to organisational matters								
Our community did the 'safety course'								

Source: Author's elaboration

Table 6.12. Negative comments about community relationships made during walking interviews and focus groups

Community relationships -negative attitudes-	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Community ties								
Neighbours do not contribute or pay								
People in this neighbourhood is individualist without community sense								
Low socialisation among neighbours								
New generations are difficult to integrate								
No relationship with contiguous neighbourhood								
Negative attitude towards neighbours with short time living there								
There is no time for sharing, people are busy								
High crime affects community ties								
Neighbourhood's atmosphere								
Issues among neighbours								
Issues with contiguous neighbourhood								
Organisation								
The community board/leaders are overwhelmed								
The community group after the 'safety course' no longer exist								
Perceived safety								
Neighbours encourage vicious circle of crime								

Source: Author's elaboration

As shown in Table 6. 11, in almost all cases, they have met someone from the gated community at some point; in some cases, it has been administrative staff due to inconveniences during the construction process or other types of issues. Overall, there is no relationship with the gated residents; except for Case 8 where most of the participants have friendships with people living in the gated developments, just one participant did not have any relationship with those residents. In general, participants from Case 8 described having a 'good relationship' between the neighbourhood and the gated communities, as they pay the monthly fee and are involved in the neighbourhood affairs.

Most of participants highlighted community organisation issues and how their community leaders seem to be overwhelmed by the amount of work. Another topic raised during the focus groups and walks was the training known as the 'safety course' which is the Community Policing Programme, already discussed in Section 6.4 from the institutional side. However, from the communities' perspective, the views are divided, all eight cases had access to this training but not all of them kept to the measures suggested, for instance, a 'safety group', in five of the eight cases it was mentioned that this group had dissolved.

Neighbours from Cases 1, 2 and 3 accepted to some extent that they contribute to feeding the vicious circle of crime, due to sometimes buying things that may have been stolen from a dwelling nearby. These communities also believe that criminals (drug dealers or thieves) are from the same neighbourhood (Table 6.9). In Case 1 mainly they think the level of violence

has affected the community ties. However, there is still trust in some neighbours, who have developed a surveillance system based on sounds and signs as will be discussed later (Table 6.18). Although other communities argued that criminals come from other places outside the neighbourhood, most of them recognise having drugs issues inside their own community or neighbouring areas.

In most cases, there is nostalgia about community ties in the past. Some participants mentioned that there was great need in those years, which forced them to work together. The residents from the cases of a smaller size (Case 2, 6 and 7) said that in the past there were many children in their neighbourhoods and they used to take them to parks, which gave adults the opportunity to share time with other parents. However, those children are teenagers now and they believe that the opportunity for casual encounters has diminished. Those communities also mentioned that they preferred to keep homeowners instead of increasing the houses available for rent, to avoid the arrival of strangers. This position might make it even more difficult for the future presence of children in their public spaces, as the neighbourhood is aging and new people may not be coming into the communities.

Another frequent statement was that neighbours do not care about their own community or that individualism is stronger than the sense of common good; that might explain the work overload of community leaders. However, the participants also emphasised the importance of having community activities and meeting their neighbours. Those encounters vary in each case; an overall classification frequency is the following (there is a summary in Table 6.13):

- Case 1: They mentioned being very busy with a housing project; as it is time consuming, they have not had chance to organise social activities lately but they have done in the past, for instance, Christmas parties.
- Case 2: Every three months they have a bingo session; they also hold Christmas parties.
- Cases 3 and 4: They have weekly activities in the Community Hall; however, most of them are private, such as weddings or birthdays. The

place is rented for those purposes. The neighbours recognise having few public community events. In Case 4, they also organise community meetings specialising in safety issues.

- Cases 5 and 6: Their last activity was two or three years ago. In Case 5, although they mentioned a decrease in their organised community activities, they said that it is very common to have casual chats on the street or parks.
- Cases 7 and 8: Their events take place two or three times a year. In both cases, they carry out a Christmas activity, which is very structured and open to people from other neighbourhoods as well.

Table 6.13. Summary of communal social activities (excluding organisational meetings of community boards)

Frequency of activities	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Frequency of social activities: weekly (mostly private)								
Communal activities more than 4 times a year								
Frequency of social activities: 2 or 3 times a year								
Frequency of social activities: last one was 2 or 3 years ago								

Source: Author's elaboration

During the participant observations, it was possible to corroborate the degree of attendance for some of those activities. In Case 1, the housing meeting gathered with around 50 neighbours who were aware of the process and the next steps. For Case 2 around 60 neighbours participated in the bingo session; the food sold during the event came from different households and the Community Board bought the bingo prizes. The safety meeting carried out in Case 4, had around 40 participants; they discussed surveillance methods and actions to address safety issues. In Case 8, the Christmas party was a concert with a national chorus. This was the only activity carried out in an open public space which was also suitable for hosting a concert with a stage. Around 40 people attended that event. These four observations suggest that community leaders have a notable convening power and community members might be willing to attend organised events.

6.5.3. Communication channels

The most common communication channel among neighbourhoods is WhatsApp. Regarding the channels to keep informed about safety matters in their area, most residents have communal WhatsApp groups, except for

Case 1 (see Table 6.14). Those groups are used to disseminate information about crimes or suspicious situations. In Case 1, the primary source of information are rumours or personal communications among neighbours. In Case 1, 3 and 7 they mentioned social media resources, mainly Facebook. On the other hand, people from the cases with higher poverty (Cases 1 and 2) referred to national news as a source of information about crimes.

Table 6.14. Summary of main communication channels to realise about crime episodes.

Communication channels	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
News on crime via rumours								
News on crime via Social Media (no Whatsapp)								
News on crime via television (news)								
News on crime via Whatsapp								

Source: Author's elaboration

6.5.4. Feelings and precautionary behaviours

The communities have mentioned issues with crime but there are also many places where they feel safe, Table 6.15 displays the comments about safe areas, as most of them have specific locations; in Chapter 7 those comments have been georeferenced. Overall, the familiar places when people know each other were more commonly associated to safety feelings. In contrast, Table 6.16 shows the negative connotations of some feelings. During the night is the time when more participants feel unsafe; however, this trend was lower in those with less poverty (Cases 6, 7 and 8). Apart from the perceived safety, it can be noted the diversity of fears that these people face most of the time.

The type of fear mentioned in all eight cases, was the fear of strangers; one reason it is because they might be linked to the sale and consumption of drugs. The participants not only expressed concerns about their personal safety, in seven of the eight cases they made comments regarding their anxiety about someone else's safety. The fear mentioned with more intensity was the fear of being mugged, except at both ends of the scale (Case 1 and 8). In Case 1 it might be explained by the dominance of other types of crimes and the constant concerns about being killed accidentally during a shooting or any violent episode. In contrast, participants from Case 8 said that mugging is uncommon in their community.

The fear of reprisals is present in the neighbourhoods with higher poverty (Cases 1, 2 and 3), they are afraid that criminals take revenge if they complain to the police. In those three cases, along with case 4, the fear of burglary is also present, mainly in Case 1. This fear also appears in Case 7, which is the reason why they prefer to keep the gate.

Cases 3, 4 and 5 share the fear of being attacked, as they mentioned this situation may be associated to the walking distance from the bus stop and the stop itself, rated as dangerous in the three cases.

Table 6.15. Positive associations about feelings related to safety expressed during walking interviews and focus groups.

Feelings -positive attitudes-	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Neighbourhood's perception								
Proud about our neighbourhood image								
Perceived safety								
This place is safe most of the time								
This place is safe during day								
This place is safe during night								
This place is very safe during day								
This place is very safe during night								
This place is very safe most of the time								

Source: Author's elaboration

Table 6.16. Negative associations about feelings related to safety expressed during walking interviews and focus groups

Feelings -negative attitudes-	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Anger								
Anger because of sale and consumption of drugs								
Fear								
Fear of being mugged								
Fear of strangers								
Concern about someone else safety								
Fear is everywhere								
Fear of someone might be hidden -weed								
Fear of burglary								
Fear of reprisals								
Fear of being killed								
Fear of someone might abduct my child								
Fear of being attacked								
Fear of inmigrants								
Fear of shootings								
Fear of being sexually harassed								
Fear of being followed								
Fear of my relative/friend might be sexually harassed								
Fear of being adbucted								
Perceived safety								
This place is unsafe during night								
This place is very unsafe all the time								
This place is unsafe most of the time								
This place is very unsafe during night								
Negative attitude towards contiguous neighbourhood								
This place is unsafe during day								

Source: Author's elaboration

The communities have adopted or are keen to implement different measures to tackle the fears described above (see Table 6.17 and 6.18). The most

popular project is surveillance cameras through CCTV. Case 2 has the system but without live monitoring, while in Cases 6 and 7 their cameras are followed by the municipal police. In Case 5 the CCTV will be working soon. The rest of the cases do not have a system but they consider it would be useful for surveillance. In Cases 3 and 4 there is private CCTV in some dwellings. In Case 1, they think that the CCTV from the gated community next to them might discourage criminals of committing offenses. In contrast, during the conversations with people from Case 8, that measure was not mentioned.

Table 6.17. Positive attitudes about precautionary measures.

Precautionary measures -positive attitudes-	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Private space								
To have dogs at home								
Public spaces								
Control of public spaces as safety measure -CCTV								
Control of public spaces as safety measure								
Positive attitude towards activate/improvement of public spaces as safety measure								
Public and private spaces								
Surviliance among neighbours								
To have an alarm								
Social Media								
To warn neighbours using social media								

Source: Author's elaboration

Table 6.18. Neutral and negative attitudes about precautionary measures.

Precautionary measures -neutral and negative attitudes-	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Institutional measures								
To make a formal complaint to the police or local government								
Private space								
To have someone at home all the time								
Public and private spaces								
To confront the criminal								
To fence or lock a space								
Public spaces								
To stay in home instead of outside as safety measure								
To avoid public spaces as safety measure								
Do not walk alone as safety measure								
To hide belongings								
To fence and lock parks								
To warn neighbours with sounds								
To greet dangerous people								
Negative attitude towards control of public spaces -CCTV								
There is no option -we have to pass anyway								
Weapons								
To have a stick or gas								

Source: Author's elaboration

There were formal complaints addressed to police and local government, mainly in Case 8. The police presence was commonly mentioned in all the cases but in consideration of the fact that the police cannot be there 24 hours, other frequent measures suggested were to hide belongings and have surveillance among neighbours themselves.

Other measures have a direct connotation in the freedom of movement in public spaces, as noticed in Table 6.18 many of those limitations are concentrated in Cases 1, 2, 3 and 4. Many residents prefer not to walk alone during the night; in Cases 2, 3, 4 and 5, some participants mentioned that they call a relative to pick them up at the bus stop or isolated places, this measure was primarily mentioned by women. The use of weapons such as sticks or tear gas was mentioned in Cases 3, 4 and 5.

In Case 1, they highlighted that criminals are in the neighbourhood all the time; therefore, they cannot avoid their presence. Given this situation, they prefer to greet them and try to be friendly to them.

Overall, all the communities believe that the control of public spaces might help to avoid crimes. For instance, in Case 8 the number of unknown cars coming to the neighbourhood was tackled through parking control in some streets; in cases with Community Parks they have an opening hours schedule. Some of the communities perceive positively the warning through social media or surveillance among neighbours, the last one means they will tell a neighbour if they are leaving the house, in order to that person can keep a watchful eye and report any suspicious situations.

6.5.5. General views about victimisation and drugs issues

During the walks and focus groups, the participants mentioned episodes of victimisation endure in the past. Although the journey was focus on perceptions, people spontaneously reported their own experiences, as well as episodes suffered by relatives or friends. It is important to clarify that the information shown in this thesis is not a victimisation survey, which usually asks about crime experiences suffered during a time frame –e.g. last 12 months. These victimisation episodes cover a broad range of experiences along years. All of them happened within the boundary of each study case; most of them have a spatial reference, which can be seen on the maps in Chapter 7 and Appendix 7-1.

The burglary was the most reported crime, which is strongly linked to private areas rather than public spaces (see table 6.19). Although in some cases, this crime happened 10 or 15 years ago, it is still their memories. The same situation occurs with murders, although it might have happened ten years ago, people still remember the place and situation under it took place. Regarding other types of crime, the time-lapse seems to be shorter and frequency higher. For instance, communities reported mugging as the most common crime in public spaces. Participants also reported suspicious situations which they consider might be a crime, such as, unfamiliar sounds during early mornings or unknown cars gathering in specific points, among others.

Overall, it seems there is not a clear victimisation pattern linked to poverty levels. In fact, slightly more episodes of victimisation have been reported in case 8 than the rest of the cases. This situation suggests than victimisation could affect randomly fear of crime, as it has been pointed out by previous evidence (Garofalo, 1979; Agnew, 1985). However, when the victimisation is georeferenced, as explored in Chapter 7, it seems that its relationship with fear of crime is stronger.

Table 6.19. Situations of victimisation suffered by participants or relatives-acquaintances in the area, mentioned during walks and focus groups

Victimisation -all attitudes-	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Public spaces								
There is no previous victimisation in this place								
Mugging								
Sexual attack or harassment								
Witness of an episode of victimisation								
Shooting								
Attack								
Murder								
Fatal traffic accident								
To be followed by someone								
People have been bitten by a dog								
Stabbing								
Stolen items from cars								
Traumatic episodes								
Vandalism								
Violence is common in this neighbourhood								
Rape								
Stolen car								
Private space								
Burglary								
Attempted of burglary								
Domestic violence								
Attempted of abduction								
Public and private spaces								
Suspicious situations								
Stolen items								
Organised crime								

Source: Author's elaboration

In contrast, the scene is different when people reported about drugs issues (see table 6.20). Those situations are concentrated in cases 1, 2, 3 and 4, the neighbourhoods with the highest levels of poverty. As will be discussed in Chapter 7, those events of sale and consumption of drugs happen frequently on the edge of the gated community. One of the major concerns is the violence associated with drugs issues. In this regard, people pre-existent fears might be sharpened by the isolation of places where those deals take place.

As mentioned, the places identified as drugs' sale spots provoke many worries, because of constant visits of strangers by car; mainly given the possibility of a shooting or any accidental injury.

Table 6.20. Comments about drugs issues during walks and focus groups.

Drugs -all attitudes-	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Drug sale or consumption								
There were drug issues in the past								
Drug consumers are from outside								
Drug consumers are not muggers								
Alcohol / Drug consumption								
This place has drug consumption								
This place has licor consumption								
Drug sale								
This place has drug sale								
There are conflicts among drug dealers								

Source: Author's elaboration

Despite cases 2, 3, 4 and 5 share common characteristics related to physical features, but Case 5 has two substantial differences from the other neighbourhoods from the group of 2 NBI: lack of drugs' issues inside the neighborhood and supply of community parks. In this regard, in Chapter 7 it will also be addressed the attitudes of this neighbourhood and all the eight study cases towards the built environment and possible links to fear perception.

6.6. Conclusion

The case studies explored have their own particularities about how they perceived the fear of crime; however, some patterns could be identified, some of them related to income inequality, others to community ties and community infrastructure.

The findings suggest that the self-reported intensity of fear during the night along the gated communities' edges might be higher in comparison to the roads without contact with the gated development. However, this pattern is different at the opposite ends of the poverty range. The community with the highest level of poverty (Case 1) shows more anxiety inside its own neighbourhood. In contrast, the wealthiest community (Case 8) has a general perception of safety in most of the neighbourhood.

The places classified as safe during day and night are mostly located on the internal streets of the neighbourhoods or the immediate areas beside them, rather than along the walls of the gated community. This pattern was found in most of the cases, except for Case 1, Case 8 and Case 5. For Cases 1 and 8 it might be the same circumstances mentioned above. In Case 5, there was almost no difference between negibourhdood's internal roads and those next to gated community, as mentioned it has strong community ties and almost no drugs issues, which keeps the area well used with people about most of the time. There are other factors related to micro elements of the built environment that might help to explain those patterns. They will be addressed in Chapter 7.

Cases 3, 4 and 5 belong to the same category of NBI and are surrounded by more than three gated communities. However, Case 5 seems to have a lower perception of fear than Cases 3 and 4; these neighbourhoods report a significant level of fear in general but especially next to the gated community. Although the three communities have infrastructure issues (see Chapter 7), they have different communal facilities. Case 3 and 4 both have a Community Hall which is used often but mostly for private activities with only sporadic community events. Case 5 does not have a Community Hall but has three Community Parks which often have people during the opening times (see observations in Chapter 7). Although participants from Case 5 recognised that the last community event was two years ago, they seem to have a spontaneous use of their public spaces, which keeps the place lively.

Residential segregation was found in seven of the eight cases. The communities do not have relationships with people from gated communities. This pattern was also found during the focus groups with teenagers from

Cases 1 and 4. The only exception was the neighbourhood with lowest poverty (Case 8) where people from the gated communities contribute actively and economically to the neighbourhood's affairs.

Finally, the neighbourhoods have differences in terms of infrastructure, public spaces, lighting, allocation of bus stops, among others; those asymmetries in public infrastructure might affect the opportunities for sharing and socialisation. Furthermore, some participants expressed that past events of victimisation have been facilitated by physical features of the built environment. In this regard, the talk's track maps from Chapter 7 encompasses the perceptions of the built environment and the incidence of localised victimisation; those views also vary between men and women. The next chapter will address further how gated communities affects the relationship between the built environment and perceived safety

Chapter 7. Signs of fear: Micro factors of the built environment and fear of crime.

This chapter will explore the signs of the built environment that are associated with fear of crime at micro level. The walking interviews were crucial to obtain this information; those signs go beyond physical features; they include people's perceptions about places and their views of the daily dynamic of their neighbourhoods, such as traffic, drugs issues or the use of public spaces. The built environment may sometimes be perceived differently by men and women; to investigate this, the chapter contrasts perspectives of both groups. Finally, it suggests a range of possible patterns associated to micro elements of the built environment and fear of crime.

As indicated in Chapter 4, there was well gender-balanced participation, which enables to make comparisons of georeferenced comments (see Figure 7.1). However, regarding comparison by age groups, among the limitations of walking interviews is that they might exclude certain populations with limited mobility (see Chapter 9), such as older people (Evans & Jones, 2011). The participation of people over 60 years old was broader in the focus groups (participation in all cases) than walking interviews (participation in four cases); their views were crucial to building the narratives of Chapter 6 and understanding general perceptions about the built environment from the current chapter. However, there was enough representation during the walking interviews to contrast their views with other age groups. Regarding teenagers, this group did not participate during the walks (although they were invited). As shown in Chapter 6, this research incorporated their views through focus groups. Fear of crime in this age group has been less explored (Melde, 2011); therefore, it was essential to obtain their perceptions as community members.

Previous studies have discussed the relationship between the built environment and fear of crime (Ferraro & LaGrange, 1987; Hale, 1996; Brunton-Smith & Sturgis 2011; Ceccato, 2012; Loukaitou-Sideris, 2012); they provide essential insights into the role of the urban fabric and the built environment in terms of its perceived safety. The relevance of micro scale features of the built environment in crime vulnerability and fear of crime has

been previously highlighted within the literature (Hillier, 2004; Loukaitou-Sideris, 2012). Other authors have explored the role of gated communities and their physical barriers as new patterns of urban segregation (Caldeira, 2000; Low, 2004; Sennett, 2018). This chapter embraces previous knowledge but also analyses, through georeferenced details, possible patterns behind the signs of fear and their relationship to the proximity to gated communities.

The chapter is divided into seven main sections. Section 7.1 summarises all the georeferenced comments (n=1319) by the nine main themes. Section 7.2 explores general perceptions towards the built environment. In Section 7.3 the use and supply of public spaces and the role of those places in feelings of safety is addressed. Section 7.4 analyses men's and women's perceptions about their environment and the fears, sense of victimisation and precautionary measures that they take. There is also a discussion about the perception of people when they walk next to a gated community wall and outside of it; those perspectives are showed in Section 7.5 which again also provides a view from men's and women's point of view. Section 7.6 shows a series of non-participant observations across the eight study cases. Finally, in Section 7.7, the chapter suggests some patterns between micro elements of the built environment and fear of crime. The chapter closes by summarising those patterns and their links with the presence of gated communities.

The findings suggest a relationship between fear of crime and localised victimisation, isolated areas, places with heavy traffic and the sites of drug distribution and consumption.

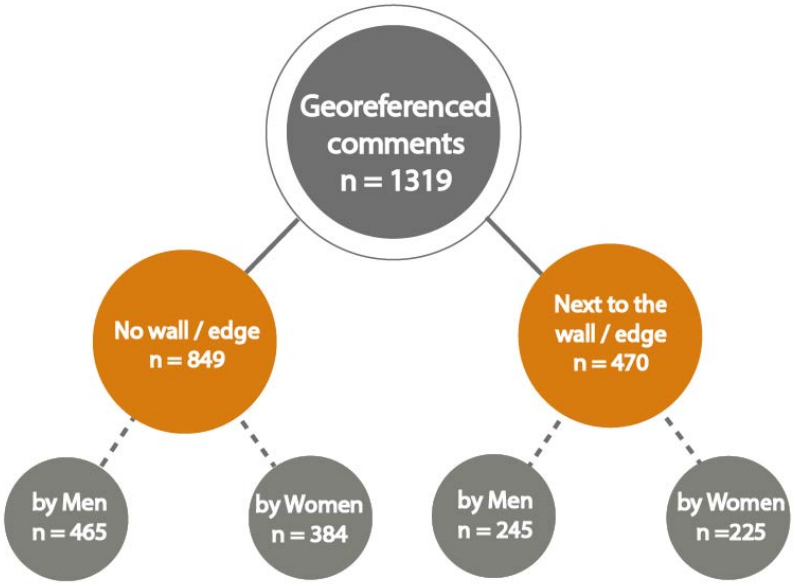
Resuming the methodological steps presented in Chapter 4, the technique of Thematic analysis was applied to analyse the empirical information, which includes spatial data corresponding to groups of themes. The chapter is based mainly on the 1,319 georeferenced comments from the walking interviews (Talk's tracks), the comments were made next to the gated communities' edge but also in other streets across the neighbourhood; the focus groups helped to interpret and complement some data obtained from walking interviews.

Figure 7.1 shows the allocation of comments. Based on that information three types of maps were produced (further details are referenced in Chapter 4):

- Talk's tracks maps by main themes (9 categories)
- Talk's tracks maps by subcategories (39 subcategories)
- Talk's tracks maps by comments (156 type of comments)

All the items are classified by attitude (positive, negative, neutral) and sex (female or male). The entire set of maps (by subcategories and comments) can be seen in Appendix 7-1; however, some of them are included in this chapter, illustrating specific situations. It can be noted that the maps from Chapter 6 and Chapter 7 are different, both were obtained from the walking interviews. However, the 'Intensity of fear maps' (Chapter 6) are based on 792 stickers that participants placed on their individual maps, whilst the Talk's tracks maps (Chapter 7) are based on the georeferentiation of 1319 people's comments and their classification by themes and subcategories.

Figure 7.1. Allocation of georeferenced comments from walking interviews.



Source: Author

7.1. Communities and their neighbourhoods: localising perceptions

The analysis of this chapter keeps the transversal comparison between different poverty levels but also explores those emotions beside and outside the gated communities' edges. Before starting to analyse the micro elements of the built environment this section gives an overview of the general distribution of perceptions across the eight study cases.

The information has been primarily divided into nine main themes:

- Built environment
- Community relationships
- Drugs
- Smells
- Feelings
- Victimisation
- People
- Precautionary measures
- Institutions

Those themes overlap across the empirical chapters. However, Chapter 6 analysed most of those themes as part of the macro dimension; whilst Chapter 7 is focused on their spatial location (georeferentiation) and their relation with micro-scale elements. The participant's attitudes about these nine categories are summarised in Figures 7.2 and 7.3. In order to provide a quick reading of the maps' items there is a 'fast-reading' legend, this colour code also applies to further maps in this chapter. The maps in Figures 7.2 and 7.3 are divided in two sets as shown in the legend below.

Legend -Figures 7.2 and 7.3 (fast reading)

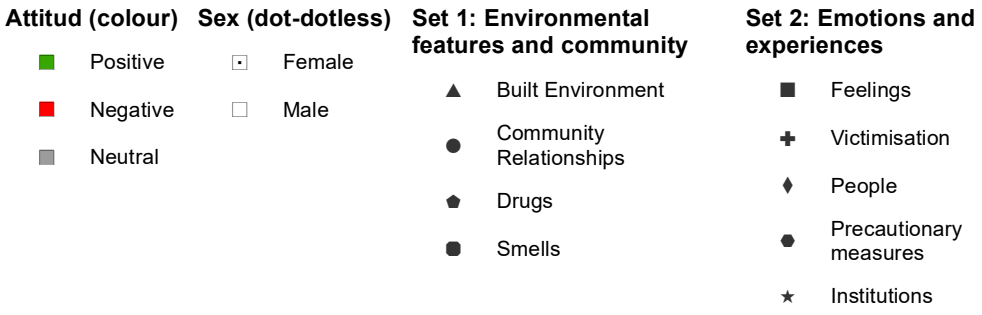
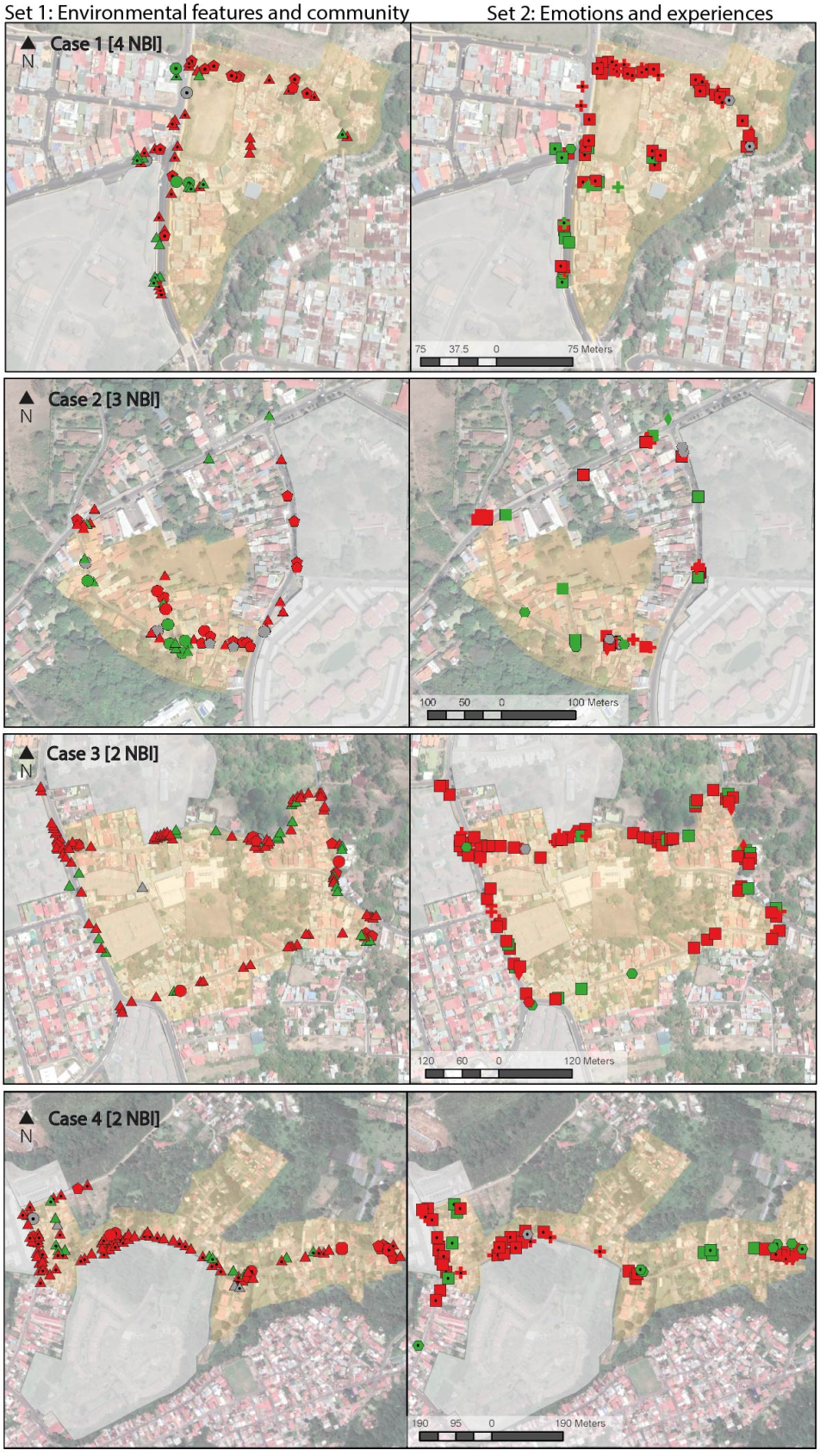
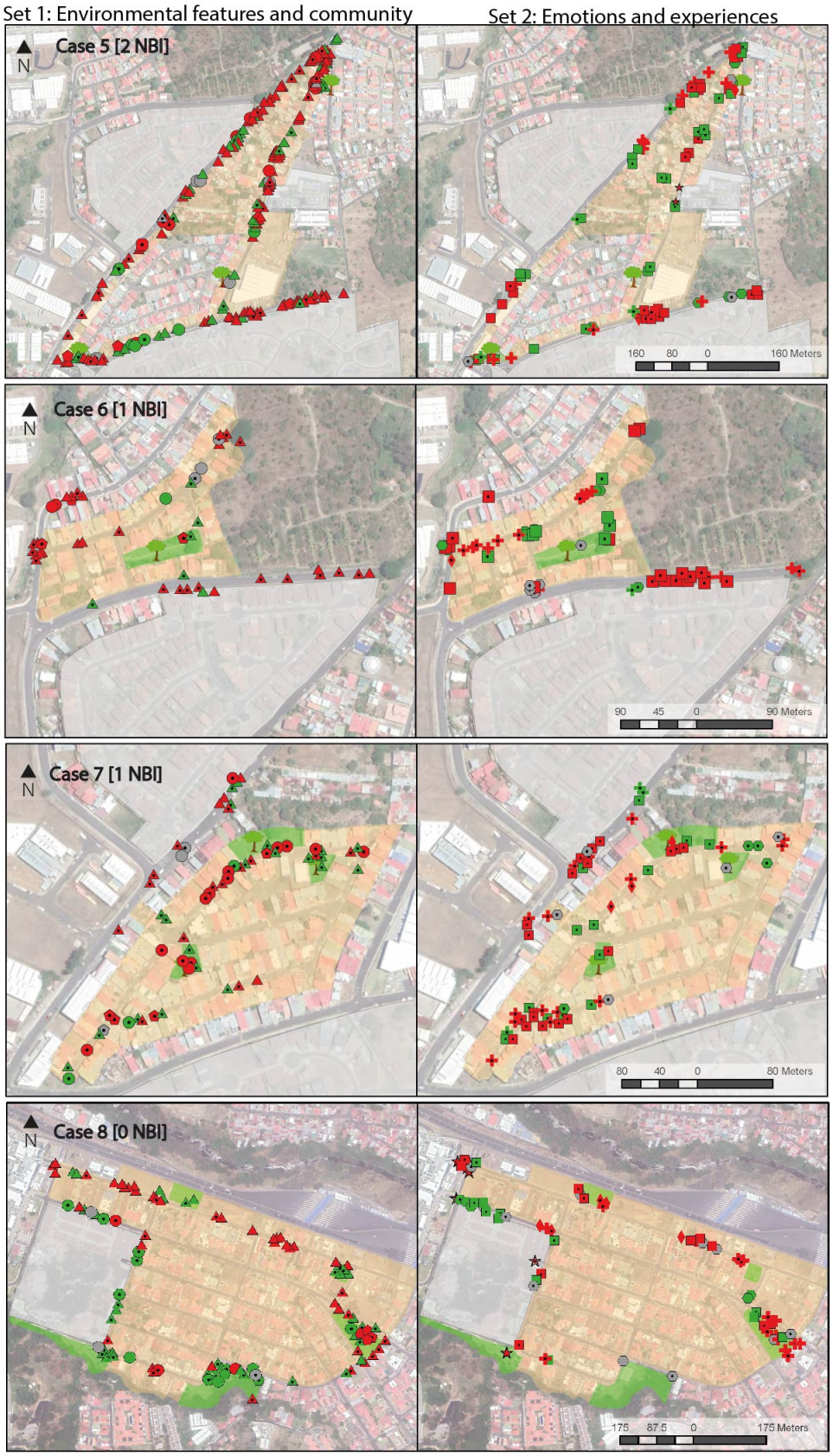


Figure 7.2. Summary of participants' perceptions for Cases 1, 2, 3 and 4, classified by the main themes. .



Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

Figure 7.3. Summary of participants' perceptions for Cases 5,6,7 and 8, classified by the main themes.



Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

Overall, it can be noted that positive attitudes from Set 1: Environmental features and community, mostly concur with positive attitudes from Set 2: Emotions and experiences. However, although the cases with lower poverty (Figure 7.3) seem to have more positive associations with the built environment, those views do not necessary imply that areas with high-quality infrastructure have less worries about crime or vice versa. As will be addressed in detail in this chapter, perceptions about the built environment go beyond just physical features, for instance, two places might have similar features but if one of them is known as a site for selling drugs, that association might change the general perception of the built environment at that point; the same happens with isolated places and localised victimisation.

Although the perception of the built environment might not depend entirely on the quality of its infrastructure and features, it should be noted that there is an unequal distribution of community facilities. Neighbourhoods from Cases 1, 2, 3 and 4 do not have Community Parks, in contrast to Cases 5, 6, 7 and 8. It should also be noted that many of the positive associations in these four neighbourhoods are concentrated in their Community Park which are managed by members of the neighbourhoods. In contrast, the communities with higher poverty seems to localise their positive experiences across the neighbourhood more randomly, most often linked to the possibility of any surveillance. The exception to this general situation is Case 5, which is the only neighbourhood with Community Parks within the poverty group of 2 NBI (same group as Cases 3 and 4). As noticed in Chapter 6, and as will be addressed in detail in this chapter, the particularities of that case might help to establish the relevance of supply and management of public spaces in relation to the general attitudes of communities.

Next to the gated communities' edges numerous negative emotions and experiences are reported, especially in Cases 2, 3, 4, 6, 7 and partially in Case 5 (south east corner). However, as mentioned in Chapter 6, the neighbourhood with the highest poverty (Case 1) and the one with no poverty (Case 8) present a different trend. In Case 5, despite many complaints about the physical features of the built environment, next to the gated community (north west corner) their emotions and experiences are predominantly positive.

The following sections will be analysing in detail these general findings and look at possible explanations for their outcomes.

7.2. General perceptions about the built environment

This section introduces the participants' thoughts about the built environment. That general picture was not presented in Chapter 6 because it provides the general base of this chapter, which will detail those perspectives further, by participants' sex and spatial location across the chapter. Tables 7.1, 7.2 and 7.3 contain information from both focus groups and walking interterviews. Similar to Chapter 6, some comments were removed from the tables (See Appendix 7-2 for the entire list). The exclusion criteria follow the same rules as Chapter 6:

- The comments made just in one neighbourhood are excluded except for:
    - Those from Case 1, 5 and 8. As shown in section 6.2, the distribution of intensity of fear shows particular prevalence in these cases. Therefore, to keep these comments might help to understand their peculiarity.
    - Those comments explicitly related to gated communities, as they are directly connected to the core research question.
- Topics regarding teenagers were excluded because this analysis was done in Section 6.3 in Chapter 6.
- Topics regarding Community Parks were excluded because they will be addressed in Section 7-4.

The colour code of the tables follows the same rules as section 6.3.

Colour legend Attitude			Number of mentions
Positive	Neutral	Negative	
			0
			1 to 3
			4 to 6
			7 to 9
			10 or more

7.2.1. Physical features of neighbourhoods

The eight study cases, as shown in Chapter 5, have differences in infrastructure and facilities. Those differences were also identified in the participants' comments (see Table 7.1). The most common complaints were issues about infrastructure and pavements, these occurred in all cases except for Case 7. Images from this location are displayed in Figure 7.4; it can be seen that there is good quality infrastructure in general. In other neighbourhoods with similar features, such as Cases 6 and 8, the participants had more complaints about the same topics (Figures 7.11 and 7.6 show physical features of Cases 6 and 8).

Some comments were made in all eight cases, for instance, concerns about isolated areas, heavy traffic and dangerous bus stops. The traffic congestion is more significant in those neighbourhoods with higher poverty – Cases 1, 2, 3, 4 and 5. As is seen in Section 7.7, many of those concerns are located next to gated communities' edges.

Worries about dangerous bus stops were expressed in all eight cases, some examples can be found in Figure 7.4 (Photo A) and 7.5 (Photos A, B, C), most of them do not have a physical infrastructure (shelter) or signalling. The walking distance between the bus stop and dwellings caused concern among people from Cases 1 to 6. In contrast, people from Cases 7 and 8 did not mention any trouble with that; they explained that they are not typically users of public transport, although they have heard about victimisation episodes in those sites. Participants associated a number of different physical signs to fear of crime, for instance: presence of unknown parked cars; motorcycles on the move; and cars passing on lonely streets were mentioned in seven of the eight cases and neighbours associate those vehicles with mugging, sexual attacks, abductions or murders. An example of those places can be found in Figure 7.5 (Photo E).

Table 7.1. Negative attitudes towards built environment elements expressed during walks and focus groups –organised by subcategories.

Built environment -negative attitudes-	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Infrastructure								
General infrastructure issues								
Lack of pavement or pavement in poor conditions								
Issues with geometry of roads								
Land use								
Issues with land uses								
This place is a former coffe plantation-livestock								
Neighbourhood's atmosphere								
Negative attitude towards neighbourhood's atmosphere								
Negative attitude towards houses for rent								
Noises								
Disturbing sounds/noises								
Perceived safety								
To live in an open neighbourhood is less safe								
This place has many routes for escaping								
Negative attitude towards contiguous neighbourhood								
Physical features								
Place in poor physical conditions								
The place is less safe now								
Signs of fear								
Vehicles in movement make the place unsafe								
Isolated place								
Dark place								
Parked vehicles are scary								
Dangerous Bus Stop								
Vacant lots are scary								
Abandoned cars make the place unsafe								
Survilliance								
Negative attitude towards private security								
Walls of gated communities are not permeable								
Issues monitoring CCTV								
Traffic								
Heavy traffic								
Walking routes								
Dangerous walking distance to Bus Stop								
Dangerous walking route								
Parked cars are obstacles for traffic								
Communal infraestructure								
Community room underused								

Source: Author's elaboration

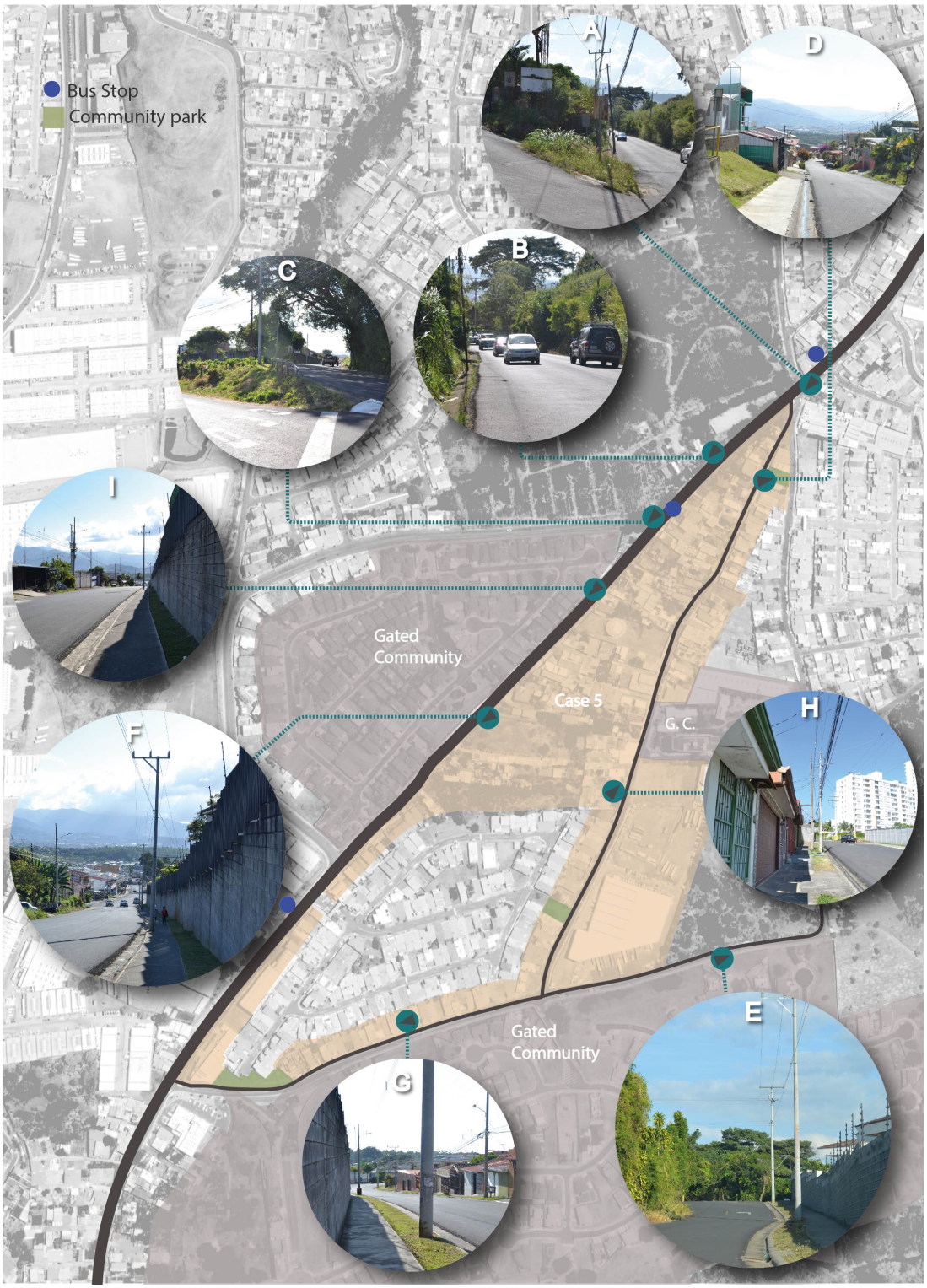
The link between the presence of strangers and potential criminal activity was also recorded with negative attitudes towards houses for rent in six of the eight cases. This situation was stronger in Case 8. As was discussed in Chapter 6, neighbours suspect that those dwellings might be linked to organised crime.

Figure 7.4. Physical features of **Case 7** and surroundings. The arrows show the direction of the photograph.



Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

Figure 7.5. Physical features of **Case 5** and surroundings. The arrows show the direction of the photographs.



Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

On the other hand, there were also positive associations towards elements of the built environment (see Table 7.2). In all cases, there were positive comments about the neighbourhood's atmosphere, for instance some residents referred to their neighbourhood as a quiet place, as a good place for living and safe in some sectors. People from the eight cases associated feelings of safety with familiarity; they ranked as safe places those where people know each other.

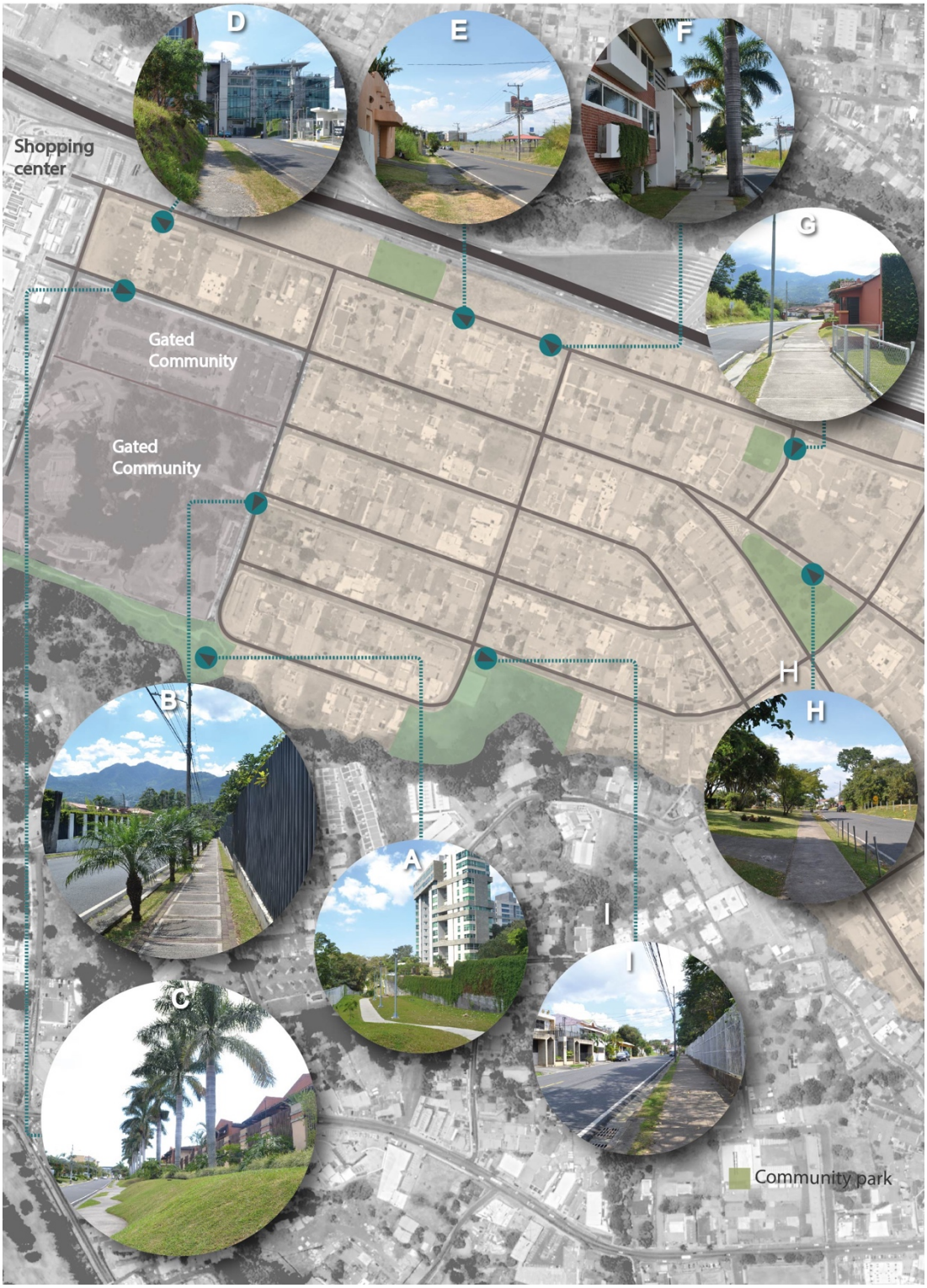
Table 7.2. Positive associations towards built environment elements expressed during walks and focus groups – organised by subcategories.

Built environment -positive and neutral attitudes-	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Neighbourhood's atmosphere								
Positive attitude towards neighbourhood's atmosphere								
Perceived safety								
The place is safer now								
This area is safe because people know each other								
Positive attitude towards contiguous neighbourhood								
Physical features								
Positive attitude towards physical features								
Positive attitude towards regenerated/ improved place								
Permeability in neighbourhood is positive for safety								
Survilliance								
Positive attitude towards private security								
To control public spaces is important for keeping the place safe								
Vehicles in movement help safety								
This neighourhood has/had gates								

Source: Author's elaboration

In five cases, there were positive comments about public infrastructure improvements managed by community efforts. People mentioned places that used to be unsafe in the past and have now been improved. For instance, in Case 8 the Community Board managed the regeneration of neglected municipal land next to a gated community (see Figure 7.6, Photo A).

Figure 7.6. Physical features of **Case 8** and surroundings. The arrows show the direction of the photographs.



Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

Overall, the positive associations to the built environment are mostly concentrated in Cases 5 and Case 8; as addressed in Chapter 6 the intensity of fear inside these neighbourhoods seems to be lower than the rest of cases. This situation might suggest a possible correlation between the perception of the built environment and fear of crime but, paradoxically, both cases present numerous complaints about the built environment. As shown in Figures 7.5 and 7.6, the quality of infrastructure compared between both cases is significantly different. Case 8 has seven Community Parks and good quality drainage and roads, as well as pavements throughout almost all the neighbourhood. In contrast, Case 5 has three Community Parks, issues with drainage, sections with narrow and wide streets and a general lack of pavement. However, these residents keep a positive attitude towards the future and how their community will overcome their infrastructure issues; they highlighted the achievements obtained and the positive atmosphere of the neighbourhood and added that its strong community ties might suggest that people from that community are mostly satisfied with their neighbourhood. For instance, one male participant expressed a good level of tolerance between neighbours:

> When we have parties with friends in our house, we have food and drinks, we have stayed here until 1am, singing and our neighbourhoods do not call the police, because they know we do that occasionally. (Male,46)

That suggests, to some extent, that perception of safety might be associated to the level of satisfaction with the neighbourhood (among other reasons), in spite of the physical conditions of the place, as some research has previously highlighted (Hartnagel, 1979; Link et al., 2017).

7.2.2. Attitudes towards physical features of gated communities

Table 7.3 displays different attitudes towards gated communities. It can be observed there is a consistent pattern with Cases 1, 5 and 8; they expressed positive comments about the gated communities nearby. Although the negative views still dominate, people from these places found some positive

aspects, especially regarding surveillance systems that provide CCTV along the edges. However, the gated edges have different features across Cases 1, 5 and 8, as shown in the following figures:

- Case 1, Figure 7.7: Photos B, C and D
- Case 5, Figure 7.5: Photos E, F, G and I
- Case 8, Figure 7.6: Photos A, B and C

Case 8 is the only one where the border between the gated development and the neighbourhood is permeable, whereas, Case 1 and Case 5 present similar features to the average boundary.

Table 7.3. Positive and negative attitudes towards gated communities expressed by participants during walks and focus groups –linked to the built environment

Gated communities -positive and negative attitudes-	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Walls or Safety resources of Gated Communities are positive								
Gated Communities improved public infrastructure								
Gated communiites make the place more insecure								
Gated communities are exclusionary								
Gated communities brings issues such as connection/landscape /land value								
Gated communities did not change our safety levels								
Gated Communities do not contribute to our neighbourhood								
Inside gated communities people do not share								
It is expensive to live in a gated community								
Particular issue with a gated community								
The building process of gated communities was disturbing								
There is crime inside gated communities								
Walls of gated communities are disturbing								

Source: Author's elaboration

As shown in Table 7.3, the weight of negative opinions is concentrated in the range from Case 2 to Case 5, which belongs to the high-middle and middle range of poverty (3 NBI and 2 NBI). These neighbourhoods also had negative experiences during the construction process of gated communities nearby, mainly damage to their community infrastructure. They also complained about certain features of gated communities' walls, such as height, isolation or a resulting darkness. Furthermore, there is dissatisfaction with elements of the urban form directly linked to those developments, for instance, complaints about the design of intersections and a lack of connectivity. People from the 2 NBI group (Cases 3, 4 and 5), highlighted that gated communities do not contribute to the neighbourhood as they did not supply public spaces or contribute to improve the current ones. Considering that Cases 1, 2, 3 and 4 do not have Community Parks, that provision might help to supply public spaces for community leisure. Participants from Cases 2, 3 and 4 mentioned that their neighbourhood and surroundings used to be safer in the past (around

30 years ago) but now that has changed. Those people also believe that some safety measures adopted by gated communities' developers, such as walls and private security, have made their neighbourhood become even more unsafe.

On the other hand, the neighbourhoods with lower poverty, Case 6 and 7 (1 NBI) and Case 8 (0 NBI) hold fewer negative associations to those developments. Despite people from Cases 6 and 7 not reporting unfavourable comments about gated communities, they did report negative experiences and feelings next to their walls, as shown in the maps from Figure 7.3 (Section 7.1). In Case 1, the complaints are related to feelings of exclusion and indirect consequences for its neighbourhood; as mentioned in Chapter 6, neighbours blame gated communities for the organised crime of drug traffic networks.

People from seven of the eight cases believe that gated communities are exclusionary, even in Case 8 where there is evidence of a relationship with residents from those developments. As shown in Chapter 6 the residential segregation is consistent in seven of the eight cases; this lack of contact with gated residents might explain the exclusionary views towards those developments.

Figure 7.7. Physical features of **Case 1** and surroundings. The arrows show the direction of the photographs.



Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

7.3. Views about public spaces' features and their management

The adopted definition of public spaces, as has been described in Chapter 4, encompasses streets, pavements, Community Parks and those private spaces with public access (Carmona, de Magalhães & Hammond, 2008). The opinions about their public spaces vary according to their current supply. Table 7.4 shows the communities' attitudes towards their public spaces which are grouped by built environment and community relationships. It can be seen how those neighbourhoods with Community Parks (Cases 5, 6, 7 and 8) have more positive attitudes related to public spaces, most of those views are related to their own parks which have good conditions and constant maintenance (see Photos 7-1 to 7-4).

Table 7.4. Communities' attitudes towards public spaces (positive, neutral and negative views).

Public spaces-all attitudes-	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Built Environment								
Good supply and diversity of uses in current parks								
Positive attitude towards closing/fencing public spaces as safety measure								
This public space was regenerated								
Control of public spaces as safety measure								
I do not go to the community park -my kids have grown up								
Neighbours' requests about more opening hours in community parks								
Socialisation take place on the street								
Use of alternative spaces for socialisation								
Concerns about supply of public spaces								
Concerns about supply of public spaces -land invasion								
Public space in poor condition								
Withdraws of having community parks								
Community relationships								
Issues with logistics about public spaces management								
Socialisation take place on the street								
Concerns about public spaces use and vitality								
Concerns about public spaces use and vitality for youth								
Issues with logistics about public spaces management								

Source: Author's elaboration

Many participants from neighbourhoods with Community Parks highlighted as positive the diversity of uses in their parks and the attendance of a range of different age groups. Actually, they have integrated different type of sports equipment and play facilities in order to attract more people. However, some of them complain about the planning regulations which do not allow a mix of infrastructure for different age groups in the same Community Park, making it difficult to get that diversity.



Photos 7.1, 7.2, 7.3, 7.4. Some Community Parks from Cases 5 to 8.
Source: Author

However, they also agree on the need to fence and lock those parks as a precautionary measure against crime. As has been mentioned in Chapter 6, those parks are commonly closed at 6 or 7 p.m. except for Case 7 which is open until 10 p.m. That decision might affect some groups such as teenagers, people who come home late from work or adults who prefer to go out during the evening. Photos 7-5 to 7-8 illustrate the way those spaces are fenced. The only exception to these fences is one of the seven parks from Case 8 (Photo 7-4).

As shown in Table 7.4, those neighbourhoods with Community Parks also face logistical challenges. Most of the participants describe how difficult it is to find somebody who will open and close the park's gate every day. Furthermore, as mentioned in Chapter 6, that person sometimes has to deal with hostilities or violent reactions from people who disagree with the opening schedule. This situation seems to overwhelm the community leaders who try to keep those spaces open to schedule. The purpose of keeping control of the parks is to avoid behaviours considered as inappropriate by many community members,

such as the consumption of drugs, alcohol or public displays of affection (PDA).



Photos 7.5,7.6,7.7, 7.8. Examples of fenced parks in cases 5 to 8.
Source: Author



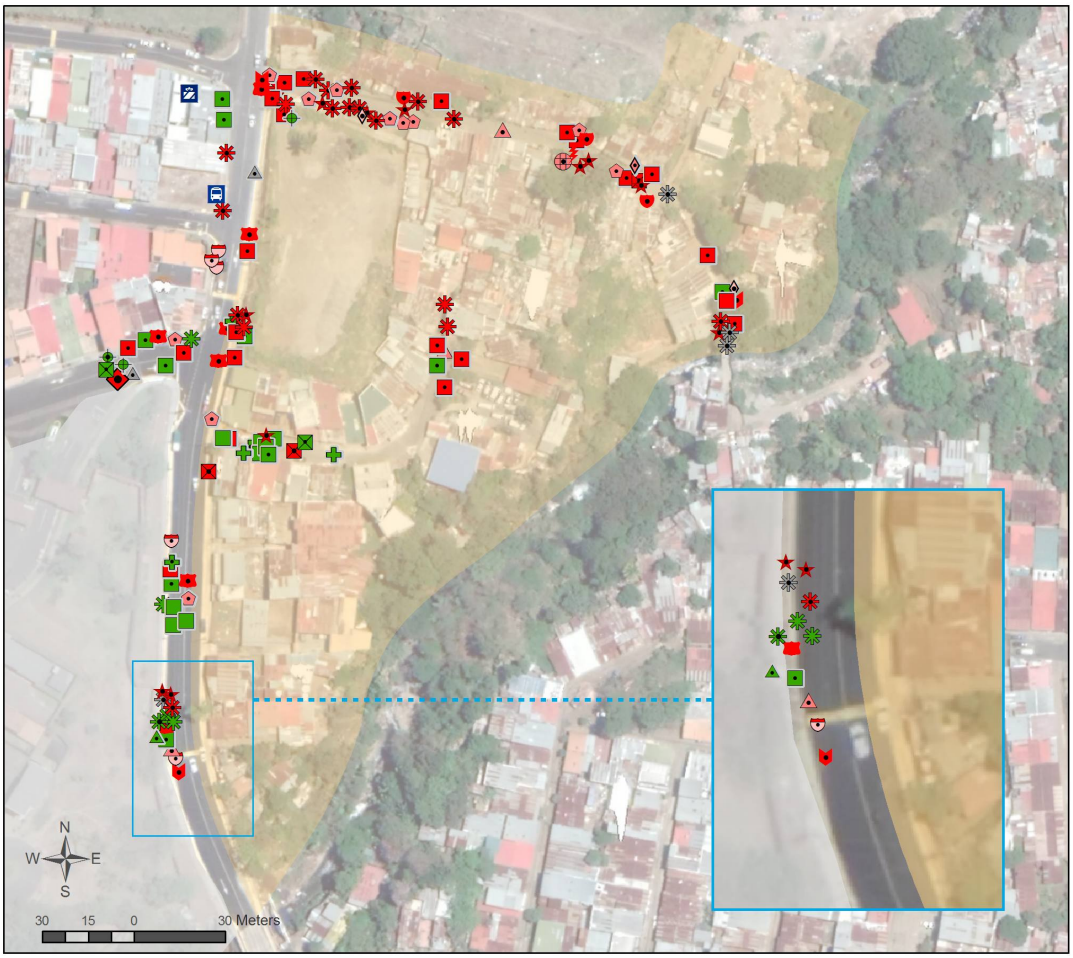
Photos 7.9, 7.10. Expected public spaces for Cases 1 and 2. Translation of sign in Case 2: 'Come to enjoy with your family, new year party. In front of the vacant lot'.
Photos 7.11 and 7.12. Community halls for Cases 3 and 4.
Source: Author

The supply of open spaces and lack of diversity causes worries in most of the neighbourhoods except for Cases 5, 7 and 8. To tackle that, the communities in higher poverty, Cases 1 and 2, are making efforts to get public land for future parks and Community Halls (see Photos 7.9 and 7.10). In this regard, the neighbours from Case 1 consider that having a park is an opportunity to provide spaces for their children, especially because sometimes they have had trouble trying to use parks nearby. Another particular difficulty faced by people from Case 1 is the squatting of their lands by their own neighbours, which has happened on the same basis in streets and dedicated areas for parks; one participant pointed this out on two occasions:

> This is a dead-end street, the Community Board had planned to join both streets, but because it was squatted, it could not happen, but this street used to have connection with the other side (Male, 57).
>
> We have an area, it was supposed to be for a communal proposes, but unfortunately it was squatted (Male, 57).

This situation captures a structural consequence of poverty, this community has problems of housing supply, therefore people who need a place for living have squatted public lands to build a house. As a result, land originally intended for public spaces are occupied by dwellings; this situation increases even more the inequality of the provision of public infrastructure and people's access to public open spaces. Despite that, the residents tolerate this situation as they are conscious that everyone needs a house. The 'Talk's track map by subcategories' in Figure 7.8 shows how people's perception about public spaces is negative in the internal roads of the neighbourhood, in contrast with the streets facing the gated community which have more positive opinions. These neighbours mentioned that they feel that the provision of pavements and CCTV from the gated community is an improvement for their neighbourhood. (see also Figure 7.7 for photos).

Figure 7.8. Case 1. Talk's track map classified by subcategories
- fast reading colours of attitudes: green (+), red (-) and grey (neutral) -



Case 1. Localised attitudes by sex and topic

References
- Retail
- Bus stop
- Neighbourhood
- Gated community

Participant's comments by subcategories
Attitude (- / +), Sex (F/M) , Subgroup
- +, F, Gated Communities
- +, F, General victimisation
- +, F, Neighbourhood's atmosphere
- +, F, Perceived safety
- +, F, Physical features
- +, F, Public spaces
- +, M, General victimisation
- +, M, Perceived safety
- +, M, Physical features
- +, M, Public spaces
- -, F, Drug consumption
- -, F, Drug sale
- -, F, Drug user
- -, F, Fear
- -, F, Infrastructure
- -, F, Neighbourhood's atmosphere
- -, F, Noises
- -, F, People linked to crime
- -, F, Perceived safety
- -, F, Private space
- -, F, Public spaces
- -, F, Signs of fear
- -, F, Surveillance
- -, F, Traffic
- -, F, Walking routes
- -, M, Infrastructure
- -, M, Perceived safety
- -, M, Public spaces
- -, M, Signs of fear
- -, M, Traffic
- -, M, alcohol consumption
- 0, F, Gated Communities
- 0, F, Public spaces

Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

7.3.1. Control and movement in public spaces

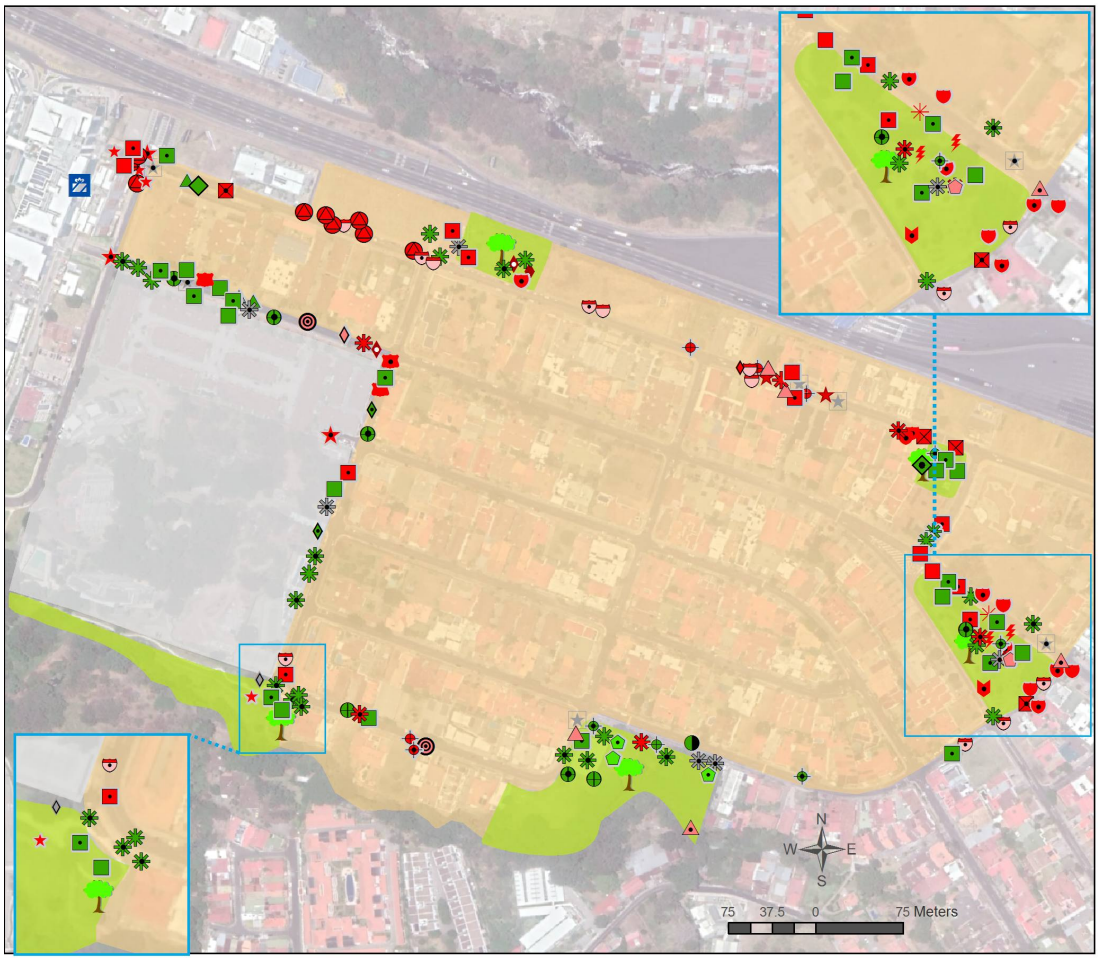
In general, most of the participants believe that controlling public spaces could help the safety in their neighbourhood (Tables 7.11, 7.12). Those measures might be CCTV, parking control, a police presence and establishing behaviour

regulations in parks. Nevertheless, this position also has some critics among the same neighbours who believe that CCTV or the police would not help to prevent the crime but is useful to capture suspects.

In many cases, people from all ages socialise on the street, even in neighbourhoods with parks. Despite this, many people prefer to stay at home or avoid public spaces as a precautionary measure, mainly in those places without Community Parks. Alternatively, in many cases, people meet in private spaces, such as houses or places outside their own neighbourhood. However, residents from neighbourhoods with Community Parks expressed positive associations between safety, infrastructure and the vitality of their parks. In Figure 7.9 the 'Talk's track map by subcategories' displays perceptions from residents of Case 8. It can be observed that there are mostly positive attitudes about public spaces in the parks; however, there are mixed views in two of them, it may have happened because the east park has been identified as an area for selling drugs, therefore during the night the neighbours increase their precautions. The north park is located next to the road with informal parking (described in Chapter 6). In both cases, these situations are linked to the presence of unfamiliar people, which causes concern, especially during the night.

Although physically some public spaces could look alike, they might be perceived in different ways by participants from all cases. As addressed in Chapter 2, people's mental maps (Koskela & Pain, 2000) based on their experiences means that elements that are physically similar might have different meanings. The subsequent sections of this chapter explore those relationships, including differences between men's and women's perceptions. Those experiences and feelings are contrasted in places next to the gated community wall and those without that location.

Figure 7.9. Case 8. Talk's track map classified by subcategories.



Case 8. Localised attitudes by sex and topices

Shopping centre
Neighbourhood
Community park
Gated community

Participant's comments by subcategories
Attitude (- / +), Sex (F/M) , Subgroup

+, F, Community ties
+, F, Drug sale or consumption
+, F, Neighbours
+, F, Perceived safety
+, F, Physical features
+, F, Public and private spaces
+, F, Public spaces
+, F, Surveillance
+, M, Community ties
+, M, Developers
+, M, Drug sale or consumption
+, M, Gated Communities
+, M, Perceived safety
+, M, Physical features
+, M, Public and private spaces
+, M, Public spaces
+, M, Surveillance
-, F, Drug sale
-, F, Homeless
-, F, Infrastructure
-, F, Local government
-, F, Neighbourhood's atmosphere
-, F, Organisation
-, F, Perceived safety
-, F, Physical features
-, F, Private space
-, F, Public and private spaces
-, F, Public spaces
-, F, Signs of fear
-, F, Traffic
-, F, Walking routes
-, M, Anger
-, M, Drug sale
-, M, Drug user
-, M, Fear
-, M, Homeless
-, M, Infrastructure
-, M, Land use
-, M, Local government
-, M, Neighbourhood's atmosphere
-, M, Neighbours
-, M, Perceived safety
-, M, Physical features
-, M, Public and private spaces
-, M, Public spaces
-, M, Signs of fear
-, M, Traffic
-, M, alcohol consumption
0, F, Institutional measures
0, F, Public spaces
0, M, Gated Communities
0, M, Institutional measures
0, M, Length of residence

Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

7.4. Perceptions by men and women about their neighbourhood and its surroundings

The way that men and women perceive the city also affects how they use public spaces and their social relationships with others. Those differences were explored in Chapter 2; re-examining that literature, it suggests that women have a lower risk of victimisation in most crimes, apart from rape and sexual assault (Ferraro, 1996; Tandogan & Ilhan, 2016). However, studies point out that they are more afraid of all types of crime than men (Hale, 1996; Falú, 2009; Tandogan & Ilhan, 2016). Given this evidence, this section explores some differences between men and women's perceptions, as well as their precautionary measures when facing crime. The comments of both groups have been georeferenced, all sets of maps are shown in Appendix 7-1. The number of items displayed in the tables varies according to the number of comments, in topics with large number of comments, the 'top ten' comments were selected (this can vary between ten and twelve as some values share positions), in those with less comments the top five is displayed (this also varies between five and seven). These tables do not have any other filter, the entire set of lists can be found in Appendix 7-2.

7.4.1. Views about physical features and victimisation experiences

Men and women voiced their perceptions about the built environment in both focus groups and walks. Table 7.5 and 7.6 shows the most prevalent comments from men and women in different places visited during the walking interviews. Although there were women in all focus groups, during the walks in Cases 2 and 3 there were no female participants.

The most cited comments are at the top of the tables. The two more common complaints from men are related to infrastructure and lack of pavements, whereas women made more negative comments about the heavy traffic and isolation at some places. Men showed more concerns about static elements of the built environment and women made more comments related to temporal

or dynamic features of places. However, both genders share similar views about dangerous walking routes from the bus stop, issues with traffic, isolated places and concerns about unfamiliar moving cars, among others.

There are also positive comments about physical features of the built environment from both men and women. Furthermore, women stressed the good supply and diversity of public spaces and a neighbourhood's atmosphere, for instance, comments such as 'This is a nice place for living' or 'It is a quiet area' were regularly cited comments on that topic. On the other hand, men highlighted the importance of permeability in dwellings, which allows for the ability to ask for help in case of any dangerous situation, that topic was also mentioned by women but not to the same degree as for men.

Table 7.5. Men's top comments about the built environment during the walking interviews.

Men's top comments about the built environment (WALKS)	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
General infrastructure issues								
Positive attitude towards physical features								
Lack of pavement or pavement in poor conditions								
Heavy traffic								
Vehicles in movement make the place unsafe								
Permeability in neighbourhood is positive for safety								
Dangerous walking distance to Bus Stop								
Dangerous Bus Stop								
Issues with land uses								
Isolated place								
Place in poor physical conditions								

Source: Author's elaboration

Table 7.6. Women's top comments about the built environment during the walking interviews.

Women's top comments about the built environment (WALKS)	Case 1	Case 4	Case 5	Case 6	Case 7	Case 8
Heavy traffic						
Positive attitude towards physical features						
Isolated place						
Parked vehicles are scary						
Vehicles in movement make the place unsafe						
Dangerous walking distance to Bus Stop						
Lack of pavement or pavement in poor conditions						
This public space was regenerated						
Good supply and diversity of uses in current parks						
Place in poor physical conditions						
Positive attitude towards neighbourhood's atmosphere						

Source: Author's elaboration

Along the walk, the participants shared their own victimisation experiences, those suffered by themselves, relatives or friends in places (see Tables 7.7 and 7.8). Men mentioned more episodes of muggings than women; in fact,

men from almost all neighbourhoods reported that situation, whereas women tended to be more aware about cases of burglary in their community. Although traffic accidents might not be considered as victimisation episodes, men from Cases 3, 5 and 6 were emphatic about mentioning traffic accidents that caused deaths in their community and which may lead to a criminal prosecution. In fact, participants from the cluster (Cases 5 and 6) described exactly the same episode on the street known for illegal car racing, next to the gated community.

Women mentioned sexual attacks or harassment and this type of victimisation was also mentioned by men; however, women expressed being direct victims of those attacks and men reported episodes suffered by female relatives or friends. Women also had more positive associations with the absence of victimisation along some segments of the route. However, despite that awareness, women still reported a higher intensity of fear than men, as will be addressed later.

Table 7.7. Men's top comments about victimisation during the walking interviews

Men's top comments about victimisation (WALKS)	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Mugging								
Fatal traffic accident								
Suspicious situations								
Burglary								
Murder								
Sexual attack or harassment (female relative/friend)								
Witness of an episode of victimisation								

Source: Author's elaboration

Table 7.8. Women's top comments about victimisation during the walking interviews.

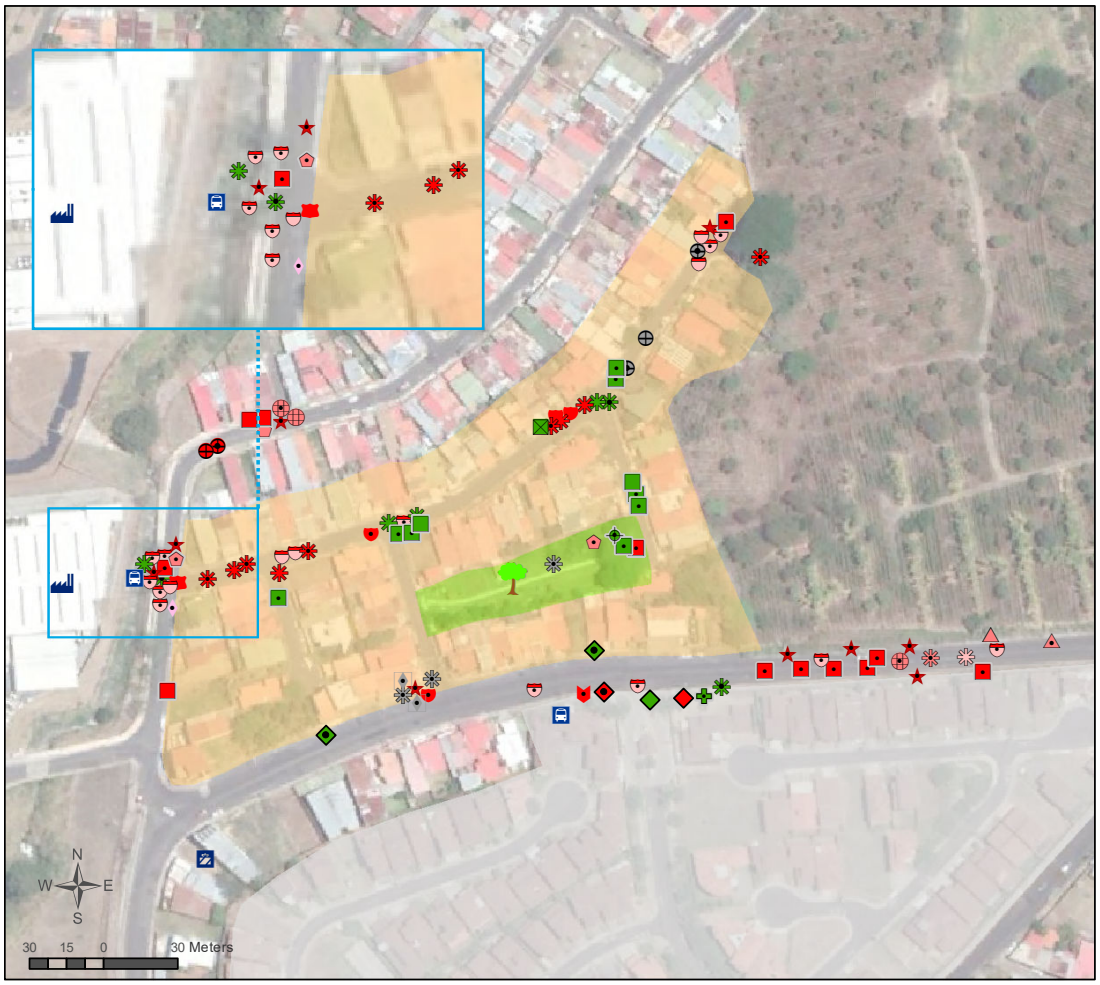
Women's top comments about victimisation (WALKS)	Case 1	Case 4	Case 5	Case 6	Case 7	Case 8
Burglary						
There is no previous victimisation in this place						
Mugging						
Sexual attack or harassment (themselves)						
Suspicious situations						
Witness of an episode of victimisation						

Source: Author's elaboration

In order to illustrate some of participant's views, Figure 7.10 displays the comments grouped by subcategories for Case 6; then in Figure 7.11 it is possible to see the physical features of the neighbourhood, Photos G and E show the street where the illegal car racing takes place, the neighbours describe that area as isolated and risky. Photos A and E correspond to bus

stops considered dangerous, one is next to a gated community's wall and the other one next to a fenced industrial area. Despite having a CCTV system in the bus stop (Photo A), the female participants mentioned that they feel unsafe there, also the walking distance from the other bus stop (Photo E) causes anxiety.

Figure 7.10. Case 6. Talks' track map classified by subcategories.



Case 6. Localised attitudes by sex and topic

References

- Retail
- Industrial land use
- Bus stop
- Neighbourhood
- Community Park
- Gated community

Participant's comments by subcategories

Attitude (- / +), Sex (F/M) , Subgroup

- +, F, General victimisation
- +, F, Perceived safety
- +, F, Physical features
- +, F, Public spaces
- +, F, Surveillance
- +, M, Neighbourhood's atmosphere
- +, M, Perceived safety
- +, M, Public spaces
- +, M, Surveillance
- -, F, Community ties
- -, F, Drug consumption
- -, F, Drug sale
- -, F, Fear
- -, F, Infrastructure
- -, F, Noises
- -, F, Perceived safety
- -, F, Private space
- -, F, Public spaces
- -, F, Public spaces -cars are threats
- -, F, Signs of fear
- -, F, Surveillance
- -, F, Uncomfortable behaviours
- -, F, Walking routes
- -, M, Community ties
- -, M, Drug sale
- -, M, Fear
- -, M, Infrastructure
- -, M, Noises
- -, M, Perceived safety
- -, M, Private space
- -, M, Public spaces
- -, M, Public spaces -cars are threats
- -, M, Signs of fear
- -, M, Surveillance
- -, M, Traffic
- 0, F, Community ties
- 0, F, Public spaces
- 0, F, Teenagers
- 0, M, Community ties

Source: Author

Figure 7.11. Physical features of **Case 6** and surroundings. The arrows show the direction of the photographs.



Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

7.4.2. Men and women facing their fears

This section shows fears and precautionary measures mentioned by male and female participants in both focus groups and walks. Tables 7.9 and 7.10 display the top fears manifested by participants. There was one male participant during walks and focus groups in Case 1; however, none of his comments was ranked among the most mentioned.

The more consistent fears in both groups are fear of strangers, fear of being mugged and concerns about someone else's safety. Women expressed fears about their children's safety, whereas men were anxious about their female relative's safety, mainly in crimes regarding sexual violence. Although women also mentioned fears about being sexually harassed, especially during the walks, they tended to mention other types of fears first.

Overall, it seems that fears in men have a consistent pattern from Case 2 to Case 6 (three first positions); however, women show more diverse distribution across the eight study cases. The next section, will analyse if those fears vary along the gated community's edge.

Table 7.9. Fears to specific situations mentioned by men in both focus groups and walks.

Top fears reported by men	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Fear of being mugged								
Fear of strangers								
Concern about someone else safety								
Fear is everywhere								
Fear of someone might be hidden -weed								
Fear of reprisals								

Source: Author's elaboration

Table 7.10. Fears to specific situations mentioned by women in both focus groups and walks.

Top fears reported by women	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Fear of strangers								
Concern about someone else safety								
Fear of being mugged								
Fear of burglary								
Fear of hearing something unusual								
Fear of someone might abduct my child								

Source: Author's elaboration

Men and women face fear of crime in different ways (see Tables 7.11 and 7.12). However, both genders have positive attitudes about using CCTV for

safety issues; this perception was found more consistent in men from Cases 1 to 6; however, the use of CCTV had also mixed views, male participants from Cases 2 to 6 questioned the usefulness of those devices for preventing crimes. Men from all cases pointed out the importance of controlling public spaces as a safety measure, that includes police presence and public spaces' regulations. Women from seven neighbourhoods also mentioned that measure.

Female participants mentioned as a precautionary measure formal complaints to police or local government; this was in five neighbourhoods and especially in the one with highest incomes. Many of those claims were regarding safety issues or infrastructure that might affect security. Both groups also mentioned the surveillance among neighbours as being something positive, which may consist of simply being aware of any suspicious movement when their neighbours are not at home.

Table 7.11. Precautionary measures more cited by women in both focus groups and walks.

Top precautionary measures reported by women	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
To make a formal complaint to the police or local government								
Control of public spaces as safety measure -CCTV								
Survilliance among neighbours								
To stay at home instead of outside as safety measure								
Control of public spaces as safety measure								
To ban teenagers going out or visiting certain places								
Do not walk alone as safety measure								
To avoid public spaces as safety measure								
To confront the criminal								
To hide belongings								

Source: Author's elaboration

Table 7.12. Precautionary measures more cited by men in both focus groups and walks.

Top precautionary measures reported by men	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Control of public spaces as safety measure -CCTV								
Control of public spaces as safety measure								
To warn neighbours using social media								
Negative attitude towards control of public spaces -CCTV								
Survilliance among neighbours								
To avoid public spaces as safety measure								
To make a formal complaint to the police or local government								
To have a stick or gas								
To ban teenagers going out or visiting certain places								
To fence or lock a space								
To have an alarm								

Source: Author's elaboration

Men and women's responses also suggest that precautionary measures taken by female participants are more linked to limitations in their use of the public

spaces especially at night, for example, ‘to stay at home’, ‘do not walk alone’. Although men from Cases 2, 3 and 4 avoid some public spaces, overall, men’s precautionary measures are more linked to surveillance and control methods. However, both groups concur in implementing restrictions to teenagers as a protection measure. There were also some confrontational responses from both genders, for example, some men have sticks at home to hit criminals and some women have directly confronted people who they believe were following them.

However, women from Case 1 face additional concerns apart from specific issues with violence and criminality, such as stigmatisation for being women from low incomes areas. During a personal interview with a woman from Case 7 who used to live in the area from Case 1, she referred to the difference between living in the area of Case 1 and the place where she lives now:

> Although I consider myself as a person with good self-esteem…it was difficult to do not feel marginalised. It was so terrible when you had to take a taxi, and you asked: Could you take me to [place’s name]? and the driver responded: ‘No darling, I cannot take you there, if I do, you have to pay more’. Then when you enter into the taxi, plenty of sexual harassment and obscene comments. But now, during the time that I have lived here, when I take a taxi, I feel that the respect that I have here I did not have there. (CM 3, personal interview, 25 October 2018)

These types of behaviours were also confirmed during a personal interview with a woman from Case 1 (CM 1); she described situations of sexual harassment and insults received for living there. In addition to that, as seen in the quote, the taxi driver asked for a higher fee for entering into the neighbourhood, which suggests that people from stigmatised areas sometimes might be also victims of illegal overpricing on private transport, which stretches even further their available incomes.

7.5. Next to the wall

This section brings together the exploration about intensity of fear from Chapter 6 and perceptions about the built environment but focuses on the physical proximity of gated communities. Section 7.4 examined men and women's fears and precautionary measures, this section explores fluctuations in both groups in those places next to the gated community and those where there is not physical contact with the edge. It closes with an overall comparison of the areas 'with' and 'without' physical contact with the edge.

7.5.1. Intensity of fear between women and men

The overall intensity of fear reported by participants was analysed in Chapter 6 (by cases). This section again addresses those perspectives but classifying men's and women's views separately. Tables 7.13, 7.14 and 7.15 are based on the individual maps produced by participants during fieldwork (Intensity of fear maps in Chapter 6). To recall how that information was obtained, the participants put stickers to indicate their intensity of fear along different places visited during the walking interview. The participants used 792 stickers in total, 524 placed in areas inside the neighbourhoods and surroundings without contact with gated communities' edge and 268 stickers in places beside that boundary.

Table 7.13 shows the general perception of men and women along the entire walk. The information suggests that among female participants, the allocation of secure places was lower than male participants. That difference is even more significant during the night, for instance, the portion of stickers that women employed to identify safe places at night was 9% against 14.4% used by men. Likewise, in the category 'very secure – night' women allocated 3.3% stickers versus 6.1% of men. Regarding places considered insecure, female participants designated higher percentages than men except for the category 'insecure night'; a possible explanation may be that women chose the sticker 'very insecure – night' instead; as table 7.13 shows the percentage of places considered very insecure at night are 18.2% in women against 12.5% in men. Overall, these results suggest that women recorded a higher intensity of fear along the walking interview route.

Table 7.13. General Intensity of fear manifested by female and male participants along walking interview.

Intensity of fear (general)	Female	Male
Very secure -DAY	10.6%	10.9%
Very secure -NIGHT	3.3%	6.1%
Secure - DAY	22.8%	25.9%
Secure - NIGHT	9.0%	14.4%
Insecure - DAY	13.2%	7.3%
Insecure - NIGHT	16.3%	19.8%
Very insecure - DAY	6.7%	3.2%
Very insecure - NIGHT	18.2%	12.5%
	100.0%	100.0%
Total of stickers n= 792	n=479	n=313

Source: Author's elaboration

Table 7.14. Intensity of fear in places without contact to gated community's edge.

Intensity of fear (no wall/edge)	Female	Male
Very secure -DAY	12.2%	12.3%
Very secure -NIGHT	4.2%	4.7%
Secure - DAY	25.0%	27.8%
Secure - NIGHT	10.6%	17.9%
Insecure - DAY	10.9%	6.1%
Insecure - NIGHT	13.5%	19.8%
Very insecure - DAY	5.8%	1.4%
Very insecure - NIGHT	17.9%	9.9%
	100.0%	100.0%
Total of stickers n= 524	n=312	n=212

Source: Author's elaboration

Table 7.15. Intensity of fear in places next to gated community's edge

Intensity of fear (next to the wall/edge)	Female	Male
Very secure -DAY	7.8%	7.9%
Very secure -NIGHT	1.8%	8.9%
Secure - DAY	18.6%	21.8%
Secure - NIGHT	6.0%	6.9%
Insecure - DAY	17.4%	9.9%
Insecure - NIGHT	21.6%	19.8%
Very insecure - DAY	8.4%	6.9%
Very insecure - NIGHT	18.6%	17.8%
	100.0%	100.0%
Total of stickers n= 268	n=167	n=101

Source: Author's elaboration

Tables 7.14 and 7.15 show a difference of perceived safety in those places next to gated communities' walls and those out of that margin. The information suggests that those places ranked as 'secure' (day and night) were less common next to the gated community's edge for both men and women. Also, those areas designated as 'insecure' or 'very insecure' were more frequently allocated next to the gated development.

It seems there is consensus regarding the places labelled as 'very secure', except for the category 'very secure – night' by men next to the wall; in fact, that category shows a more prominent gap between men and women; men allocate 8.9% of their stickers in that area, whereas women place just 1.8% of them. Another disparity between the genders is displayed in the category

‘Insecure – day’ next to the wall, there men allocated 9.9% of stickers as opposed to 17.4% from women. Apart from those two significant gaps, next to the wall, it seems differences between men and women perceptions become narrower. It can be noticed that places classified as ‘very insecure’ (day and night) by men, present a notable increase. For instance, in the category ‘very insecure – day’ the figure passes from 1.4% (no wall) to 6.9% (next to the wall). Likewise, for those places under the category ‘very insecure – night,’ in the same order, the value rises from 9.9% to 17.8% respectively. Both categories for women had an increase but not in the same proportion as for men.

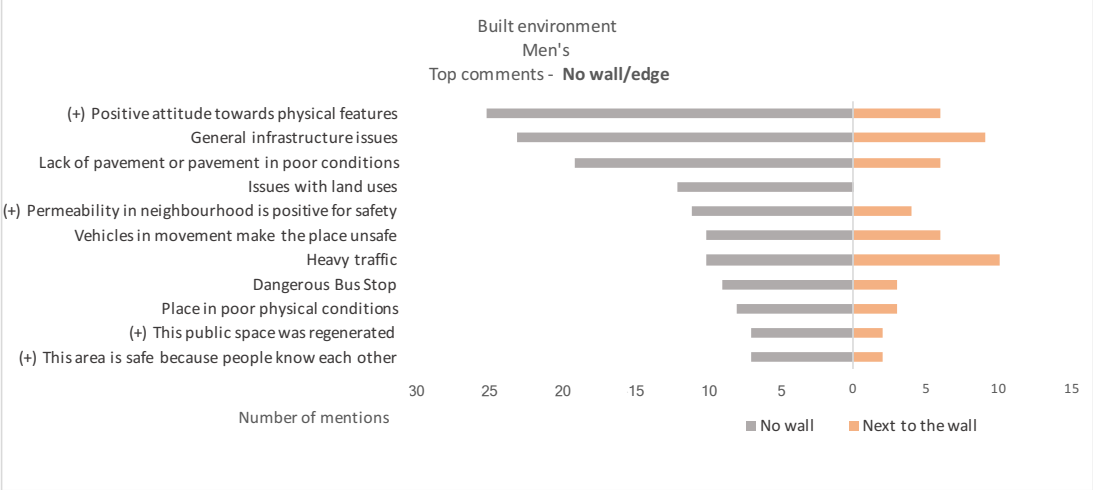
These data from Tables 7.14 and 7.15 suggests that gaps of perceived safety between men and women might become narrower when they are next to the gated community wall, keeping women as the group with the highest level of anxiety. These findings might be explained by two scenarios: first, women tend to be alert in public spaces most of the time (Tandogan & Ilhan, 2016), it suggests that gated communities might moderately increase pre-existing fears. Second, because men might not have the same levels of anxiety walking in public spaces as women have, the walls may be interrupting the permeability of the urban space and make them more aware of likely threats. Although another explanation could be the approach of Sutton and Farral (2005) who hold that men if they were completely honest might reveal similar levels of fear to those expressed by women.

7.5.2. Men’s and women’s perceptions about the built environment

During the walking interviews, from the georeferenced comments (1,319 in total), it was possible to divide those interventions next to the gated community edge out from those from the barrier. Figures 7.12 and 7.13 show the top comments about the built environment made by men and women, the charts are ranked by the most frequent comments in places without physical contact with edges to gated communities, mostly internal streets of their neighbourhood. Next to the bar also appears the same comments but made next to the gated edge. As the walk covered areas in the neighbourhood with

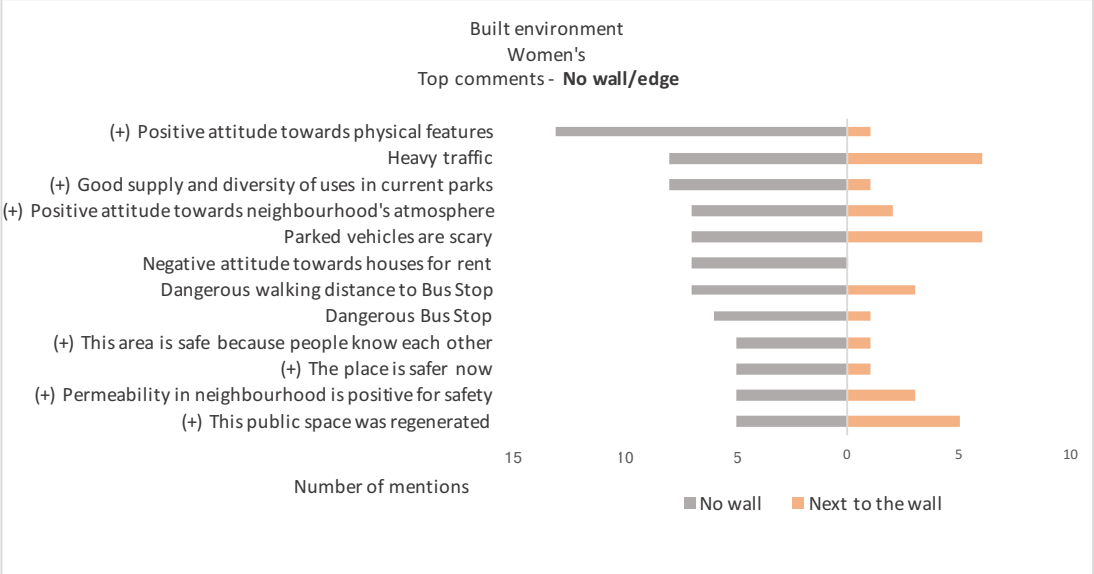
and without gated communities' edge, the proportion of places without walls was higher than for those enclosed. Therefore, the proportion of comments in places without wall was 64% against 36% for those on the edge of gated communities; keeping this in mind, the next figures display, in absolute values, the more frequent comments. The number of items in the chart fluctuates between nine and twelve, as some values are repeated. (See the entire list in Appendix 7-3).

Figure 7.12. Men's top comments about the built environment ranked by more frequent comments in places without physical contact with gated communities' edge.



Source: Author's elaboration

Figure 7.13. Women's top comments about the built environment ranked by more frequent comments in places without physical contact with gated communities' edge.

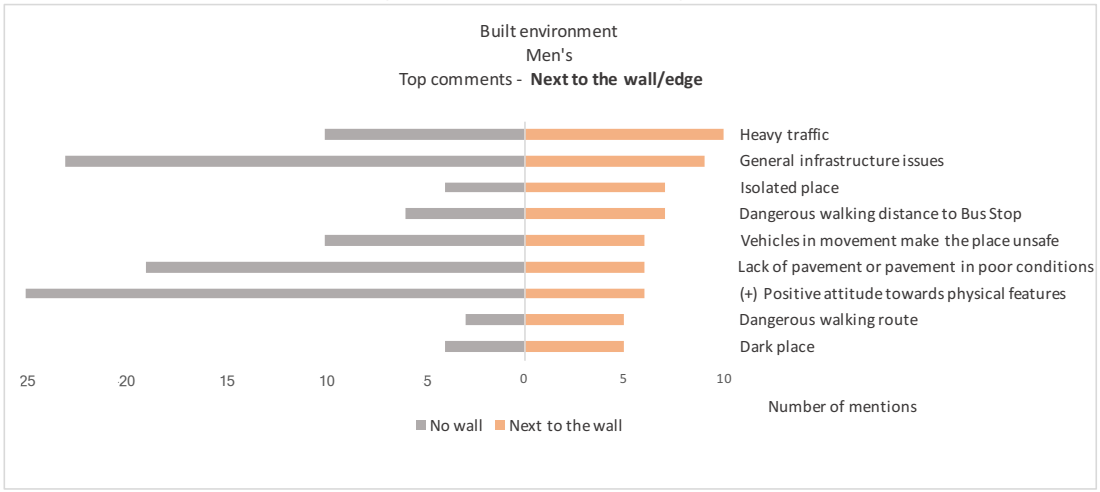


Source: Author's elaboration

As shown in the figures, in those areas of the neighbourhood without contact with the gated community's edge, the most mentioned comments were those related to positive associations about physical features of their neighbourhood, although there were also many negative comments. For instance, the men complained more about infrastructure issues, whereas women are more concerned about the heavy traffic. In general, the positive attitudes of women about their neighbourhood were more frequent than men's. However, overall, there are numerous positive comments, both men and women stressed the relevance of permeability in the neighbourhood, the importance of knowing each other and having regenerated areas.

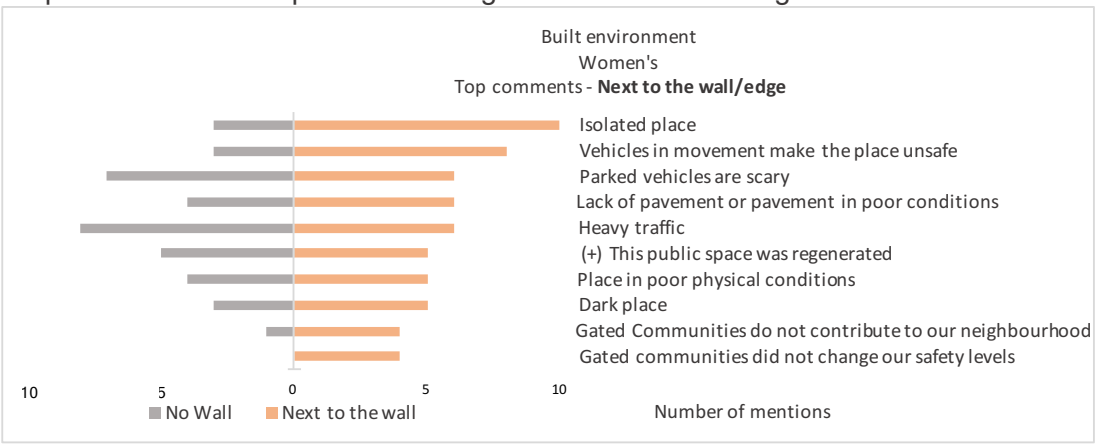
Contrasting the views inside the neighbourhood with the most frequent comments next to the gated communities' edges (Figures 7.14 and 7.15) both men and women reduced the number of positive comments about the built environment. It is evident that men made more comments related to heavy traffic and infrastructure issues are still relevant for them but, in this case they highlighted elements less linked to tangible or static features, such as isolation, darkness, dangerous walking routes and vehicles in transit. Women complain more about the isolation of the place and the anxiety produced by moving vehicles such as motorcycles and unknown cars; there are also worries if there are parked cars along the edge. Regarding infrastructure issues, they were more concerned about the lack of pavements rather than general infrastructure problems (e.g. drainage or road surface) and the poor physical conditions of those areas were also relevant. Similar to men, they associate the edge with a lack of lighting. However, women made more direct associations to the presence of gated communities; they stressed the absence of contribution from those developments to the neighbourhood. In those areas perceived as secure, they mentioned that gated development did not improve the safety.

Figure 7.14. Men's top comments about built environment ranked by more frequent comments in places next to gated communities' edge.



Source: Author's elaboration

Figure 7.15. Women's top comments about built environment ranked by more frequent comments in places next to gated communities' edge.



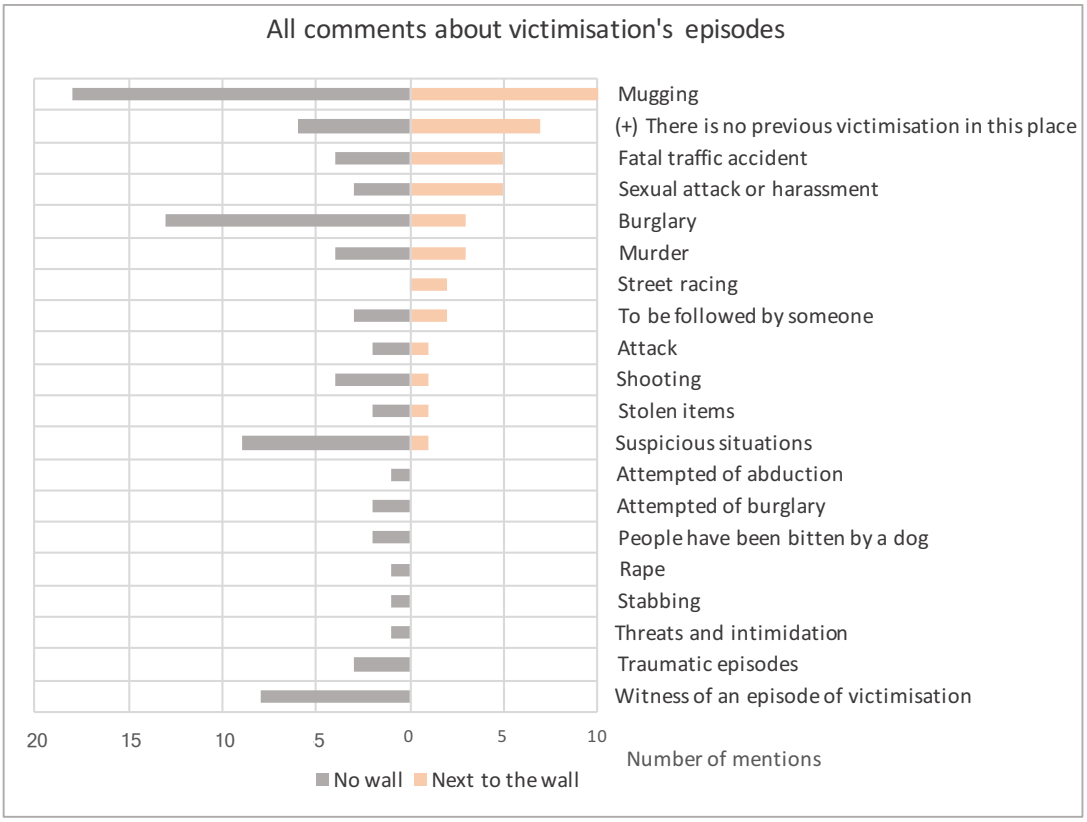
Source: Author's elaboration

In general, it seems that positive associations are more common inside the neighbourhoods than next to the gated community wall. Also, it is notable how the complaints between men and women are more similar in the segment next to the gated development, which might explain why the intensity of men's fear next to the gated community wall apparently comes closer to women's fear levels.

7.5.3. General views about emotions and experiences

Victimisation and feelings reported by participants have been widely discussed in this chapter and Chapter 6. This analysis is focused on the main differences next to and outside the gated community's edges. Figure 7.16 shows all the victimisation episodes reported. Some events were mentioned in both places, such as mugging, burglary, murders or fatal traffic accidents (as mentioned, this last one may or may not be considered a crime depending on the circumstances). Sexual attacks and harassment were more frequently reported next to the gated communities than inside their neighbourhoods. Other particular episodes emerge in some neighbourhoods such as illegal car racing and 'to be followed by someone' which could be linked to the isolation of some areas.

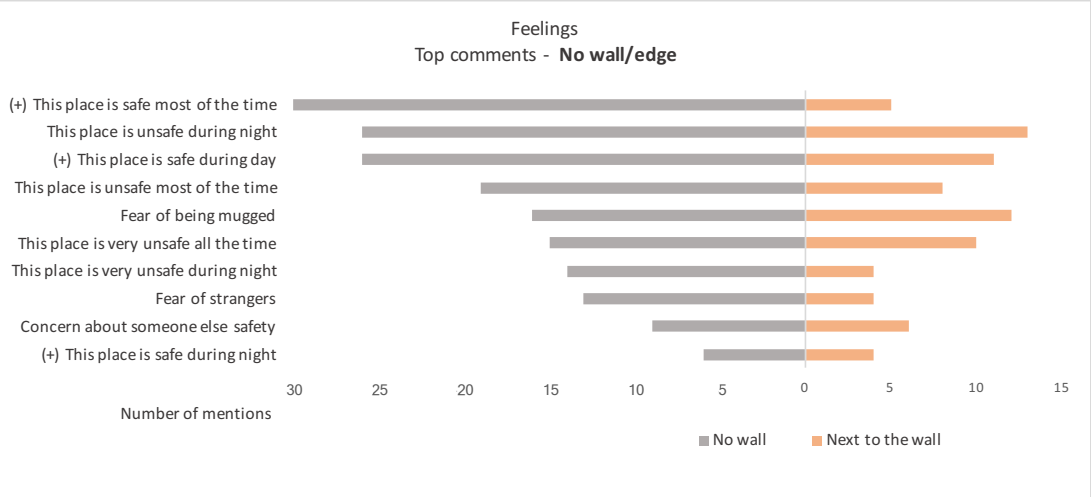
Figure 7.16. All comments about victimisation episodes reported by participants



Source: Author's elaboration

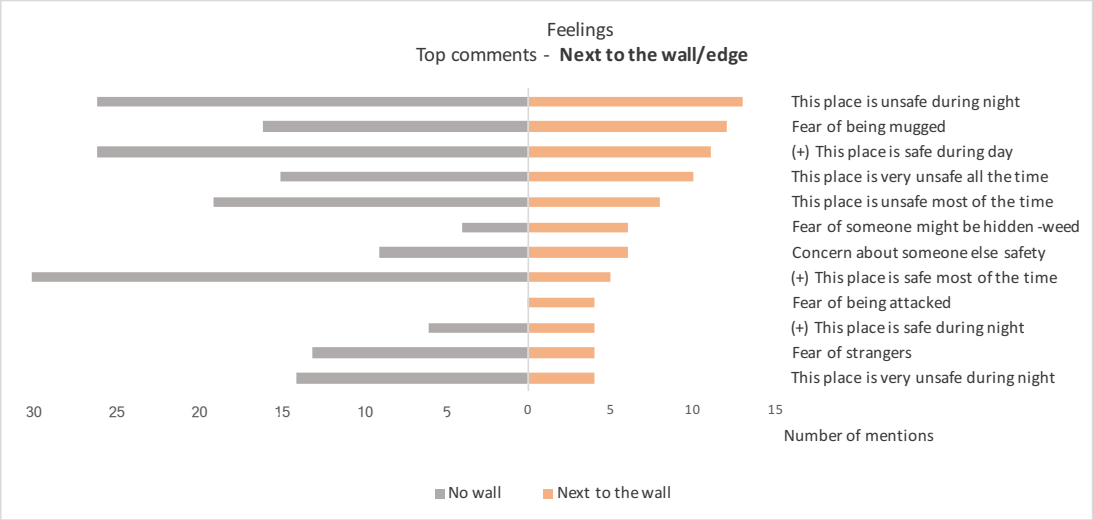
Figures 7.17 and 7.18 show the top comments about feelings reported next to and out of the gated communities' edges. Contrasting these outcomes with Figure 7.16, it can be noted that despite there being episodes of victimisation associated to places without contact with the gated community, there are more positive attitudes about safety in those areas as well. For instance, in places without a gated community's wall the top comment was 'this place is safe most of the time'; in contrast, the most frequent comment next to the wall was 'this place is unsafe during the night'. On the other hand, the presence of strangers seems to cause more worries inside the internal roads of the neighbourhood than in roads next to the gated community wall. It may be explained as being due to the constant presence of familiar people on the internal roads of the neighbourhood, which makes it more evident if someone who does not belong to the neighbourhood is walking around. Another concern next to the wall is the possibility that someone might be hidden along the gated community edge or in the bushes next to the wall.

Figure 7.17. Top comments about feelings ranked by more frequent comments in places without physical contact with gated communities' edge.



Source: Author's elaboration

Figure 7.18. Top comments about feelings ranked by more frequent comments in places next to gated communities' edge.



Source: Author's elaboration

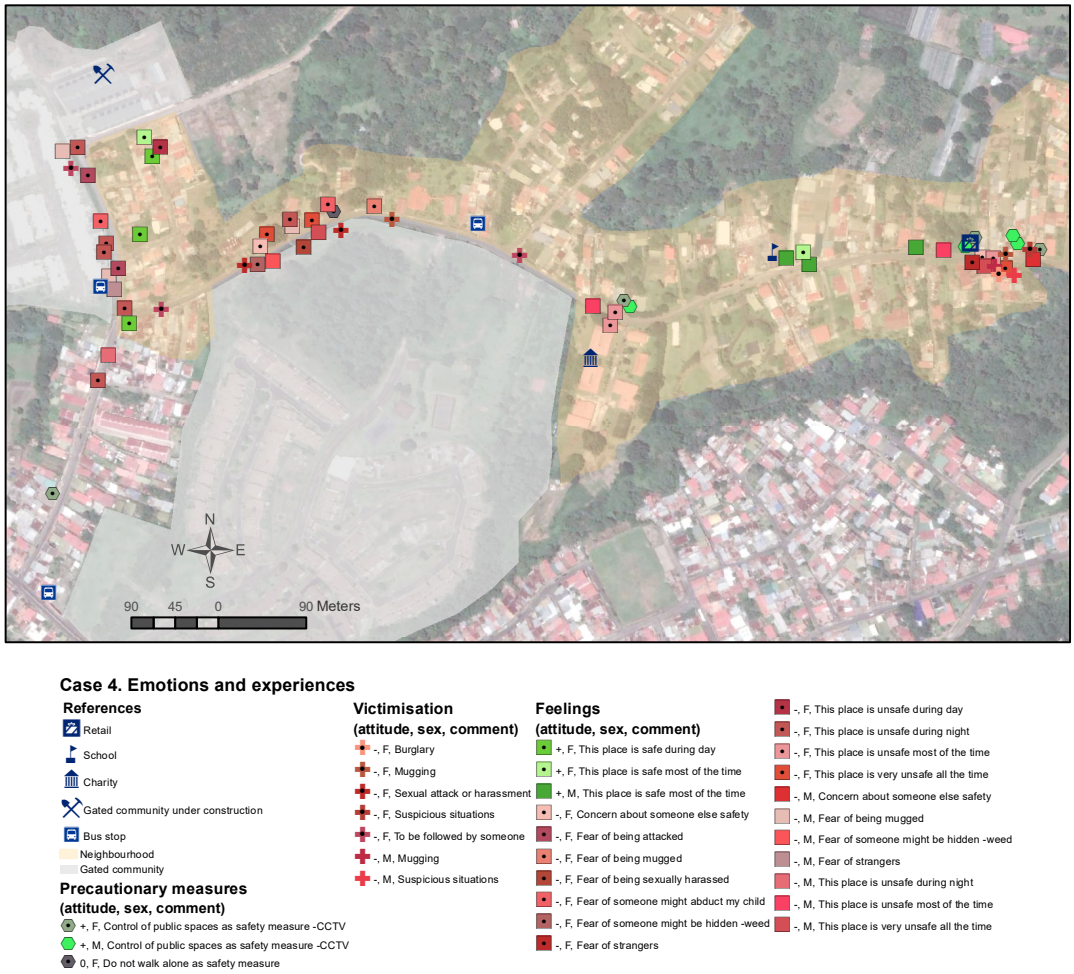
In order to illustrate some of the main topics analysed in this section 'Next to the wall', shows the 'Talk's tracks map by comments' for Case 4 (Figures 7.19 and 7.20), which encompasses most of the concerns and positive attitudes mentioned in other cases as well. Furthermore, Case 4 has two gated communities with different edges: wall and columns with fabric.

It follows the same system of symbols as the other maps in this chapter:

- dot /dot-less: women / men
- green tones positive associations, red tones negative, grey tones neutral.

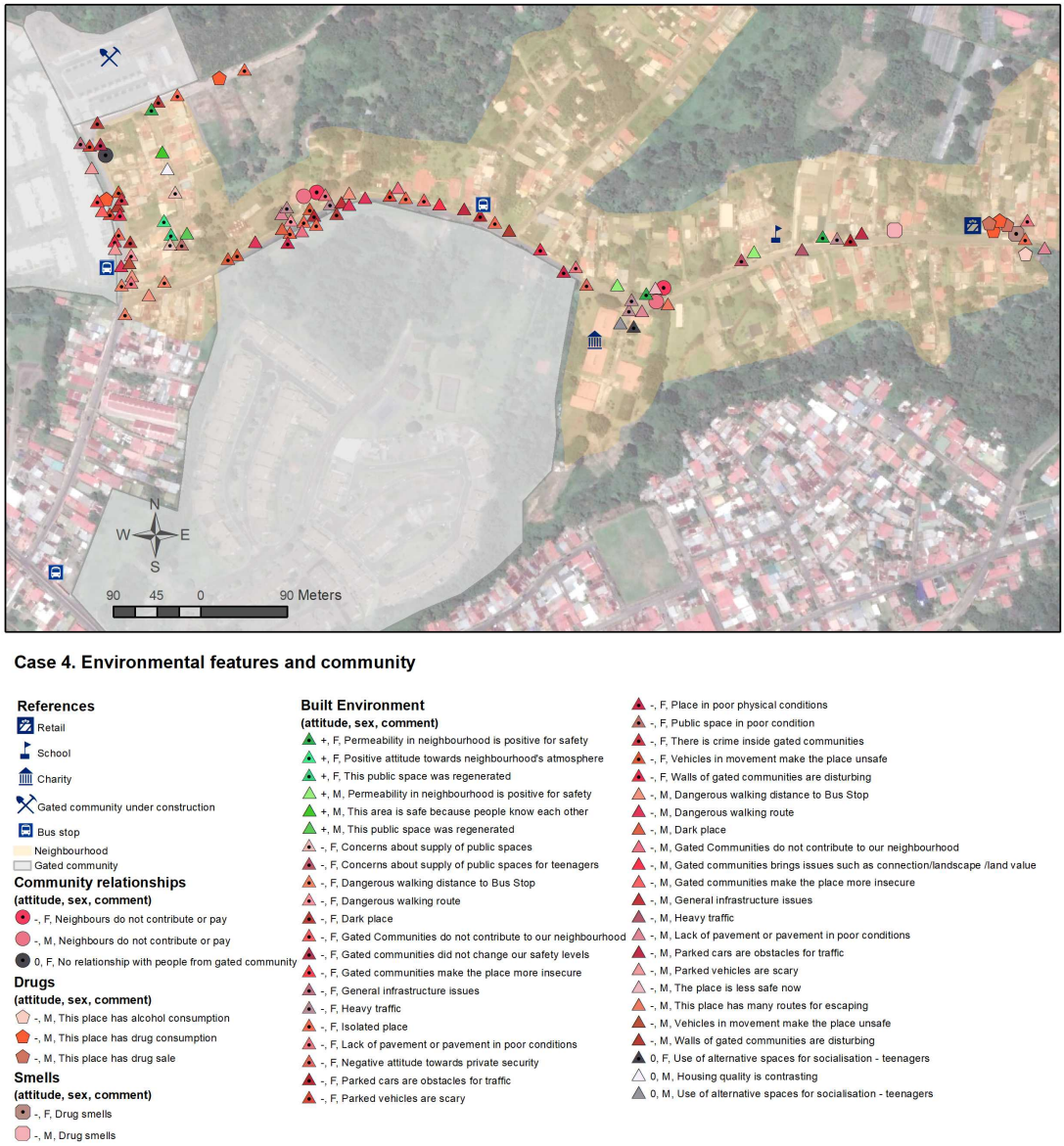
The entire set (eight cases) of 'Talk's tracks map by comments' can be found in Appendix 7-1. In Figure 7.19 the emotions and experiences are shown; it indicates that most of the positive associations about safety are localised on the internal roads of the neighbourhood, out from the gated edge. Furthermore, those places considered unsafe are linked to localised episodes of victimisation or drugs issues.

Figure 7.19. Case 4. Talks' track map classified by comments in emotions and experiences.



Source: Author's elaboration
Aerial photograph: Google, Maxar Technologies,

Figure 7.20. Case 4. Talks' track map classified by comments in environmental features and community.



Source: Author's elaboration
Aerial photograph: Google, Maxar Technologies, 2018.

As shown in Figure 7.20 those areas with positive associations with the built environment are also perceived as safer; in addition, those places with issues linked to drugs are perceived as unsafe (clusters at the west and east side). This reflects that positive associations to the built environment are more related to the mental maps of perceptions rather than the quality of the infrastructure.

Figure 7.21 displays the physical features of those places, some comments in those areas are:

- Photo A: drug consumption, place unsafe during the night.
- Photo B: place is safe during daytime, public space was regenerated.
- Photo C: place safe most of the time, permeability in neighbourhood is positive.
- Photo D: drug sale, drug consumption, drug smell, fear about someone else's safety, mugging, suspicious situations, CCTV required.
- Photos F and H: place unsafe most of the time, sexual harassment, mugging, isolated place, concerns about someone else's safety.
- Photo E: moving traffic makes the place unsafe, dangerous walking distance to the bus stop.
- Photo G: gated communities do not contribute, fear of strangers, dangerous walking route.

Figure 7.21. Physical features of **Case 4** and surroundings.



Source: Author's elaboration with data from Fieldwork.
Aerial photograph: Google, Maxar Technologies, 2018.

Patterns linked to drugs

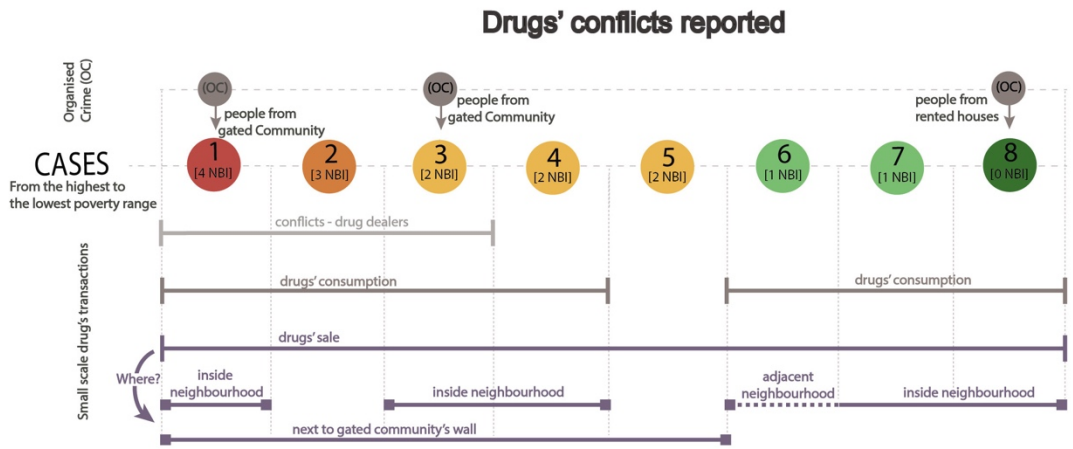
In Chapter 6 it was seen how many participants associate feelings of being unsafe to drug-related issues. Those situations take place either on the internal roads of the neighbourhood or next to the gated community wall. Fears regarding organised crime and drugs traffic seem to affect mostly the female participants from the lowest income group. Drug issues are present in all eight study cases but with some variation on the type of situations and location. Some fears are associated with conflicts between drug dealers, such as shootings or murders, there are also negative feelings related to drug consumers and fears of being mugged or of burglary in those areas.

The drug conflicts arise without any distinction of incomes levels. However, those places related to drugs issues were consistently linked to fear of crime and those areas were classified as follow:

- Places linked to sale and consumption of drugs (small scale)
- Places linked to conflicts among drug dealers
- Places linked to organised crime (drugs traffic, prostitution and gambling).

Figure 7.22 shows a synthesis about drug conflicts perceived by participants and their location (inside neighbourhood or next to the wall). The main concern from participants was that drug issues might bring dangerous strangers, such as consumers, sellers or people searching for revenge or with territorial problems.

Figure 7.22. Drugs conflicts perceived by participants from all cases.



Source: Author's elaboration

Although the sale of drugs was found in all cases, the testimonies from neighbours suggest that those drug problems are more commonly linked to violence (conflicts among drug dealers) and these cause more concern in places with higher poverty – Cases 1, 2 and 3. Furthermore, people from Cases 1 and 3, despite never having met residents from the gated communities nearby, to a large extent linked those people to drug trafficking, whereas residents from Case 8 blame people from rented houses for the same issues. As mentioned in Chapter 6, the drug situation, mainly the selling of them, seems to negatively affect people's perceived safety; in five of the eight cases this situation was reported beside the gated community wall, which might trigger even more negative associations to the built environment at those sites.

This chapter focuses on the participants' views about their built environment, mainly the perceptions of different physical locations. These comments reveal that the closeness of the gated community might be increasing some of the feelings of anxiety and increasing the more negative reactions to the built environment. The next section shows a series of observations made by the author in those areas highlighted as safe or unsafe by community members, mainly those next to the gated community edge.

7.6. Observations: A view to the neighbourhood's everyday life

During focus groups and walking interviews, the residents described the routine and dynamics in their neighbourhoods. Those experiences are the core of this thesis; however, as part of a triangulation process, the challenging task of observing those environments from the researcher's point of view was undertaken but guided by the narratives of the participants.

As shown in the methodology section (see Chapter 4) observations were carried out during weekends and weekdays. For each case, there was at least one observation during peak hours (weekdays between 15:30 and 18:30). Some cases have a larger number of observations due to there being a higher concentration of gated communities around them or because their shapes

required it. The systematised results of those observations are displayed in Figures 7.23, 7.24 and 7.25.

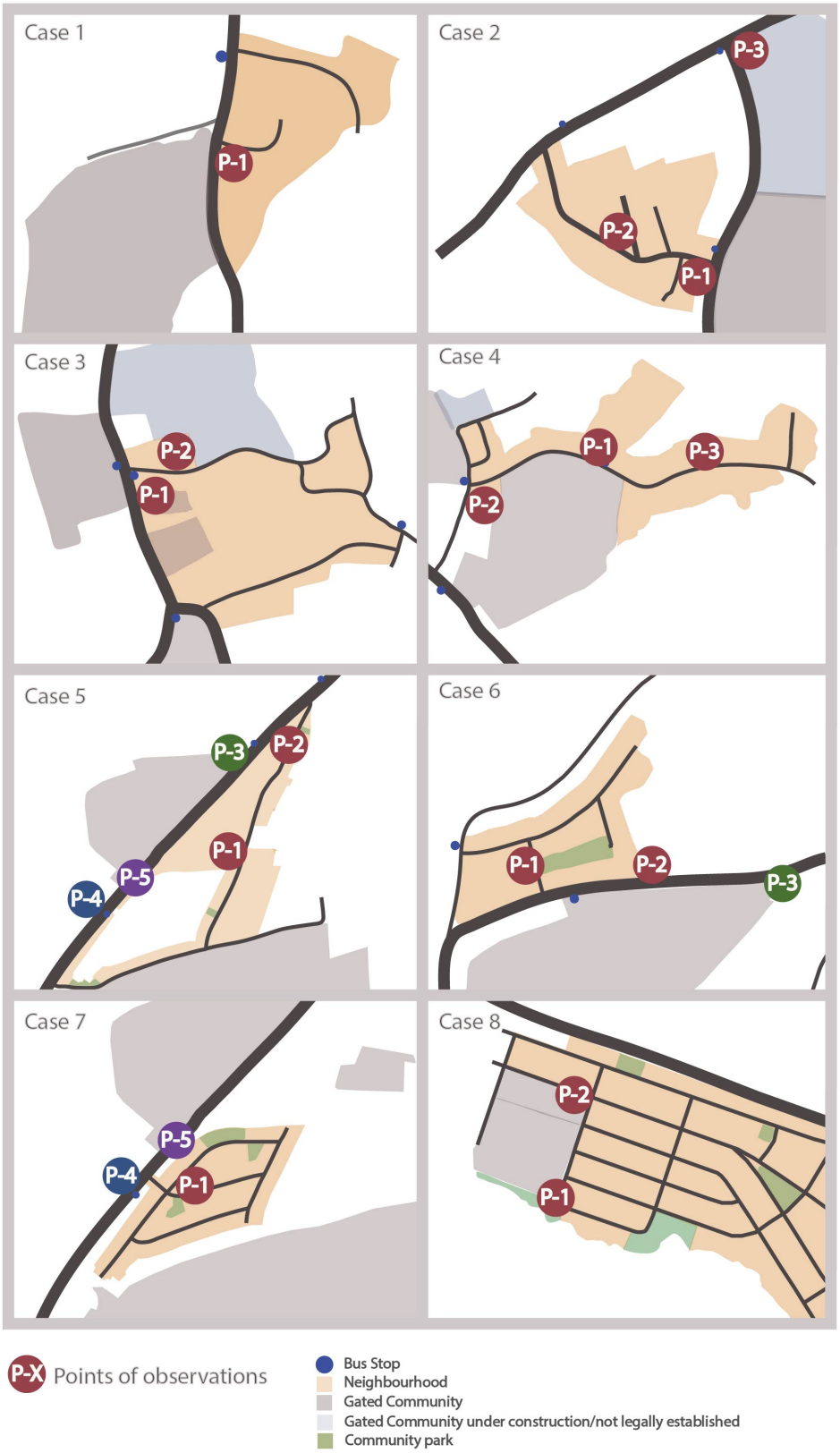
They cover the visual range from the spots indicated in Figure 7.23, which includes internal streets of the neighbourhood and those next to gated communities. All the observations were done days after the walking interviews and focus groups, in order to evidence the observation sites more accurately. However, during the observations in Case 1 the main street next to the gated community was being repaired; those works would keep that street partially closed for some months onwards. Therefore, during the traffic observations, the number of cars does not reflect the typical activities of that street. However, Figure 7.26 shows the sounds reported by the author (taken from the walking interviews' audios) and in those maps the sounds linked to heavy traffic in that street at the moment of the walking interview (weekend afternoon) are noticeable.

Figures 7.24 and 7.25 show the neighbourhood's dynamics at the observation points. The activity observed is divided in three categories:

- Social interactions (20 min).: Number of people staying in a single place to: have a conversation, play or enjoy sports
- Pedestrian activity (20 min): Number of people walking (pavement or street). The charts make two distinctions: a. places with and without pavement, b. side of the street selected by the pedestrian (next to the gated community's wall or next to the dwellings).
- Traffic (5 min): Number of vehicles passing in front of the observation point. This includes cars, motorcycles and bikes.

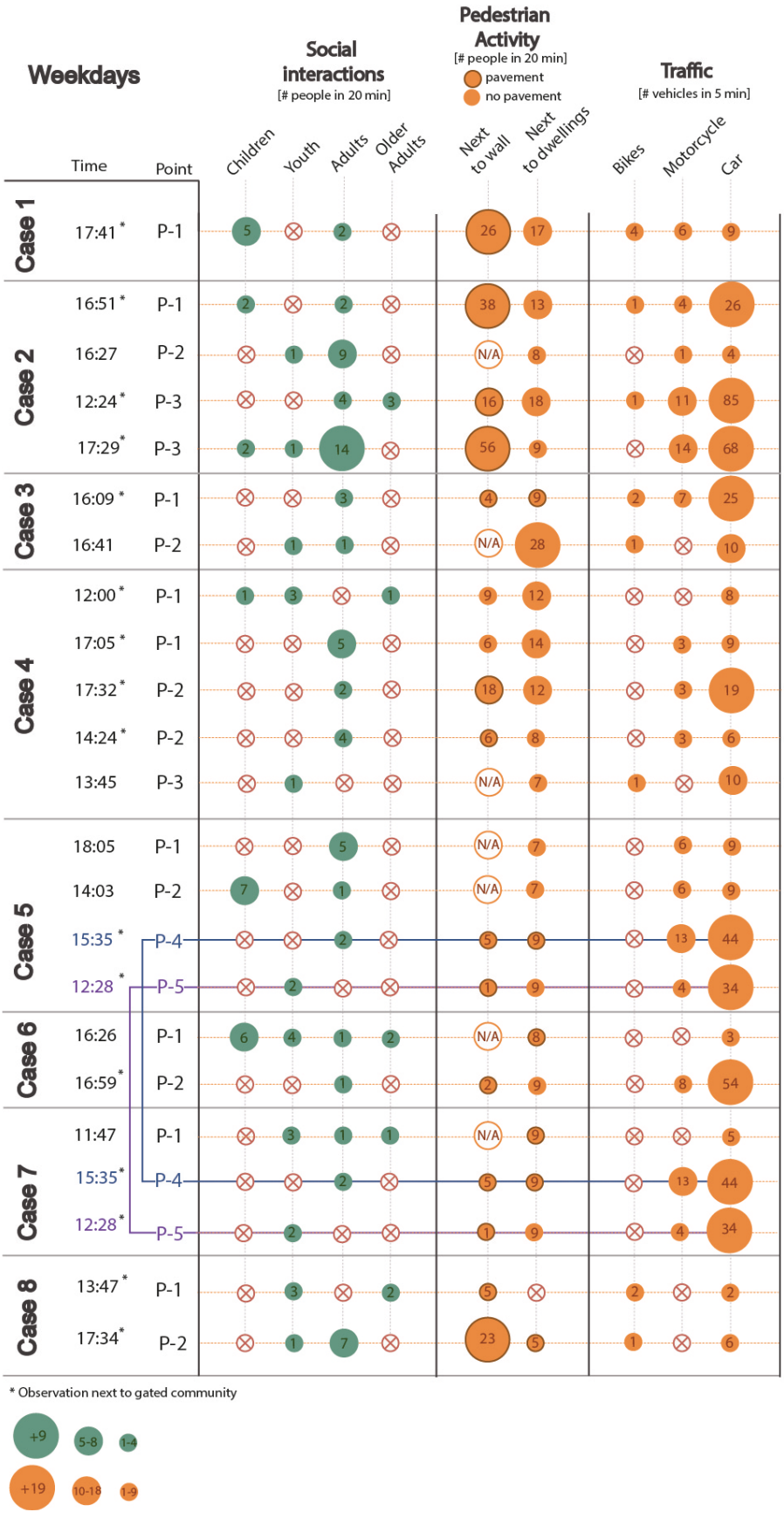
Figure 7.24 shows observations on weekdays and Figure 7.25 displays those carried out at weekends. Due to some neighbourhoods sharing the same gated community wall, the points P-3, P-4 and P-5 from Cases 5, 6 and 7 are the same. More details about the methodological procedures can be found in Chapter 4.

Figure 7.23. Observation points per case.



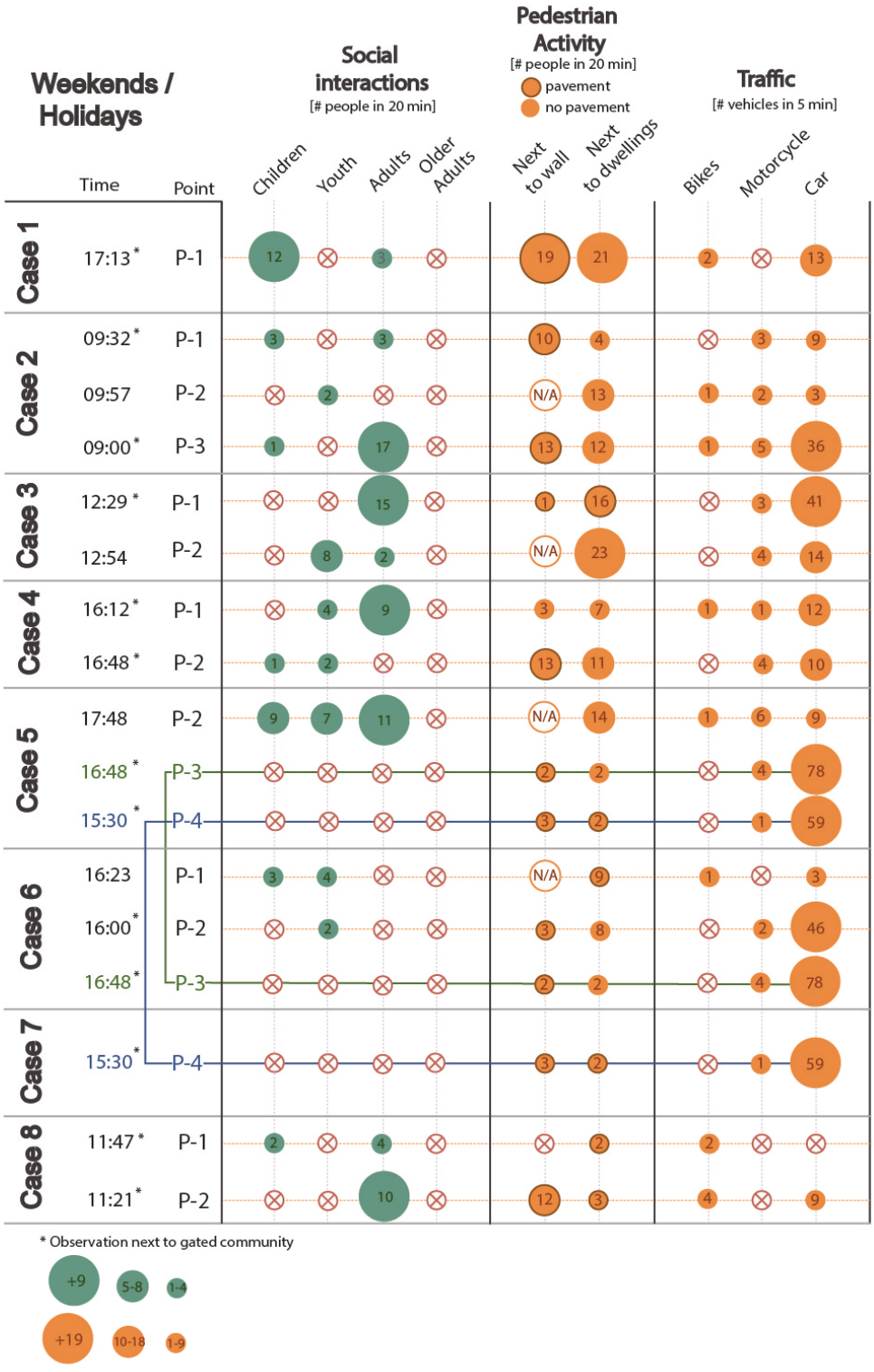
Source: Author's elaboration

Figure 7.24. Observations during weekdays per each study case.



Source: Author's elaboration

Figure 7.25. Observation during weekends



Source: Author's elaboration

7.6.1. Social interactions

The observations show a higher social interaction during weekends. The presence of children and young people was larger in Cases 1, 5 and 6. In Cases 5 and 6, the children were playing in the Community Parks, whereas those from Case 1 were playing on the internal streets of the neighbourhood, perpendicular to the gated community. During the walks and focus groups, people from Case 1 expressed their concern about the lack of public spaces for children. In the observations it was possible to appreciate multiple interactions among them; however, as they were playing on the street, their games were interrupted by vehicles, which also might put them at risk of an accident. There was no presence of young people, which matches with the information given by the teenagers in the focus group. As mentioned in Chapter 6, teenagers from that place socialise mainly in private spaces or public spaces outside their neighbourhood.

The activity in Case 5 also concurs with the description given by this community, which reveals numerous interactions on the internal streets. Conversely, in Case 6, the participants mentioned that its park had a low use because the children had grown up. But that Community Park, apart from children, had also users from all age groups. In fact, it was the only park with people of all ages using that space during the time of the observation. In Case 6, participants expressed, during the focus group, that the community managed to include infrastructure for different ages groups, despite the planning regulations not allowing the mixing of children's infrastructure with other uses in the same park. In Case 5 is also observed this mixture, as they have a basketball court next to the children's playground. The lack of flexibility of planning codes in parks was mentioned further in other neighbourhoods and some neighbours recognised the need 'to play' with the rules in order to have more diverse activities in their parks.

The area with the lower social interaction was the wall shared by Case 5 and Case 7: P-3, P-4 and P-5 observation points. That place had very low interaction during the weekdays and zero interactions during the weekends'

observations. But also, the north wall from the same gated community (Case 6, points P-2 and P-3) has a similar performance. In contrast, next to some gated communities' walls there were larger interactions than the internal neighbourhood's streets, such as in Cases 3 and 4. In those places, there were also bus stops where people meet whilst waiting for public transport; this allows them to meet people or have a chat. In spite of that movement, people from those neighbourhoods complained about their fear at these bus stops but most of them cannot avoid them because of their need to take public transport.

On the other hand, Case 8 also had activity next to the gated community, mainly in point P-2, and that case does not have a bus stop there. It was the only case with a Community Park next to the gated community (see also Figure 7-6 Photo A), where the park did not have facilities for children, therefore it was used mainly by adults. Case 8 is particular in having an agreement with the administration of the shopping centre behind it; this collaboration resulted in some restorations works. This place was the only one managing a public domain area with private contributions.

7.6.2. Pedestrian activity

The observations suggest a higher degree of pedestrian movement in those neighbourhoods with the highest levels of poverty – Cases 1, 2 and 3, both on weekdays and weekends. Cases 1 and 2 also present a larger number of pedestrians next to the gated community wall, which is the only side of the street with pavement, as can be seen in Figure 7.7 Photo C and Figure 7.27 Photos A, C, D and H.

The site that shares the same gated community (P-4 and P-5 from Cases 5, 6 and 7) has a lower pedestrian activity observed. There, even in areas without pavement, many people preferred to walk next to dwellings instead of using the pavement next to the gated community, especially during weekdays. This might be explained by the preference for permeability among many of those residents. In cases when the conditions of the pavement were the same between the gated community edge and the neighbourhood overall, the side next to the dwellings had more pedestrians, except for Case 8.

The walking route next to the gated community is a daily journey, especially for Cases 1, 2, 3 and 4, who need to take the bus there; this was noted during the observations but also during the walking interviews. The internal roads without contact with gated communities seem to have a slightly higher pedestrian activity during weekends, except for Case 3 where the number of pedestrians was larger than the average on both weekdays and weekends in the area beside the gated community (see Figure 7.28 Photos B and D).

7.6.3. Traffic

In general, the observations showed a higher traffic intensity in peak hours during weekdays, except in Case 8 where neighbours have struggled to control the cars' access to their community; this case has the lowest rate of vehicles' movement in general. In other neighbourhoods, the traffic increases in those roads between the gated community and the neighbourhood's dwellings. This situation was a complaint mainly made during the walks in Cases 1, 3, 5 and 6. In peak hours, in the neighbourhoods with lower incomes (Cases 1, 2 and 3) it was observed that there was a broader range of means of transport (bikes, motorcycles, cars). On the other hand, in the cluster (Cases 5,6 and 7), there were no bikes during the times of the observations. Case 8 was the only one where there were no motorcycles in the observation period.

During the weekends, in Cases 1, 2, 3 and 4 there was a decrease in the number of vehicles but, in contrast, the cluster had an increase in that figure, especially the total number of cars. Case 8 presents, again, a lower quantity of vehicles than the other seven cases, similar to its weekdays' performance, which confirms the effectiveness of traffic restrictions managed by this community.

The variation on traffic volume might have different explanations which are not necessarily linked to poverty levels, they could be the result of: local and regional network connections; increases in density nearby, land uses or centres of attraction, among others. However, Cases 1, 2, 3, 4, 5 and 6 (partially) are crossed by routes which report heavy traffic by participants. Figure 7.26 shows the sounds reported by the author during the walking

interviews; it can be noted that the neighbourhoods with the highest incomes are also those less affected by traffic noises.

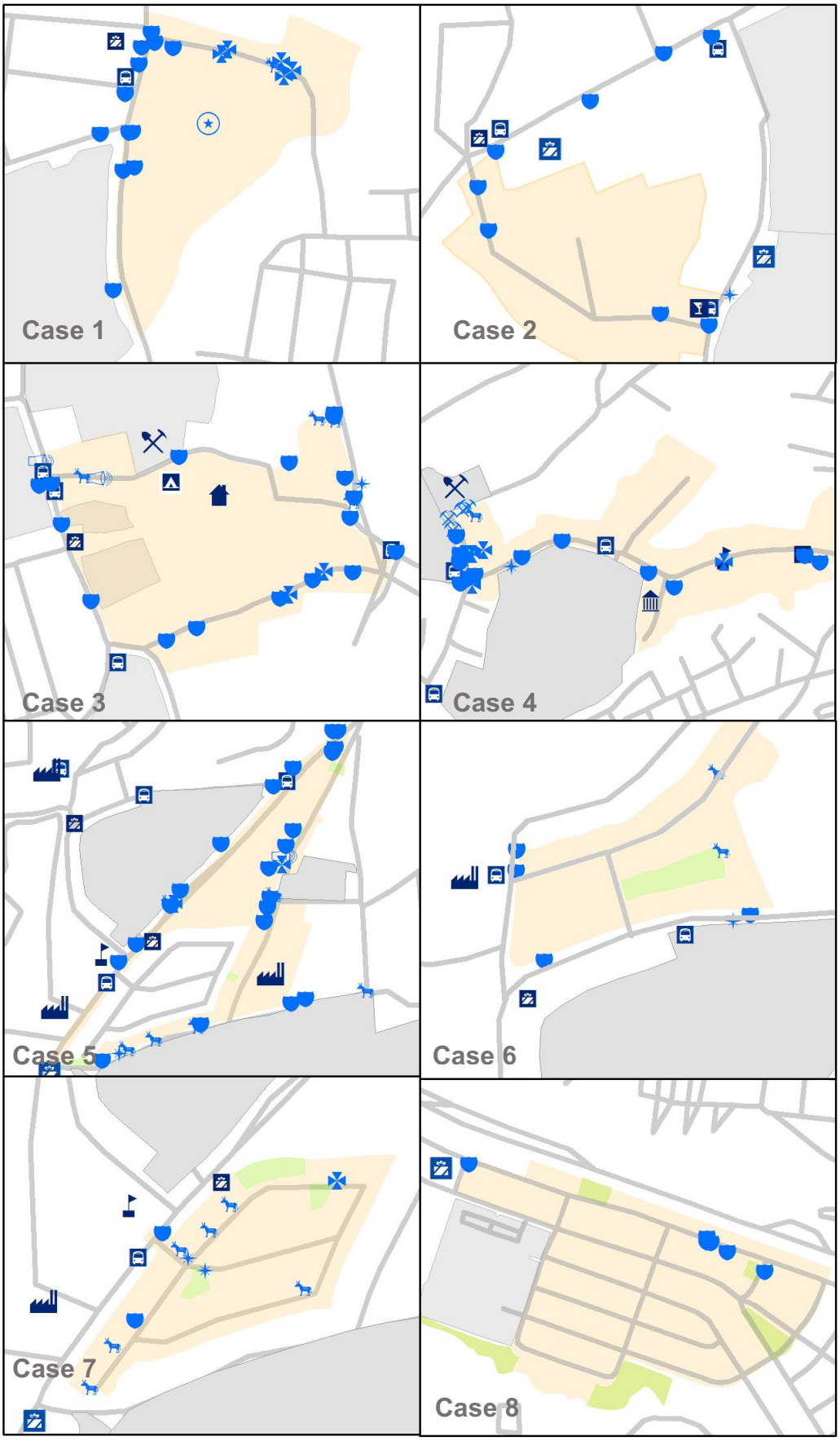
The gated communities from the study cases have sizes significantly larger than the historical Costa Rican block, which is 80 × 80 metres (inherited from colonial times). As a result, the gated communities keep internal roads for the exclusive use of their residents; this situation might explain some drawbacks in the road system (Pujol, Sánchez & Pérez, 2011) and a saturation on the streets nearby. As analysed earlier, heavy traffic is linked to feelings of unsafety in some cases, mainly because it delays the waiting times in crossing the streets at bus stops which are considered dangerous by participants.

Legend figure 7.26

Sounds reported by the author

- Street advertising
- Birds
- Construction machinery
- Dogs
- Kids playing on the street
- Music from houses
- Heavy Traffic

Figure 7.26. Sounds reported by the author during walking interviews



Source: Author's elaboration, streets taken from IGN's cartography.

7.6.4. Physical features

Physical elements of the built environment vary according to poverty levels, as has been shown across this chapter. More details can be found in Chapter 5 (cases description).

- In Case 1 (Figure 7-7) the streets are narrow and there is no pavement, in contrast to the layout next to the gated community wall. Those dwellings on the opposite side of the gated community edge have similar conditions to the rest of the residences within that neighbourhood. The gated community entrance faces another neighbourhood with better infrastructure than Case 1.
- Case 2 (Figure 7-27) has comparable features to Case 1; for instance, a narrow internal road without pavement in most of the neighbourhood. However, the quality of materials in their dwellings are in more favourable conditions than Case 1.
- Case 3, in contrast to Cases 1 and 2, the area between the neighbourhood and the gated community is pavemented on both sides. The gated community wall in Case 3 has graffiti with phrases such as ‘No observe’ [Do not watch] and ‘No aprenda’ [Do not learn], which, according to participants, have been written by organised criminals to warn people (See Figure 7-28 Photo A).
- The edges of the gated communities in Case 4 have different features (Figure 7.21). The one on the west side has a five metre high wall, whereas the second one has a soft edge (fabric and columns). Although that edge seems to be permeable, there are no dwellings next to it. There is a buffer area with a small forest between the neighbourhood and the gated community’s residences; this forest is part of the gated development facilities. In general, the neighbourhood has a discontinued pavement but with space enough for building one in the future, it has wider streets than Cases 1, 2 and 3.
- The shape of Case 5, as displayed in Figure 7.5, is a wide ring which also covers the external dwellings from Case 7. The geometry of its roads varies between wide and narrow streets with and without

pavement. The physical features of Case 5 are similar to Cases 3 and 4.

- In Case 6 (Figure 7.11) the infrastructure is of higher quality than Case 5, all its roads have a uniform width, there is pavement throughout the entire neighbourhood, except for the area opposite to the gated community. That street beside the wall, as mentioned, is used for illegal car racing, which provoked a lot of complaints from participants during the walking interview.
- Case 7, similar to Case 6, has high-quality infrastructure. It has pavement throughout the neighbourhood, wide streets and Community Parks. This neighbourhood, has a gate to control the entrance of vehicles and people, which is shown in Figure 7.4 Photo B, along with other physical features.
- Finally, in Case 8 most of the infrastructure is of good quality, except for some segments towards the north part where the pavements discontinue, this area is parallel to a highway and it also has some vacant lots without maintenance. (Figure 7.6 Photo E).

Figure 7.27. Physical features of **Case 2** and surroundings.



Source: Author's elaboration
Aerial photograph: Google, Maxar Technologies, 2018.

Figure 7.28. Physical features of **Case 3** and surroundings.



Source: Author's elaboration
Aerial photograph: Google, Maxar Technologies, 2018.

7.6.5. Inequality in infrastructure

Overall, when comparing the pedestrian movements against a neighbourhood's physical features, it seems that those neighbourhoods with a lower quality of infrastructure – Cases 1, 2, 3, 4 and 5, have a higher pedestrian movement than those neighbourhoods with better pavements and streets. Assuming that those people from lower incomes might use public transport more frequently than those from Cases 6, 7 and 8, the lack of pedestrian infrastructure might affect their daily commute more significantly.

In most of the cases there is no pavement on the opposite side of the gated community, except Cases 3 and 8. This situation forces people to walk next to the wall, mainly in those cases where there is heavy traffic; as mentioned the location of many bus stops are next to the gated community edge, except Cases 1 and 8. These appear to be the communities where fear of crime increases next to the gated community barrier and their neighbours have limited options to avoid the walk along that side. In general, there is no permeability between neighbourhood's houses and gated communities' dwellings, except for Case 8, where there are railings and it is possible to observe what is happening beyond the gate.

All of which suggests that, overall, the public infrastructure quality increases when the poverty level is lower, which includes the supply of Community Parks, sidewalks, the quality of the road surface, street geometry and drainages.

7.7. Micro patterns to feelings of safety and unsafety in the built environment associated by communities

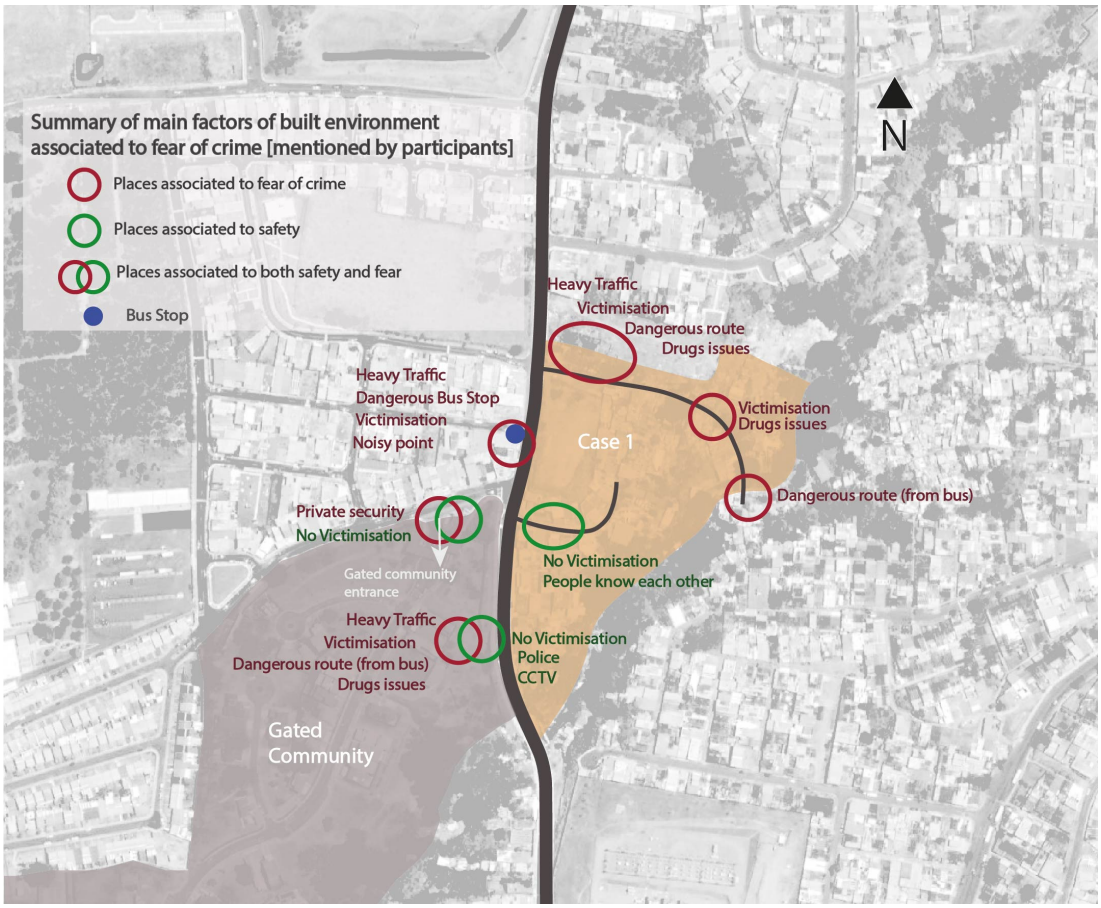
This section aims to synthesise the possible patterns between the built environment and fear of crime. As explained in previous sections, Appendix 7-1 shows in detail the 1,319 georeferenced comments made by the participants. Figures 7.29 to 7.36 show a summary of those maps with the main topics mentioned by communities (Talk track maps) and dominant feelings (Intensity of fear maps) in different places along the walk.

7.7.1. Patterns for Case 1[4 NBI]

Case 1 is the community with the highest levels of poverty. In Chapter 6, it was possible to notice how the intensity of fear seems to be concentrated on the internal roads of the neighbourhood. Figure 7.29 explores possible factors associated with those feelings.

Streets associated with a record of victimisation have a strong link to feelings of unsafety. People from this neighbourhood also link those victimisation situations to issues related to drugs such as drug sales, drug use and conflicts between drug dealers. Some of the walking routes were unavoidable, due to the location of the bus stops. Residents classified those daily journeys as dangerous because they needed to pass through the places associated with drugs conflicts and they are not able to change the route or time.

Figure 7.29. Case 1. Summary of main comments made by participants and their possible association to dominant safety and unsafety feelings.



Source: Author's elaboration
Aerial photograph: Google, Maxar Technologies, 2018.

Another factor widely mentioned was the heavy traffic on the main street. Although people highlighted worries about road safety, they also referred to the waiting times for crossing the street after leaving the bus. They suggested that that period of time could be a threat, as somebody could come and mug them.

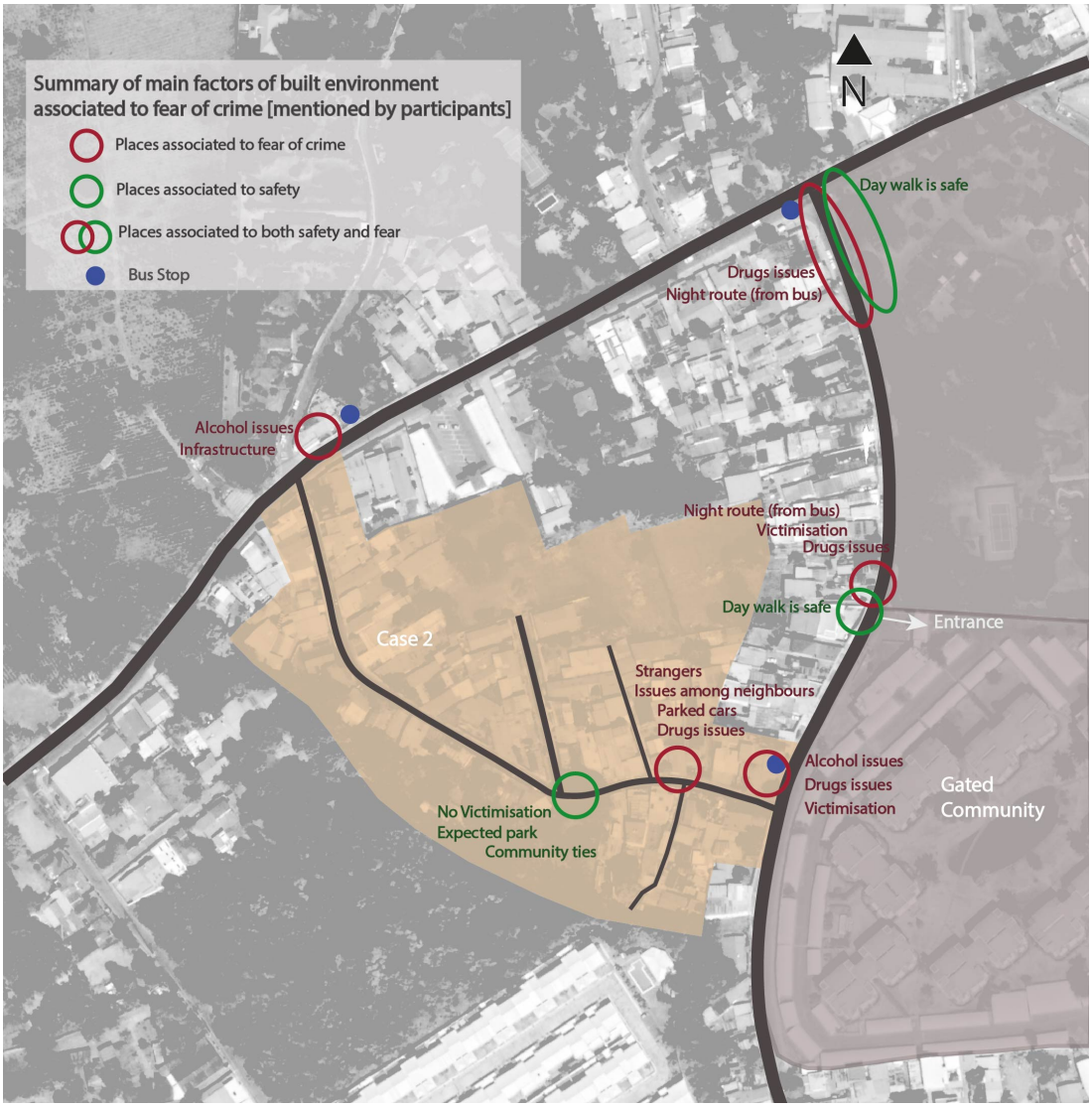
Regarding a feeling of safety, participants gave different reasons. On the street perpendicular to the gated community, they evoked a sense of familiarity, where people know each other and also there is an absence of episodes of victimisation in the past. In those places partially associated with a sense of safety, apart from there being no record of victimisation, they highlighted the presence of the police and a CCTV attached to the gated community. The comments along the gated community wall are divided into both positive and negative associations.

7.7.2. Patterns for case 2 [3 NBI]

In Case 2, those places associated with fear of crime were mainly those linked with drugs issues (see Figure 7.30). As shown in Figure 7.22, that situation is similar to Case 1 and happens in both, on the internal streets of the neighbourhood and next to the gated community wall. This community also has troubles with alcohol consumption at both ends of the neighbourhood. There are some situations of victimisation and, mostly, the negative attitude towards safety have in common the presence of the sale and consumption of drugs and alcohol.

Next to the gated community wall, there were also references to the walking distance from the bus stop, that is considered dangerous. However, they still have the possibility of using the next bus stop – north west entrance. This circumstance is different from Case 1, where people did not have an alternative bus stop; nevertheless, residents from Case 2 reported safety issues at both entrances. Along the gated community's edge, there are some positive associations with safety, especially in daytime; during the walk, there were no explicit references to elements of the built environment associated with that. However, as shown in Section 7.6, this road is the most active in all eight cases, it has a large presence of vehicles and pedestrians.

Figure 7.30. Case 2. Summary of main comments made by participants and their possible association to dominant safety and unsafety feelings.



Source: Author's elaboration
Aerial photograph: Google, Maxar Technologies, 2018.

The positive associations to safety inside the neighbourhood seem to be related to the absence of victimisation but also the social vitality of that district. As shown in Figure 7.27 Photo F, that point is in front of a vacant lot, which they are expecting to transform into a community space in the future. Therefore, they organise many of their community activities on the road in front of that lot, which makes that place a reference point for gathering and sharing.

7.7.3. Patterns for Case 3 [2 NBI]

The configuration of Case 3 shows a significant concentration of gated communities towards the west side; moreover, there is a gated community under construction on the north side, which covers a significant portion of the neighbourhood (see Figure 7.31).

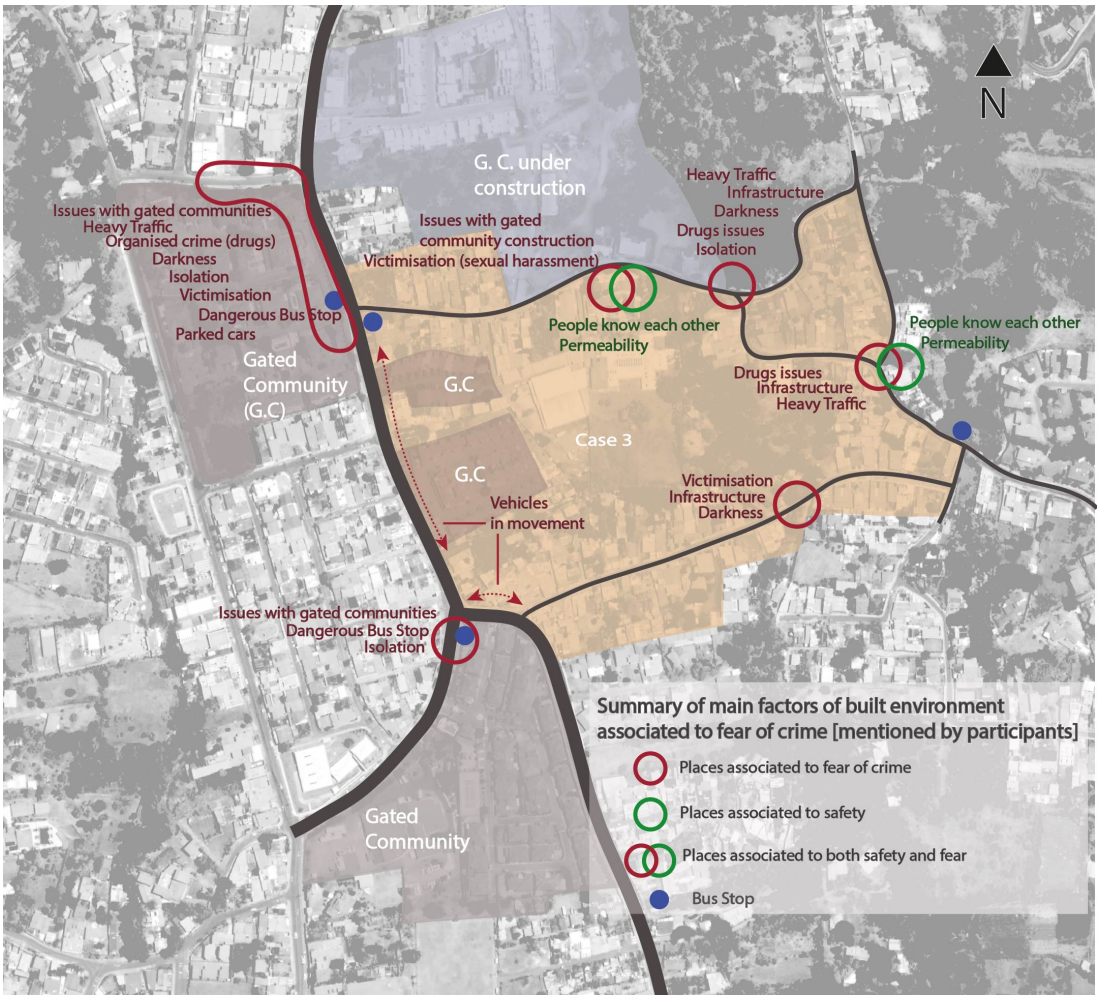
Participants voiced an elevated level of fear next to the gated community located on the north west side of the neighbourhood. They mentioned numerous issues such as isolation, darkness, heavy traffic, as well as interventions or ‘threats’ from organised crime in public spaces (Figure 7.28 Photo A). Those neighbours also complained about how the gated community’s administration managed the edges, mixing the wall with bamboo plants in a disorganised way, which could help criminals to hide (Figure 7.28 Photo B).

Regarding the gated community in the south, the main worry was the isolation of the bus stop next to that wall (Figure 7.28 photo G). The presence of moving vehicles in front of both gated communities causes anxiety, primarily because of past events of victimisation linked to mugging.

Due to this discontent with the current gated communities, there is a hostile attitude towards the new one under construction. That reaction was also confirmed during the focus group. They blame workers from the construction site for episodes of sexual harassment. Also, they complained that heavy machinery causes noises and irritation. Once the operations are finished, they believe that their neighbourhood will become even more insecure due to the pre-existing troubles associated with gated communities in this area.

Along the neighbourhood, there are places with mixed feelings of both safety and the lack of safety. The areas with a sense of fear are linked to drug issues, heavy traffic, isolation and darkness, all of which provoke worries among neighbours, mainly during the night. In contrast those areas with familiarity among neighbours and a permeability of dwellings are considered safer places, especially in the hours of daylight.

Figure 7.31. Case 3. Summary of main comments made by participants and their possible association to dominant safety and unsafety feelings.



Source: Author's elaboration
Aerial photograph: Google, Maxar Technologies, 2018.

7.7.4. Patterns for Case 4 [2 NBI]

Case 4 presents numerous similarities to Case 3. As shown in Figure 7.32, this community is surrounded by gated communities. Its neighbours also mentioned similar factors associated to fear of crime next to the gated community edge, such as the presence of unknown parked cars, isolation, victimisation and circulation of unknown vehicles. Among the cases of victimisation, there are sexual attacks and harassment, muggings and being followed by someone.

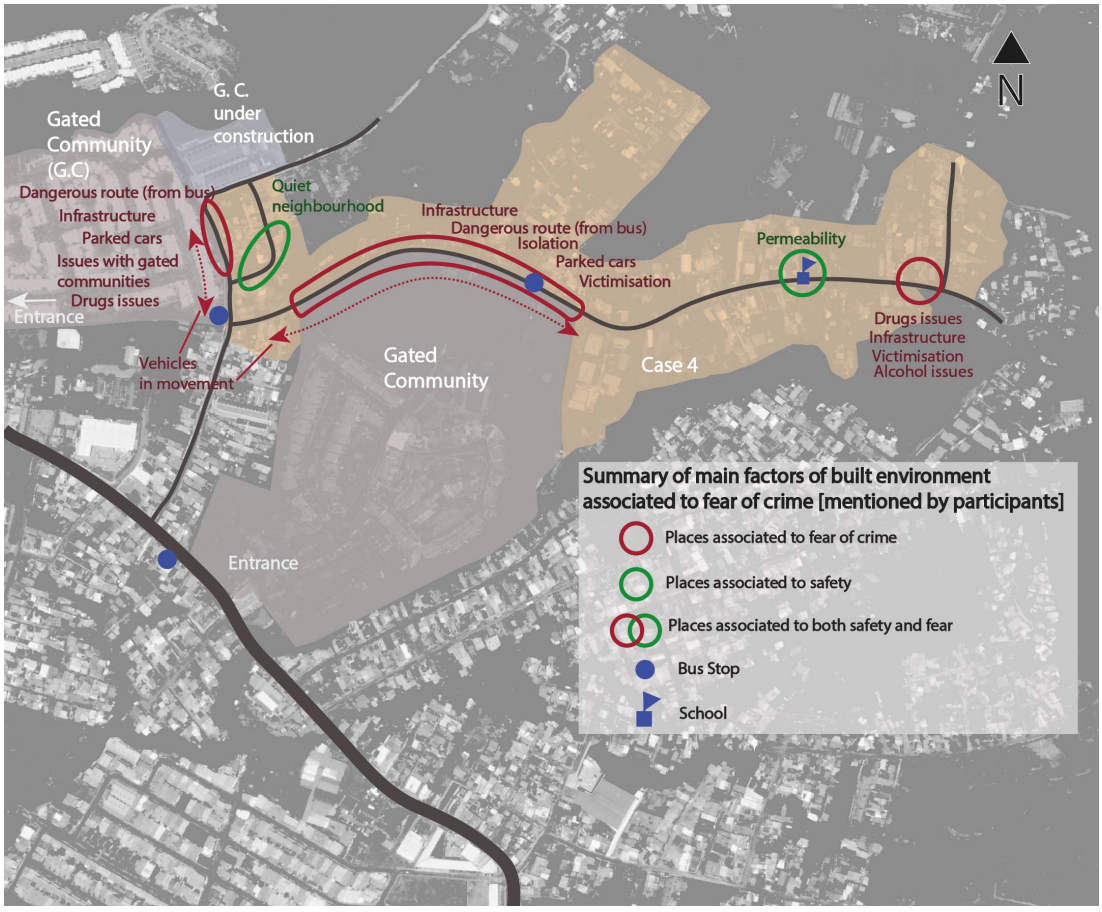
Furthermore, there is also a new gated community under construction, which has generated some inconveniences due to heavy machinery; however, unlike

Case 3, this new development will have their main entrance facing the neighbourhood. That situation, according to the closest neighbours, might help with the surveillance of that street.

Another reported insecure area inside the neighbourhood is linked to the consumption and sale of drugs and alcohol (Figure 7.21 Photo D). Participants also referred to the strong smell of drugs around that place, which keeps them aware of the situation.

The places ranked as safe were located on the internal roads of the neighbourhood. On the west side, neighbours mentioned that the area was calm, without any significant disturbance. On the east side, around the school, people highlighted the permeability of dwellings as well as the tranquillity given by the presence of the primary school.

Figure 7.32. Case 4. Summary of main comments made by participants and their possible association to dominant safety and unsafety feelings.



Source: Author's elaboration
Aerial photograph: Google, Maxar Technologies, 2018.

7.7.5. Patterns for Case 5 [2 NBI]

As mentioned earlier, Case 5 has infrastructure characteristics similar to Cases 3 and 4 and it is also surrounded by gated communities. However, it has Community Parks and no issues with drugs inside the neighbourhood.

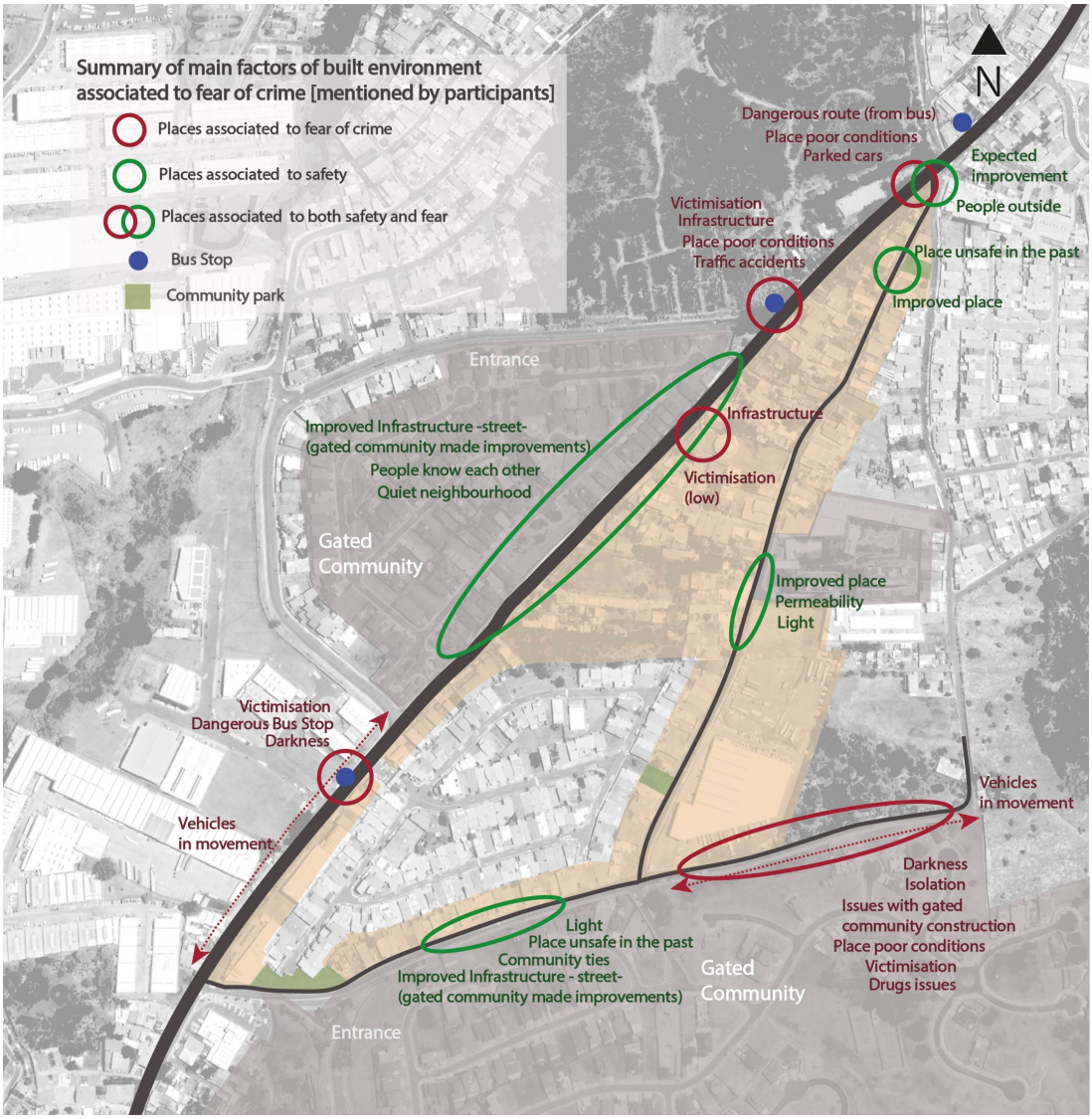
As shown in Figure 7.33, there are areas where the concentration of fear is higher. Towards the south east of the neighbourhood, there is a place between the gated community and a vacant lot which the participants considered as very dangerous, on the same street there is also an industrial land use. They ranked the entire area as unsafe due to isolation, darkness, poor conditions and victimisation episodes. That sector was the only one with drugs issues along the entire walk. Similar to Cases 3 and 4, there are fears about the circulation of unknown vehicles across that area, especially due to past events of victimisation by people in cars and on motorcycles.

The sharp corners to the north east side (both close to bus stops) were identified as unsafe places (see also Figure 7.5 Photos A and C); both have in common being next to places in poor condition, such as the vacant lots. The corner just next to the gated community in that area was also ranked as a site of traffic accidents and a scene of victimisation at the bus stop. Another place considered unsafe is the bus stop towards the south west; this bus stop is next to commercial areas and faces industrial land uses. People consider that the absence of dwellings affects safety at that point, especially during the night, making the place vulnerable to criminals in unknown vehicles.

Despite these issues, this neighbourhood also has large areas ranked as safe places. For instance, the road along the east gated community, which faces dwellings. In that area, people mention very low episodes of victimisation, familiarity among neighbours, tranquillity of the place and improvements in the infrastructure made by the community. Regarding the south area next to the gated community on the south west side people mentioned strong community ties among the households from the neighbourhood, good lighting and improvements in the infrastructure in general. This is in contrast to the south east side from the same wall, already described as unsafe. This might be because of the presence of dwellings on the south west side, that suggests

that, when the gated communities' walls are facing areas with absence of dwellings it might significantly increase fear of crime. Other areas considered safe inside the neighbourhood are those associated with permeability and with a presence of people on the street, as well as improved infrastructure, such as an investment in Community Parks.

Figure 7.33. Case 5. Summary of main comments made by participants and their possible association to dominant safety and unsafety feelings.

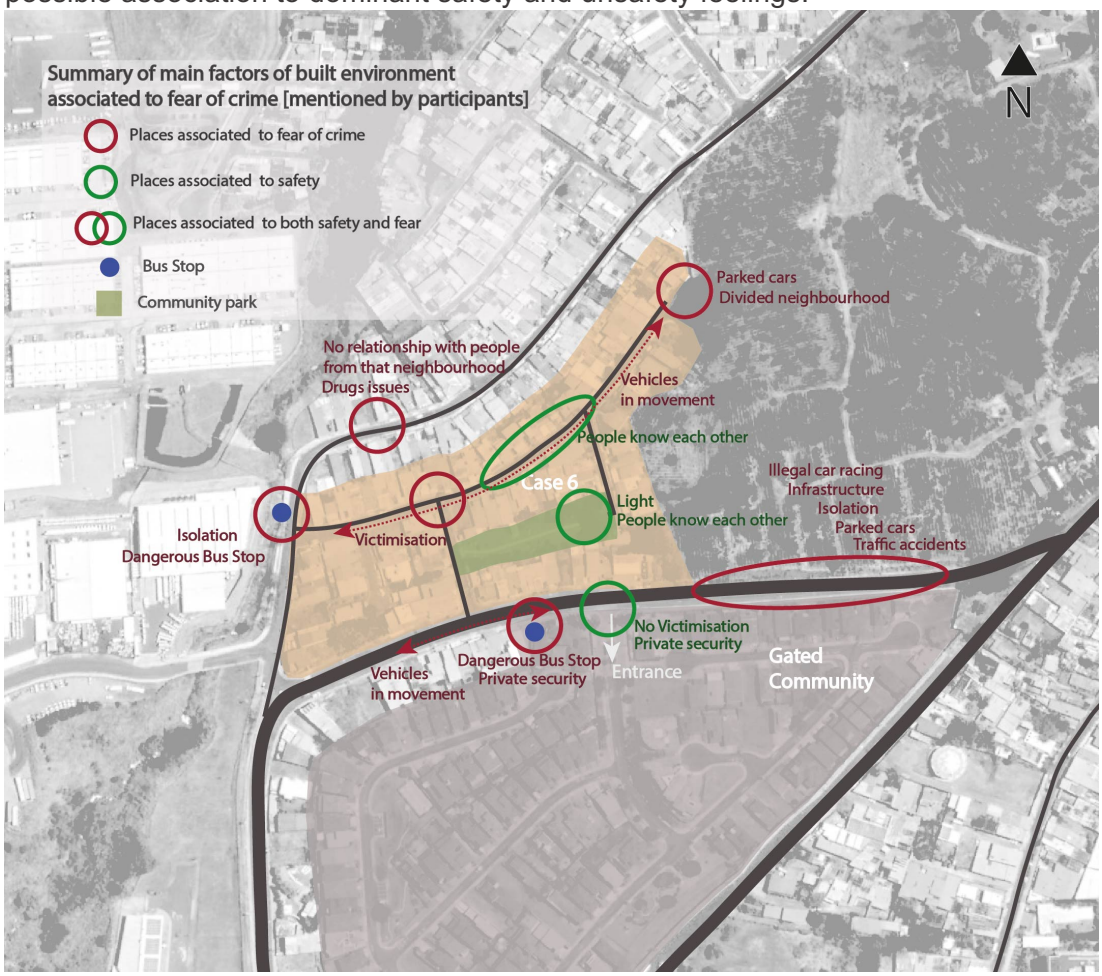


Source: Author's elaboration
Aerial photograph: Google, Maxar Technologies, 2018.

7.7.6. Patterns for Case 6 [1 NBI]

In Case 6, fears seem to be linked mainly to isolated places and moving cars. Figure 7.34 shows an area to the east, between the gated community and a vacant lot, which was considered as one of the most dangerous; similar to other cases, they mentioned isolation and parked cars, that street is used for illegal car racing which provokes anxiety and unwanted noises. People also reported traffic accidents in the sharp corner towards the east – shared with Case 5.

Figure 7.34. Case 6. Summary of main comments made by participants and their possible association to dominant safety and unsafety feelings.



Source: Author's elaboration
Aerial photograph: Google, Maxar Technologies, 2018.

In front of the gated community's entrance, there are divided opinions about private security; some people believe that guards might help in cases of an emergency, others think it is useless. However, they concur that the bus stop next to that wall is dangerous. Similar to the other cases, the possibility of crimes by passing vehicles causes worry, especially in front of the two bus stops on the map (See also Figure 7.11 Photos A and E). Despite being a small neighbourhood, the participants mentioned that it is divided into sectors, in which each neighbour group manages the safety measures on their own area. However, this situation has also reduced the communication among them as a neighbourhood as a whole.

Although there are no significant issues with drugs inside the neighbourhood, they mentioned that the community next to them (at the north) has drug dealers, which increases their fears, especially because they have heard shootings.

As Figure 7.34 shows, the street that crosses the neighbourhood has safety issues at its opposite ends. The east side has a vacant lot where sometimes there are unknown parked cars, according to the neighbour's reports; at the other extreme, there is a bus stop next to industrial land, which apparently produces a sense of isolation, similar to that at the gated community wall. Despite the neighbourhood being monitored by CCTV, the participants have mixed feelings about the effectiveness of cameras; however, their attitudes are mostly positives towards that surveillance system. That street also has recorded numerous cases of victimisation despite there being portions considered safe, due to people knowing each other.

Neighbours believe that the Community Park is a safe place, that positive view about Community Parks was consistent across all the cases from the cluster (Cases 5, 6 and 7). Residents from Case 6 mentioned that people who live in front of the park are reliable and well known and that gives them comfort. As a safety measure, they decided to close that park at 7 p.m.

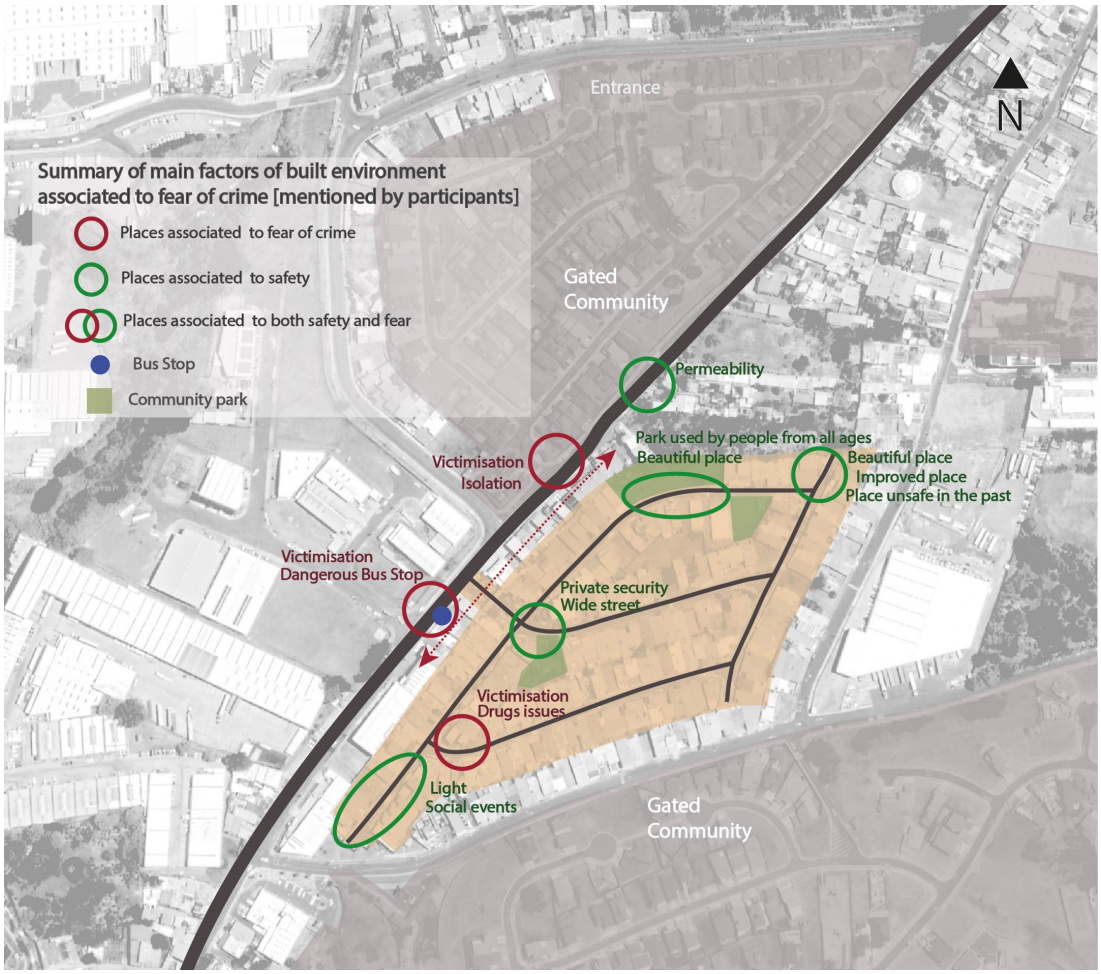
7.7.7. Patterns for Case 7 [1 NBI]

As mentioned, Case 7 is the only one with a gate at the entrance. According to the participants, that situation makes them feel safer inside their neighbourhood. As Figure 7.35 shows, most of the neighbourhood is considered safe, except for one corner where participants suspect there are drug sales. Although that illegal situation happens inside the dwelling, not in public spaces, it attracts unknown cars and people cross the gates to buy drugs. There is some evidence of victimisation in that area but people did not link it to drugs issues. However, there is concern about the possibility of a shooting or conflicts among drug dealers in the future.

In Case 7 there are many positive associations to their built environment; they mentioned many places where victimisation happened in the past but now they are safe. This neighbourhood keeps their parks open until 10 p.m., later than the rest of the cases; as mentioned, the attitudes towards those spaces were mostly positive.

However, residents' perceptions change quickly as soon as they leave the gates. They consider the bus stop as a dangerous place (similar to Case 5), this feeling is fuelled by the presence of unknown cars and cases of victimisation. In contrast to Case 5, they ranked as unsafe a segment of the gated community wall that both neighbourhoods share. Recalling Case 5's perceptions, they did not make any significant negative associations regarding safety there.

Figure 7.35. Case 7. Summary of main comments made by participants and their possible association to dominant safety and unsafety feelings.



Source: Author's elaboration
Aerial photograph: Google, Maxar Technologies, 2018.

7.7.8. Patterns for Case 8 [0 NBI]

Case 8 is a large neighbourhood, as mentioned it has the lowest poverty indicator. The physical features of this place are distinctive in comparison to the other cases. As shown in Figure 7.6 Photos B and C, the gated communities in this place have permeable edges. This neighbourhood also has small gated communities in their blocks, which are permeable as well.

As discussed in Chapter 6, there are ties among both communities (gated and non-gated residents); in contrast to the other cases, gated residents are considered part of the neighbourhood. In this regard, the attitude to safety along that edge were mostly positive (see Figure 7.36). Furthermore, Case 8

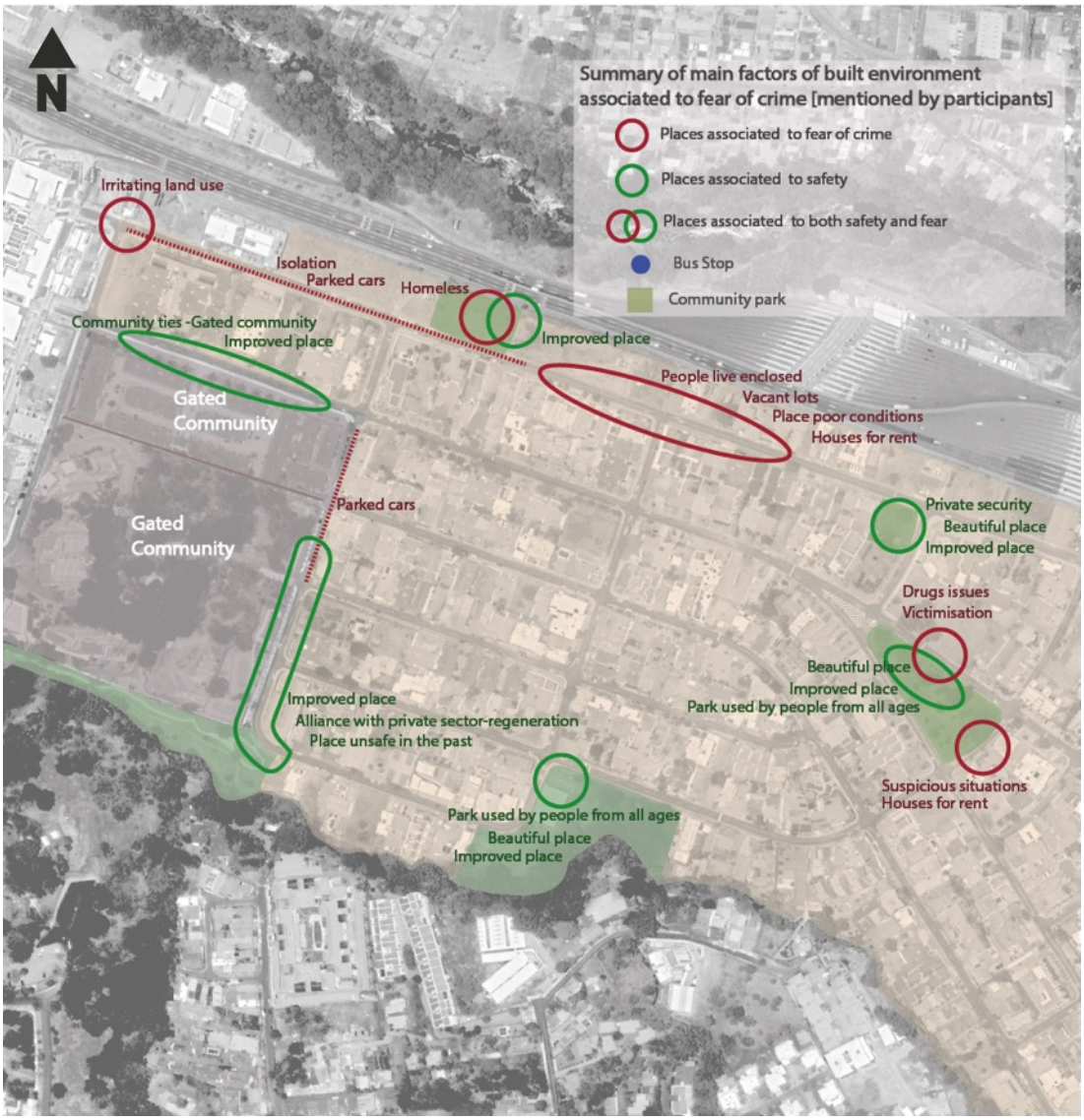
was the only case in which there is an alliance with the private sector to improve a public space, specifically that next to the gated community wall; the partner was the shopping centre behind the gated community.

During the walk, there were many positive comments about their Community Parks; they consider their parks as beautiful places and diverse. They have improved significantly as part of the Community Board's efforts. However, they reported some drawbacks in two of them. The one towards the east is linked to the selling of drugs and also some episodes of victimisation have happened there, including a rape. The other park in the north seems to be unsafe during the night; it has been occasionally occupied by the homeless and this situation provokes a degree of anxiety among the participants.

In terms of safety, the main concern is the commercial land use towards the north west, which is considered irritating. As has been mentioned, that land use seems to attract unknown cars. The red dotted lines show the places where commonly those cars are parked. They mentioned that this issue is even worse in the areas next to vacant lots that are in poor condition. There is parking also at the east side of the gated community wall but it produces fewer problems.

In this neighbourhood, as mentioned in Chapter 6, houses for rent are considered an issue; therefore, the places where those dwelling dominate are ranked as unsafe. The insecurity is higher when there is a mixture of both houses for rent and vacant lots.

Figure 7.36. Case 8. Summary of main comments made by participants and their possible association to dominant safety and unsafety feelings.



Source: Author's elaboration
Aerial photograph: Google, Maxar Technologies, 2018.

7.7.9. Summing up the patterns

The patterns of fear associated to elements to the built environment might vary according to the particular community experience, among the most common findings across the eight study cases are:

- Localised episodes of victimisation: Some studies suggest that the relationship between victimisation and fear of crime is weak (Garafalo, 1979; Agnew, 1985). This statement seems to match with data shown in Chapter 6 and displays different episodes of victimisation suffered by

participants and their acquaintances, which apparently are not consistent with the levels of fear in general. However, once those victimisation episodes are georeferenced the data suggest that fear of crime is higher in those points. (More details on Appendix 7-1 'Talk's tracks maps by comments')

- Elements of built environment linked to isolation: Some features of built environment related to isolation were also linked to feelings of unsafety Among those elements are darkness, the absence of permeability, the presence of unknown vehicles (parked or moving), vacant lots and bus stops in places without dwellings behind them.
- Drug issues: Those places related to the sale and consumption of drugs were consistently considered as dangerous or problematic by the participants. On many occasions, those points were located in places also reported as isolated. Alcohol consumption was likewise a trouble linked to unsafe feelings by the communities.
- Heavy traffic: Many places considered as unsafe had traffic issues in common. That problem was even more severe when the neighbourhood lacked a pavement; in those cases, residents complained that they had to be aware of both crimes and traffic accidents. Furthermore, when there are dangerous bus stops on streets with heavy traffic, it may become a barrier, impeding the ability to cross quickly and making the waiting times harder. When the bus stop is next to a gated community wall, that traffic could operate as a 'second wall', which explains why the participants feel very anxious in places with those features.

There are also positive associations related to safety and the built environment; the most common are:

- Regenerated places: Those places which have had an improvement were more commonly associated with positive feelings, mainly when the Community Board or neighbours managed that renovation. Most of those areas correspond to Community Parks but there are also some specific streets. In some cases, the future plans for improvement likewise raises optimistic feelings.

- Public spaces with social activity: The Community Parks were commonly associated with feelings of safety; these parks are well maintained as showed in Photos 7-1 to 7-4, they also have spontaneous uses, as explored during the observations. Apart from parks, some community events are carried out in public streets occasionally closed to traffic, those streets were associated with feelings of safety; however, there were complaints about the bureaucracy required to temporarily close a community road.
- Permeability: Those areas with dwellings were associated with a sense of safety. People mentioned the possibility of being heard in an emergency – in response to a crime or possible crime. They highlight the fact that being seen or being able to ask for help is easier when there are railings or front gardens instead of closed walls.
- Familiarity: The areas where people know each other, or neighbours have many years of living there, were frequently linked to safety.
- Lack of victimisation episodes (partially): Those areas without previous victimisation events were associated with safety but only in some cases. The attitudes were mixed; there were places considered unsafe, despite there being no evidence or stories about episodes of victimisation in the past.

7.8. Conclusions

The signs of fear associated with the built environment vary according to disparities, gender and personal experiences. This chapter explored those axes across the eight study cases.

Section 7.8 concludes with the following overall patterns:

- Localised victimisation and fear of crime
- Elements linked to isolation and fear of crime
- Drugs issues and fear of crime
- Heavy traffic and fear of crime
- Regenerated places (by communities) and safety feelings
- Community Parks (good quality) and safety feelings

- Dwellings' permeability and safety feelings
- Familiarity and safety feelings
- Lack of victimisation (partially) and safety feelings.

As it was addressed in this chapter, depending on the situation, these patterns can be found inside the neighbourhood or in the sector next to the gated community. The negative associations with the built environment, in general, were mostly regarding infrastructure issues and heavy traffic, especially in the group of 2 NBI (Cases 3, 4 and 5); to some extent, all the communities manifest discontent with isolated places and dangerous bus stops. However, when those associations to the built environment were related to the gated communities nearby, the negative comments were concentrated in Cases 1, 2, 3, 4 and 5. The complaints were focused on physical and social exclusion, the disturbing construction process and their private security. The groups with the highest incomes (Cases 6, 7 and 8) expressed less negative association towards those residential developments.

The selling of drugs and their consumption inside the neighbourhood does not adhere to any single pattern; it was found in all poverty levels (except for consumption in Case 5). However, the drug sale next to gated community walls was reported in Cases 1 to 5; the neighbourhoods with lower poverty, Cases 6 to 8 did not report that circumstance. On the other hand, concerns about conflicts among drug dealers were expressed in Cases 1, 2 and 3; this situation causes anxiety among neighbours due to the violence associated with those disputes.

The perception of the built environment also varies between men and women, during the walking interviews women reported concerns about the heavy traffic, isolated places and the presence of unknown parked cars; whereas men were more emphatic on infrastructure issues but also referred to traffic issues. Furthermore, both genders concurred in comments such as lack of pavement, dangerous walking routes or places in poor conditions. They also expressed positive views about their built environment, mainly about physical features; in this respect, women more frequently referred to positive aspects about their public spaces. Despite women having many positive comments

about the built environment (in their top comments), when those comments are split between those made inside the neighbourhood and those next to the gated community's edge, the panorama changes and their comments (same as men) become more pessimistic.

The outcomes of reported intensity of fear suggest that women manifested higher levels of fear than men in general. However, when those figures were split in perceptions next to the gated community wall and areas without physical contact with that barrier, the gap between men and women's fears becomes narrower next to the wall.

Although one of the most common precautionary measures was the use of CCTV, there is not a strong relationship between feelings of safety and the existence of those devices. For instance, in Cases 2 and 6 there were places ranked as safe, which had CCTV, others considered unsafe also had cameras.

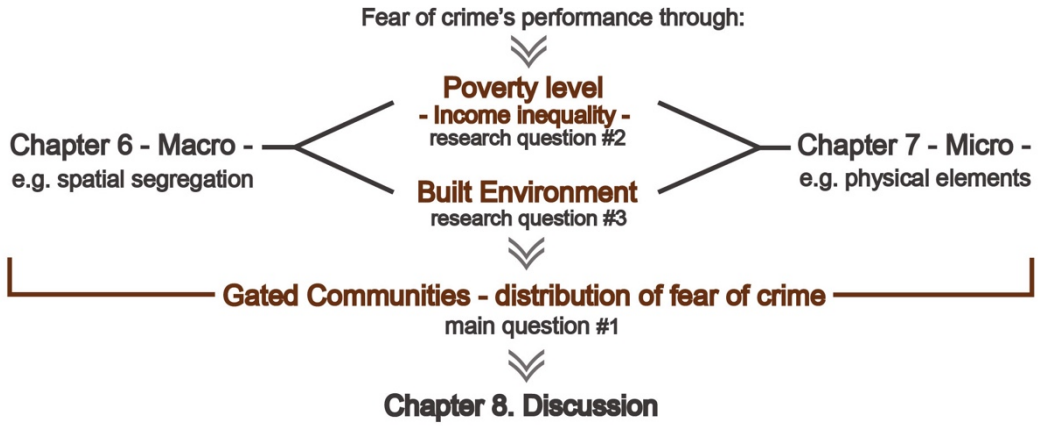
Summing up, according to the patterns analysed, there is a higher link between some features of the built environment and fear of crime mainly in those neighbourhoods with higher poverty and no Community Parks: Cases 1, 2, 3 and 4. However, in Case 1 those outcomes are not necessary linked to the physical presence of the gated community. Case 5 has both the highest favourable and unfavourable comments about the built environment; noticeably, the positive attitudes about the neighbourhood's atmosphere and lack of drug consumption in public spaces seems to produce a reduction in their levels of anxiety next to the gated developments (except for a segment in the south east). On the other hand, in Cases 6 and 7, despite more favourable associations about physical features on the internal roads of the neighbourhood, in sectors next to gated communities and bus stops the perceptions change to more negative attitudes. Finally, in Case 8 the fear was mostly linked to uncomfortable land uses and unknown parked cars.

The next chapter will discuss the macro patterns found in Chapter 6 and the micro patterns of this chapter, in order to link these findings with the core research questions about distribution of fear of crime outside gated communities and its relationship with poverty levels and built environment.

Chapter 8 Discussion: Gated communities and the distribution of fear.

This discussion chapter brings together the empirical work analysed in Chapters 6 and 7 to answer the research questions. It then connects those findings with the current state of knowledge, in order to highlight this work's new contributions to the literature. Its overall organisation remains structured by the research questions. Figure 8.1 resumes from the material in the Methodology chapter, Chapter 4, by describing the organisation of this discussion:

Figure 8.1. Structure of thesis' analysis (resumed from Chapter 4)



Source: Author's elaboration

As explained in Chapter 4 (Methodology), the secondary research questions explore the levels of fear of crime in relation to poverty levels (#2) and characteristics of the built environment (#3). These questions help to answer the main research question (#1) about how gated communities affect the distribution of fear of crime. As noticed within the empirical chapters, gated developments impact differently on deprived and wealthy communities but their physical features, such as edges, configuration or permeability, also have different implications in people's perceptions. The themes of the subjects from both questions #2 and #3 are interrelated; differences between poverty levels are always present throughout this thesis because they were part of the selection criteria for the case studies. People's perceptions about the built

environment are also implicit in the analysis; however, physical features may differ in wealthy and deprived neighbourhoods, which draws attention to the inequalities of infrastructure. Therefore, both subjects (#2 and #3) have interlinked themes which are related and can hardly be differentiated during the analysis.

Given that the empirical chapters focused on analysing both subjects at the same time but from different perspectives, Chapter 6 explored macro spatial patterns and Chapter 7 the perceptions associated to micro elements of the built environment. Although both approaches may overlap, it was possible to obtain a comprehensive picture of both dimensions (#2 and #3) and their link to gated communities. This chapter discusses how gated communities impact on fear of crime in neighbourhoods from diverse poverty ranges by combining macro and micro spatial dimensions; the same procedure applied to the analysis of the built environment.

The structure of this chapter is divided as follows: The first part focuses on discussing how gated communities impact on fear of crime in surrounding neighbourhoods by considering income disparities. The second part debates people's emotional reactions to elements of the built environment and considers how different features of gated communities might impact on those feelings. The third part answers the three research questions based on the two previous sections. The chapter closes by identifying the research topic's position in the current state of knowledge.

This discussion draws attention to the paradox that, if gated communities are seen as 'shelters' against crime (for those inside), conversely they might be operating as a catalyst of fear (for those outside), feeding a loop of actions and reactions around fear of crime.

8.1. Fear of crime through poverty levels

The impact of gated communities on neighbouring populations varies with income disparities but they are not uniform; some poverty ranges are more affected than others. The effects of disparities in fear of crime can be noticed in residential segregation, infrastructure's inequalities, perceptions about strangers and drugs conflicts.

8.1.1. Community relationships and residential segregation

Chapter 6 identified residential segregation between open neighbourhoods and gated communities. Most of the participants mentioned that they did not know the people who lived inside gated developments. Although, they have met gated residents (e.g. at church), they are not their friends. There are no community ties between the two places, except for the one neighbourhood without poverty (Case 8). Despite lack of contact, people from non-gated neighbourhoods have formulated their own notion about those who live behind the gates. Across the case studies, negative associations about gated residents were mostly concentrated in Cases 3 and 4 (2 NBI group). However, there were also unfavourable opinions in Cases 1, 2 and 7. Residential segregation was also reproduced in the responses from teenage participants, in Cases 1 and 4, who did not have peer friends among gated residents and shared similar conceptions to the adults.

Participants also described significant tensions with people from gated communities. For instance, some believe gated communities may attract crime to their neighbourhood either because those residents are wealthy or because they themselves might be involved in illegal activities (Cases 1 to 5). These findings suggest that once the gated community is in place, fears from non-gated neighbours might be fuelled by misconceptions, suspicions or personal judgements. Although, commonly, gated communities have been seen as shelters against criminality where people from inside aim to be protected from the outside, **fear of crime might also operate in the opposite direction: from open neighbourhoods towards gated communities.**

Looking beyond spatial segregation and the assumptions concerning gated residents, Chapter 7 analysed participants' perceptions about the physical presence of closed condominiums. Cases 2 to 5 (3 NBI and 2 NBI) saw a concentration of negative associations, although all eight cases recorded unfavourable opinions about gated communities. In Case 5, neighbours did not refer negatively to gated residents but they did voice a multiplicity of issues concerning the physical structure of those developments. However, these

neighbours also recognised that some gated communities repaired the public street in front of the development. The most common complaints about the physical features of gated communities emphasised were:

- lack of contribution to the neighbourhood
- discomfort with their walls
- exclusionary places
- disruption of the urban fabric by reducing possibilities of connections with other neighbourhoods
- making their surrounding more insecure
- the process while they were being built was disturbing.

In contrast, Cases 6, 7 and 8 (1 NBI and 0 NBI), which are closer or in the same poverty range than that of the gated communities next to them, had significantly less negative associations towards those developments. On the other hand, people from the most deprived neighbourhood, Case 1 (4 NBI), had significantly fewer complaints than those from Cases 2 to 5. In this neighbourhood, the residents believe that the gated community has improved the surveillance resources around their properties; nevertheless, they still blame the development for being exclusionary and probably linked to organised crime.

These findings suggest that negative associations towards gated residents are more intense in neighbourhoods with higher poverty levels, when the disparities between neighbourhood and gated community are more profound; however, that relationship is not always linear, it could be affected by internal communal dynamics within non-gated neighbourhoods.

Focus groups with teenagers were carried out in two neighbourhoods (Cases 1 and 4), comparing the teenager's views with adult perceptions; the intensity of fear reported for youths is not far from the adults' impressions in the same neighbourhoods. Furthermore, residential segregation patterns observed in adults are also reproduced in teenagers. These outcomes suggest that**, at**

least in the communities with lower incomes, teenager's perceptions about fear of crime and patterns of residential segregation (in relation to gated communities) seem to be close to the adults' viewpoints.

8.1.2. Inequalities in infrastructure

As shown in Chapter 7, there are significant disparities in the supply of public spaces and in the quality of infrastructure across the eight case studies.

Among the most remarkable infrastructure problems are the lack of pavements and community parks. For instance, Cases 1, 2, 3, 4 and 5 have significant portions of their neighbourhoods without pavements; paradoxically, according to the observations, those communities have higher pedestrian activity than Cases 6 and 7 which have pavements throughout their neighbourhoods. Another drawback is the lack of community parks, which is the situation for Cases 1, 2, 3 and 4; that circumstance reduces even further the possibility of socialisation in public spaces. In addition, it might impede on a smooth interchange for new people coming to the neighbourhood, for instance, people who rent dwellings.

Poor infrastructure is a factor in explaining why neighbours from Cases 2, 3, 4 and 5 complain about the lack of contribution of gated communities to their surroundings and the damage done to a neighbourhoods' infrastructure during the construction works. In this respect, according to participants' perceptions, it seems those areas adjacent to new developments have to endure their physical externalities and still face the shortcomings in the neighbourhood's infrastructure. **The lack of compensation from gated developments to their surroundings, especially in the range from 3 NBI to 2 NBI, appears to affect the levels of hostility from the people of those places towards the physical presence of gated communities.**

In the cluster (Cases 5, 6 and 7), the physical conditions are different; Case 5 (2 NBI) has lower quality infrastructure than Cases 6 and 7 (1 NBI). Despite being around the same gated community, their perceptions are mixed. People from Case 5 reported a lower intensity of fear next to that gated community than those in Cases 6 and 7. However, they still mentioned numerous negative associations towards the physical presence of those developments. This might

suggest that their positive feelings of safety next to the wall could be related to their own strong community ties rather than a favourable or unfavourable opinion about gated communities. In contrast, Case 6 and 7 reported no complaints about their physical features, despite their self-reported intensity of fear being higher next to the wall than elsewhere. **It seems that the externalities of gated communities might be perceived more intensely when the community nearby have shortcomings in their infrastructures.**

8.1.3. Strangers and familiarity

Chapters 6 and 7 explore the participant's views about strangers and elements of the built environment that warn about the potential presence of unfamiliar people. With respect to this, the fear of strangers was consistently mentioned by participants from all income levels. Chapter 6 shows how this fear was one of the more common general feelings but mainly in those cases with the highest incomes – Cases 7 and 8. However, people from those groups surprisingly showed an openness to the influx of some types of strangers, such as athletes or filmmakers. Chapter 7 discusses elements of the built environment that participants frequently associated with strangers, such as houses for rental, parked cars and unfamiliar vehicles, both cars and motorcycles. Because they perceive those elements as a source of danger, the anxiety increases in isolated places where encounters with strangers might happen. To reinforce this, Chapter 6 shows how the roads without physical contact with the gated community were ranked as safer than those next to the wall (except for Cases 1, 8 and, partially, 5). Among the main reasons for feeling safe in those areas are:

- dwellings' permeability
- familiarity with the setting
- the fact of knowing people there and
- the possibility of asking for help or yelling in case of emergency such as a mugging.

Although the gated communities faced dwellings which were part of open neighbourhoods, it was found that: **the perceived safety reported was**

overall higher on the neighbourhoods' roads with houses on both sides (dwellings – dwellings) rather than the sector next to the gated community (wall/edge – dwellings).

The exceptions to the above statement (Cases 1, 5 and 8) could be interpreted according to the particularities of those cases. In Case 1, participants reported a higher level of violence on their neighbourhood's internal streets rather than those next to the wall and safety perceptions from participants of Cases 5 and 8 display almost no difference between areas beside or outside of gated edges.

The conflicts among drug dealers in Case 1 has a profound impact on residents' perceived safety; therefore, the physical presence of the gated community seems not to represent a significant issue in comparison to the high level of violence already there internally. On the contrary, participants perceive that the gated development could draw attention from the police and increases the surveillance on the main street. As discussed in Chapter 6, this community believes that the police try to avoid entering its neighbourhood, therefore more police patrols are seen as helpful. **It might reflect the fact that for neighbourhoods in extreme poverty, with urgent needs to be fulfilled, the externalities produced by gated developments might not be a priority for them yet.** But it also reflects significant levels of exclusion, due to neighbours' belief that the police will be interested in patrolling the area only if there are wealthy residents there.

Case 5 has the peculiarity of being the only community with no issue of drug consumption inside the neighbourhood. Furthermore, community interactions in their public spaces (parks and streets) were notable and neighbours expressed good levels of trust between them. Those circumstances might contribute to explaining why the walls facing their neighbourhood do not seem to increase their intensity of fear.

On the other hand, Case 8, as mentioned, was the only one with community ties between gated and non-gated residents; in this case, both groups belong to the range of 0 NBI (no poverty) and infrastructure quality was similar in both places. Furthermore, the physical edges between both communities were

permeable. **It suggests that permeable borders might foster trust between gated and non-gated residents but also that those levels of trust are more likely when both communities belong to the same income level.**

Participants considered familiarity as a crucial element for safety. Therefore, the arrival of new people into the neighbourhood was considered a safety issue. For instance, in six neighbourhoods there were negative comments about houses for rent (Chapter 7). Cases 3 and 4 were the only places without opposition to houses for rent; those neighbourhoods are among the oldest from the study cases but also those with higher complaints about gated communities and safety problems. It seems that through the years, they might have become more familiar with the arrival of new generations; this circumstance does not seem to affect their perceived safety significantly and their figures of rented dwellings are similar to the rest of the cases (Chapter 5).

In contrast, people from the newest neighbourhoods, (Cases 6 and 7) which have both been founded for less than 20 years, expressed preference for residents who own their own house rather than those renting. However, both neighbourhoods are facing up to the growth of their children, today's teenagers, and this situation has affected the socialisation among adults in community parks. They highlighted that, in the past, they used to visit the parks to take their children and to chat with other neighbours but, now they have grown up, socialisation has reduced and their parks have lost vitality. Paradoxically, the arrival of new neighbours could help to animate those areas with the presence of new, younger generations keeping natural surveillance in their parks. They also mentioned drawbacks with planning codes which do not allow the mixing of children's playgrounds with other types of activities, which again might reduce the possibility of having natural surveillance more hours a day.

8.1.4. Illegal Drugs and built environment

As discussed in Chapter 6 and 7, drug conflicts arose in all cases, without any distinction in income levels. Participants distinguished between places related to the sale and consumption of drugs (small scale), areas linked to conflicts among drug dealers and places associated with organised crime (drugs trafficking).

Drug sales were found in all cases, although in Cases 5 and 6, this situation happened beside the neighbourhood. The testimonies from neighbours suggest that the drug problems most commonly linked to violence are conflicts among drug dealers, which cause more concern in areas with higher poverty – Cases 1, 2 and 3. Furthermore, people from Cases 1 and 3, despite never having met residents from the gated communities nearby, linked those people to drug trafficking on to large scale (organised) crime. **In this way, suspicions about the economic activity from gated residents and the possibility of that activity being linked to organised crime, might increase the anxiety of non-gated residents.**

That concern was even more profound in the poorest neighbourhood, as they called the gated community a 'drug factory', blaming their residents for corrupting their young people by recruiting them as drug dealers. In this neighbourhood, despite the physical structure of the gated community seeming not to affect their levels of perceived safety negatively, gated communities were a cause for concern due to possible indirect consequences. **Therefore in this case the gated community might operate as a symbol of an unequal power relationship, in which participants from the most deprived neighbourhood believe their community is becoming vulnerable as a target from organised crime.**

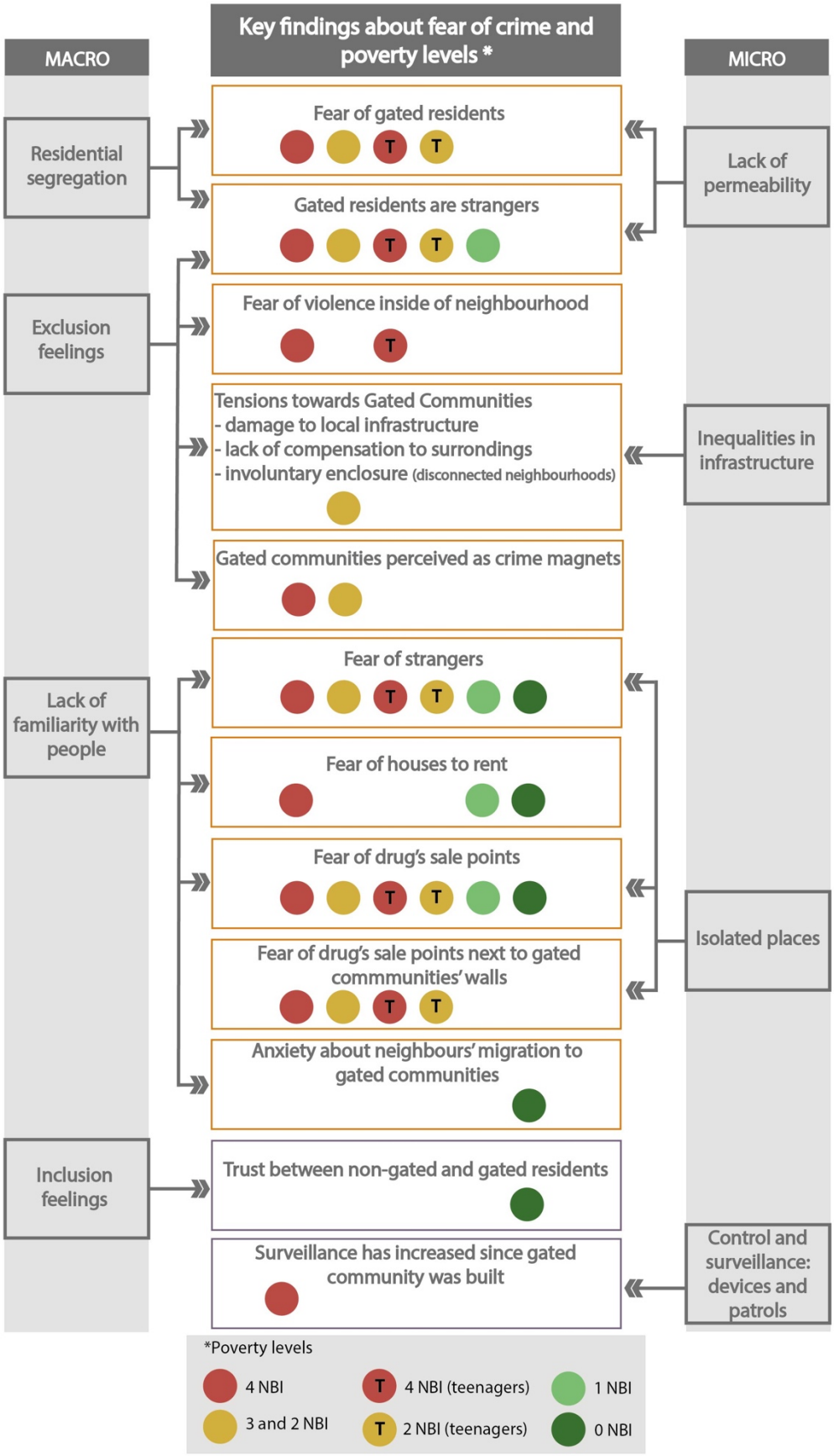
Wealthy areas are not exempt from anxiety about drug conflicts but they may have different circumstances. People from Case 8 believe that organised crime is taking place in houses for rent (inside their neighbourhood). As mentioned in Chapter 6, residents are concerned because many of their neighbours are moving into gated communities; as a consequence, there are

many empty big houses whose rent is expensive. They think that desperate owners are renting those places to drug traffickers who can afford the high price. Therefore, they claim that those properties have been used for money laundering, prostitution and gambling. Although this neighbourhood does not report significant safety issues related to the physical presence of gated communities nearby, their indirect effect over houses for rent increases neighbours' fears. As shown in Chapter 5, effectively, Case 8 has the largest numbers of dwellings for rent, 33% of the occupied houses are rented and 19% of the existing dwellings are unoccupied waiting to be rented**. It may be possible that wealthy open neighbourhoods are facing the risk of residents' migration into gated communities.**

Small-scale drug issues cause concern in all neighbourhoods regardless of income levels and those places associated with drug issues were ranked as unsafe. People localised those transactions to places inside the neighbourhood and also next to the gated community wall. In Cases 1 to 5, the drug sales happen along the gated community's edge, although in Case 5 it appears just in one segment, outside of the community. These transactions are carried out in the public space, where there are also bus stops and daily journeys take place. **These findings suggest that small-scale drug sales next to the gated communities' walls exacerbate the fears in those sectors. It might also be possible that isolation in those areas could facilitate the atmosphere for those transactions.**

Figure 8.2 summarises the key findings about poverty levels and fear of crime which will help to respond the research question #2. The diagram shows those outcomes and their relationship with the effects of gated communities within the macro and micro dimensions analysed in Chapter 6 and 7 respectively.

Figure 8.2. Key findings about poverty and fear of crime within the macro and micro dimensions explored in Chapters 6 and 7.



Source: Author's elaboration

8.2. Built environment and distribution of fear

8.2.1. Physical features and feelings next to the wall

This section discusses the emotional responses from participants next to gated communities and contrasts their reactions with those from areas without gated developments (Chapter 7); also it discusses some aspects related to community guardianship (Chapter 6 and 7) and central patterns of the built environment associated with fear of crime (Chapter 7). These topics were grouped because many decisions regarding guardianship or surveillance have direct implications on features of the built environment.

As discussed in Chapter 6, the empirical data suggest, overall, a higher self-reported intensity of fear next to gated community walls in comparison to the internal streets of neighbourhoods. Chapter 7 discussed the diversity of feelings and perceptions from participants about gated and non-gated sectors; areas bordering gated communities were associated with isolation, darkness, traffic issues, infrastructure problems and a potential presence of unknown vehicles. In contrast, the neighbourhood roads where there was no contact with those edges showed more positive attitudes towards their physical features. There were complaints about infrastructure, traffic and safety matters; however, there were also more favourable comments about built environment features, despite the quality of the infrastructure being practically the same on both sites or even better next to the gated development. **It suggests that the perception of the built environment next to the gated community might be connected to the self-reported intensity of fear there.**

In general, the balance of feelings expressed next to the wall were commonly more pessimistic than those away from it. Although there are negative associations about safety issues in areas on the internal roads of neighbourhoods, positive comments were more frequent (except for Cases 1 and 8). The most common concerns beside gated and non-gated areas were safety during night hours and fear of being mugged. Fear of strangers was mentioned in both areas and was more frequently cited inside the

neighbourhood; this might be explained, to some extent, by the fact that unknown people disrupt the familiarity of those areas. Next to the wall, people expressed worries about the possibility of someone hiding there (e.g. in bushes) and a fear of being attacked. However, comments about the lack of victimisation were higher next to the wall than inside the neighbourhood. This may reflect the fact that people have pre-existing fears regardless of the presence of gated communities. It seems that some feelings of unsafety next to the edges may not necessarily be linked to past events of victimisation and that many negative perceptions about the built environment next to those developments are linked to isolation. **It suggests that the cognitive dimension of fear of crime (Ferraro & LaGrange, 1987), associated with judgements about risk, amplifies the pre-existent fears of non-gated residents next to the wall and many of those judgements might be based on physical features of the built environment rather than past events of victimisation.**

Chapter 7 also explores anxiety in men and women. Overall, it seems that self-reported intensity of fear is greater in women than men, in both places: next to the gated edge and internally in the neighbourhood. Next to the wall, the women's fears increased in all the categories. However, one unanticipated finding was that next to the same gated edge, the self-reported intensity of fear in men had a significant rise, reaching almost the same level as women in six of the eight categories tested. **It suggests that, especially during the night along the gated community's wall, the levels of fear might be closer between men and women.**

Although next to the wall, the fear gap between men and women become narrower, it does not necessarily mean that women are less affected by those elements. It could mean that women are more alert all the time, both consciously and unconsciously (Weisman,1992); as a consequence, those edges provoke a moderate increase in their pre-existent (and already elevated) fears. Coincidentally, the comments about the built environment are more similar between men and women next to the wall than away from it. **This consensus supports the idea that some perceptions about the built**

environment are consequently linked to fear of crime and, to some extent, gated edges homogenised those perceptions.

As discussed in Chapter 7, men and women hold positive associations about the implementation of CCTV systems for surveillance; however, the precautionary measures taken by men and women are different. Women's precautions are more linked to limiting the use of public spaces; for instance, to stay at home or avoid walking alone outside, especially in the dark; whereas men took measures related to the surveillance and guardianship of public spaces. **This finding supports a broad body of literature that recognises that fear or crime limits women moving around the city.**

In respect of the overall negative associations about the built environment, men complain more frequently about static elements, such as infrastructure issues, whereas women remarked on more temporal features of the places, for example, unknown parked vehicles or isolation. Although both groups overlapped in some categories, such as issues with heavy traffic or dangerous walking routes, men gave more importance to the environment's physical features. Those outcomes might reinforce the suggestion that women are continuously more aware of events happening around them.

The precautionary measure of avoiding public spaces was also expressed by female teenager participants; while their male peers played sports on the street, the females stayed at home most of the time (Chapter 6). As teenagers are still under the supervision of their parents, the rules regarding the use of public spaces might be a result of their parents' fears and prejudices being transmitted to their children, as some adult participants recognised during focus groups (Chapter 6). The socialisation issues faced by teenagers might be said to be amplified in those neighbourhoods without community parks (higher poverty). Those teenagers mentioned that they entertain themselves in private spaces such as shopping malls or in parks outside their own neighbourhood. The neighbourhoods with community parks have an opening hours schedule and the areas are closed during the evening. Despite being open only in daytime hours, during the observations (Chapter 7) it was possible to see teenagers and young people using those spaces in all four

cases with parks. **Therefore, asymmetry in the supply of community parks in neighbourhoods with higher poverty, might make the community relationships of teenagers difficult within their immediate environment.**

As discussed, some patterns of the built environment were more commonly related to safe or unsafe feelings. Some of these have been discussed already in this chapter, such as drug issues and isolation. However, there are other factors related to collective memory such as traumatic episodes, victimisation or personal experiences of crime. Some studies have suggested that the relationship between fear of crime and victimisation is weak (Garofalo, 1979; Agnew, 1985). Chapter 7 discusses how that relationship seems to be stronger when an episode of victimisation is localised accurately and someone walks through that place. Despite there being predictors of fear of crime, such as gender or income inequality, this does not mean that those feelings of fear are uniform all the time; even within a certain neighbourhood variations can appear. Instances of victimisation or the reputation of a place shape people's mental maps (Koskela & Pain, 2000). The empirical data collected suggest that georeferenced episodes of victimisation, in most of the cases, concur with higher levels of anxiety at the same place. **In this regard the relationship between fear of crime and victimisation could have a positive association if it is accurately linked to the spatial dimension.**

The places most commonly linked to events of victimisation are bus stops, some of which are located next to the walls of gated communities in areas with heavy traffic. Participants mentioned that they already feel fearful waiting for the bus in those isolated areas and that busy traffic makes their waiting times even more difficult because they are not able to cross the street to escape if something suspicious is happening. **It suggests that heavy traffic performs as a 'second wall' in some areas, 'trapping' people next to the gated community's wall.**

Chapter 7 also explores positive associations of the built environment and feelings of safety. As has been discussed, permeability and familiarity are common reasons to justify the perception of safety. In addition, those areas with small-scale regenerations (e.g. parks and streets), were also considered

safer; these areas had in common that they were promoted and managed by members of the community board. These bodies have economic independence but operate in coordination with the local government in some respects; this situation gives them some freedom to intervene physically in the management of public spaces (especially parks) but their budget is limited. Local government can also make direct investments in the parks through their annual budget. Given those funding sources, the community board manages the improvements. **As a result, one of the most common positive associations to feelings of safety were those places that, according to residents, 'used to be unsafe' but, through a communal initiative, were addressed and they 'are safe' now.**

Additionally, those open spaces that periodically hosted community events, such as parks, streets or vacant lots, were associated with feelings of safety. However, as Chapter 6 showed, there are general complaints about the level of bureaucracy required for carrying out community events in public spaces. For instance, among the Ministry of Health's requirements are licenses to sell/give food, provision of public toilets and private security. People argue that those requirements are not realistic for small-scale events and they discourage community activities. In Cases 2, 3, 4 and 5 these drawbacks were mentioned more often. Therefore, the bureaucratic process for holding events in public spaces seems to affect to a greater extent communities with low incomes, which have more difficulty in affording the identified requirements. Additionally, those procedures can be complicated and time consuming, which absorbs more time from volunteers.

8.2.2. Controlling the public space

Surveillance and control have been used to transform the built environment, with the intention of reducing the opportunities for crime. However, those measures are not exclusive to gated communities. As Chapter 6 discusses, during the focus groups, communities from all cases, except Case 8, mentioned CCTV as one of the most effective actions to prevent crime; in fact, it was the measure most frequently mentioned, even in places without monitoring systems or CCTV. Nevertheless, some neighbours recognise that

CCTV does not help to prevent crime but does contribute to capturing eventual crime suspects. In this way, the results were ambiguous; there were places ranked as safe which had CCTV and areas marked as unsafe which also had CCTV. There was, therefore, no strong relationship between the places identified as safe and the use of CCTV devices.

Another precautionary measure implemented by communities in public spaces was to control community parks. The community parks within the case studies are local government assets under community board management, which allows some flexibility; as mentioned, just four neighbourhoods have parks. Community boards have a sophisticated logistic to keep them working, there are regulations for their use, an opening schedule and they are fenced. The keys to the gates are allocated among different neighbours who are in charge of opening and closing them every day. Chapter 6 and 7 addressed the logistical challenges that those communities have to face as well as some social conflicts derived from disagreements about the administration, e.g. opening hours. Despite those drawbacks, in general, community leaders seem to be proud of keeping their community parks in good condition and under control. As shown during the observations (Chapter 7), all the community parks are well maintained, are well used and most were open at the time of observation. In this respect, the high level of commitment of community leaders keeps the neighbourhood parks in excellent condition but there are still challenges to increase their opening times or widen access for groups of users. **In general, a positive balance of feelings of safety within community parks and immediate surroundings was found, which might be linked to their good quality, a sense of belonging and human activities.**

8.2.3. Gating becoming the norm

Local authorities might be contributing to gates becoming the norm. Chapter 6 discussed testimonies from community members and interviews with local authorities in which both groups explained that their municipalities sponsor CCTV in neighbourhoods and also fence parks. Those devices are in place

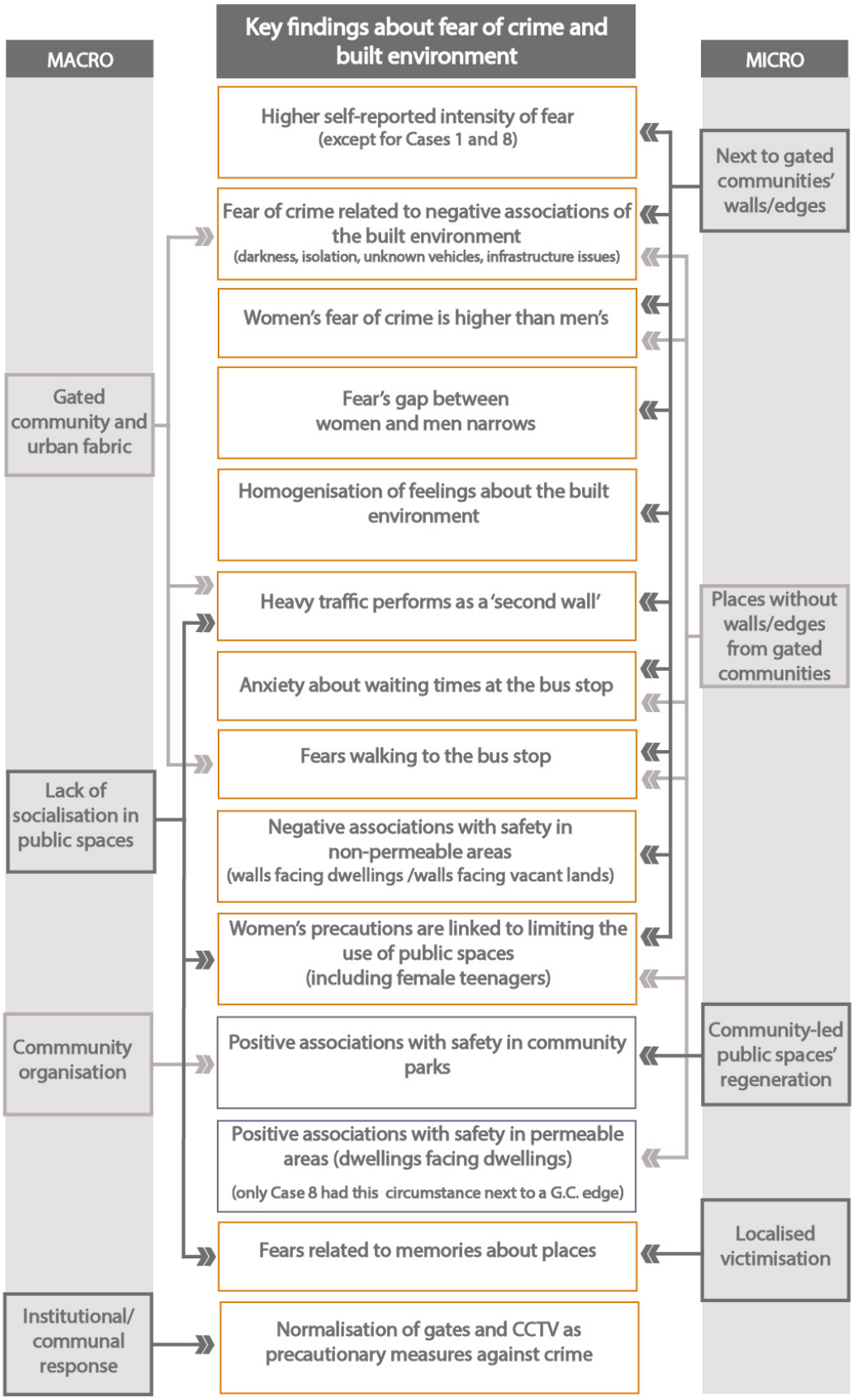
mostly because communities make requests through participative budgets but also as a municipal initiative.

During the interviews with the local police (Chapter 6), it seems those authorities see gated communities as a positive way to combat crime. They did not make any negative associations about the effects of those developments on their surrounding public spaces. On the contrary, they believed that walls reinforce surveillance because they have CCTV and create an atmosphere which dissuades criminals, warning them to go elsewhere. During the interviews carried out with the chairs of social departments (local governments), they stated they were aware of the social segregation produced by gated communities. However, they did not link the proliferation of gated communities to the level of perceived safety around them. Finally, although members of the communities complain about gated developments (Chapter 7), it seems there is a feeling of powerlessness about their proliferation and control. In fact, some recognised that they would move into a gated community if they could afford it because it is 'safer'.

This would indicate that gating is becoming the norm as a safety precaution. Furthermore, local institutions do not see gated communities as an issue in spreading fear on their peripheries. On the contrary, according to the interviews, local police support the rise of walls and the surveillance provided by gated communities. Besides, the local government also contributes to building fences (in parks) and funding CCTV to monitor open neighbourhoods. **This suggests that walls, fences and CCTV systems are seen as a normal strategy against crime; this situation might compromise the awareness of local authorities when delivering planning decisions to control features of gated communities.**

Figure 8.3 shows a summary of the key findings about fear of crime and built environment and their relationship with the macro and micro dimensions explored in Chapter 6 and 7 respectively.

Figure 8.3. Key findings about fear of crime and built environment within the macro and micro dimensions explored in Chapters 6 and 7.



Source: Author's elaboration

8.3. Beyond the gate: Fear of crime outside gated communities

This section aims to respond to the core research questions. According to the design of the research, the secondary questions will help to answer the main question, therefore, they will be answered first and this section will close by responding to the main research question.

Secondary question: Is there any variation in fear of crime in those neighbourhoods with higher levels of poverty?

This research question raises the following hypothesis:

H1. Fear of crime is higher in the study cases where the income inequality between the gated community and the adjacent neighbourhood is notable.

The association between the two is not strictly linear but, in general, it was found that neighbourhoods with higher poverty reported more anxiety than those less deprived. The poverty indicators within gated communities from the eight case studies are 0 NBI and 1 NBI; those neighbourhoods that reported numerous negative comments about safety have also more disparity in relation to the gated community. However, those levels of fear are not always exacerbated by the physical presence of gated communities. In Case 1 (the highest poverty) although the intensity of fear reported is significantly larger than the rest of cases, it is mostly concentrated on the internal roads of the neighbourhood (high violence) rather than next to the gated community wall. It was the only case where fear of crime was significantly higher inside the neighbourhood than next to the wall. However, the effects of income inequality can be noticed by feelings of exclusion and how people from Case 1 blame gated residents for operating organised crime networks which recruit their young people.

The case study without poverty, Case 8, was the neighbourhood with greater positive perceptions next to the gated edge. It was also the one with lowest residential segregation because gated residents are considered part of its community. However, these people are concerned because their neighbours

are migrating to gated communities, leaving empty dwellings. The participants believe that this is putting their community at risk.

Although both ends of the poverty distribution are consistent with the hypothesis, both agree that the effects of gated communities over their neighbourhoods are not necessarily related to the physical features of the gated development.

In respect of the cluster surrounding the same gated community, Cases 5, 6 and 7, it is important to highlight that Case 6 and 7 have the same poverty indicator as the gated development (1 NBI); those cases, in general, seem to report more positive attitudes about perceived safety within the neighbourhood than the cases in higher poverty in general (except for Case 5). However, on the roads next to the wall of the gated community, the intensity of fear reported and comments about safety reflect similar patterns to those in less wealthy communities. Residents from Case 5 (2 NBI) reported that some areas were considered dangerous; however, none of them were located next to the gated community shared with Cases 6 and 7, some of them were beside another gated community. Cases 6 and 7 had private security and CCTV systems (Case 7 also has gates); as shown in the intensity of fear maps, these cases reported positive safety levels within the neighbourhood's boundaries but once they leave the internal roads, feelings in the peripheries change drastically, despite those areas also having CCTV. In contrast, Case 5 does not have any of those surveillance systems (although they aim to have CCTV) but their perceptions of unsafety around the same gated community are significantly lower. As mentioned, this neighbourhood has active natural surveillance and their residents have expressed trust in their neighbours.

Summarising the results in this cluster: in the neighbourhoods with higher incomes (Cases 6 and 7) the self-reported intensity of fear of crime increases significantly once the neighbourhood's boundaries are crossed, mainly next to gated community's walls. The perceptions from people in Case 5 are more uniform and their neighbours do not report an increase in fear of crime next to the gated community shared with Cases 6 and 7. However, they had some

overlaps, such as at bus stops and sharp corners, which were ranked as dangerous places by cluster's residents from different neighbourhoods.

Cases 3 and 4 (2 NBI) were the neighbourhoods that seemed more profoundly affected by the presence of gated communities. The disparities between the gated communities (0 NBI) and neighbourhoods (2 NBI) are notable. Non-gated residents directly complained about the proliferation of gated developments around their neighbourhoods, provoking an 'involuntary enclosure' and interrupting their communication channels. Those cases are traditional neighbourhoods with many years of being funded, located in areas with good transportation networks but away from more deprived areas. That situation might attract real estate developers who may be looking for places where land prices are not extremely expensive, yet are in a good location.

On the other hand, disparities can be noticed in places with more profound conflicts due to drug use. Participants strongly linked drug issues to unsafe feelings. Those situations appeared more substantially in Cases 1, 2 and 3. Apart from the sale and consumption of drugs, these communities were concerned about the possibility of fights among drugs dealers. Therefore, communities in higher poverty are also the most vulnerable to these conflicts.

Finally, it was found that more deprived communities had less positive opinions about gated communities. Groups with 4 NBI, 3 NBI and 2 NBI (Cases 1, 2, 3, 4 and 5) have more negative connotations towards the physical presence of gated communities, or their residents, than those groups with 1 NBI (Cases 6 and 7) and 0 NBI (Case 8). This could be explained firstly by preconceptions as a result of the residential segregation but also because of inequalities in infrastructure; evidenced by neighbours expressing their frustration about gated communities using the public infrastructure without giving anything in return.

Secondary question: Which conditions of the built environment within the neighbourhood influence the fear of crime?

This secondary question frames the following hypothesis:

H2. Residents perceive as unsafe those elements of the built environment without permeability and lack of community interaction.

The empirical evidence suggests that a lack of permeability and community interaction have a notable relationship with the fear of crime. The research showed that feelings of safety were more commonly expressed in areas with the entrances to dwellings on both sides of the road, rather than sectors with walls on one side and dwellings on the other. The segments where the wall faced a vacant lot were ranked as highly dangerous. The places when vacant lots faced entrances to dwellings were mixed; sometimes they were ranked as unsafe and at other times as safe.

In Case 8, the edges between gated communities' dwellings and the neighbourhood are permeable; they have railings instead of walls. As shown in the observations beside one of the gated communities, the pedestrian activity is significant. Therefore, the two circumstances mentioned in the hypothesis (lack of permeability and low interaction) are hardly present in these edges, which might explain why their residents reported lower intensity of fear there.

However, the circumstances from the hypothesis above were not always met. In Case 5, some sectors with walls facing dwellings were ranked almost as safe than those areas with dwellings on both sides, despite the observations showing lower levels of social interaction there than areas with facing dwellings on both sides. This neighbourhood revealed numerous positive associations about their built environment but also many complaints. As mentioned earlier, one of the most important particularities of this place is the lack of drug consumption in public spaces; this situation, added to its strong community ties, might help to interpret these distinct outcomes.

Isolation was the feature of the built environment most frequently associated with fear of crime; the participants also stressed consequences related with isolation, such as anxiety about:

- vehicles in movement (cars and motorcycles)
- parked cars
- unwanted encounters with strangers

- bus stops without natural surveillance
- dangerous walking routes to the bus stop
- darkness.

Heavy traffic was mentioned a lot as a problem, mainly next to isolated places; the absence of pedestrian traffic lights accentuates this situation. Although traffic was frequently cited as an issue, there were no traffic lights on any of the roads covered by the walking interviews. Some residents blamed gated communities for traffic congestion; however, more research is required in order to determine any link between the proliferation of those developments and any increase in traffic in their surroundings.

As addressed in the previous research question, inequalities in infrastructure might be linked to perceptions of the built environment but also to the opportunities for socialisation. The quality of infrastructure varies to the same degree as poverty levels; therefore, those neighbourhoods with more poverty were also those with worse public infrastructure. The main issues found were:

- absence of community parks in Case 1 (4 NBI), Case 2 (3 NBI), Case 3 and 4 (2 NBI)
- lack of pavement in Cases 1 (total), Case 2 (almost totally), Case 3 (partially), Case 4 (partially) and Case 5 (partially).

Those infrastructure issues affect the opportunities for sharing, the cross-generational relationships and natural surveillance. Participants mentioned having chats on the street and how heavy traffic may affect socialisation at certain hours in the day. Case 5 is the only neighbourhood, within the 2 NBI poverty range, with community parks. That circumstance might reinforce why this case reveals different patterns to the rest in the category 2 NBI. In this regard, participants from neighbourhoods with parks (Cases 5, 6 ,7 and 8) expressed positive associations of safety in those public spaces.

There are places associated with fear of crime that are not physically homogeneous, they may look different but are part of a collective memory of experiences or identified as areas of potential risks:

- Places with localised victimisation: the specific point where episodes of victimisation took place (to participants, relatives or friends), especially those that happened in public spaces, such as mugging, murders and sexual harassment.
- Places associated with the sale and consumption of drugs and alcohol. This fear is even higher if there is a risk of conflict among drug dealers.
- Houses for rent: except for Cases 3 and 4, most of the participants considered that houses for rent and the arrival of unknown people might pose a risk for their communities.

Participants from all poverty ranges linked these locations with fear of crime; their reasons were more linked to symbolic association to danger rather than physical features of the place.

Main question: How do gated communities affect the spatial distribution of fear of crime in the neighbouring public spaces?

The main research question raises the following hypothesis:

H3. Residents from neighbourhoods next to gated communities perceive the public spaces beside the gated edges as less safe than those without contact with the gated community.

After analysing the secondary questions, this research suggests that gated communities affect the spatial distribution of fear of crime in their surrounding public spaces and, most of the time, increase anxiety in their peripheries. However, the scope of fear produced by closed condominiums have variations; there can be direct implications on their surroundings or indirect impacts with diffuse spatial delimitation. Although both dimensions overlap; they could be classified as:

Direct impacts over:

- Perception of the built environment: isolated, disconnected and non-permeable environments.
- Residential segregation: fear of others and preconceptions.

Indirect impacts over:

- Local dynamics: social interaction, trust and relationship with setting.
- Structural circumstances: poverty disparities and infrastructure inequalities.

Regarding the direct impacts, as analysed in the previous research question, there is a definite emotional response linked to the physical presence of gated communities. In seven of the eight cases the edge between a gated community and its neighbourhood was a non-permeable structure, mainly walls. All the walking interviews were journeys across familiar environments, where some parts of the neighbourhood face gated communities whilst others do not. In five of those seven cases, more associations regarding isolation, darkness, dangerous walking routes and heavy traffic were made next to the wall, which were strongly linked to fear of crime.

The impact of gated communities in the spatial distribution of fear of crime was also analysed by some demographic characteristics. The research shows that both men's and women's self-reported intensity of fear was increased next to the gated community. Women reported higher levels of anxiety in both sites, places with and without contact to gated developments. However, next to closed condominiums, the fear gap between men and women became narrower. On the other hand, regarding adults' and teenagers' perceptions, it was found that this young population, from high and middle poverty levels, reveals levels of fear that are close to those of adults next to the gated communities and within the neighbourhood.

The physical barrier between neighbourhoods and gated developments has exacerbated the residential segregation, except for the only case where those barriers are permeable and there is no poverty disparity between both communities.

Residential segregation seems to have implications in fear of crime for the residents outside the wall. There are judgements about those who live behind the gates: are they involved in illegal activities? do they care about the surrounding communities? do their safety devices and infrastructure relocate crime towards neighbouring communities? All the assessments about these

unknown people seem to intensify the perceived risks, which is the result of the residential segregation provoked by the gated communities themselves.

Among the indirect impacts of gated communities within neighbourhoods, can be mentioned changes in local dynamics which exacerbate fear of crime, for instance, residents from Cases 1 and Case 8 (the opposite ends). Neighbours from the most deprived neighbourhood blame people from the gated community nearby for recruiting their young people for illegal activities; that assumption links the presence of the gated development with a fear situation. On the other hand, in the wealthiest neighbourhood, there were worries about the number of houses for rent. These participants said that their neighbours had moved into gated communities making many large houses empty or being rented by people that might be linked to organised crime (as they can afford the lease prices). Residents from both cases did not associate the physical structure of gated communities to unsafety; however, those assessments about the consequences for their neighbourhoods reflect an indirect impact of gated communities over their settings.

Regarding structural circumstances, gated communities might intensify problems such as income inequality. As mentioned in the secondary questions, overall, it is likely to find higher levels of fear when there are disparities between open neighbourhoods and gated communities. These differences are stressed by inequalities in infrastructure; tensions about shortcomings in infrastructure might fuel assumptions about gated residents and what neighbours call a lack of interest in their surroundings.

Resuming the hypothesis, the research suggests that the physical closeness to a gated community affects the perceived safety negatively. Although the most deprived and wealthiest neighbourhoods (opposite ends of the poverty distribution) show different reactions, they seem to be affected by indirect consequences. Residential segregation and tensions which arise from gated communities affect almost all poverty ranges analysed, although with more intensity in the more impoverished communities.

8.4. State of knowledge and findings

This section discusses the implications of the findings in the literature. Some of them reinforce statements in the stage of knowledge, others contribute to a growing body of literature by addressing research gaps and open up new doors for further research.

8.4.4. The inside and the outside

The deep residential segregation found in this research supports previous statements about how gated communities exacerbate this phenomenon (Blakely & Snyder, 1997; Caldeira, 2000; Roitman & Phelps, 2011; Vaughan & Arbaci, 2011). In this regard, Rojo Mendoza (2015) states that income inequalities in Latin American might be sharpened by gated communities and the very idea of exclusion.

Outcomes from the empirical data suggest that the effects of residential segregation provoked by gated condominiums also have implications in fear of crime for those living outside. Low (2004) has analysed how residents from gated communities are afraid of those outside the wall. In this work, it was found that those fears also operate in the opposite direction: from non-gated areas towards gated developments, where anxiety is fuelled by fear of others. According to Maslow's hierarchy of needs, human beings in their search for safety prefer the known over the unknown because familiar things help them to enjoy stability (Maslow, 1954). Scholars have pointed out the importance of diversity, mixed neighbourhoods and encounters with strangers for maintaining the liveliness of the city and keeping natural surveillance (Jacobs, 1961; Sennett, 2018); those interchanges are strongly limited if there is a wall between the two communities.

This thesis contributes to the discussion about the open city (Sennett, 2018) by showing the positive associations related to safety in permeable areas of neighbourhoods. As explored in Chapter 2, physical features could help to foster people’s interactions and minimise residential segregation through 'soft edges' (Gehl, 2010:p.75) or membranes (Sennett, 2018). However, to

incorporate these elements in urban designs is not the only challenge in this process; income disparities between communities might make integration difficult when the gap is significant.

According to the empirical data, those interchanges might be more likely when both groups (inside and outside) belong to the same poverty range and borders are permeable. These circumstances were only met within the wealthiest neighbourhood of the eight case studies. Despite a physical barrier between neighbourhood and closed condominium, it was permeable and there was a sense of cooperation between gated and non-gated residents. As a result, there were positive associations towards the gated neighbours. It reinforces the 'Intergroup contact hypothesis' proposed by Allport (1954), who suggests that contact between two groups helps to reduce prejudices if it is developed under conditions such as equal status, sense of cooperation, common goals and support by institutions.

The findings contribute to the debate about open systems in Latin American cities. Handal and Irazábal (2019) claim that gated neighbourhoods in Honduras have limited the mobility patterns, have increased residential segregation and have facilitated the operation of criminal gangs. However, in Central America, little research has yet been done to understand the effects of gated developments' shape on interactions between surrounding communities. This work shows the viewpoints of non-gated residents who report being victims of involuntary enclosures. The rapid spread of gated communities has generated new urban patterns around traditional open neighbourhoods blocking their connections with other communities.

8.4.5. The role of the built environment in fear of crime

The relationships between the built environment and fear of crime have been widely discussed in this work (Loukaitou-Sideris, 2012; Mihinjac & Saville, 2019; Ceccato, 2020). Many findings concur with those theoretical approaches, such as greater levels of fear in isolated and dark places (Loukaitou-Sideris, 2012). This research contributes to those theoretical discussions by exploring how the edges of gated communities homogenise

the perceptions about the built environment, raising feelings of anxiety but also analysing those emotions across different poverty levels.

The positive relationship between incomes inequalities and fear of crime have been analysed in terms of access to well-being (Vauclair & Bratanova, 2017) and the relationship with violence (Wilkinson & Pickett, 2009). The outcomes of this thesis are consequent with that literature, they expand those views by exploring the relationship between inequalities in public infrastructure and fear of crime. Those disparities increase the gap between neighbourhoods with high and low poverty levels and reduce the opportunities for socialisation and natural surveillance. Furthermore, infrastructure inequalities between gated and non-gated areas exacerbates tensions from non-gated residents towards those in gated communities.

This investigation will contribute to the research about fear of crime and urban fabric. As noted in Chapter 4, most gated developments within the case studies have sizes over nine hectares, that situation implies a disruption to the urban fabric, which prolongs the walking times alongside non-permeable boundaries. Landman (2008:p.234) points out that gated communities stimulate the creation of a ‘cellular development pattern’ that restrains urban integration and limits mixed land uses by reducing the number of access points. Hillier (1988) has also criticised enclosure housing forms because they affect free movement and therefore impede natural surveillance. Hillier (2004) suggests that having dwelling entrances facing public spaces might mitigate the likelihood of crime. This thesis verified that the lack of permeability of gated communities’ walls intensifies fears most of the time.

Furthermore, many isolated places next to the walls of gated communities were reported as drugs’ sale points. Within the Latin American context, there are circumstances related to potential risks, such as areas linked to drug issues. As a result, all the places linked to drug problems were consistently ranked as unsafe. Drug traffickers in Latin America have been portrayed as dangerous and ‘illegally successful’ people (Palma Campos, 2018:p.42). This work contributes to the Latin American efforts to explore how some urban

patterns might facilitate the conditions for ‘small scale’ drugs operations in public spaces.

Heavy traffic is another element connected to the urban fabric that might exacerbate fear of crime, mainly in places such as the edges of gated communities or bus stops. In this regard, a poor stratification by speed (Marshall, 2005) was found in many areas. For instance, in some neighbourhoods, the connection between two internal streets (minor roads) could only be made via the main street with heavy traffic. Although gated communities might not be locally responsible for the traffic levels, their proliferation, without controlling their shape and size, might reduce the number of streets available and the potential connections, consequently increasing traffic congestion. Beebeejaun (2017) cites the effects of a motorway (Bristol, UK) on women’s fear of crime. This thesis shows how traffic can operate as a ‘second wall’ next to gated communities, confining pedestrians to the pavement and, therefore, increasing their anxiety.

This research also contributes to the discussion about fear of crime and victimisation; some scholars have found a weak relationship between both phenomena (Garofalo, 1979; Agnew, 1985), others claim a higher correlation in low-income populations in Latin America (Ruiz & Turcios, 2009), Koskela and Pain (2000) refer to people making mental maps with narratives and experiences. This thesis has detected that, once an episode of victimisation is localised, the associated fear of crime is stronger; through the walking interviews, it was possible to corroborate those connections and how localised victimisation intensifies feelings of unsafety. This pattern was consistent in public spaces where crimes had occurred.

Positive experiences about the built environment and safety can be found within the literature. Sampson, Raudenbush and Earls (1997) suggest that community cohesion, trust, willingness to contribute for the common good and informal social control can help to reduce violence. Sendra and Sennett (2020) highlight the role in urban design of communities with a long history of activism or groups that promote activities locally. They state that designers and communities can work together in improving existing public spaces (or creating

new ones), which consequently foster new interactions. This work confirms that community-led interventions renewed public spaces which were perceived as the safest places by the participants.

8.4.6. Socio-demographic characteristic

Chapter 2 addressed how socio-demographic factors, such as gender and age, could influence fear of crime. There is a general consensus that fear of crime is higher in women than men (Sacco, 1990; Hale, 1996; Falú, 2009; Tandogan & Ilhan, 2016). This statement has been questioned by scholars who hold that it might be being underestimated in men (Sutton & Farral, 2005). The outcomes from Chapter 7 were consistent about higher levels of anxiety in women than men; however, surprisingly, that gap became narrower next to the gated community edge. Furthermore, the comments from women and men about the built environment were clearly differentiated along the roads without contact with gated communities. However, beside the walls perceptions from the two genders were similar, which suggests that the edges of gated communities might homogenise feelings about the built environment which, in turn, intensifies the perceived risks. Furthermore, this finding allows visualising the constant levels of alertness in women, as their fears increase only moderately next to the wall, in comparison with the significant increment in those of men. These outcomes also show that the fear gap between men and women in public spaces is perhaps not always constant, it can be wider or narrower, also it could be affected by specific features of the built environment.

The walking interviews enabled exploration and contrasted localised experiences of both men and women in public spaces. Beebeejaun (2017) highlights the importance of walking in understanding womens' spatial perceptions. Scholars have claimed that space is not neutral and has different meanings for males and females (Muxí Martinez, 2011; Ortiz Escalante, 2014). This research contributes to the literature that explores gender differences in the perception of the built environment.

Another socio-demographic factor approached in this work was the fear of crime in teenagers. Melde (2011) draws attention to how fear of crime in this cohort has been underestimated; he argues that, typically, the samples on fear

of crime studies are focused on adults and further research is required in the teenage population. This work addressed some of those concerns; it was found that the gap in safety perception between adults and teenagers seems to be narrow; young people are aware about drug transactions in public spaces and general issues of their neighbourhood. Furthermore, this age group keeps the same degree of residential segregation as adults, at least in teenagers from high and middle poverty levels. This exploration also contributes to the gender discussion, by showing how female teenagers have a more limited use of public space than their male peers.

8.4.7. Surveillance and control

Surveillance is a key element in perceived safety. However, this concept has had different interpretations, most of them with implications over public spaces, from natural surveillance or ‘eyes on the street’ (Jacobs, 1961) to ‘defensible spaces’ (Newman, 1973). These approaches also have the dichotomy of open-close systems or outside-inside. Depending on who is exercising the surveillance, the position of ‘others’ might change. This work has explored how the surveillance resources from gated communities are seen from the outside and also how people from some neighbourhoods implement their own systems.

In the case studies, the vigilante approaches encompass natural surveillance, which might not always be conscious, and systems deliberately implemented such as private security, community policing, CCTV and a schedule of opening hours for community parks. As described in Chapter 3, those parks are municipal assets under the administration of community boards. As a result of that management system, those areas are maintained in good condition, with a sense of belonging, contributing to natural surveillance with their use. In this regard, de Magalhães and Freire-Trigo (2017:p.27), who studied different contractual forms of administration of public spaces in London, suggest that management transfer does not necessarily affects publicness in a negative way ‘However, it requires judiciously designed accountability mechanisms and clear decisions by all key stakeholders’. Those community parks are fenced with public access only during opening hours. That brings about the paradox

of how the normalisations of those gates are seen as a common surveillance and a control system that keeps the community motivated to safeguard the place. Although those neighbourhoods reproduce the use of gates, the levels of restrictions are still far from the mechanisms implemented by gated communities.

However, the surveillance system of gated communities could be helping to intensify fears outside. This research suggests that gated communities fuel the 'feedback loop' of fear of crime within the Latin American context. Lee (2001) introduces this concept by assessing governmental discourses[5] and Huhn (2017) also uses that approach by exploring the political discourse of fear in Central America; he holds that fear discourse has been used to exacerbate people's anxiety; as a result, punitive populism and fear of crime intensify each other. Landman (2012) suggests that urban fortifications are part of a negative feedback loop of crime in South Africa. Lee (2001) argues that research about fear of crime has impacted on government policies; therefore 'fear of crime' was born as a set of particular discourses. He refers to Foucault's concept of 'governmentality' based on knowledge (for instance, statistics); therefore, laws have been created to achieve the 'common good' which is to obey with discipline (Foucault et al. 1991). In this regard, those forms of power feed themselves through learning processes, producing actions and reactions constantly (Foucault, 1979). Hence, Lee (2001:p.472) suggests that the information about fear of crime has been part of government strategies where 'fearing subjects' are also the object of regulation; thereby discourse intensifies the fear of crime without any specific location of sites or institutions where it operates.

This thesis suggests that gated communities, especially in Latin America, fuel the feedback loop of fear of crime by intensifying fear in public spaces but receive nurture from it at the same time. This work stresses how that cycle can also be reproduced spatially through urban patterns.

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[5]. Lee develops his concept base on Hacking's (1995) studies about memory.

8.5. Conclusions

Distribution of fear of crime on the peripheries of gated communities is a complex phenomenon which is, to some extent, overlooked. There is a large body of research about the residential segregation provoked by those developments and the reasons behind their creation and spread. However, there are still many challenges to understanding the effects of gated communities towards the outside, mainly those regarding perceptions of safety from adjacent communities.

This discussion contributes to the state of knowledge by analysing the fear of crime from one perspective that has been less explored, which is fear of crime in public spaces as an effect of gated communities rather than just a cause. Through the core research questions, it was asked if gated communities produce emotional responses that distort the spatial distribution of fear of crime. It was found that its allocation varies not only through poverty conditions and other disparities but also by features of the built environment, feelings of exclusion and spatial segregation.

Chapter 9. Conclusions

This thesis has explored how gated communities affect the spatial distribution of fear of crime. After responding to the research questions, summarising and discussing the empirical findings in Chapter 8, this closing chapter addresses the key findings within the Latin American context, the limitations of the study, the implications of the study for urban policies and finally the research agenda.

9.1. Key findings and contributions

This section summarises the main findings and contributions of this thesis; they have already been discussed in the previous chapters and this section intertwines those outcomes with relevant contextual elements.

As mentioned in Chapter 3, Costa Rica, in a Latin American context, shows some favourable indications of development in comparison with other countries from the region; for instance, a high proportion of expenditure from its GDP on healthcare and education. Furthermore, the intentional homicide rate, despite being higher than the worldwide average, is lower than the Latin American standard and it is far from being one of the most violent countries. In contrast, the concern about victimisation in that country is greater than the Latin American average (Corporación Latinobarómetro, 2018) and very close to those countries, such as El Salvador, that hold the highest rate of intentional homicides worldwide (World Bank, 2020).

The information above shows that Costa Rican people might have pre-existing fears which are not necessarily linked to the presence of gated communities. However, this study found that under certain circumstances, such as the existence of non-permeable barriers, the physical structure of gated communities can provoke an emotional response, distorting the spatial distribution of fear of crime and making it more intense in those areas such as the edges of the different communities. Furthermore, the thesis has analysed the elements of the built environment that exacerbate those anxieties, such as isolation, darkness or heavy traffic. As shown, when the perceptions of both men and women were analysed, gated communities' barriers seem to homogenise feelings about the built environment, mainly those related to fear of crime.

As mentioned in Chapter 3, regarding income inequalities, the GINI index for Costa Rica is among the highest of Latin America but it has lost its previous comparative advantage (PEN, 2019a); the consequences of those inequalities are also reflected spatially. This study found that in those cases where the disparities in levels of poverty were more profound between the neighbourhood and the closed condominium, some tensions had arisen. Those cases in higher poverty perceived, more intensely, an impact at the externalities of gated developments, such as feelings of exclusion. There was also a sense of unease linked to the lack of contribution by those living in gated communities to the areas nearby, except in the most deprived case which showed a different pattern in this matter.

Furthermore, inequalities in infrastructure, such as the lack of a community's parks and pavements, were more significant in poorer neighbourhoods. As shown in the empirical chapters, within the four neighbourhoods with parks people more frequently experienced feelings of safety when they walked next to them and respected their good maintenance and management. In this respect, this study concludes that inequalities in infrastructure might have an impact on the perceptions of the built environment linked to fear of crime.

Costa Rica also shares the general Latin American patterns of residential segregation, already discussed in Chapter 2. As addressed in that section, gated communities in the region have exacerbated the barriers of differentiation, promoting separateness instead of any sense of integration (Caldeira, 2000). As a result of this spatial segregation, this thesis found that tensions from the outside towards the inside have emerged, especially in neighbourhoods with higher levels of poverty. Among the participants' opinions are feelings of resentment and allegations blaming residents from gated communities of committing illegal activities or of the areas being magnets for crime. Those feelings seem to be mirrored in the younger generations; teenagers expressed the same judgments as the adults from their neighbourhoods. Therefore, as shown in the discussion chapter, one of the consequences of residential segregation is the fact that fear of crime also operates in the 'opposite' direction, from the non-gated neighbourhood towards the gated community.

There are also exceptions to that spatial segregation; the wealthiest neighbourhood, for example, did not show the same pattern. However, despite the existence of permeable edges and communal relationships with gated residents, people from this neighbourhood had to face the anxiety of seeing their neighbourhoods migrate into gated communities, leaving large empty houses for rent. As discussed, one of the most profound concerns of these neighbours is the possibility that those dwellings could be occupied by people linked to organised crime.

At the institutional level, it was noticed how fences, walls and devices such as CCTV had become normal as mechanisms to prevent crime. According to the Costa Rican planning rules, the local government is responsible for urban codes and planning in general. The central government can dictate broad guidelines at national and regional level (see Chapter 3 for more details); however, municipalities set the final planning regulations in their territories. The impact of walled developments on the fear of crime seems to be overlooked by local authorities; on the contrary, the police officers interviewed believed that gated communities might help to create safer places. However, some interviewees from municipal social departments were more aware of the role of gated communities in exacerbating residential segregation. In this respect, some externalities produced by those developments could be reduced, to some extent, through design codes; for instance, by controlling their size or type of edges.

Apart from the findings discussed, this study produced some methodological inputs. As shown in Chapter 4, this work proposes the formulation of ‘intensity of fear’ and ‘talks’ track’ maps. They complement the data collection process introduced in the walking interviews (Evans & Jones, 2011) and work in conjunction with the safety exploratory walks by ONU-Habitat (2013b). This thesis uses these new tools to investigate the different components regarding fear of crime. To achieve this, the ‘intensity of fear’ maps were created from the participant’s self-reported fear, using individual maps with stickers representing different intensities of fear. Moreover, the 'talk's track' maps were conceived by combining qualitative software (NVivo) and GIS (ArcMap). Although GIS has already been used to study fear of crime, this work

contributes to further understanding by employing these novel efforts to facilitate a link between people's narrative and spatial representation.

9.2. Limitations and challenges of the study

This study contributes to the growing efforts in researching the impacts of gated communities over their surroundings, mainly those regarding fear of crime. However, this research experienced limitations and challenges, some of which were linked to secondary sources of information and others were with regard to the fieldwork. Those limitations are extensively detailed with the purpose of contributing to future research by being transparent about the difficulties of the research process.

9.2.1. Limitations on secondary sources

The source of information for the case studies selection was the Costa Rican census. The most recent census was carried out in 2011; therefore, there was a gap of information of approximately seven years between the census data and the fieldwork. However, due to the units of analysis in this thesis being neighbourhoods, that level of detail could only be found in the UGMs from the census. This circumstance did not substantially affect the selection of neighbourhoods, as it is very unlikely that the socioeconomic conditions of a neighbourhood would change dramatically in such a short period of time. However, some new gated communities started their construction process after 2011 and therefore were not featured in the census.

In Costa Rica, the construction of residential condominiums is a growing phenomenon. As shown in Chapter 3, the new licences for those developments almost doubled between 2000 to 2017 (Sánchez, 2018). As a result, some of the gated communities under consideration for this work had dwellings still under construction in 2011 but they were completed when the fieldwork took place in 2018. Again, this limitation does not affect the findings significantly; nevertheless, the information about the study cases in Chapter 5 might not contain all the dwellings built inside the gated communities by 2018.

The final limitation with the census data is the correspondence between the census cartography and the boundaries of the neighbourhoods. As explained in Chapter 4, the census units (UGMs) are the most accurate approximation

available to obtain demographic information from the neighbourhoods. However, sometimes the geometry of the UGM does not match exactly with the neighbourhood's boundaries. As a consequence, it might be possible that the demographic information described in Chapter 5 included some dwellings from adjacent areas.

In order to be transparent with regard to the limitations of the census, in Chapter 5 those details were described extensively. For that reason, the chapter detailed the demographic situation in 2011 and produced a comparison of aerial photographs from 2011 and 2018. The same chapter shows cartography of the UGMs in each study case versus the neighbourhood's delimitation (done during the fieldwork). As mentioned, this limitation emerges in the first phase of the selection process without affecting the quality of the study, as the findings come mainly from the empirical data collected during the fieldwork.

9.2.2. Methodological limitations and challenges

This study was carried out by a mixture of methods of data collection. One of the most challenging aspects was the recruitment of participants for walking interviews and focus groups. As described in detail in Chapter 4, the process started by contacting the community leaders who later made an open call inviting members of their community to participate, sometimes through WhatsApp groups, phone calls, email or personal communications. The leaders were asked, if possible, to invite both men and women and to encourage people from different ages, including teenagers over 14 years of age. At that stage, the researcher did not have control over the exact number of participants and their characteristics. The community leaders were told that, ideally, a maximum of 10 people was considered suitable. On the day before the activity, they gave to the researcher an approximate figure of participants. Although this process had the disadvantage of uncertainty, it also had the benefit of avoiding any bias from the researcher during the recruitment process.

The invaluable help of the community leaders enabled recruitment of 102 participants for walking interviews and focus groups (both adults and

teenagers). However, on two walks (Cases 2 and 3) there were no women and the number of participants was limited. These unbalances and how they were tackled are listed as follows:

- Walking interview in Case 2: This activity was carried out with only one male participant. However, the focus group had six participants (men and women) which enabled the researcher to triangulate some of the information given by the male participant about the built environment. Additionally, an in-depth interview was carried out with a female neighbour. She talked about features of the built environment and she was invited to put stickers on the neighbourhood map (corresponding with intensity of fear). In order to be consistent methodologically, the talk's track maps for this neighbourhood were based on the walking interview (male); however, the information from the focus group and in-depth interview (female) allowed the researcher to obtain an integral picture of the neighbourhood's perceptions.
- Walking interview in Case 3: There were no women during this walking interview; however, it was possible to obtain the views of women during the focus group. In a similar way to Case 2, the talk's track maps of this neighbourhood are based on the views of men and this is detailed in those maps. Case 3 belongs to the poverty group of 2 NBI; this study has three cases in that poverty range; the overall adult participation in that category was 16 men and 21 women. Therefore, despite the absence of women in that walking interview, there is still a significant representation of female participants in that range of poverty.

As mentioned in Chapter 4, the thesis obtained the High-Risk Ethical Approval at the UCL Research Ethics Committee. The main reasons for being classified within that category were: the inclusion of teenagers; the recording of emotional responses from all participants; and the safety measures required during the walking interviews. Although this was challenging in terms of protocols, it allowed for the expansion of the possibilities of the fieldwork and increased its depth. Given the comments of the Committee, the research design considered the possibility of having teenagers during the walking interviews; however, there was also an alternative plan in case this portion of

the population did not participate in the activity. The second option was to carry out at least two focus groups with teenagers, preferably at high school level; the UCL ethical approval included both alternatives. As anticipated, there were no teenagers during the walks, therefore, the focus groups were necessary.

Although the original idea was to recruit teenagers through their teachers, as soon as the researcher obtained the high schools' approvals, the country began a national strike in public institutions. The strike was highly supported by the educational sector and lasted three months (this covered the part of the fieldwork period and after it was finished). This meant that focus groups in those institutions would not be possible and, as an alternative, the focus groups were performed in the teenagers' own neighbourhoods; again, the community leaders helped to recruit them. Once at the meeting place (a familiar neighbour's house), both teenagers and parents/guardians received information about the project and filled out the consent forms. A third focus group was intended with teenagers from the wealthiest neighbourhood, the recruitment was planned through a school of arts which was not involved in the strike action; however, at the last minute the focus group was cancelled by the school, due to certain indirect effects of the strike.

As addressed in Chapter 4, the non-participant observations were deliberately planned at the end of the fieldwork, after collecting the perceptions of the communities. That decision was made in order to have a broader perspective of opinions and to be able to select the observation points carefully. Furthermore, it was essential to build some level of trust between the community and the researcher before starting the observations, thereby reducing the discomfort of watching someone unfamiliar taking notes. This meant that there was a time gap between walking interviews and observations but this did not represent a significant problem. However, when the observations took place in Case 1, construction works were taking place on the street next to the gated community; those lasted until the fieldwork was concluded. This situation affected the observations of traffic levels in that neighbourhood. To compensate for that limitation, Chapter 7 incorporated a map with the sounds registered by the author during the walking interview; although it was not possible to determine the numbers of vehicles from that

data, it showed the places where sounds of heavy traffic were more frequent and pronounced. That information enabled to confirm the accuracy of people's comments about traffic.

Methodologically, the walking interviews provided a rich spread of information; however, they had a spatial delimitation and required a physical effort from participants. Therefore the routes for these walks were selected prioritising the information needed to answer the research questions and in order to prevent fatigue among the participants. In most cases, it was possible to cover the entire neighbourhood; nevertheless, in larger cases such as Cases 4 and 8, the route excluded some streets. That omission did not critically affect the quality of the information because the diversity of sites covered was enough to respond to the research questions.

Another limitation of the walking interviews was that they might exclude certain populations with limited mobility, such as older people (Evans & Jones, 2011). For this study around 16% of participants in walking interviews were over 60 years old; although this figure hampers the ability to make quantitative contrasts, it allowed the researcher to record valuable narratives about the history of a location and to include experiences from this section of the community. Furthermore, during the focus groups, there were older people participating in all eight neighbourhoods; their chronicles were crucial to understanding the transformation of places over the years.

The possibility of having some limitation due to participants' mobility was considered beforehand and, for that reason, sedentary methods such as focus groups and in-depth interviews were included. Furthermore, considering the extant broad body of literature researching fear of crime in older people, this study aimed to contribute evidence about fear amongst teenagers because this topic still requires further research (Melde, 2011). That explains why the question regarding the age of participants was asked during the walking interviews by the way of the individual maps (stickers).

Case study research has strengths and limitations (Yin, 2018). During this work, some of these limitations were known beforehand while others were unpredictable. Through the presentation of empirical data, context and the

description of cases, the study was intentionally transparent concerning those conditions, in order to give reliability to the findings. On the other hand, most of the time the case study protocol deliberately contemplated alternative measures to tackle those limitations. Despite these efforts, some drawbacks were difficult to anticipate; however, a clear narrative of the limitations will help to improve protocols for further research and the continuing search for knowledge.

9.3. Implications of the study for urban policies

The effects of gated communities on perceived safety seem to have been overlooked, particularly regarding those outside the gates; this study seeks to record the impact of urban policies on those neighbourhoods. The construction of gated communities in Costa Rica follows similar patterns to other countries in Latin America. Although each nation has different planning frameworks, this work should help to draw attention to certain specifications that may be included in planning regulations and design codes to control the proliferation of gated communities and their features in order to minimise the impact of negative externalities. However, many effects of gated communities over territory are exacerbated by structural causes, such as income inequality, which requires profound actions in the economic policy from the central government.

In Costa Rica, as mentioned in the context chapter, gated communities have been created under the condominium scheme which is an ownership status rather than a construction pattern. As a result of that circumstance, gated communities are ruled by two branches of laws: the national regulations regarding their ownership and local planning norms for their physical features.

The recommendations below are made for a Costa Rican context; however, they could also be applied to other Latin American countries with similar planning frameworks. Evidence from this work and a robust body of literature suggest that gated communities produce numerous externalities which have effects on both the urban and social fabric. However, those developments also have their supporters and there is a growing demand for them within the Costa

Rican housing market. That circumstance makes any proposed limitation complex, as many economic and political interests are involved.

9.3.1. Recommendations about condominium ownership scheme – national level.

A substantial difference between open residential projects and condominiums is the supply of public spaces required by national laws. Whilst a new open residential project allocates up to 45% of its land to public streets and community parks (Law N° 4240), the residential projects under the condominium scheme are not required to supply any public land (Law N°7933). That difference makes condominiums even more attractive to developers. The national regulations for the condominium scheme delegates matters regarding physical features to local government.

During the fieldwork it was noted that the poorest neighbourhoods did not have community parks; this is one of the deficiencies in infrastructure that might affect fear of crime. Moreover, among the complaints from the non-gated residents is the lack of contribution from the gated development to their surroundings (particularly considering the external factors that they produce).

Residential condominiums could make contributions to compensate for the lack of community parks; this work proposes that it could be made at:

a. National level: Through a public-private agreement which involves the percentage of areas for internal parks.
b. Local level: Through a land grant requested by the local government before the condominium is legally established (this proposal will be developed in Section 9.3.2.).
c. A hybrid of the two previous points (developed in Section 9.3.2.).

Currently the national condominiums' bylaw (Executive order N° 32303), indicates that internally the residential condominium must allocate 10% of its surface or 20 m^2 per unit, to internal parks. In this respect, this work proposes through the suggestion *a);* a public-private agreement where a portion of that land could be placed outside the gate. In respect of this, the management should have an agreement through the condominium administration and local

government. That private land would have public access and maintenance from the condominium administration and the local government could exempt the land taxes of that portion of the development.

However, that procedure does not warrant a community appropriation; for that reason, it might be convenient that local governments transfer the management of those parks to the community boards which would manage the general affairs and requirements of infrastructure directly with the condominium administration. The local government would solve any disagreement between both boards.

That scheme could evolve into a permanent transfer of land from the condominium to the local government. In this regard, the proposal recommends a flexing of the condominium bylaw, to allow for this type of operation.

Table 9.1 summarises how the proposals of this section are linked to the findings.

Table 9.1. Summary of proposals about public-private agreements through a flexing of the condominium bylaw (national level).

Findings	**Proposals**
Fear of crime due to inequalities in infrastructure	Public-private agreement where a portion of the private land can be placed outside the gate to create community parks. Possibility of permanent transfer of lands to local government.
Tensions for lack of compensation from gated communities	
Successful management of public spaces (community boards)	Transfer of new park's management to community boards

Source: Author's elaboration

9.3.2. Planning recommendations – local level

One of the most powerful tools to control the construction of gated communities is the use of regulatory plans which are the municipal urban codes for planning. Those plans can include a set of rules in order to minimise the impact of closed condominiums; this proposal addresses the supply of public spaces and the configuration of physical features.

Supply of public spaces

The local government could ask, as a requirement, that residential condominiums supply public land which can be used for community parks or streets – option b) from the previous section. This land could be on the periphery of the gated community (taken from the main property); however, if the community boards nearby have a specific lot in mind, the developer could acquire that land and transfer it to the local government to fulfil the requirement. As shown during the fieldwork in some neighbourhoods without community parks, their members already had selected lands with the hope of it being purchased by the local government. In such cases, the regulatory plans, should specify all the details regarding percentages and management of those lands.

However, this mechanism might force condominiums to give a double supply: to their internal residents and external neighbours. In this regard, as mentioned in the section above, it might be possible to manage a hybrid between option a) and b). For instance, if the local government asked for 5% of the original property for public land, a portion of that value could be a reallocation of the percentage for internal parks but outside the gates. Those lands would then be in the public domain, therefore gated residents could use them as well.

Something crucial in this operation is clarity about the management of those open spaces. As noticed in this research, places in poor condition can affect the levels of fear of crime. If those areas when transferred to the local government are neglected, instead of reducing fear they could provoke the opposite effect; consequently, the regulation could acquire a ‘bad reputation’ and jeopardise the opportunities of improving the supply of community parks.

Size of gated communities

The local government can control the size and shape of gated communities through regulatory plans (urban codes). Developments could adapt to the municipal projected roads which could be limited in size, avoiding large sections of gated areas. That measure also could avoid the disruption and saturation of the road system. As shown through the case studies, many gated communities are larger than nine hectares (even 43 hectares) provoking discontinuities in the network of streets. The long walking distances beside gated communities' walls increase people anxieties, in all case studies the developments under considerations covered more than two blocks, limiting the possibilities to take alternative routes.

Permeable borders

A development of properties under condominium schemes does not necessarily means a gated community. However, gated communities are commonly established under the condominium status. Their walls and lack of permeability were mentioned by the participants as triggers for isolation and danger. It has been widely researched that those barriers contribute to residential segregation; in this work it was found that this circumstance also leads to anxiety from outside neighbours. Given that, the most preferred scenario would be to avoid the gates and enclosures; in Costa Rica, it would be a complicated and long route given the acceptance of gated communities there. However, local governments can determine the physical characteristics of those developments and their edges. In this regard, the Costa Rican planning framework could enforce permeable borders (e.g. railings instead of walls), promote residential condominiums at the centre of blocks or in smaller sizes. Nevertheless, this process requires to encourage municipalities to incorporate those regulations within their planning rules and face the pressure of developers.

Land uses

Borders of condominiums in contact with the public space could enable land uses such as cafés, small shops or other activities compatible with housing. Gated residents could access from the inside, perhaps through their own

control devices, but people from neighbouring communities could also use those facilities. Those activities could foster casual encounters between gated and non-gated residents contributing to reducing preconceptions about each other.

Hillier (1988) points out the responsibility of town plans for fostering integration and movement through urban spaces; he suggests that burglary risk increases with higher segregation, as the spaces for encounters are reduced. The layout of the city has an important role in perceived and actual safety. Therefore, local governments should not overlook the effects of over-enclosure into the urban fabric and consequently in fear of crime. Table 9.2 summarises some measures that could help to reduce some impacts of gated communities over their surroundings.

Table 9.2. Summary of proposals about local measures to reduce some impacts of gated communities over their surroundings.

Findings	**Proposals**
Fear of crime due to inequalities in infrastructure	Supply of new parks through a land grant requested by the local government before the condominium is legally established (the community board would manage those parks).
Tensions for lack of compensation from gated communities	
Positive associations with safety in community parks.	
Fears due to long walking distances next to gated communities' walls.	Control of gated communities size and shape.
Effects of gated communities into the urban fabric.	
Fears next to gated communities' walls (negative associations of the built environment).	Permeable borders. Diversification of land uses in condominiums borders.
Positive associations with safety in permeable places.	
Residential segregation (fear of gated residents).	
Negative association with built environment next to gated communities' walls	

Source: Author's elaboration

9.3.3. Activation of public spaces

Communal activities

Natural surveillance is challenging to achieve when people are afraid of even using public spaces. A common complaint from residents was the tiresome bureaucratic process to carry out communal activities in public spaces; furthermore, sometimes the requirements exceed the expenses available for the communal activity. As a result, some communities prefer to perform their events in private areas. The spontaneous use of public spaces benefits the regularity of natural surveillance, the planned activities also contribute to foster closer ties between neighbours. In this regard, this study recommends reconsidering those requirements, creating a new more flexible category for small scale events performed inside neighbourhoods.

9.4. Research agenda

This research has explored the distribution of fear of crime outside gated communities in Costa Rica. Nevertheless, further exploration is required, mainly to compare circumstances among different nations in the Latin American context. The dispersion and lack of systematisation of research about fear of crime is a challenge in that region (Dammert, 2012). Therefore, comparative studies might help to understand how profoundly this phenomenon affects perceived safety in other contexts. As mentioned in Chapter 3, Latin America holds the highest rates of homicide worldwide (Chioda, 2016) and it is considered the region with the most economic inequalities in the world (PEN, 2016). As shown in that chapter, Central American countries, despite their small size, have enormous disparities and gated communities, as part of the urbanisation pattern, might be exacerbating those inequalities. More studies about this phenomenon in Central America will help to understand the spatial segregation patterns and how they affect fear of crime, as there are still many research gaps about this topic. More information in this field might help local governments to break with practices that have impoverished the regions and, instead, go on to contribute to creating new mechanisms to manage the territory (ProDUS-UCR, 2011).

Considering the rapid spread of gated communities in Latin America; further research about planning legal frameworks might help local governments and institutions to explore new ways of mixed schemes for acquiring open spaces but also to handle aspects such as their form, size and their physical features.

Further investigation is also required to research the fear of crime among teenagers. This study shed some light on their perceptions and how they are not very different from the views of adults. However, it would be relevant to explore how teenagers from different poverty levels perceive the spatial segregation and how it affects their perception of the built environment and fear of crime. Further analysis is also needed to examine the role of this population in creating community ties. As shown in this study, the freedom of movement of teenagers is limited by their parents' anxieties. Many of those youths do not have community places in their immediate environment that they can share with their peers; that circumstance might affect other areas of their well-being but it also makes it difficult to establish contact with other members of the neighbourhood.

This study explored how temporal elements of the built environment, such as heavy traffic, could affect the levels of fear, as it creates as a ‘second wall’ for pedestrians when they walk next to a gated community, especially if it is facing a main road. Further research on this topic may help to understand the effect of vehicular flows on people’s anxiety and their relationship with land uses and other elements of the built environment.

Previous studies have analysed fear of crime in transportation settings (Loukaitou-Sideris & Fink, 2009). The empirical data from this thesis showed how the ‘entry’ and ‘exit’ to the public transportation system has a crucial role on people’s perceptions of safety; for instance, waiting times at bus stops, walking distance to the bus stops, waiting times for crossing the street (once someone has alighted from the bus). Transportation nodes, stations and bus stops have all been identified as hot spots of crime (Ceccato, 2016b). More research about the flow of people can be used at bus stops to improve natural surveillance would help transportation authorities to improve their design and

select more carefully the location of bus stops, land uses around those areas and the permeability needed.

Mobile participant methods, such as walking interviews, enabled the capturing of other senses, such as sounds or smells, as part of the people's experiences in the city and can identify other factors that affect the perception of safety. Further research about those elements will contribute to a broader picture of environmental factors linked to fear of crime.

The growing use of GIS to research fear of crime can help to understand the spatial distribution of this phenomenon and the associated factors of the built environment. Little is known yet about the impact of gated communities on fear of crime in public spaces, this research contributed to this by recognising this gap and by analysing eight case studies in depth and providing patterns. However; more research is required, especially to understand the effect gated communities, as a network in the city system, have on fear. In places like Costa Rica, where there is a rapid spread of this phenomenon, they are no longer separated elements therefore their impact as a network needs to be understood. In this respect, the use of GIS and methodological approaches such as Space syntax (Hillier, 1996) can provide valuable insights to research the effects of gated communities as a network within the city.

The methods employed in this research can be easily replicated in other contexts. They can also work alongside other efforts carried out to understand the perception of residential environments within Latin America's neighbourhoods (Calderón Monge et al., 2018; von-Breymann & Montenegro-Montenegro, 2019). The study of fear of crime and the built environment involves diverse disciplines; as mentioned at the beginning of this work those fields can be both integrated or overlapped. Therefore, the findings and methods from this research seek to be part of that chain of knowledge.

The studies in planning can lead the way to numerous research projects. The form of gated communities is the result of planning codes or their absence. Although both global and local factors have driven their spread, they are ultimately a physical structure that produces an emotional response for those outside them, as this work demonstrates. In addition, they produce profound

disruptions to the social fabric which exacerbates disparities. This research considered a little-studied angle – that of gated communities; it provides further evidence of the need for even more inclusive planning policies.

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Appendix 4- 1. Pilot: Tested tools

All questions were made in Spanish and some questions were adapted to a more familiar language.

Pilot- Walking interviews: Semi-structured questionnaire

- Mark on the map your daily route (from the bus station or daily walk).
- Which side of the pavement do you prefer for walking?
- Please mark the places where you feel anxious (During the day and night).
- During the walk, I will ask them:
    - Why?
    - Which type of anxiety do you feel?
- Stops during the walk: Parks, vacant lots, some points next to the Gated Community. Any place that people suggest.
- Some additional questions
    - How often do you use your parks?
    - Who are the users? (routine description)
    - Where do young people meet?

    To keep the map simple to encourage conversation.

Feedback: Walking interview

Regarding Logistic

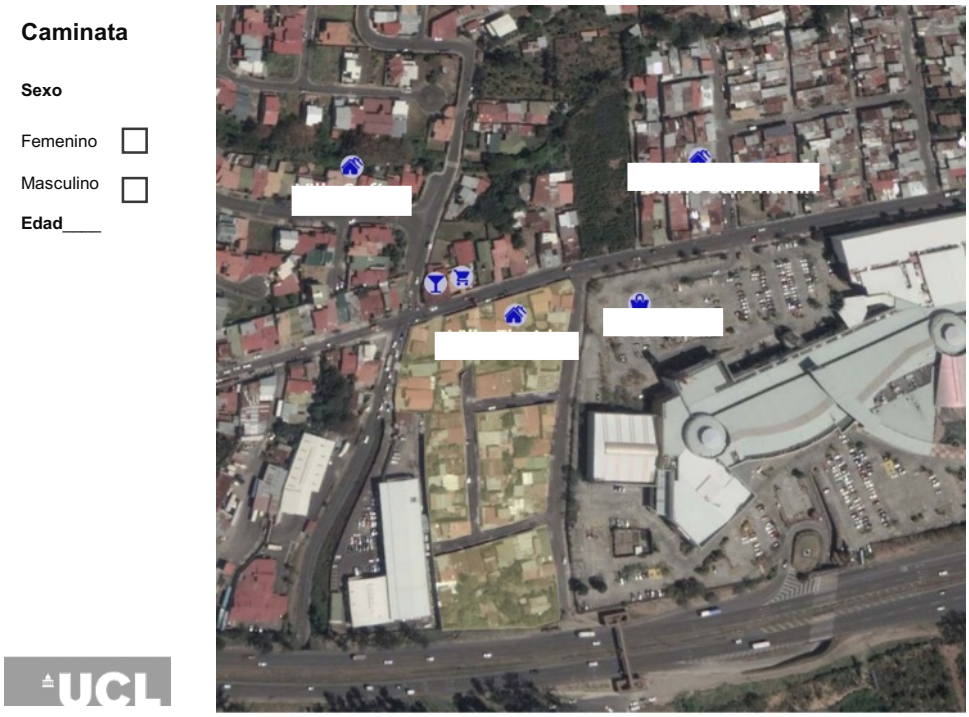
- Sometimes the stickers are detached by the wind- It is necessary to improve the way how the stickers are bonded.
- I should bring sun blocker for the participants.
- The size of the map is fine; the size of the icons is fine.
- The length of the walk is fine (1 hour, but short distance)
- The audio recorder was very good even though some recorders were next to a highway.
- It is difficult to choose the participants.
- It is important to come out some meters from the neighbourhood, especially if there is another gated community nearby.
- The snacks are fine

- The water's bottles should have a bag because it makes difficult to paste the stickers.
- The teenager participant was very active and manifested to feel comfortable during the walk.

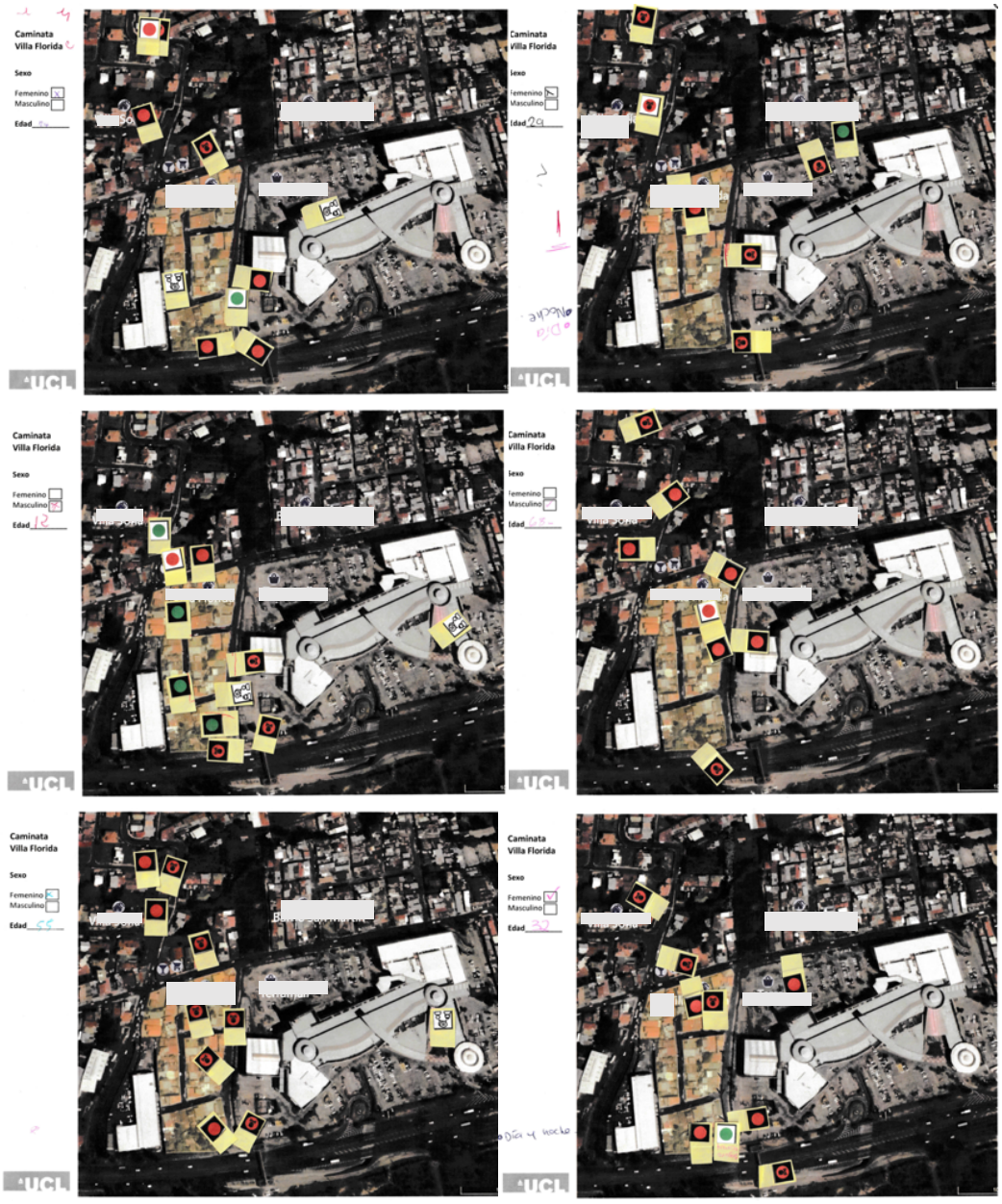
Regarding the use of the map

- People asked for a new icon= 'safe', because they were given three categories: very safe, unsafe and very unsafe.
- Some people are no familiarised with maps, therefore, it is important to improve the reference points and to stop in each corner (maybe I can put different colours at the corners). The surface covered by the Gated Community should be a polygon on the map, to facilitate the reading.
- Most of the information came from the conversation; however, when I asked about the use of the map, people told me that they liked it, because they had the opportunity to show the individual perception, they also liked to see the overall view of the neighbourhood.
- The daily route is better to describe it instead of mark it on the maps, it makes too complicated their use.

Pilot-Walking interviews: Individual map model



Pilot-Walking interviews: Individual maps



Pilot- Focus groups: Semi-structured questionnaires

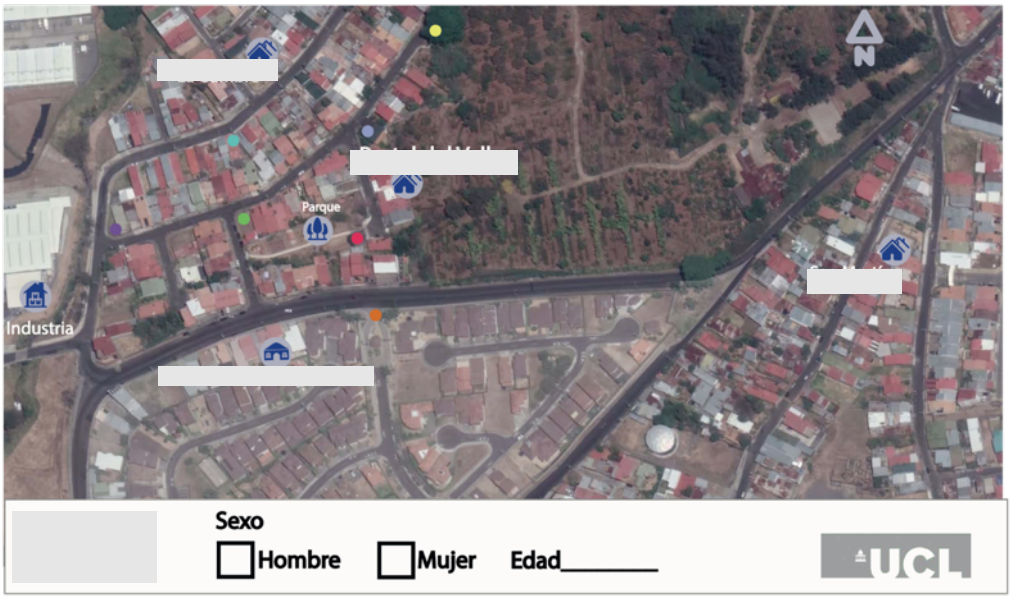
- How long have you lived in this neighbourhood?
- How do you describe the relationship between neighbours?
- Could you please describe any social activity in your neighbourhood? Any individual routine? (e.g. I go to the park every Friday, etc.)
- Where do the activities take place? How often?
- What about the young people? Which type of activities do they do? (these questions could switch if there are young people there)
- Have you met your neighbours from the Condominium _____? What do you know/think about them?
- Regarding safety issues. Which are your main concerns?
- How do you realise about these situations? (information source).
- Which measures do you take to feel safer? (in your neighbourhood and in general).
- Are you happy or satisfied living in this neighbourhood?

Feedback: Focus group

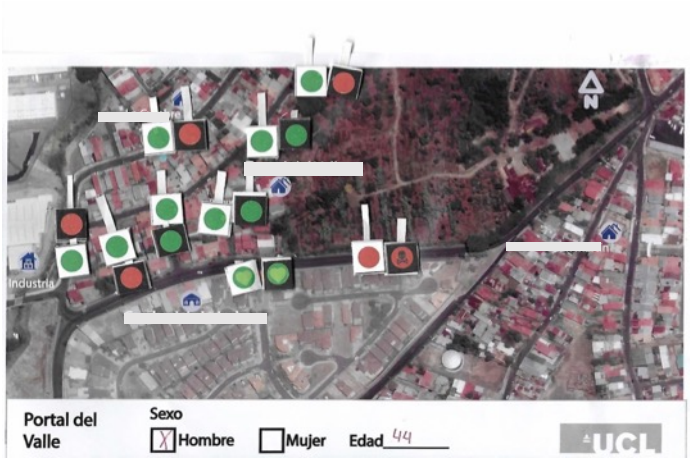
- Most of the questions are fine, they foster the conversation and the information required is obtained, however the last question should change, it is vague and participants tend to respond Yes or No.
    - Are you happy or satisfied living in this neighbourhood?
- The length is fine (1 hour)
- The snacks are fine
- One participants brought her teenage son (the same who participated in the walking interview). But he did not want to participate; the focus groups should not mix adults and teenagers.

Appendix 4- 2. Final tools for walking interviews

Example of graphic tools given to participants – Individual maps







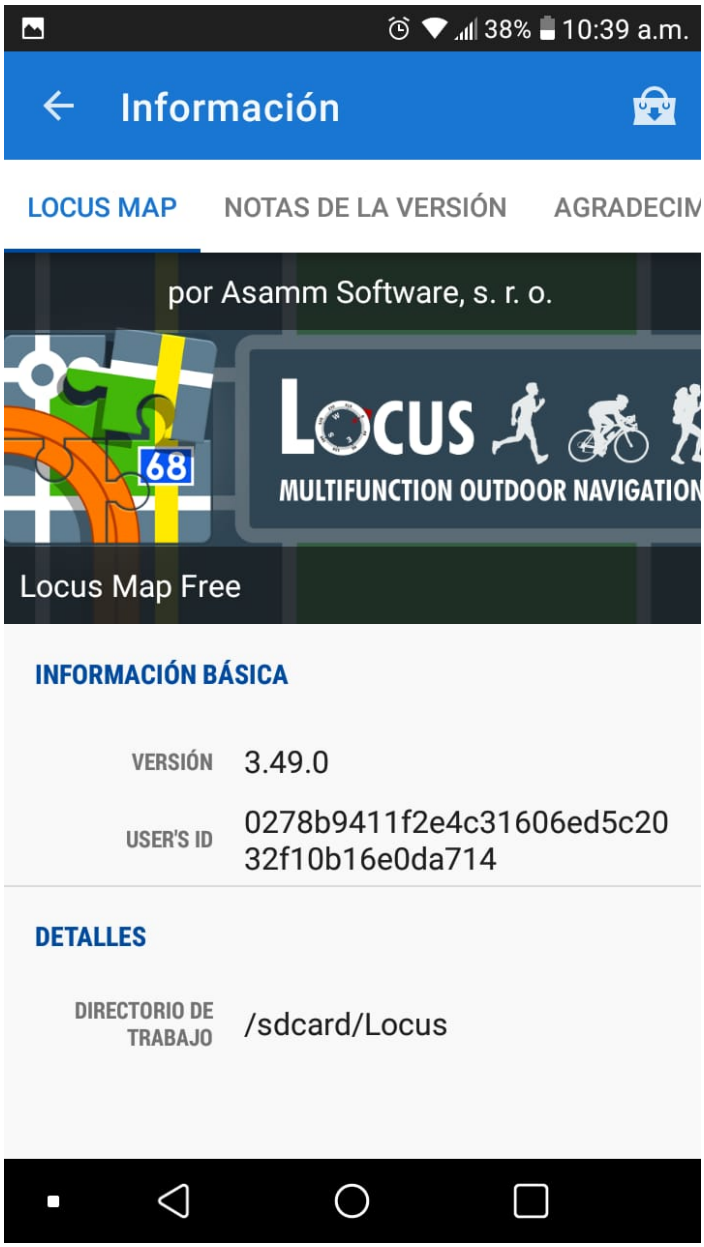
Appendix 4- 3. GPS application for tracking the walk

App name: Locus Map

Multifunction outdoor navigation

for Android





Appendix 4- 4. Final semi-structured questionnaires and protocols

Walking interview protocol:

- Description of the research to the participants. Time for questions
- Description of safety measures, and provision of elements for that purpose (bottles with water and reflective equipment)
- Discussion of the route with the participants. They could make suggestions.
- Signing of consent forms.
- The clipboards with the individual maps and icons are provided to the participants and then the explanation of each icon is made.
- Synchronising of GPS app with Audio-recorder
- Walk and conversation
- Snacks, fruits and refreshments at the end of the walk
- In each walking interview, there was always a researcher's helper
- Duration: between one to two hours

Walking interviews – semi-structured questionnaire

The conversation usually flows during the walk; however, some questions are made to foster the conversation.

- Could you please indicate your daily walking routine?
- In each stop:
    - How do you feel at this point?
    - Why?
    - Which type of anxiety do you feel?
- Stops during the walk: Parks, vacant lots, some points next to the Gated Community. Any place that people suggest.
- Which side of the pavement do you prefer for walking?
- Some additional questions
    - How often do you use your parks?
    - Who are the users? (routine description)
    - Where do the young people meet?

    To keep the map simple to encourage conversation.

Focus group protocol:

- Description of the research to the participants. Time for questions
- Signing of consent forms.
- Provision of a group map in case someone wanted to make any observation of a specific place.
- Snacks and refreshments at the beginning of the focus group
- In each focus group, there was a researcher's helper
- Duration: around one hour, sometimes it lasted longer.

Focus group – semi-structured questionnaire

- How long have you lived in this neighbourhood?
- How do you describe the relationship between neighbours?
- Could you please describe any social activity in your neighbourhood? Any individual routine? (e.g. I go to the park every Friday, etc.)
- Where do the activities take place? How often?
- What about the young people? Which type of activities do they do? (these questions could switch if there are young people there)
- Have you met your neighbours from the Condominium _____? What do you know/think about them?
- Regarding safety issues. Which are your main concerns?
- How do you realise about these situations? (information source).
- Which measures do you take to feel safer? (in your neighbourhood and in general).
- If you had the opportunity of moving on into another neighbourhood, would you? Why?

TEENAGERS' Focus group protocol:

- Description of the research to the participants and parents/guardians. Time for questions
- Signing of consent forms from both parent/guardian and teenager.
- Provision of a collective map (big size) and groups of individual stickers and markers to each teenager. The same stickers than the maps of intensity of fear.
- Provision of snacks and refreshments at the end of the focus group

- Duration: around one hour.

Focus group – semi-structured questionnaire

- How long have you lived in this neighbourhood?
- Could you please put the stickers across different places in the neighbourhood?. They are asked to put them first at the same stops done with the adults. There is a conversation around this topic
- Regarding safety issues. Which are your main concerns?
- How do you realise about these situations? (information source).
- Which measures do you take to feel safer? (in your neighbourhood and in general).
- How do you describe the relationship between neighbours?
- Could you please put a point on the map in the places where you have friends?
- Have you met your neighbours from the Condominium _____? What do you know/think about them?
- What do you do for fun? Where do you go?
- Could you please describe any social activity in your neighbourhood? Any individual routine? (e.g. I go to the park every Friday, etc.) Where do the activities take place? How often?
- If you had the opportunity of moving on into another neighbourhood, would you? Why?

In-depth interview local governments – semi-structured questionnaire

Have you heard any complaints of comments about topics regarding safety in the neighbourhoods _____?

Which are the most common complaints regarding safety?

Which are the most common request from these communities about this topic (for instance, patrols, communal events, devices, etc)?

Have you noticed any variation in the requests by incomes levels?

Have you heard any comments about the effects of condominiums in the neighbouring communities? Have heard any complaint from those neighbourhoods?

How do think is the organisation level of the neighbourhoods_____? Do they have social activities?

Do you know to which high school attend the teenagers from the neighbourhoods_____?

After that they are asked for the contact of the community leaders

In-depth interview researches – semi-structured questionnaire 1

(researchers in income inequality, migration and media: R1 and R3)

Could you tell me your views about your research about____ and safety perceptions within the GAM?

Do you think media influence fear of crime in general?

Do you think the population from your study suffer from residential segregation?

What do you think about the use of 'zero tolerance' policies in safety?

In-depth interview researches – semi-structured questionnaire 2

(researcher in planning and housing: R2)

What is your perception of big condominiums and residential segregation?

What is the role of real estate developers (and market) in residential segregation?

Which alternative does have the country to avoid the increase of residential segregation?

- From the social housing system
- From the public space supply

Which options do local governments have to reduce those effects?

In-depth interview members of the community.

(for specific information)

CM1

How long have you lived here?

Could you tell me about the safety differences between the place you use to live and where you live now (she is a migrant)?

Which have been the main changes in your neighbourhood since you live here?

How do you feel about people from other neighbourhoods coming here?

CM2

How long have you lived here?

Could you please put stickers on this map indicating the places where you feel safe and unsafe (explanation of stickers)

Which have been the main changes in your neighbourhood since you live here?

What does have change since the gated community was built? Do you know people who work there?

How do you feel about people from other neighbourhoods coming here?

CM3

How long have you lived here?

Could you tell me about the safety differences between the place you use to live and where you live now? As a woman, there is any specific concern that you would like to share?

Which have been the main changes in your neighbourhood since you live here?

How do you feel about people from other neighbourhoods coming here?

CM4

How long have you lived here?

Which are the most common complaints about safety in your neighbourhood?

Which have been the main changes in your neighbourhood since you live here?

Could you please explain to me your experience in managing the community park?

Where do young people meet?

Do you know someone from the gated community?

How do you feel about people from other neighbourhoods coming here?

Observation form

ID Observation____

Neighbourhood:_____ Film (video) Nº____

Time:_____ Observation time (min)____

Day_____

Neighbourhood's sector (inside /next to gated community) _____

1. **Pedestrian Movement**
   Are there pavements?

   Outside gated community YES__ NO__

   Inside neighbourhood YES__ NO__

   Pedestrian movement – number of people

   Next to gated community _____

   Next to neighbourhood dwellings _____

2. **Social activities** (number of people involved)

Activity	Children	Young people	Adults	Older people
Conversations garden-pavement				
Playing on the street				
Activity in parks				
Conversation on the pavement				
Greetings				
Others_____				

3. **Traffic (it can be supported by the video)**
   # vehicles in 5min_____

   # motorcycles in 5min_____

   #bicycles in 5min_____

   width of street (steps)_____

4. **Physical features**
   Vacant lots_____ neglected lots_____

   Graffiti___ type_____

   Rubbish_____

   Signalling _____

Urban furniture_____

Arborisation _____

Lighting_____

Bus stops_____

Land use_____

5. Other activities (attention to elements mentioned by the community)
e.g. drugs sale

_____

_____

_____

_____

Appendix 4- 5. Codes list and their classification by comments, subcategory and theme

List codes and their classification. This list shows the original codes, which later were simplified and merged; the column ‘Comments’ is the result of that process. The tables and maps in Chapter 6 and 7 are displayed by **Comments**, **Subcategory** and **Main theme**.

Those codes with the element **(SR)** were georeferenced in GIS, they keep the same classification shown in the following tables.

Codes	Attitude	ID Group	Comments	Subcategory	Main Theme
90 : -BE_abandoned car	-	36	Abandoned cars make the place unsafe	Signs of fear	Built Environment
286 : CR_Alliance private sector	0	83	Alliance between community board and private sector	Community ties	Community relationships
525 : F_anger with drugs' sale-consumption t(SR)M	-	146	Anger because sale and consumption of drugs	Anger	Feelings
823 : V_attack	-	260	Attack	Public spaces	Victimisation
829 : V_attempted of abduction w(SR)F	-	262	Attempted of abduction	Private space	Victimisation
826 : V_Attempted burglary	-	261	Attempted of burglary	Private space	Victimisation
293 : CR_between 10-14 living there	0	85	Between 10 and 14 years living in the neighbourhood	Length of residence	Community relationships
296 : CR_between 15-19 living there	0	86	Between 15 and 19 years living in the neighbourhood	Length of residence	Community relationships
299 : CR_between 5-10 living there	0	87	Between 5 and 10 years living in the neighbourhood	Length of residence	Community relationships
604 : -I_Institutional burocracy -community projects	-	179	Bureaucracy difficults community projects/activities	National institutions/Local government	Institutions
830 : V_Burglary	-	263	Burglary	Private space	Victimisation
273 : CR Frequency activities +4 times at year	0	79	Communal activities more than 4 times at year	Frequency of activities	Community relationships
302 : CR_center for recicling	+	88	Communal intiatives or groups	Organisation	Community relationships
317 : CR_community groups	+	88	Communal intiatives or groups	Organisation	Community relationships
320 : CR_Community ties_stronger_with people involved	+	88	Communal intiatives or groups	Organisation	Community relationships
339 : CR_Housing project	+	88	Communal intiatives or groups	Organisation	Community relationships
395 : CR_Meeting Safety	+	88	Communal intiatives or groups	Organisation	Community relationships
394 : CR_meeting people from G.C in Church F	0	111	Communitcation channel with gated community: church	Gated Communities	Community relationships
334 : CR_Gated community - neighbourhood shop wM	0	97	Communitcation channel with gated community: neighbourhood shop	Gated Communities	Community relationships
104 : BE_Community room_+rent -activities	-	44	Community room underused	Communal infraestructure	Built Environment
441 : CR_past +union because +needs	0	124	Community ties were stronger in the past	Community ties	Community relationships
444 : CR_past_community relations were stronger	0	124	Community ties were stronger in the past	Community ties	Community relationships
488 : CR_Ties stronger-issues for solving	0	124	Community ties were stronger in the past	Community ties	Community relationships
539 : F_Fear someone else safey	-	154	Concern about someone else safety	Fear	Feelings
479 : CR_Socialisation is going down	-	7	Concerns about public spaces use and vitality	Public spaces	Community relationships
324 : CR_Few social activities	-	7	Concerns about public spaces use and vitality	Public spaces	Community relationships
381 : CR_lack socialisation because fear others wF	-	7	Concerns about public spaces use and vitality	Public spaces	Community relationships
365 : CR_If young people go out are arrested	-	103	Concerns about public spaces use and vitality for youth	Public spaces	Community relationships
93 : -BE_Absence public spaces _youth w(SR)F	-	8	Concerns about supply of public spaces	Public spaces	Built Environment
107 : BE_comunal space permanently closed	-	8	Concerns about supply of public spaces	Public spaces	Built Environment
126 : -BE_Few public spaces nearby	-	8	Concerns about supply of public spaces	Public spaces	Built Environment
205 : -BE_No parks in neighbourhood M	-	8	Concerns about supply of public spaces	Public spaces	Built Environment
246 : -BE_Public space permanently closed w(SR)F	-	8	Concerns about supply of public spaces	Public spaces	Built Environment
250 : BE_public spaces-other neighbourhoods	-	8	Concerns about supply of public spaces	Public spaces	Built Environment
209 : -BE_No public spaces children	-	37	Concerns about supply of public spaces for kids	Public spaces	Built Environment
212 : -BE_No public spaces for teenagers	-	38	Concerns about supply of public spaces for teenagers	Public spaces	Built Environment
186 : -BE_Invasion public spaces w(SR)M	-	39	Concerns about supply of public spaces -land invasion	Public spaces	Built Environment
434 : CR_Park regulations	0	14	Control of public spaces as safety measure	Public spaces	Precautionary measures
746 : Pr_parking control	+	14	Control of public spaces as safety measure	Public spaces	Precautionary measures
753 : Pr_Police around	+	14	Control of public spaces as safety measure	Public spaces	Precautionary measures
756 : Pr_Private Security wM	+	14	Control of public spaces as safety measure	Public spaces	Precautionary measures
718 : Pr_CCTV To see and To be seen	+	225	Control of public spaces as safety measure - CCTV	Public spaces	Precautionary measures
670 : -P_People from other neighbourhood_criminal	-	207	Criminals are from other neighbourhood	People linked to crime	People
625 : P_criminal_same neighbourbhood	-	188	Criminals are from our neighbourhood	People linked to crime	People
94 : -BE_Bus Stop dangerous	-	40	Dangerous Bus Stop	Signs of fear	Built Environment
97 : -BE_Bus Stop walking distance	-	41	Dangerous walking distance to Bus Stop	Walking routes	Built Environment
116 : -BE_Dangerous route- sports w(SR)M	-	44	Dangerous walking route	Walking routes	Built Environment
117 : -BE_Dangerous walking route	-	44	Dangerous walking route	Walking routes	Built Environment
120 : -BE_Dark place	-	45	Dark place	Signs of fear	Built Environment
616 : -I_Trust in Justice System	-	183	Distrust in the Justice System	Justice System	Institutions
198 : -BE_Music T(SR)F	-	61	Disturbing sounds/noises	Noises	Built Environment
215 : -BE_Noise point	-	61	Disturbing sounds/noises	Noises	Built Environment
722 : Pr_don't confront to criminal IF	0	227	Do not confront the criminal	Private space	Precautionary measures
713 : Pr_Ask a male relative to pick me up IF	0	13	Do not walk alone as safety measure	Public spaces	Precautionary measures
781 : Pr_to pick someone up	0	13	Do not walk alone as safety measure	Public spaces	Precautionary measures
791 : Pr_To walk in a group w(SR)F	0	13	Do not walk alone as safety measure	Public spaces	Precautionary measures
841 : V_domestic violence tM	-	268	Domestic violence	Private space	Victimisation
510 : D_consumers - outsider	0	141	Drug consumers are from outside	Drug consumption	Drugs
509 : D_consumer no mugger IM	0	140	Drug consumers are not muggers	Drug consumption	Drugs
633 : P_drugs dealer -outside	-	192	Drug dealers are from outside	Drug dealer	People
636 : P_Drugs dealers_local	-	193	Drug dealers are local	Drug dealer	People
819 : -Sm_Drugs	-	258	Drug smells	Smells reported by participants	Smells
628 : P_drugs consumer local	-	189	Drug users are local	Drug user	People
631 : P_drugs consumer-robbery tF	-	190	Drug users commit robbery/mugging/burglary	Drug user	People
881 : V-A_ Traffic accident	-	284	Fatal traffic accident	Public spaces	Victimisation
529 : F_fear is everywhere	-	148	Fear is everywhere	Fear	Feelings
545 : F_fear to be adbucted I(SR)F	-	156	Fear of being adbucted	Fear	Feelings
546 : F_Fear to be attacked	-	157	Fear of being attacked	Fear	Feelings
575 : F_to be followed	-	168	Fear of being followed	Fear	Feelings
550 : F_Fear to be killed	-	159	Fear of being killed	Fear	Feelings
537 : F_fear robbery wF	-	152	Fear of being mugged	Fear	Feelings
553 : F_fear to be mugged	-	160	Fear of being mugged	Fear	Feelings
549 : F_Fear To be harassed w(SR)F	-	158	Fear of being sexually harassed	Fear	Feelings
526 : F_fear house burglarised	-	147	Fear of burglary	Fear	Feelings
578 : F_to hear something unusual IF	-	169	Fear of hearing something unusual	Fear	Feelings
556 : F_Fear to inmigrants	-	161	Fear of inmigrants	Fear	Feelings
538 : F_fear someone can be rapped w(SR)M	-	153	Fear of my relative/friend might be raped	Fear	Feelings

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532 : F_fear my relative-friend be harrassed w(SR)M	-	149	Fear of my relative/friend might be sexually harassed	Fear	Feelings
534 : F_Fear of reprisals	-	151	Fear of reprisals	Fear	Feelings
533 : F_fear of a shooting w(SR)F	-	150	Fear of shootings	Fear	Feelings
574 : F_Somebody abduct my child IF	-	167	Fear of someone might abduct my child	Fear	Feelings
542 : F_Fear someone hidden-weed	-	155	Fear of someone might be hidden -weed	Fear	Feelings
559 : F_Fear to strangers	-	162	Fear of strangers	Fear	Feelings
330 : CR_Frequency actiivies around 2-3 year wF	0	95	Frequency of social activities: 2 or 3 times at year	Frequency of activities	Community relationships
327 : CR_Frecuency activities -last one 2-3 years ago	0	94	Frequency of social activities: last one 2 or 3 years ago	Frequency of activities	Community relationships
331 : CR_Frequency activities weekly	0	96	Frequency of social activities: weekly	Frequency of activities	Community relationships
148 : -BE_Gated Communities magnet for crime-money	-	51	Gated communiites make the place more insecure	Gated Communities	Built Environment
157 : -BE_Gated Communities -unsafe for us	-	51	Gated communiites make the place more insecure	Gated Communities	Built Environment
163 : -BE_Gated communities-exclusionary	-	53	Gated communities are exclusionary	Gated Communities	Built Environment
145 : -BE_Gated communities increase our property value +taxes	-	48	Gated communities brings issues such as connection/landscape /land value	Gated Communities	Built Environment
151 : -BE_Gated Communities size_connection issues	-	48	Gated communities brings issues such as connection/landscape /land value	Gated Communities	Built Environment
154 : -BE_Gated Communities take away part of our view	-	48	Gated communities brings issues such as connection/landscape /land value	Gated Communities	Built Environment
173 : -BE_Growth Gated Communities	-	48	Gated communities brings issues such as connection/landscape /land value	Gated Communities	Built Environment
166 : BE_Gated Community no change in security	-	54	Gated communities did not change our safety levels	Gated Communities	Built Environment
142 : -BE_Gated Communities don't contribute neighbourhood	-	52	Gated Communities do not contribute to our neighbourhood	Gated Communities	Built Environment
16 : +BE_Gated Communities-improvement public infraestructure w(SR)M	+	26	Gated Communities improved public infrastructure	Gated Communities	Built Environment
180 : -BE_Infraestructure issues	-	57	General infrastructure issues	Infrastructure	Built Environment
632 : P_drugs consumers-traffickers - care after cars w(SR)M	+	191	Good built environment can change drug user/dealer attitude	Drug user/dealer	People
462 : CR_relation people from Gated Communites	+	129	Good relationship with people from gated communities	Community ties	Community relationships
289 : CR_Alliance-good relations with other communities	+	84	Good relationships with other communities	Community ties	Community relationships
4 : +BE_A lot of parks	+	2	Good supply and diversity of uses in current parks	Public spaces	Built Environment
36 : +BE_Public spaces used all ages	+	2	Good supply and diversity of uses in current parks	Public spaces	Built Environment
39 : +BE_Public Spaces used by teenagers	+	2	Good supply and diversity of uses in current parks	Public spaces	Built Environment
221 : BE_Park for dogs	+	2	Good supply and diversity of uses in current parks	Public spaces	Built Environment
224 : BE_Park is used from people outside	+	2	Good supply and diversity of uses in current parks	Public spaces	Built Environment
285 : CR_active parks wF	+	2	Good supply and diversity of uses in current parks	Public spaces	Built Environment
267 : -BE_Traffic	-	77	Heavy traffic	Traffic	Built Environment
338 : CR_High crime affects community ties wF	-	98	High crime affects community ties	Community ties	Community relationships
253 : BE_Quality housing - constrast I(SR)M	0	73	Housing quality is contrasting	Physical features	Built Environment
342 : CR_I am not originally from this neighbourhood	0	99	I am not originally from this neighbourhood	Neighbours	Community relationships
398 : CR_My kids grew-I don't go to the park	0	112	I do not go to the community park -my kids have grown up	Public spaces	Built Environment
346 : CR_I have met someone from G.C2	0	100	I have met someone from the Gated community	Gated Communities	Community relationships
352 : CR_I want to help community despite negativity IM	+	101	I want to help community despite negativity	Community ties	Community relationships
356 : CR_I'd prefer to live in a Gated Community	0	102	I would live in a gated community -if I could	Gated Communities	Community relationships
359 : CR_I'd prefer to live in another place	0	102	I would live in another place	Gated Communities	Community relationships
362 : CR_If we had money-we'd live in G.C	0	102	I would live in a gated community -if I could	Gated Communities	Community relationships
391 : CR_Maybe I'd live in another place	0	110	I would live in another place	Neighbourhood's atmosphere	Community relationships
453 : CR_People inside G.C don't share either	-	126	Inside gated communities people do not share	Gated Communities	Built Environment
368 : CR_Inside G.C they do share F	+	104	Inside gated communities people do share	Gated Communities	Community relationships
72 : +I_past_Public Institutions wF	-	31	Institutions were better in the past	Institutions performance	Institutions
190 : -BE_isolated place	-	59	Isolated place	Signs of fear	Built Environment
193 : -BE_isolated place when commercial use is no longer trendy t(SR)M	-	59	Isolated place	Signs of fear	Built Environment
375 : CR_issues with-among neighbours	-	106	Issues among neighbours	Neighbourhood's atmosphere	Community relationships
194 : BE_issues monitoring CCTV wM	-	60	Issues monitoring CCTV	Survilliance	Built Environment
372 : CR_Issues with neighbourhoods nearby	-	105	Issues with contiguous neighbourhood	Neighbourhood's atmosphere	Community relationships
807 : -Se_Bus frequency	-	254	Issues with frequency	Public transport	Public services
169 : -BE_geometry road-neighbourhood	-	55	Issues with geometry of roads	Infrastructure	Built Environment
103 : -BE_commercial use displaces people w(SR)M	-	43	Issues with land uses	Land use	Built Environment
110 : -BE_Constructions over fragile areas	-	43	Issues with land uses	Land use	Built Environment
113 : -BE_crime linked to commercial land use	-	43	Issues with land uses	Land use	Built Environment
187 : -BE_Irritating land use	-	43	Issues with land uses	Land use	Built Environment
369 : -CR_issues with dogs	-	6	Issues with logistics about public spaces management	Public spaces	Community relationships
437 : CR_Park's guardian -issues	0	6	Issues with logistics about public spaces management	Public spaces	Community relationships
810 : -Se_Bus route	-	255	Issues with routes	Public transport	Public services
813 : Se_water-rubbish collection	-	256	Issues with Water/ Rubbish collection	Water/ Rubbish collection	Public services
133 : BE_G.C. expensive -maintenaince quota-life	-	49	It is expensive to live in a gated community	Gated Communities	Built Environment

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183 : -BE_Infraestructure issues_pavement	-	58	Lack of pavement or pavement in poor conditions	Infrastructure	Built Environment
607 : I_law allow G.T. no public areas	-	180	Law allows to gated communities do not supply public areas	National institutions/Local government	Institutions
382 : CR_less 5 living there	0	107	Less than 5 years of living in this neighbourhood	Length of residence	Community relationships
601 : I_commercial development-irregular	-	178	Local government allowed irregular commercial development	Local government	Institutions
385 : CR_low relation among neighbours	-	108	Low socialisation among neighbours	Community ties	Community relationships
415 : CR_Neighbours pay but don't get integrated wF	-	108	Low socialisation among neighbours	Community ties	Community relationships
276 : CR_ +20 years living there	0	80	More than 20 years of living in this neighbourhood	Length of residence	Community relationships
845 : V_Mugging	-	270	Mugging	Public spaces	Victimisation
848 : V_murder	-	271	Murder	Public spaces	Victimisation
699 : -PI_local	-	220	Negative association to a local place	Local	Places - Scales
708 : -PI_Regional wM	-	223	Negative association to a regional place	Regional	Places - Scales
255 : -BE_safety other neighbourhoods	-	62	Negative attitude towards contiguous neighbourhood	Perceived safety	Built Environment
199 : -BE_Neighbourhoods close by	-	62	Negative attitude towards contiguous neighbourhood	Perceived safety	Feelings
715 : Pr_CCTV don't prevent crime or not usefull	-	15	Negative attitude towards control of public spaces -CCTV	Public spaces	Precautionary measures
784 : -Pr_To see and To be seen by CCTV	-	15	Negative attitude towards control of public spaces -CCTV	Public spaces	Precautionary measures
176 : -BE_houses for rent	-	56	Negative attitude towards houses for rent	Neighbourhood's atmosphere	Built Environment
123 : -BE_few people	-	46	Negative attitude towards neighbourhood's atmosphere	Neighbourhood's atmosphere	Built Environment
129 : -BE_fires w(SR)F	-	46	Negative attitude towards neighbourhood's atmosphere	Neighbourhood's atmosphere	Built Environment
179 : -BE_I don't like this neighbourhood F	-	46	Negative attitude towards neighbourhood's atmosphere	Neighbourhood's atmosphere	Built Environment
423 : CR_No people neighbourhood nights	-	46	Negative attitude towards neighbourhood's atmosphere	Neighbourhood's atmosphere	Built Environment
452 : CR_people from neighbourhood are negative M	-	46	Negative attitude towards neighbourhood's atmosphere	Neighbourhood's atmosphere	Built Environment
416 : -CR_neighbours with few time living there	-	118	Negative attitude towards neighbours with short time living there	Community ties	Community relationships
240 : -BE_Private Security	-	70	Negative attitude towards private security	Survilliance	Built Environment
758 : Pr_Social Media doesn't help to prevent crime wF	-	236	Negative attitude towards social media to prevent crime	Social Media	Precautionary measures
694 : -P_upper class t(SR)M	-	217	Negative attitude towards upper-income people	Incomes	People
610 : -I_local goverment-efficiency	-	181	Negative attitudes towards local government	Local government	Institutions
613 : -I_police efficiency	-	182	Negative attitudes towards Police	Police	Institutions
401 : CR_neighbourhood divided by sectors	0	113	Neighbourhood divided by sectors	Community ties	Community relationships
667 : P_people dont' care-don't appreciate social act.	-	206	Neighbours do not appreciate social activities	Neighbours	People
409 : CR_Neighbours don't constribute-care	-	116	Neighbours do not contribute or pay	Community ties	Community relationships
412 : CR_Neighbours encourage crime -vicious circle	-	117	Neighbours encourage vicious circle of crime	Perceived safety	Community relationships
440 : CR_Parks should be open until late-teenagers wM	0	5	Neighbours' requests about more opening hours in community parks	Public spaces	Built Environment
448 : CR_People ask for more opening hours-public space	0	5	Neighbours' requests about more opening hours in community parks	Public spaces	Built Environment
419 : CR_new generations_difficult to integrate	-	119	New generations are difficult to integrate	Community ties	Community relationships
501 : CR_urban growth_new generations don't share	-	119	New generations are difficult to integrate	Community ties	Community relationships
504 : CR_We are happy to integrate new generations wF	+	138	New generations are welcome	Community ties	Community relationships
323 : CR_email communication wM	0	93	News on crime via email	Communication channels	Community relationships
308 : CR_Communication rumors-crime	0	90	News on crime via rumours	Communication channels	Community relationships
476 : CR_Social Media general communication	0	133	News on crime via Social Media (no Whatsapp)	Communication channels	Community relationships
422 : CR_News -crime IF	0	120	News on crime via television (news)	Communication channels	Community relationships
311 : CR_Communication whatsapp group	0	91	News on crime via Whatsapp	Communication channels	Community relationships
426 : CR_no relation people from neighbourhood nearby	-	121	No relationship with contiguous neighbourhood	Community ties	Community relationships
429 : CR_No relation -people Gated Communities	0	122	No relationship with people from gated community	Gated Communities	Community relationships
839 : V_crime network cars' stealers, protitution,games tM	-	266	Organised crime	Public and private spaces	Victimisation
465 : CR_Safety course	0	130	Our community did the 'safety course'	Organisation	Community relationships
230 : -BE_Parked cars-obstacles	-	67	Parked cars are obstacles for traffic	Traffic	Built Environment
227 : -BE_Parked cars	-	66	Parked vehicles are scary	Signs of fear	Built Environment
483 : CR_Specific issue with Gated Community	-	134	Particular issue with a gated community	Gated Communities	Built Environment
643 : -P_from gated communities- arrogant	-	196	People from gated communities are arrogant	People from gated communities	People
649 : P_gated communities foreigns tF	0	198	People from gated communities are foreigners	People from gated communities	People
656 : P_Gated Communities-Narcos tM	-	201	People from gated communities are Narcos - organised crime	People from gated communities	People
650 : P_Gated Communities -upper class	0	199	People from gated communities are upper-class	People from gated communities	People
653 : P_Gated Communities- upper middle class	0	200	People from gated communities are upper-middle-class	People from gated communities	People
660 : P_Gated community working people-professionals	+	203	People from gated communities are working people	People from gated communities	People
640 : -P_from gated communites don't care abous us	-	195	People from gated communities do not care about us	People from gated communities	People
646 : P_Gated Communities -debts	-	197	People from gated communities have many debts	People from gated communities	People

Codes	Attitude	ID Group	Comments	Subcategory	Main Theme
657 : P_Gated Communities-small families	0	202	People from gated communities have small families	People from gated communities	People
432 : -CR_Other neighbourhoos ban our kids to use parks	-	123	People from other neighbourhoods do not want our kids in their parks	Public spaces	Community relationships
840 : V_dogs bitting people w(SR)F	-	267	People have been bitten by a dog	Public spaces	Victimisation
282 : CR_+individualism less community sense	-	82	People in this neighbourhood is individualist without community sense	Community ties	Community relationships
353 : CR_I wish my neighbours were more involved	-	82	People in this neighbourhood is individualist without community sense	Community ties	Community relationships
679 : P_people leaving dwelling for Gated Communities tM	-	210	People is leaving dwellings to live in gated communities	Gated Communities	People
49 : +BE_There are people outside- safe w(SR)M	+	20	Permeability in neighbourhood is positive for safety	Physical features	Built Environment
27 : +BE_Permeability dwellings-help	+	20	Permeability in neighbourhood is positive for safety	Survilliance	Built Environment
233 : -BE_Place poor conditions-dirty-weed	-	68	Place in poor physical conditions	Physical features	Built Environment
709 : Pr_activities in public spaces wM	+	10	Positive attitude towards activate/improvement of public spaces as safety measure	Public spaces	Precautionary measures
757 : Pr_put light w(SR)F	+	10	Positive attitude towards activate/improvement of public spaces as safety measure	Public spaces	Precautionary measures
264 : BE_to fence parks helps safety	+	9	Positive attitude towards closing/fencing public spaces as safety measure	Public spaces	Built Environment
65 : +CR_social and religious activities	+	1	Positive attitude towards communal activities	Community ties	Community Relationships
335 : CR_High Community participation	+	1	Positive attitude towards communal activities	Community ties	Community relationships
24 : +BE_Neighbourhoods close by	+	24	Positive attitude towards contiguous neighbourhood	Perceived safety	Built Environment
69 : +I_local government	+	29	Positive attitude towards local government	Institutions performance	Institutions
76 : +P_ lower middle class M	+	32	Positive attitude towards low/middle-incomes people	Incomes	People
21 : +BE_My neighbourhood is nice	+	18	Positive attitude towards neighbourhood's atmosphere	Neighbourhood's atmosphere	Built Environment
42 : +BE_Quiet neighbourhood or place	+	18	Positive attitude towards neighbourhood's atmosphere	Neighbourhood's atmosphere	Built Environment
45 : +BE_safety is better inside neighbourhood	+	18	Positive attitude towards neighbourhood's atmosphere	Neighbourhood's atmosphere	Built Environment
48 : +BE_There are no people selling_using drogs w(SR)F	+	18	Positive attitude towards neighbourhood's atmosphere	Neighbourhood's atmosphere	Built Environment
86 : BE_a lot people come here (sellers-other)	+	18	Positive attitude towards neighbourhood's atmosphere	Neighbourhood's atmosphere	Built Environment
349 : CR_I prefer to live here	+	18	Positive attitude towards neighbourhood's atmosphere	Neighbourhood's atmosphere	Built Environment
59 : +CR_families have not changed M	+	27	Positive attitude towards neighbours	Neighbours	Community relationships
60 : +CR_neighbourhood tradition wF	+	27	Positive attitude towards neighbours	Neighbours	Community relationships
61 : +CR_neighbours care and pay	+	27	Positive attitude towards neighbours	Neighbours	Community relationships
64 : +CR_neighbours with few time living there t(SR)M	+	27	Positive attitude towards neighbours	Neighbours	Community relationships
77 : +P_Neighbours-good people	+	27	Positive attitude towards neighbours	Neighbours	Community relationships
292 : CR_Be part of community board good for me IM	+	27	Positive attitude towards neighbours	Neighbours	Community relationships
494 : CR_to reward people who work-community wF	+	27	Positive attitude towards neighbours	Neighbours	Community relationships
1 : +BE nice-beautiful place	+	16	Positive attitude towards physical features	Physical features	Built Environment
10 : +BE_Expected public space or infraestructure improvement	+	16	Positive attitude towards physical features	Physical features	Built Environment
20 : +BE_Land use nearby-nice wM	+	16	Positive attitude towards physical features	Physical features	Built Environment
30 : +BE_Place with light	+	16	Positive attitude towards physical features	Physical features	Built Environment
56 : +BE_wide street	+	16	Positive attitude towards physical features	Physical features	Built Environment
33 : +BE_Private Security	+	22	Positive attitude towards private security	Survilliance	Built Environment
17 : +BE_Infraestructure is better now	+	17	Positive attitude towards regenerated/ improved place	Physical features	Built Environment
236 : -BE_place poor-dirty conditions-past	+	17	Positive attitude towards regenerated/ improved place	Physical features	Built Environment
73 : +I_police efficiency	+	30	Positive attitude towards the police	Institutions performance	Institutions
68 : +F_someone else perception towards our neighbouhood-progress	+	34	Proud about our neighbourhood image	Neighbourhood's perception	Feelings
676 : -P_people kissing or beyond PDA	-	209	Public display of affection (P.D.A) is disturbing	Uncomfortable behaviours	People
247 : -BE_Public Space poor condition	-	72	Public space in poor condition	Public spaces	Built Environment
851 : V_rape t(SR)F	-	272	Rape	Public spaces	Victimisation
254 : BE_Real State developers are from our neighbourhood	+	74	Real State developers belong to our neighbourhood	Developers	Community relationships
686 : P_Real State developers could help community tM	0	213	Real State developers could help our community	Developers	People
696 : Pl_local	0	219	Reference to a local place	Local	Places - Scales
702 : Pl_national	0	221	Reference to a national place	National	Places - Scales
705 : Pl_Regional	0	222	Reference to a regional place	Regional	Places - Scales
279 : CR__Organisation	0	81	Reference to organisational matters	Organisation	Community relationships
388 : CR_Many years living here-safe	+	109	Safe area people have lived here for many years	Perceived safety	Community relationships
852 : V_sexual attack-harrassment	-	273	Sexual attack or harassment	Public spaces	Victimisation
258 : -BE_Sexual harrassment-constructions	-	273	Sexual attack or harassment	Public spaces	Victimisation
855 : V_Shooting	-	274	Shooting	Public spaces	Victimisation
673 : -P_People in skateboard	-	208	Skateboarders are disturbing	Uncomfortable behaviours	People
471 : CR_Social activites have growing up wF	+	132	Social activities have increased in this neighbourhood	Organisation	Community relationships
378 : CR_Kids playing on the street	0	3	Socialisation take place on the street	Public spaces	Built Environment
505 : CR_We meet our neighbours on the street quick chat wF	0	3	Socialisation take place on the street	Public spaces	Built Environment
405 : CR_Neighbours anger with kids playing street F	0	3	Socialisation take place on the street	Public spaces	Community relationships
487 : CR_Teenagers meet on the street-neighbourhood wF	0	135	Socialisation take place on the street -teenagers	Public spaces	Built Environment
571 : F_some strangers are nice	+	166	Some strangers are nice	Strangers	People
622 : P_arrested person-people	-	187	Someone was arrested in this place	People linked to crime	People

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877 : V_wanted criminal was living here w(SR)F	-	187	Someone was arrested in this place	People linked to crime	People
864 : V_stabbed kid w(SR)F	-	277	Stabbing	Public spaces	Victimisation
865 : V_stabbed male O(SR)M	-	277	Stabbing	Public spaces	Victimisation
836 : V_Car Stolen	-	265	Stolen car	Public spaces	Victimisation
861 : V_Someone stole something	-	276	Stolen items	Public and private spaces	Victimisation
842 : V_item stolen from car	-	269	Stolen items from cars	Public spaces	Victimisation
833 : V_Car racing -illegal-	-	264	Street racing	Public spaces -cars are threats	Victimisation
759 : Pr_Surveillance between neighbours	+	237	Surviliance among neighbours	Public and private spaces	Precautionary measures
866 : V_suspicious situation	-	278	Suspicious situations	Public and private spaces	Victimisation
690 : P_Teenagers don't like to go out tM	0	215	Teenagers from this neighbourhood do not like go out	Teenagers	People
687 : P_Teenagers do sports-gym-social	+	214	Teenagers from this neighbourhood do sports and socialise	Teenagers	People
691 : P_Teenagers-entertainment-cellphone-tech	-	216	Teenagers from this neighbourhood entertain with mobile and tech	Teenagers	People
136 : -BE_Gated Communities construction works	-	50	The building process of gated communities was disturbing	Gated Communities	Built Environment
406 : CR_neighbours' board-overwhelmed	-	115	The community board is overwhelmed	Organisation	Community relationships
447 : CR_People approach C.Board just for help wF	-	115	The community board is overwhelmed	Organisation	Community relationships
468 : CR_Safety course_group no longer exist	-	131	The community group after the 'safety course' no longer exist	Organisation	Community relationships
50 : +BE_This place was safer in the past	-	21	The place is less safe now	Physical features	Built Environment
53 : +Be_unsafe past	+	19	The place is safer now	Perceived safety	Built Environment
459 : CR_plans future-activities	+	128	There are activities planned for the future	Organisation	Community relationships
506 : D_Conflicts -drug dealers	-	139	There are conflicts among drug dealers	Drug sale	Drugs
639 : P_few teenagers in the neighbourhood wF	-	194	There are few teenagers in this neighbourhood	Teenagers	People
663 : P_hitmen w(SR)F	-	204	There are hitmen in this place	People linked to crime	People
664 : P_homeless people here	-	205	There are homeless in this place	Homeless	People
683 : P_people with guns	-	212	There are people with guns in this place	People linked to crime	People
139 : -BE_Gated Communities -crime inside	-	51	There is crime inside gated communities	Gated Communities	Built Environment
740 : Pr_no option we have to cross anyway	-	233	There is no option -we have to pass anyway	Public spaces	Precautionary measures
83 : +V_No previous victimisation	+	33	There is no previous victimisation in this place	Public spaces	Victimisation
451 : CR_People busy no time for sharing wF	-	125	There is no time for sharing, people is busy	Community ties	Community relationships
516 : D_Drugs issues-past	+	143	There were drug issues in the past	Drug sale or consumption	Drugs
456 : CR_People know each other_safe	+	127	This area is safe because people know each other	Perceived safety	Built Environment
404 : CR_Neighbourhood founded +100 years M	+	114	This neighbourhood has more than 100 years	Community ties	Community relationships
498 : CR_United neighbourhood	+	137	This neighbourhood is united	Community ties	Community relationships
202 : BE_Neighbourhood's gates	0	63	This neighourhood has/had gates	Surviliance	Built Environment
513 : D_consumption	-	142	This place has drug consumption	Drug consumption	Drugs
522 : D_sale	-	145	This place has drug sale	Drug sale	Drugs
519 : D_LIcor consumption	-	144	This place has licor consumption	Alcohol consumption	Drugs
261 : BE_This place has many routes for escaping	-	76	This place has many routes for escaping	Perceived safety	Built Environment
130 : BE_former coffee plantation-livestock	-	47	This place is a former coffe plantation-livestock	Land use	Built Environment
562 : F_Safe day	+	163	This place is safe during day	Perceived safety	Feelings
568 : F_Safe night	+	165	This place is safe during night	Perceived safety	Feelings
565 : F_safe general	+	164	This place is safe most of the time	Perceived safety	Feelings
579 : F_Unsafe day	-	170	This place is unsafe during day	Perceived safety	Feelings
585 : F_Unsafe night	-	172	This place is unsafe during night	Perceived safety	Feelings
582 : F_Unsafe general	-	171	This place is unsafe most of the time	Perceived safety	Feelings
588 : F_very safe day	+	173	This place is very safe during day	Perceived safety	Feelings
592 : F_very safe night	+	175	This place is very safe during night	Perceived safety	Feelings
591 : F_very safe in general w(SR)F	+	174	This place is very safe most of the time	Perceived safety	Feelings
595 : F_Very unsafe all the time	-	176	This place is very unsafe all the time	Perceived safety	Feelings
598 : F_very unsafe night	-	177	This place is very unsafe during night	Perceived safety	Feelings
491 : CR_To improve-improved public space	+	136	This public space was regenerated	Public spaces	Built Environment
869 : V_threat-hitman w(SR)F	-	279	Threats and intimidation	Public spaces	Victimisation
714 : Pr_Avoid a place w(SR)F	0	12	To avoid public spaces as safety measure	Public spaces	Precautionary measures
766 : Pr_To Change route	0	12	To avoid public spaces as safety measure	Public spaces	Precautionary measures
788 : Pr_To take a taxi or car	0	12	To avoid public spaces as safety measure	Public spaces	Precautionary measures
762 : Pr_teenager can no go there	0	238	To ban teenagers going out or visiting certain places	Teenagers	Precautionary measures
765 : Pr_teenagers go out with parents wF	0	238	To ban teenagers going out or visiting certain places	Teenagers	Precautionary measures
858 : V_Someone follow me-him-her	-	275	To be followed by someone	Public spaces	Victimisation
769 : Pr_to confront criminal	0	239	To confront the criminal	Public and private spaces	Precautionary measures
787 : Pr_To stare them (suspects) w(SR)F	0	239	To confront the criminal	Public and private spaces	Precautionary measures
314 : CR_Community Control	+	92	To control public spaces is important for keeping the place safe	Surviliance	Built Environment
772 : Pr_to Enter as quit as possible M	0	240	To enter as quit as possible to my house	Public spaces	Precautionary measures
750 : Pr_Parks close at 6-7pm	0	235	To fence and lock parks	Public spaces	Precautionary measures
730 : Pr_fenced-locked space	0	229	To fence or lock a space	Public and private spaces	Precautionary measures
773 : Pr_To greet dangerous people w(SR)F	0	241	To greet dangerous people	Public spaces	Precautionary measures
774 : Pr_to have a stick-gas (to hit)	0	242	To have a stick or gas	Weapons	Precautionary measures
710 : Pr_Alarm	+	224	To have an alarm	Public and private spaces	Precautionary measures
739 : Pr_Insurance IM	0	232	To have an insurance	Institutional measures	Precautionary measures
721 : Pr_Dogs IF	+	226	To have dogs at home	Private space	Precautionary measures
729 : Pr_don't leave house alone wF	0	228	To have someone at home all the time	Private space	Precautionary measures
777 : Pr_to hide belongings	0	243	To hide belongings	Public spaces	Precautionary measures
218 : -BE_Open neighbourhood	-	65	To live in an open neighbourhood is less safe	Perceived safety	Built Environment
80 : +P_people live enclosed	+	28	To live locked is safer	Neighbourhood's atmosphere	Community relationships
680 : -P_people live enclosed	-	211	To live locked makes the place unsafe	Neighbours	People
780 : Pr_to keep the car locked IM	0	244	To lock the car	Private space	Precautionary measures
733 : Pr_formal complain police-local government	0	230	To make a formal complaint to the police or local government	Institutional measures	Precautionary measures
723 : Pr_Don't go out	0	11	To stay in home instead of outside as safety measure	Public spaces	Precautionary measures

Codes	Attitude	ID Group	Comments	Subcategory	Main Theme
726 : Pr_Don't go out night	0	11	To stay in home instead of outside as safety measure	Public spaces	Precautionary measures
736 : Pr_I take risk-no obsessive	0	231	To take risks and not being obsessive about crime	Public spaces	Precautionary measures
792 : Pr_To warn neighbourhoods - social media	+	245	To warn neighbours using social media	Social Media	Precautionary measures
795 : Pr_warn through 'touchs' wF	0	246	To warn neighbours with sounds	Public spaces	Precautionary measures
797 : Pr_Whistle	0	246	To warn neighbours with sounds	Public spaces	Precautionary measures
743 : Pr_Parents warning teenagers	0	234	To warn teenagers	Teenagers	Precautionary measures
870 : V_Traumatic experience	-	280	Traumatic episodes	Public spaces	Victimisation
305 : CR_closeness helps_inmediate neighbours	+	89	Trust in neighbours	Neighbours	Community relationships
495 : CR_Trust between neighbuours	+	89	Trust in neighbours	Neighbours	Community relationships
816 : -Sm_bad smell	-	257	Unpleasant smells	Smells reported by participants	Smells
472 : CR_Social activites in private lots	0	4	Use of alternative spaces for socialisation	Public spaces	Built Environment
475 : CR_Social and religious activites outside neighbourhood wF	0	4	Use of alternative spaces for socialisation	Public spaces	Built Environment
243 : BE_Private Spaces teen entertianment	0	71	Use of alternative spaces for socialisation - teenagers	Public spaces	Built Environment
486 : CR_Teenagers meet in houses w(SR)F	0	71	Use of alternative spaces for socialisation - teenagers	Public spaces	Built Environment
270 : -BE_vacant lots	-	78	Vacant lots are scary	Signs of fear	Built Environment
873 : V_vandalism	-	281	Vandalism	Public spaces	Victimisation
7 : +BE_car in movement	+	23	Vehicles in movement help safety	Survilliance	Built Environment
100 : -BE_car in movement	-	42	Vehicles in movement make the place unsafe	Signs of fear	Built Environment
195 : -BE_Motorcycle in movement	-	42	Vehicles in movement make the place unsafe	Signs of fear	Built Environment
876 : V_Violence is common here wF	-	282	Violence is common in this neighbourhood	Public spaces	Victimisation
13 : +BE_Gated Communities_Walls-Safety	+	25	Walls or Safety resources of Gated Communities are positive	Gated Communities	Built Environment
160 : -BE_Gated Communities_Walls	-	52	Walls of gated communities are disturbing	Gated Communities	Built Environment
172 : -BE_graffiti mafia threat t(SR)M	-	52	Walls of gated communities are disturbing	Gated Communities	Built Environment
206 : -BE_No permeability walls	-	64	Walls of gated communities are not permeable	Survilliance	Built Environment
796 : Pr_We don't prevent just react wM	0	247	We do not prevent just react	Public and private spaces	Precautionary measures
89 : BE_a park would bring drugs wM	-	35	Withdraws of having community parks	Public spaces	Built Environment
878 : V_witness of crime	-	283	Witness of an episode of victimisation	Public spaces	Victimisation
695 : P_young people don't want kids tF	-	218	Young people do not want kids	Youth	People

Appendix 4- 6. Information sheets and consent forms

Walking interviews – Information sheet

This research is part of a Doctoral thesis sponsored by the University College London in the United Kingdom and funded by the University of Costa Rica.

EXPLORATORY WALK -Participant Information Sheet for Adults and adolescents over 16.

UCL Research Ethics Committee Approval ID Number: 13363/001

YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET

Title of Study:
Fear of crime beyond the walls. Effects of gated communities in neighbouring public spaces. The case of the Greater Metropolitan Area of Costa Rica.
Department: The Bartlett School of Planning
Name and Contact Details of the Researcher(s):
Karla Barrantes Chaves **/** karla.chaves.16@ucl.ac.uk/ +44 07784599014

Name and Contact Details of the Principal Researcher: Claudio De Magalhães **/**

c.magalhaes@ucl.ac.uk / +44 (0)20 31089534

The researcher, Karla Barrantes Chaves is a PhD Candidate at the Bartlett School of Planning at the University College London. She also is a lecturer and researcher at the University of Costa Rica. Currently, she has permission to carry out her PhD in the United Kingdom.

You are being invited to take part in a research project. Before you decided it is important for you to understand why the research is being done and what participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you want to take part. Thank you for reading this

The purpose of the study is to know the safety perception in different types of neighbourhoods, which border Gated Communities and the reasons why people avoid or prefer certain places. The research aims to understand if some elements of the environment influence in people's safety feeling. For instance, what is your sensation when you walk aside of the Gated Community close to your neighbourhood, how do you perceive the streets, pavements and parks in your neighbourhood. Additionally, this research seeks to know if the community relationships and activities might make any difference in the safety perceptions. For this reason, we have chosen eight different types of neighbourhoods across the Great Metropolitan Area of Costa Rica. This research will take between 3 or 4 years in total.

We hope that this kind of research will eventually help us to know the neighbours' perceptions about safety in public spaces. Those opinions will be beneficial to improve the quality of our cities and to understand the effect of some elements of urban design, for instance, the construction of walls or enclosed spaces.

We chose you because you are a member of one the neighbourhoods under study, which are those that border gated communities. In case you are not a member of the neighbourhood_____, you are under exclusion criteria, and unfortunately, we cannot count on your valuable help.

It is up to you to decide whether or not to take part. Your participation is voluntary *if you choose not to take part in the study will not disadvantage to anyone* in any way. *If you do decide to take part, you will be given this information sheet to keep. You can withdraw at any time without giving a reason and without it affecting any benefits that you are entitled to.* If you decide to withdraw, you will be asked what you wish to happen to the data you have provided up to that point.

This group activity will take around one hour; we will walk along the neighbourhood; a map will be provided. You will be able to make annotations and put stickers on it, the information that you will put on the map is regarding your levels of fear.

If you feel uncomfortable with the length of the walk, you can let the researcher know. The following measures will be taken to assure your well-being:
a. The route and speed for the exploratory walks will be discussed beforehand; if you might feel uncomfortable in any part of the walk for whatever reason, you can decline to participate in advance.
b. In case, the discomfort happens during the walk. A member of our research team could take you back to home.
c. In case of you required further assistance, the Costa Rica emergency line (911) will be contacted, and any measure suggested by the emergency team will be taken. You will not be alone at any stage of your emergency.

The audio recordings of your activities made during this research will be used only for analysis and for illustration in conference presentations and lectures. No other use will be made of them without your written permission, and no one outside the project will be allowed access to the original recordings.
While there are no immediate benefits for those people participating in the project, it is hoped that this work will help to understand the issues in the perception of security in Costa Rica. Therefore, your help is very valuable for the research and we really appreciate it.

In case you have any complaints, you can address it to Claudio De Magalhães / c.magalhaes@ucl.ac.uk / +44 (0)20 31089534. If you feel your complaint has not been handled satisfactorily can also contact the Chair of the UCL Research Ethics Committee to ethics@ucl.ac.uk.

All the information that we collect about you such as gender, age, contact information as well any special detail that makes you identifiable. It will be kept strictly confidential.

You will not be able to be identified in any ensuing reports or publications. The information will be stored with security codes in a limited number of devices.

All the personal data storage included audios will be destroyed from UCL computers immediately after the submission of the thesis. They also will be removed from the researcher's devices five years after the submission of the thesis.

I understand that confidentiality will be maintained as far as possible unless, during our conversation I hear anything which makes me worried that someone might be in danger of harm, I might have to inform relevant agencies of this.

The results of this research will be published in a PhD thesis and papers and conferences. If you want to receive any copy of these results, your email address will be confidentially stored.

Data Protection Privacy Notice

Notice:
The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data, and can be contacted at data-protection@ucl.ac.uk. UCL's Data Protection Officer is Lee Shailer, and he can also be contacted at data-protection@ucl.ac.uk**.**

Your personal data will be processed for the purposes outlined in this notice. The legal basis that would be used to process your personal data will be UK regulations, in accordance with Costa Rican norms. You can provide your consent for the use of your personal data in this project by completing the consent form that has been provided to you.

Your personal data will be processed so long as it is required for the research project. If we are able to anonymise the personal data you provide we will undertake this, and will endeavour to minimise the processing of personal data wherever possible.

If you are concerned about how your personal data is being processed, please contact UCL in the first instance at data-protection@ucl.ac.uk. If you remain unsatisfied, you may wish to contact the Information Commissioner's Office (ICO). Contact details, and details of data subject rights, are available on the ICO website at: https://ico.org.uk/for-organisations/data-protection-reform/overview-of-the-gdpr/individuals-rights/

Contact for further information

Name and Contact Details of the Researcher(s): Karla Barrantes Chaves / karla.chaves.16@ucl.ac.uk/ +44 07784599014/ Costa Rica number: +506 88233726
Name and Contact Details of the Principal Researcher: Claudio De Magalhães / c.magalhaes@ucl.ac.uk / +44 (0)20 31089534

Thank you for reading this information sheet and for considering to take part in this research study.

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FOCUS GROUP -Participant Information Sheet for Adults and adolescents over 16.

UCL Research Ethics Committee Approval ID Number: 13363/001

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Title of Study:
Fear of crime beyond the walls. Effects of gated communities in neighbouring public spaces. The case of Greater Metropolitan Area of Costa Rica.
Department: The Bartlett School of Planning
Further information about School of Planning: https://www.ucl.ac.uk/bartlett/planning/about-us
Name and Contact Details of the Researcher(s):
Karla Barrantes Chaves **/** karla.chaves.16@ucl.ac.uk/ +44 07784599014

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You are being invited to take part in a research project. Before you decided it is important for you to understand why the research is being done and what participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you want to take part. Thank you for reading this

The purpose of the study is to know the safety perception in different types of neighbourhoods, which border Gated Communities and the reasons why people avoid or prefer certain places. The research aims to understand if some elements of the environment influence in people's safety feeling. For instance, what is your sensation when you walk aside of the Gated Community close to your neighbourhood, how you perceive the streets, pavements and parks in your neighbourhood. Additionally, this research seeks to know if the community relationships and activities might make any difference in the safety perceptions. For this reason, we have chosen eight different types of neighbourhoods across the Great Metropolitan Area of Costa Rica. This research will take between 3 or 4 years in total.

We hope that this kind of research will eventually help us to know the neighbours' perceptions about safety in public spaces. Those opinions will be beneficial to improve the quality of our cities and to understand the effect of some elements of urban design, for instance, the construction of walls or enclosed spaces.

We chose you because you are a member of one the neighbourhoods under study, which are those that border gated communities. In case you are not a member of the neighbourhood_____, you are under exclusion criteria, and unfortunately, we cannot count on your valuable help.

It is up to you to decide whether or not to take part. Your participation is voluntary *if you choose not to take part in the study will not disadvantage to anyone* in any way. *If you do decide to take part, you will be given this information sheet to keep. You can withdraw at any time without giving a reason and without it affecting any benefits that you are entitled to.* If you decide to withdraw, you will be asked what you wish to happen to the data you have provided up to that point.

This group activity will take around one hour; you will have a conversation with the others participants. You will talk about the neighbourhood activities, how satisfied are you with your neighbourhood, and any comment that you have regarding with the relationships between neighbours.

If you feel uncomfortable with the conversation, you can let the researcher know. The following measures will be taken to assure your well-being:
a. You can decline to continue with the focus group.
b. If you prefer a member of our research team could take you back to home.
c. In case of you required further assistance, the Costa Rica emergency line (911) will be contacted, and any measure suggested by the emergency team will be taken. You will not be alone at any stage of your emergency.

The audio recordings of your activities made during this research will be used only for analysis and for illustration in conference presentations and lectures. No other use will be made of them without your written permission, and nobody outside the project will be allowed access to the original recordings.
While there are no immediate benefits for those people participating in the project, it is hoped that this work will help to understand the issues in the perception of security in Costa Rica. Therefore, your help is very valuable for the research and we really appreciate it.

In case you have any complaints, you can address it to Claudio De Magalhães / c.magalhaes@ucl.ac.uk / +44 (0)20 31089534. If you feel your complaint has not been handled satisfactorily can also contact the Chair of the UCL Research Ethics Committee to ethics@ucl.ac.uk.

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Contact for further information

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Name and Contact Details of the Principal Researcher: Claudio De Magalhães / c.magalhaes@ucl.ac.uk / +44 (0)20 31089534

Thank you for reading this information sheet and for considering to take part in this research study.

Community leaders – Information sheet

UCL Research Ethics Committee Approval ID Number: 13363/001

YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET

Title of Study:
Fear of crime beyond the walls. Effects of gated communities in neighbouring public spaces. The case of Greater Metropolitan Area of Costa Rica.

Department: The Bartlett School of Planning
Name and Contact Details of the Researcher(s):
Karla Barrantes Chaves **/** karla.chaves.16@ucl.ac.uk/ +44 07784599014

Name and Contact Details of the Principal Researcher: Claudio De Magalhães **/** c.magalhaes@ucl.ac.uk / +44 (0)20 31089534

We would like to invite people of your neighbourhood to take part in our research study. This research is part of a Doctoral thesis sponsored by the University College London in the United Kingdom and, funded by the University of Costa Rica. Due to you have been identified as a community leader, we kindly ask your help as a bridge with the community members. Before you decide whether you would like to take part, please take time to read this information sheet carefully. If there is anything that is not clear, or if you would like more information, please do not hesitate to contact Karla Barrantes Chaves, karla.chaves.16@ucl.ac.uk, 8823-3726.

The purpose of the study is to know the safety perception in different types of neighbourhoods and the reasons why people avoid or prefer certain places. This research will take between 3 or 4 years in total. People of your community will be invited to participate in one exploratory walk and/or focus group. These activities involve:

Exploratory walk: This activity will take around one hour; we will walk along the neighbourhood; a map will be provided. People will be able to make annotations and put stickers on it, the information that you will put on the map is regarding levels of fear.

Focus group: This group session will take around one hour; we will have a conversation with the participants. We will talk about the neighbourhood activities, how satisfied are they with their neighbourhood, and any comment that they have regarding with the relationships between neighbours.

We hope that this kind of research will eventually help us to know the neighbours' perceptions about safety in public spaces. These opinions will be beneficial to improve the quality of our cities.

We hope that our findings will help to improve the quality of our cities, to understand the effect of some elements of urban design, for instance, the construction of walls or enclosed spaces. However, any research has to be thorough before practical recommendations are made. This is likely to mean that there is no immediate benefit for people taking part in the study, but we hope that it will be beneficial in the future.

If your neighbours do decide to take part, they can withdraw at any time without giving a reason. If they choose to withdraw, they will be asked what they wish to happen to the data they have provided up to that point. In case, a discomfort occurs during the walks or focus group. A member of our research team could take them back to home. In case, they required further assistance, the Costa Rica emergency line (911) will be contacted, and any measure suggested by the emergency team will be taken. They will not be alone in case of an emergency.

The audio recordings for this activity will be used only for analysis and for illustration in conference presentations and lectures. No other use will be made of them without the written permission, and no one outside the project will be allowed access to the original recordings.

Your contribution is very valuable for the research, and we really appreciate it. Thank you for taking the time to read this information sheet. Your help makes our research possible

In case you have any complaints, you can address it to Claudio De Magalhães / c.magalhaes@ucl.ac.uk / +44 (0)20 31089534. If you feel your complaint has not been handled satisfactorily can also contact the Chair of the UCL Research Ethics Committee at ethics@ucl.ac.uk.

All the information that we collect about you during the course of the research will be kept strictly confidential. You will not be able to be identified in any ensuing reports or publications.

The results of this research will be published in a PhD thesis and papers and conferences.

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Contact for further information

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Name and Contact Details of the Principal Researcher: Claudio De Magalhães / c.magalhaes@ucl.ac.uk / +44 (0)20 31089534

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INTERVIEWS -Participant Information Sheet for Adults

UCL Research Ethics Committee Approval ID Number: 13363/001

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Further information about School of Planning: https://www.ucl.ac.uk/bartlett/planning/about-us
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The purpose of the study is to know the safety perception in different types of neighbourhoods, which border Gated Communities and the reasons why people avoid or prefer certain places. The research aims to understand if some elements of the environment influence in people's safety feeling. For instance, what is the sensation when people walk aside of Gated Communities, how they perceive the streets, pavements and parks in their neighbourhood. Additionally, this research seeks to know if the community relationships and activities might make any difference in the safety perceptions. For this reason, we have chosen eight different types of neighbourhoods across the Great Metropolitan Area of Costa Rica. This research will take between 3 or 4 years in total.

We hope that this kind of research will eventually help us to know the neighbours' perceptions about safety in public spaces. Those opinions will be beneficial to improve the quality of our cities and to understand the effect of some elements of urban design, for instance, the construction of walls or enclosed spaces.

We chose you because you have done research on the topic or you have special information about the neighbourhoods under study.

It is up to you to decide whether or not to take part. Your participation is voluntary *if you choose not to take part in the study will not disadvantage to anyone* in any way. *If you do decide to take part, you will be given this information sheet to keep. You can withdraw at any time without giving a reason and without it affecting any benefits that you are entitled to.* If you decide to withdraw, you will be asked what you wish to happen to the data you have provided up to that point.

This interview activity will take around one hour. We will talk about fear of crime in public spaces and your knowledge about the neighbourhoods under study.

If you feel uncomfortable with the conversation, you can let the researcher know. The following measures will be taken to assure your well-being:
a. You can decline to continue with the interview.
b. If you prefer I take you back to home.
c. In case of you required further assistance, the Costa Rica emergency line (911) will be contacted, and any measure suggested by the emergency team will be taken. You will not be alone at any stage of your emergency.

The audio recording made during this research will be used only for analysis and for illustration in conference presentations and lectures. No other use will be made of them without your written permission, and no one outside the project will be allowed access to the original recordings.
While there are no immediate benefits for those people participating in the project, it is hoped that this work will help to understand the issues in the perception of security in Costa Rica. Therefore, your help is very valuable for the research and we really appreciate it.

In case you have any complaints, you can address it to Claudio De Magalhães / c.magalhaes@ucl.ac.uk / +44 (0)20 31089534. If you feel your complaint has not been handled satisfactorily can also contact the Chair of the UCL Research Ethics Committee to ethics@ucl.ac.uk.

All the information that we collect about you such as gender, age, contact information as well any particular detail that makes you identifiable. It will be kept strictly confidential. You will not be able to be identified in any ensuing reports or publications. The information will be stored with security codes in a limited number of devices.

All the personal data storage included audios will be destroyed from UCL computers immediately after the submission of the thesis. They also will be removed from the researcher's devices five years after the submission of the thesis.

I understand that confidentiality will be maintained as far as possible unless, during our conversation I hear anything which makes me worried that someone might be in danger of harm, I might have to inform relevant agencies of this.

The results of this research will be published in a PhD thesis and papers and conferences. If you want to receive any copy of these results, your email address will be confidentially stored.

Data Protection Privacy Notice

Notice:
The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk. UCL's Data Protection Officer is Lee Shailer, and he can also be contacted at data-protection@ucl.ac.uk*.*

Your personal data will be processed for the purposes outlined in this notice. The legal basis that would be used to process your personal data will be UK regulations, in accordance with Costa Rican norms. You can provide your consent for the use of your personal data in this project by completing the consent form that has been provided to you.

Your personal data will be processed so long as it is required for the research project. If we are able to anonymise the personal data you provide, we will undertake this and will endeavour to minimise the processing of personal data wherever possible.

If you are concerned about how your personal data is being processed, please contact UCL in the first instance at data-protection@ucl.ac.uk. If you remain unsatisfied, you may wish to contact the Information Commissioner's Office (ICO). Contact details and details of data subject rights are available on the ICO website at: https://ico.org.uk/for-organisations/data-protection-reform/overview-of-the-gdpr/individuals-rights/

Contact for further information

Name and Contact Details of the Researcher(s): Karla Barrantes Chaves / karla.chaves.16@ucl.ac.uk/ +44 07784599014/ Costa Rica number: +506 88233726
Name and Contact Details of the Principal Researcher: Claudio De Magalhães / c.magalhaes@ucl.ac.uk / +44 (0)20 31089534

Thank you for reading this information sheet and for considering to take part in this research study.

Parent/Guardian Information Sheet and Consent – teenagers under 16 years' old

Fear of crime beyond the walls. Effects of gated communities in neighbouring public spaces. The case of Greater Metropolitan Area of Costa Rica.

We would like to invite your child to take part in our research study. Before you and your child decide whether you would like to take part, it is important for you to know why the research is being done and what it will involve. Please take time to read this information sheet carefully and discuss it with others if you wish. If there is anything that is not clear, or if you would like more information, please do not hesitate to contact Karla Barrantes Chaves, karla.chaves.16@ucl.ac.uk, 8823-3726.

The aim of the study

The purpose of the study is to know the perception of insecurity in different types of neighbourhoods and the reasons why people feel unsafe. This research will take between 3 or 4 years in total. However, your child will be asked to collaborate just one time.

Usually, the studies regarding fear of crime have been focused on adult samples, setting aside the adolescents' opinions. For this reason, it is important to us to know how the young people perceive the city and which elements could cause them concern.

It is our hope that this kind of research will eventually help us to know the adolescent's perceptions about safety in public spaces. These opinions will be beneficial to improve the quality of our cities.

What will happen if we take part?

If you agree to take part in this research, your child will be part of a focus group (a group interview with other peers) for a little over one hour. During that time, your child will also be asked about the places in her/his neighbourhood where she/he feel safe or unsafe and why. Some maps will be used during the session.

Please talk about the study with your child. Please make sure that your child understands what he/she will be doing and give him/her an opportunity to ask any questions that he or she may have.

We do not anticipate any risks to the individuals taking part in this study. We will liaise with your child's class teacher to ensure that they do not miss any lessons that the teacher believes important for the child to attend. This study has been approved by the UCL Research Ethics committee.

What are the potential benefits?

We hope that our findings will help to improve the quality of our cities, to understand the effect of some elements of urban design, for instance, the construction of walls or enclosed spaces. However, any research has to be thorough before practical recommendations are made. This is likely to mean that there is no immediate benefit for the children taking part in the study, but we hope that their help will be beneficial to other children in the future, or when they become adults.

Does my child have to take part in this study?

It is up to you and your child whether or not you take part in this study. If you do decide to take part, you will be asked to sign a consent form. If you decide now, or at a later date, that you do not wish to participate in this research you are free to withdraw at any time without giving a reason. Even if you are happy for your child to take part, he or she will still decide for himself. It will be explained to your child that he/she can choose to withdraw from the study at any time, without giving a reason. We want to make sure that everyone is happy when taking part in our project.

Will information about my child's performance be available to anyone?

All information collected from you and your child during the course of this research will be kept strictly confidential unless required by law. For example, the school will not have access to our research records. It is important for parents to know that we are interested in the average performance of children, not in any individual child. No individual child will be named or singled out.

Who will have access to the research records?

Only members of our research team will be able to look at the information we collect. The use of some types of personal information is safeguarded by the Data Protection Act of 1998 (DPA). The DPA places an obligation on those who record or use personal information, but also gives rights to people about whom information is held.

How to contact the researchers

Name and Contact Details of the Researcher(s): Karla Barrantes Chaves / karla.chaves.16@ucl.ac.uk/ +44 07784599014/ Costa Rica number: +506 88233726

Name and Contact Details of the Principal Researcher: Claudio De Magalhães / c.magalhaes@ucl.ac.uk / +44 (0)20 31089534

We are happy to talk through any questions with you. We would be extremely grateful if you could return the enclosed form to your child's teacher. Thank you for taking time to read this information.

Thank you for taking the time to read this information sheet.

Your help makes our research possible!

Charlotte Cecil

Division of Psychology and Language Sciences

University College London

26 Bedford way, London

Please tick (√) appropriate box:

☐ **Yes**, I would like my child to participate in this study

☐ **No**, I do not want my child to participate in this study.

If Yes, please complete the following:

☐ I have read the Information Sheet.

☐ I understand that I am free to withdraw my child from the study at any time without giving a reason.

☐ I understand that my child is free withdraw from the study at any time without giving a reason.

☐ I have had the opportunity to ask any questions I wish to ask.

☐ I have the names and telephone numbers of the research team in case I have any queries in the

future.

Adolescent Consent

Please tick (√) appropriate box:

☐ Yes, I would like to participate in this study

☐ No, I do not want to participate in this study.

Consent form – Adults

This research is part of a Doctoral thesis sponsored by the University College London in the United Kingdom and funded by the University of Costa Rica

CONSENT FORM FOR *ADULTS* IN THE STUDY: Fear of crime beyond the walls. Effects of gated communities in neighbouring public spaces. The case of Greater Metropolitan Area of Costa Rica.

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Study: Fear of crime beyond the walls. Effects of gated communities in neighbouring public spaces. The case of the Greater Metropolitan Area of Costa Rica.

Department: The Bartlett School of Planning

Name and Contact Details of the Researcher(s): Karla Barrantes Chaves **/** karla.chaves.16@ucl.ac.uk/ +44 07784599014

Name and Contact Details of the Principal Researcher: Claudio De Magalhães **/** c.magalhaes@ucl.ac.uk / +44 (0)20 31089534

Name and Contact Details of the UCL Data Protection Officer: Lee Shailer/ data-protection@ucl.ac.uk**.**

This study has been approved by the UCL Research Ethics Committee:

Project ID number: 13363/001

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

		Tick Box
1.	*I confirm that I have read and understood the Information Sheet for the above study. I have had an opportunity to consider the information and what will be expected of me. I have also had the opportunity to ask questions which have been answered to my satisfaction - *a group discussion* ☐ - *an exploratory walk* ☐ - *an individual interview* ☐	
2.	*I understand that I will be able to withdraw my data up to *4 weeks after the activity indicated above (section 1)*	
3.	*I consent to the processing of my personal information (age and gender), for the purposes explained to me. I understand that such information will be handled in accordance with all applicable data protection legislation.	
4.	I understand that all personal information will remain confidential and that all efforts will be made to ensure I cannot be identified. I understand that my data gathered in this study will be stored anonymously and securely. It will not be possible to identify me in any publications.	
5.	*I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason. I understand that if I decide to withdraw, any personal data I have provided up to that point will be deleted unless I agree otherwise.	
6.	No promise or guarantee of benefits have been made to encourage you to participate	
7.	I understand that the data will not be made available to any commercial organisations but is solely the responsibility of the researcher(s) undertaking this study.	
8.	I understand that I will not benefit financially from this study or from any possible outcome it may result in in the future.	
9.	I agree that my anonymised research data may be used by others for future research.	
10.	I consent to my interview being audio/video recorded and understand that the recordings will be: - Stored anonymously, using password-protected software and will be used for training, quality control, audit and specific research purposes. - All the personal data storage included audios will be destroyed from UCL computers immediately after the submission of the thesis. They also will be removed from the researcher's devices five years after the submission of the thesis.	
11.	I hereby confirm that I understand the inclusion criteria as detailed in the Information Sheet and explained to me by the researcher.	
12.	I hereby confirm that: (a) I understand the exclusion criteria as detailed in the Information Sheet and explained to me by the researcher; and (b) I do not fall under the exclusion criteria.	
13.	I am aware of who I should contact if I wish to lodge a complaint.	

I confirm that I understand that by ticking/initialling each box below I am consenting to this element of the study. I understand that it will be assumed that unticked/initialled boxes means that I DO NOT consent to that part of the study. I understand that by not giving consent for any one element that I may be deemed ineligible for the study.

Do you like a copy an email copy of the results of this study?	YES	NO

EMAIL

ADDRESS:_____

_____ _____ _____

Name of participant Date Signature

_____ _____ _____

Name of researcher Date Signature

Appendix 6- 1. Matrices of comments by main theme

Number of mentions of each comment in both focus groups and walking interviews, by Female and Male participants. Data processed through NVivo software and exported to Excel. The comments about Built Environment are presented in Appendix 7-2 alongside the Talks' track maps.

Institutions

Row Labels	Case 1.	Case 2.	Case 3.	Case 4.	Case 5.	Case 6.	Case 7.	Case 8.
Institutions performance	**0**	**10**	**6**	**1**	**7**	**1**	**1**	**1**
Institutions were better in the past	0	0	0	1	0	0	0	0
Positive attitude towards local government	0	8	4	0	7	1	1	1
Positive attitude towards the police	0	2	2	0	0	0	0	0
Justice System	**0**	**2**	**4**	**7**	**0**	**0**	**0**	**1**
Distrust in the Justice System	0	2	4	7	0	0	0	1
Local government	**2**	**0**	**8**	**3**	**5**	**0**	**0**	**22**
Local government allowed irregular commercial development	0	0	0	0	0	0	0	9
Negative attitudes towards local government	2	0	8	3	5	0	0	13
National institutions/Local government	**0**	**4**	**1**	**3**	**16**	**0**	**0**	**3**
Bureaucracy difficults community projects/activities	0	4	1	1	10	0	0	3
Law allows to gated communities do not supply public areas	0	0	0	2	6	0	0	0
Police	**2**	**0**	**5**	**3**	**0**	**0**	**0**	**2**
Negative attitudes towards Police	2	0	5	3	0	0	0	2
Grand Total	**4**	**16**	**24**	**17**	**28**	**1**	**1**	**29**

Drugs

Row Labels	Case 1.	Case 2.	Case 3.	Case 4.	Case 5.	Case 6.	Case 7.	Case 8.
Alcohol consumption	**1**	**8**	**1**	**1**	**4**	**0**	**0**	**2**
This place has licor consumption	1	8	1	1	4	0	0	2
Drug consumption	**7**	**11**	**14**	**9**	**0**	**2**	**5**	**3**
Drug consumers are from outside	0	2	0	0	0	0	1	0
Drug consumers are not muggers	0	0	0	2	0	0	0	0
This place has drug consumption	7	9	14	7	0	2	4	3
Drug sale	**17**	**14**	**7**	**4**	**1**	**2**	**3**	**4**
There are conflicts among drug dealers	6	3	2	0	0	0	0	0
This place has drug sale	11	11	5	4	1	2	3	4
Drug sale or consumption	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**3**
There were drug issues in the past	0	1	0	1	0	0	0	3
Grand Total	**25**	**34**	**22**	**15**	**5**	**4**	**8**	**12**

Community relationships

Row Labels	Case 1.	Case 2.	Case 3.	Case 4.	Case 5.	Case 6.	Case 7.	Case 8.
Communication channels	**12**	**7**	**3**	**5**	**8**	**5**	**5**	**3**
News on crime via email	0	0	0	0	0	0	1	0
News on crime via rumours	7	0	1	3	4	0	0	1
News on crime via Social Media (no Whatsapp)	4	0	1	0	0	0	3	0
News on crime via television (news)	1	1	0	0	0	0	0	0
News on crime via Whatsapp	0	6	1	2	4	5	1	2
Community ties	**10**	**32**	**30**	**46**	**39**	**51**	**29**	**49**
Alliance between community board and private sector	0	0	0	0	0	0	0	4
Community ties were stronger in the past	1	0	7	13	7	5	0	2
Good relationship with people from gated communities	0	0	0	0	0	0	0	17
Good relationships with other communities	1	1	0	0	6	0	1	2
High crime affects community ties	1	0	0	0	0	0	0	0
I want to help community despite negativity	0	0	0	0	0	8	0	0
Low socialisation among neighbours	0	0	0	2	2	10	5	1
Negative attitude towards neighbours with short time living there	0	1	1	0	0	1	0	0
Neighbourhood divided by sectors	2	3	1	4	1	10	3	0
Neighbours do not contribute or pay	0	1	11	5	1	7	6	4
New generations are difficult to integrate	0	2	2	5	5	0	0	0
New generations are welcome	0	2	0	0	1	0	0	0
No relationship with contiguous neighbourhood	0	0	0	0	2	1	1	0
People in this neighbourhood is individualist without community sense	1	1	2	7	2	5	2	3
Positive attitude towards communal activities	2	17	6	8	11	3	10	16
There is no time for sharing, people is busy	2	0	0	1	0	0	1	0
This neighbourhood has more than 100 years	0	0	0	1	0	0	0	0
This neighbourhood is united	0	4	0	0	1	1	0	0
Developers	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Real State developers belong to our neighbourhood	0	0	0	0	0	0	0	1
Frequency of activities	**0**	**1**	**1**	**1**	**1**	**1**	**2**	**1**
Communal activities more than 4 times at year	0	1	0	0	0	0	0	0
Frequency of social activities: 2 or 3 times at year	0	0	0	0	0	0	2	1
Frequency of social activities: last one 2 or 3 years ago	0	0	0	0	1	1	0	0
Frequency of social activities: weekly	0	0	1	1	0	0	0	0
Gated Communities	**6**	**8**	**7**	**14**	**12**	**6**	**13**	**7**
Communitcation channel with gated community: church	0	1	0	1	0	0	0	0
Communitcation channel with gated community: neighbourhood shop	0	0	0	0	0	1	0	0
I have met someone from the Gated community	1	1	0	3	4	1	4	1
I would live in a gated community -if I could	0	0	0	2	0	0	3	3
I would live in another place	0	0	1	2	1	0	2	1
Inside gated communities people do share	0	0	0	1	0	0	0	0
No relationship with people from gated community	5	6	6	5	7	4	4	2
Length of residence	**3**	**8**	**3**	**8**	**6**	**3**	**9**	**4**
Between 10 and 14 years living in the neighbourhood	1	1	0	1	1	0	6	0
Between 15 and 19 years living in the neighbourhood	2	0	0	0	1	3	1	0
Between 5 and 10 years living in the neighbourhood	0	0	0	2	0	0	1	0
Less than 5 years of living in this neighbourhood	0	2	0	0	0	0	1	2
More than 20 years of living in this neighbourhood	0	5	3	5	4	0	0	2
Neighbourhood's atmosphere	**6**	**5**	**5**	**3**	**6**	**17**	**14**	**6**
I would live in another place	0	0	0	2	0	0	0	1
Issues among neighbours	4	4	4	0	5	13	11	5
Issues with contiguous neighbourhood	2	0	1	0	0	2	0	0
To live locked is safer	0	1	0	1	1	2	3	0
Neighbours	**6**	**10**	**3**	**5**	**10**	**1**	**10**	**11**
I am not originally from this neighbourhood	1	0	0	1	0	0	0	5
Positive attitude towards neighbours	4	9	3	2	6	0	7	5
Trust in neighbours	1	1	0	2	4	1	3	1
Organisation	**9**	**28**	**9**	**28**	**43**	**21**	**14**	**68**
Communal intiatives or groups	2	5	1	4	5	0	4	11
Our community did the 'safety course'	1	5	1	1	2	2	1	2
Reference to organisational matters	5	17	3	15	22	7	6	34
Social activities have increased in this neighbourhood	0	0	0	0	0	0	0	1
The community board is overwhelmed	0	1	3	3	12	3	2	19
The community group after the 'safety course' no longer exist	1	0	1	1	0	1	1	0
There are activities planned for the future	0	0	0	4	2	8	0	1
Perceived safety	**6**	**4**	**2**	**0**	**1**	**0**	**0**	**0**
Neighbours encourage vicious circle of crime	3	2	2	0	0	0	0	0
Safe area people have lived here for many years	3	2	0	0	1	0	0	0
Public spaces	**3**	**1**	**7**	**8**	**10**	**5**	**8**	**17**
Concerns about public spaces use and vitality	0	0	3	8	1	3	0	1
Concerns about public spaces use and vitality for youth	0	0	3	0	0	0	0	0
Issues with logistics about public spaces management	0	0	0	0	9	1	8	16
People from other neighbourhoods do not want our kids in their parks	2	0	0	0	0	0	0	0
Socialisation take place on the street	1	1	1	0	0	1	0	0
Grand Total	**61**	**104**	**70**	**118**	**136**	**110**	**104**	**167**

Feelings

Row Labels	Case 1.	Case 2.	Case 3.	Case 4.	Case 5.	Case 6.	Case 7.	Case 8.
Anger	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**4**
Anger because sale and consumption of drugs	0	0	1	0	0	1	0	4
Fear	**21**	**20**	**48**	**47**	**15**	**17**	**14**	**10**
Concern about someone else safety	3	3	4	10	3	3	1	0
Fear is everywhere	1	0	0	8	0	4	0	2
Fear of being adbucted	1	0	0	0	0	0	0	0
Fear of being attacked	0	0	1	3	1	0	0	0
Fear of being followed	0	1	0	0	0	1	0	0
Fear of being killed	5	0	1	0	0	0	0	0
Fear of being mugged	0	3	19	6	5	2	4	0
Fear of being sexually harassed	1	0	0	1	0	1	0	0
Fear of burglary	4	1	1	2	0	0	1	0
Fear of hearing something unusual	0	0	0	7	0	0	0	0
Fear of inmigrants	0	1	2	1	1	0	0	0
Fear of my relative/friend might be raped	0	0	4	0	0	0	0	0
Fear of my relative/friend might be sexually harassed	0	1	1	0	0	0	0	0
Fear of reprisals	1	3	5	0	0	0	0	0
Fear of shootings	3	0	0	0	0	1	1	0
Fear of someone might abduct my child	0	1	0	3	0	2	0	0
Fear of someone might be hidden -weed	1	0	6	2	2	1	0	1
Fear of strangers	1	6	4	4	3	2	7	7
Neighbourhood's perception	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**
Proud about our neighbourhood image	0	0	0	0	2	0	0	0
Perceived safety	**40**	**20**	**50**	**32**	**37**	**24**	**23**	**24**
Negative attitude towards contiguous neighbourhood	1	0	0	1	0	4	0	1
This place is safe during day	6	3	8	3	7	4	3	2
This place is safe during night	1	1	1	0	4	0	0	3
This place is safe most of the time	3	6	5	6	8	2	12	4
This place is unsafe during day	1	0	3	1	0	1	0	0
This place is unsafe during night	7	6	7	11	7	2	3	2
This place is unsafe most of the time	8	3	5	4	2	7	2	1
This place is very safe during day	0	0	1	0	2	0	0	3
This place is very safe during night	0	0	0	0	1	0	0	3
This place is very safe most of the time	0	0	0	0	2	1	0	0
This place is very unsafe all the time	13	0	9	6	4	0	1	1
This place is very unsafe during night	0	1	11	0	0	3	2	4
Grand Total	**61**	**40**	**99**	**79**	**54**	**42**	**37**	**38**

Precautionary measures

Row Labels	Case 1.	Case 2.	Case 3.	Case 4.	Case 5.	Case 6.	Case 7.	Case 8.
Institutional measures	**1**	**0**	**3**	**0**	**1**	**3**	**0**	**15**
To have an insurance	0	0	0	0	0	2	0	0
To make a formal complaint to the police or local government	1	0	3	0	1	1	0	15
Private space	**1**	**1**	**0**	**5**	**0**	**0**	**1**	**0**
Do not confront the criminal	0	0	0	1	0	0	0	0
To have dogs at home	0	0	0	4	0	0	1	0
To have someone at home all the time	1	0	0	0	0	0	0	0
To lock the car	0	1	0	0	0	0	0	0
Public and private spaces	**2**	**3**	**1**	**9**	**8**	**5**	**5**	**4**
Survilliance among neighbours	1	0	0	3	7	0	1	3
To confront the criminal	1	0	1	6	0	1	0	0
To fence or lock a space	0	2	0	0	0	1	2	0
To have an alarm	0	0	0	0	1	3	2	1
We do not prevent just react	0	1	0	0	0	0	0	0
Public spaces	**16**	**20**	**13**	**34**	**14**	**27**	**10**	**11**
Control of public spaces as safety measure	3	3	1	2	3	5	3	5
Control of public spaces as safety measure -CCTV	2	9	5	9	7	14	2	0
Do not walk alone as safety measure	1	1	1	2	1	3	0	1
Negative attitude towards control of public spaces -CCTV	0	1	1	2	2	2	1	0
Positive attitude towards activate/improvement of public spaces as safety measure	0	1	0	0	0	0	1	0
There is no option -we have to pass anyway	2	0	0	0	0	0	0	0
To avoid public spaces as safety measure	1	1	2	4	0	0	3	1
To enter as quit as possible to my house	0	1	0	0	0	0	0	0
To fence and lock parks	0	0	0	0	1	1	0	3
To greet dangerous people	2	0	0	0	0	0	0	0
To hide belongings	2	1	1	4	0	0	0	1
To stay in home instead of outside as safety measure	1	2	2	7	0	2	0	0
To take risks and not being obsessive about crime	0	0	0	2	0	0	0	0
To warn neighbours with sounds	2	0	0	2	0	0	0	0
Social Media	**0**	**1**	**0**	**7**	**0**	**1**	**1**	**0**
Negative attitude towards social media to prevent crime	0	0	0	2	0	0	0	0
To warn neighbours using social media	0	1	0	5	0	1	1	0
Teenagers	**0**	**2**	**0**	**7**	**0**	**6**	**1**	**0**
To ban teenagers going out or visiting certain places	0	2	0	5	0	4	0	0
To warn teenagers	0	0	0	2	0	2	1	0
Weapons	**0**	**0**	**1**	**4**	**1**	**0**	**0**	**0**
To have a stick or gas	0	0	1	4	1	0	0	0
Grand Total	**20**	**27**	**18**	**66**	**24**	**42**	**18**	**30**

People

Row Labels	Case 1.	Case 2.	Case 3.	Case 4.	Case 5.	Case 6.	Case 7.	Case 8.
Developers	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**
Real State developers could help our community	0	0	0	0	3	0	0	0
Drug dealer	**1**	**1**	**4**	**1**	**0**	**0**	**1**	**2**
Drug dealers are from outside	0	0	0	1	0	0	0	1
Drug dealers are local	1	1	4	0	0	0	1	1
Drug user	**4**	**3**	**8**	**3**	**0**	**0**	**0**	**1**
Drug users are local	4	3	8	2	0	0	0	1
Drug users commit robbery/mugging/burglary	0	0	0	1	0	0	0	0
Drug user/dealer	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**
Good built environment can change drug user/dealer attitude	0	1	0	0	0	0	0	0
Gated Communities	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
People is leaving dwellings to live in gated communities	0	0	0	0	0	0	0	2
Homeless	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**5**
There are homeless in this place	0	1	0	0	0	0	0	5
Incomes	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**
Negative attitude towards upper-income people	0	0	2	0	0	0	0	0
Positive attitude towards low/middle-incomes people	0	0	1	0	0	0	0	0
Neighbours	**0**	**2**	**7**	**6**	**1**	**3**	**0**	**1**
Neighbours do not appreciate social activities	0	0	0	2	0	2	0	0
To live locked makes the place unsafe	0	2	7	4	1	1	0	1
People from gated communities	**2**	**1**	**6**	**21**	**7**	**1**	**8**	**0**
People from gated communities are arrogant	0	0	0	5	0	0	1	0
People from gated communities are foreigners	0	0	0	0	1	0	0	0
People from gated communities are Narcos -organised crime	1	0	2	0	0	0	0	0
People from gated communities are upper-class	1	0	1	5	2	1	0	0
People from gated communities are upper-middle-class	0	0	0	4	1	0	2	0
People from gated communities are working people	0	0	0	0	1	0	5	0
People from gated communities do not care about us	0	1	3	3	0	0	0	0
People from gated communities have many debts	0	0	0	4	0	0	0	0
People from gated communities have small families	0	0	0	0	2	0	0	0
People linked to crime	**3**	**3**	**7**	**7**	**3**	**1**	**5**	**4**
Criminals are from other neighbourhood	0	1	4	4	2	0	2	0
Criminals are from our neighbourhood	1	0	0	2	0	0	0	0
Someone was arrested in this place	0	2	2	0	0	0	1	3
There are hitmen in this place	0	0	0	0	0	0	1	0
There are people with guns in this place	2	0	1	1	1	1	1	1
Strangers	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**8**
Some strangers are nice	0	0	0	0	1	1	0	8
Teenagers	**0**	**0**	**1**	**2**	**0**	**3**	**5**	**0**
Teenagers from this neighbourhood do not like go out	0	0	0	0	0	0	1	0
Teenagers from this neighbourhood do sports and socialise	0	0	1	0	0	0	2	0
Teenagers from this neighbourhood entertain with mobile and tecl	0	0	0	2	0	1	2	0
There are few teenagers in this neighbourhood	0	0	0	0	0	2	0	0
Uncomfortable behaviours	**2**	**0**	**1**	**0**	**2**	**2**	**1**	**2**
Public display of affection (P.D.A) is disturbing	2	0	0	0	2	1	1	1
Skateboarders are disturbing	0	0	1	0	0	1	0	1
Youth	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**
Young people do not want kids	0	0	0	0	0	0	2	0
Grand Total	**12**	**12**	**37**	**40**	**17**	**11**	**22**	**25**

Victimisation

Row Labels	Case 1.	Case 2.	Case 3.	Case 4.	Case 5.	Case 6.	Case 7.	Case 8.
Private space	**5**	**5**	**3**	**6**	**7**	**11**	**9**	**7**
Attempted of abduction	0	0	0	0	0	0	0	1
Attempted of burglary	0	0	1	0	1	2	0	0
Burglary	5	5	1	6	5	9	9	6
Domestic violence	0	0	1	0	1	0	0	0
Public and private spaces	**2**	**2**	**5**	**4**	**2**	**1**	**1**	**15**
Organised crime	1	0	0	0	0	0	0	2
Stolen items	1	0	0	1	2	0	0	2
Suspicious situations	0	2	5	3	0	1	1	11
Public spaces	**32**	**11**	**31**	**16**	**18**	**22**	**21**	**16**
Attack	0	1	7	0	0	2	0	2
Fatal traffic accident	0	0	1	0	5	3	0	1
Mugging	6	3	13	6	5	3	5	5
Murder	2	0	2	1	2	2	1	1
People have been bitten by a dog	0	0	0	0	0	0	2	0
Rape	0	0	0	0	0	0	0	1
Sexual attack or harassment	3	0	4	3	0	0	5	1
Shooting	6	1	0	2	1	4	0	1
Stabbing	1	0	0	1	0	0	0	0
Stolen car	0	0	0	0	1	0	0	0
Stolen items from cars	0	1	0	0	0	0	1	0
There is no previous victimisation in this place	6	2	0	0	4	1	5	2
Threats and intimidation	0	0	0	0	0	0	1	0
To be followed by someone	0	0	0	3	0	3	0	0
Traumatic episodes	0	0	0	0	0	2	0	0
Vandalism	0	1	0	0	0	0	0	1
Violence is common in this neighbourhood	2	0	0	0	0	0	0	0
Witness of an episode of victimisation	6	2	4	0	0	2	1	1
Public spaces -cars are threats	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
Street racing	0	0	0	0	0	1	0	0
Grand Total	**39**	**18**	**39**	**26**	**27**	**35**	**31**	**38**

Others: references to general places, public services and smells

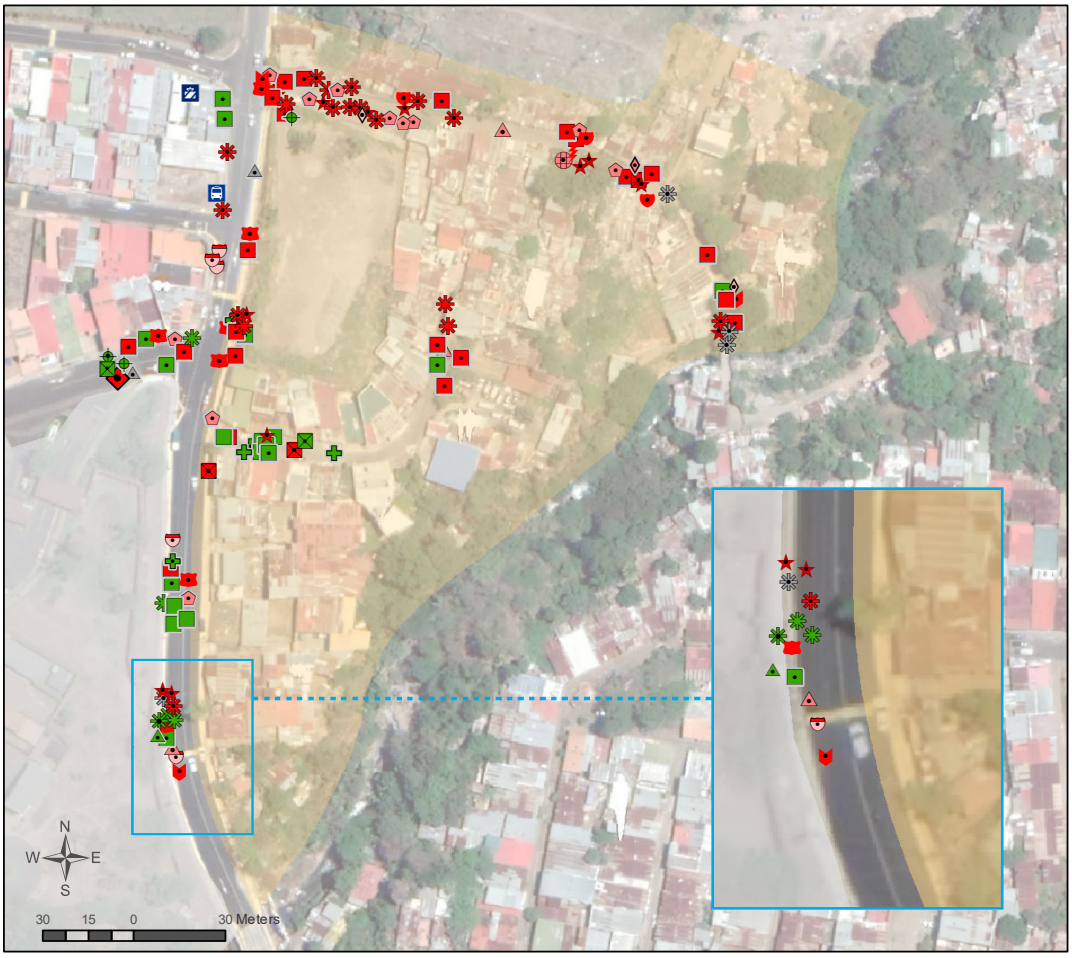
Row Labels	Case 1.	Case 2.	Case 3.	Case 4.	Case 5.	Case 6.	Case 7.	Case 8.
Places - Scales	**10**	**10**	**13**	**22**	**19**	**4**	**2**	**10**
Local	**3**	**1**	**0**	**11**	**3**	**0**	**1**	**3**
Negative association to a local place	1	0	0	3	0	0	0	1
Reference to a local place	2	1	0	8	3	0	1	2
National	**1**	**3**	**1**	**1**	**3**	**0**	**0**	**3**
Reference to a national place	1	3	1	1	3	0	0	3
Regional	**6**	**6**	**12**	**10**	**13**	**4**	**1**	**4**
Negative association to a regional plac	0	0	3	0	1	0	0	1
Reference to a regional place	6	6	9	10	12	4	1	3
Public services	**0**	**0**	**1**	**5**	**5**	**0**	**0**	**0**
Public transport	**0**	**0**	**1**	**5**	**0**	**0**	**0**	**0**
Issues with frequency	0	0	1	2	0	0	0	0
Issues with routes	0	0	0	3	0	0	0	0
Water/ Rubbish collection	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**
Issues with Water/ Rubbish collection	0	0	0	0	5	0	0	0
Smells	**0**	**1**	**2**	**2**	**1**	**0**	**0**	**0**
Smells reported by participants	**0**	**1**	**2**	**2**	**1**	**0**	**0**	**0**
Drug smells	0	1	0	2	0	0	0	0
Unpleasant smells	0	0	2	0	1	0	0	0
Grand Total	**10**	**11**	**16**	**29**	**25**	**4**	**2**	**10**

Sounds and interactions captured by the author

Row Labels	Case 1.	Case 2.	Case 3.	Case 4.	Case 5.	Case 6.	Case 7.	Case 8.
Interactions (Author)	**20**	**7**	**15**	**23**	**21**	**13**	**9**	**16**
Captured by author	**20**	**7**	**15**	**23**	**21**	**13**	**9**	**16**
Greetings	6	4	6	2	10	2	1	2
Kids playing on the stree	1	0	0	0	0	0	0	0
Laughs from participant	13	3	9	21	11	11	8	14
Sounds (Author)	**18**	**9**	**28**	**28**	**32**	**10**	**11**	**9**
Captured by author	**18**	**9**	**28**	**28**	**32**	**10**	**11**	**9**
Advertising	0	0	2	0	1	0	0	0
Birds	0	1	1	1	2	1	2	1
Construction	0	0	0	4	0	0	0	0
Dogs	1	0	4	1	6	2	6	0
Music	4	0	2	7	2	0	1	0
Rain	0	0	0	0	0	2	0	0
Traffic	13	8	19	15	21	5	2	8
Grand Total	**38**	**16**	**43**	**51**	**53**	**23**	**20**	**25**

Appendix 7- 1. Set of Talk's track maps for eight case studies

Case 1. Talk's track map by subcategory



Case 1. Localised attitudes by sex and topic

References

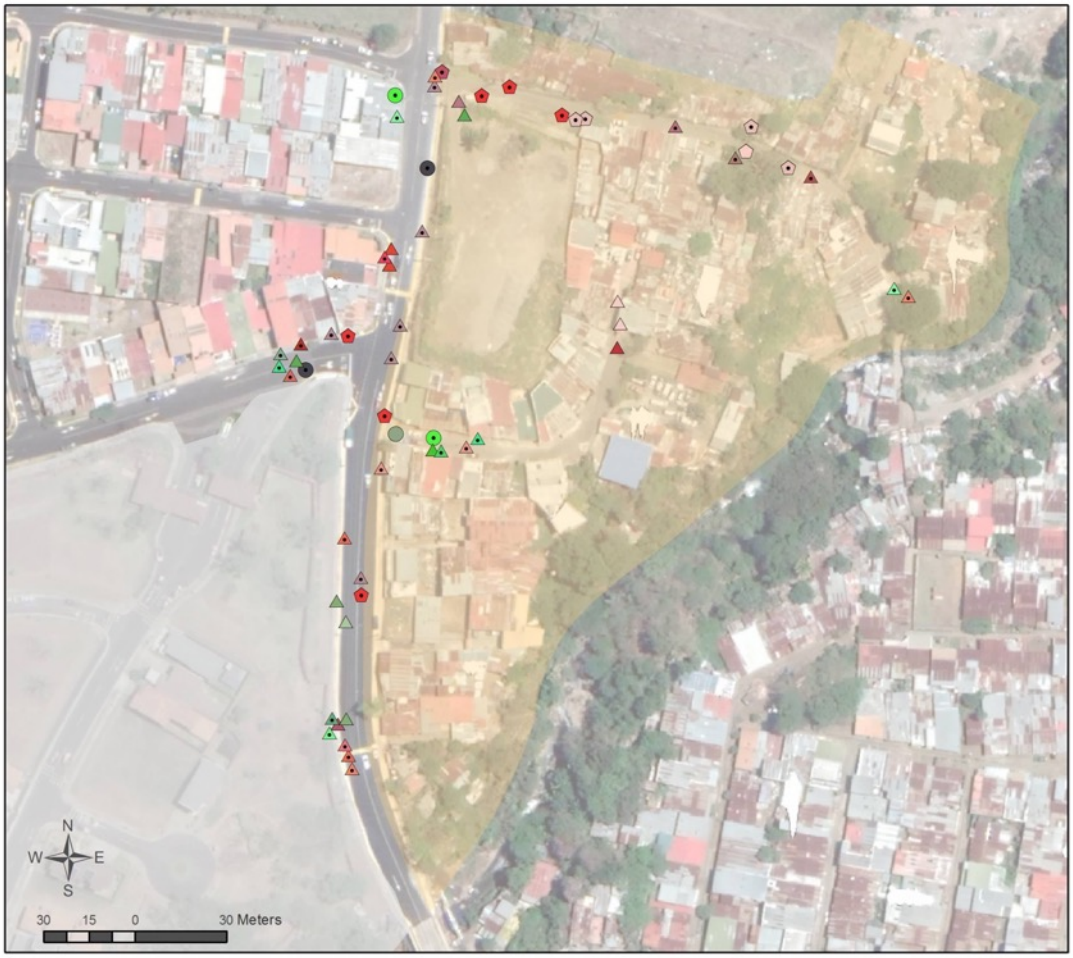
- Retail
- Bus stop
- Neighbourhood
- Gated community

Participant's comments by subcategories

Attitude (- / +), Sex (F/M) , Subgroup

- +, F, Gated Communities
- +, F, General victimisation
- +, F, Neighbourhood's atmosphere
- +, F, Perceived safety
- +, F, Physical features
- +, F, Public spaces
- +, M, General victimisation
- +, M, Perceived safety
- +, M, Physical features
- +, M, Public spaces
- -, F, Drug consumption
- -, F, Drug sale
- -, F, Drug user
- -, F, Fear
- -, F, Infrastructure
- -, F, Neighbourhood's atmosphere
- -, F, Noises
- -, F, People linked to crime
- -, F, Perceived safety
- -, F, Private space
- -, F, Public spaces
- -, F, Signs of fear
- -, F, Surveillance
- -, F, Traffic
- -, F, Walking routes
- -, M, Infrastructure
- -, M, Perceived safety
- -, M, Public spaces
- -, M, Signs of fear
- -, M, Traffic
- -, M, alcohol consumption
- 0, F, Gated Communities
- 0, F, Public spaces

Case 1. Talk's track maps by comments: Environmental features and community.



Environmental features and community

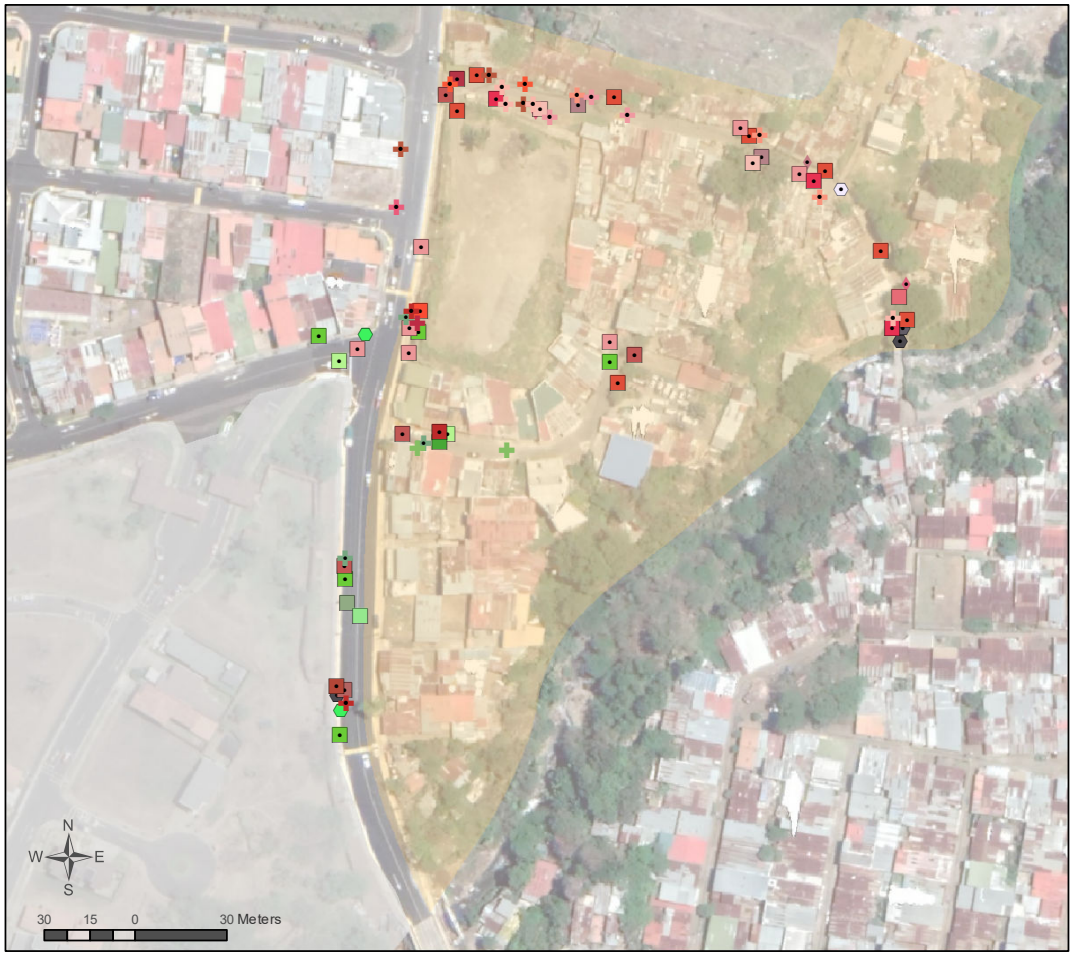
Neighbourhood
Gated community

Community relationships
(attitude, sex, comment)
+, F, Safe area people have lived here for many years
+, M, Safe area people have lived here for many years
0, F, No relationship with people from gated community

Drugs
(attitude, sex, comment)
-, F, There are conflicts among drug dealers
-, F, This place has drug consumption
-, F, This place has drug sale
-, M, This place has alcohol consumption

Built Environment
(attitude, sex, comment)
+, F, Control of public spaces as safety measure -Police
+, F, Positive attitude towards contiguous neighbourhood
+, F, Positive attitude towards neighbourhood's atmosphere
+, F, Positive attitude towards physical features
+, F, This area is safe because people know each other
+, F, Walls and Safety resources of Gated Communities are positive
+, M, Control of public spaces as safety measure -Police
+, M, Positive attitude towards physical features
+, M, The place is safer now
+, M, This area is safe because people know each other
-, F, Dangerous Bus Stop
-, F, Dangerous walking distance to Bus Stop
-, F, Disturbing sounds/noises
-, F, General infrastructure issues
-, F, Heavy traffic
-, F, Isolated place
-, F, Lack of pavement or pavement in poor conditions
-, F, Negative attitude towards contiguous neighbourhood
-, F, Negative attitude towards houses for rent
-, F, Negative attitude towards neighbourhood's atmosphere
-, F, Negative attitude towards private security
-, M, Concerns about supply of public spaces -land invasion
-, M, Concerns about supply of public spaces for kids
-, M, Dangerous Bus Stop
-, M, General infrastructure issues
-, M, Heavy traffic

Case 1. Talk's track maps by comments: Emotions and experiences.



Emotions and experiences

Neighbourhood
Gated community

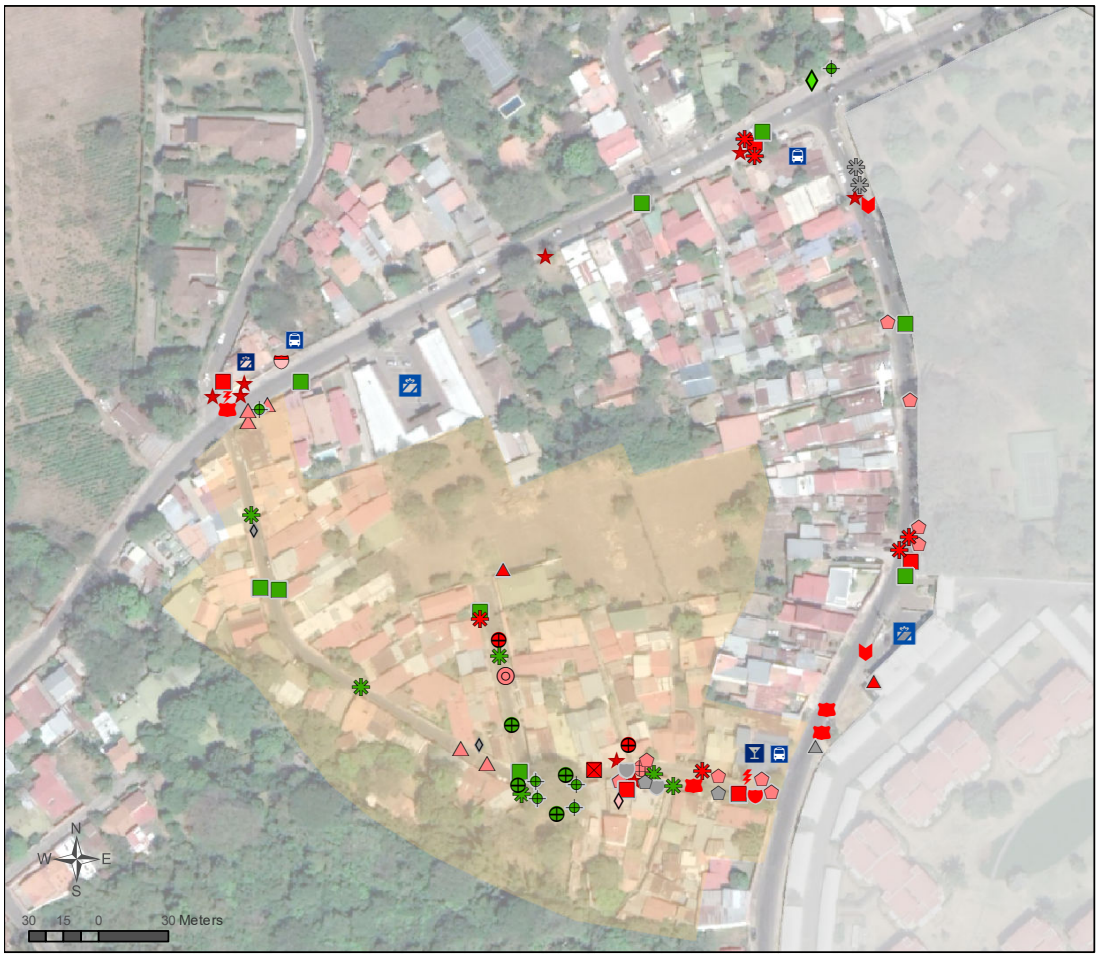
Victimisation
(attitude, sex, comment)
+, F, There is no previous victimisation in this place
+, M, There is no previous victimisation in this place
-, F, Burglary
-, F, Mugging
-, F, Murder
-, F, Sexual attack or harassment
-, F, Shooting
-, F, Stabbing
-, F, Witness of an episode of victimisation
-, M, Mugging

People
(attitude, sex, comment)
-, F, Drug users are local
-, F, There are people with guns in this place

Precautionary measures
(attitude, sex, comment)
+, M, Control of public spaces as safety measure -CCTV
0, F, Do not walk alone as safety measure
0, F, To avoid public spaces as safety measure
0, F, To greet dangerous people

Feelings
(attitude, sex, comment)
+, F, This place is safe during day
+, F, This place is safe most of the time
+, M, This place is safe during day
+, M, This place is safe during night
+, M, This place is safe most of the time
-, F, Concern about someone else safety
-, F, Fear of being abducted
-, F, Fear of being killed
-, F, Fear of being sexually harassed
-, F, Fear of burglary
-, F, Fear of someone might be hidden -weed
-, F, Fear of strangers
-, F, This place is unsafe during day
-, F, This place is unsafe during night
-, F, This place is unsafe most of the time
-, F, This place is very unsafe all the time
-, M, This place is unsafe during night

Case 2. Talk's track map by subcategory



Case 2. Localised attitudes by sex and topic

References

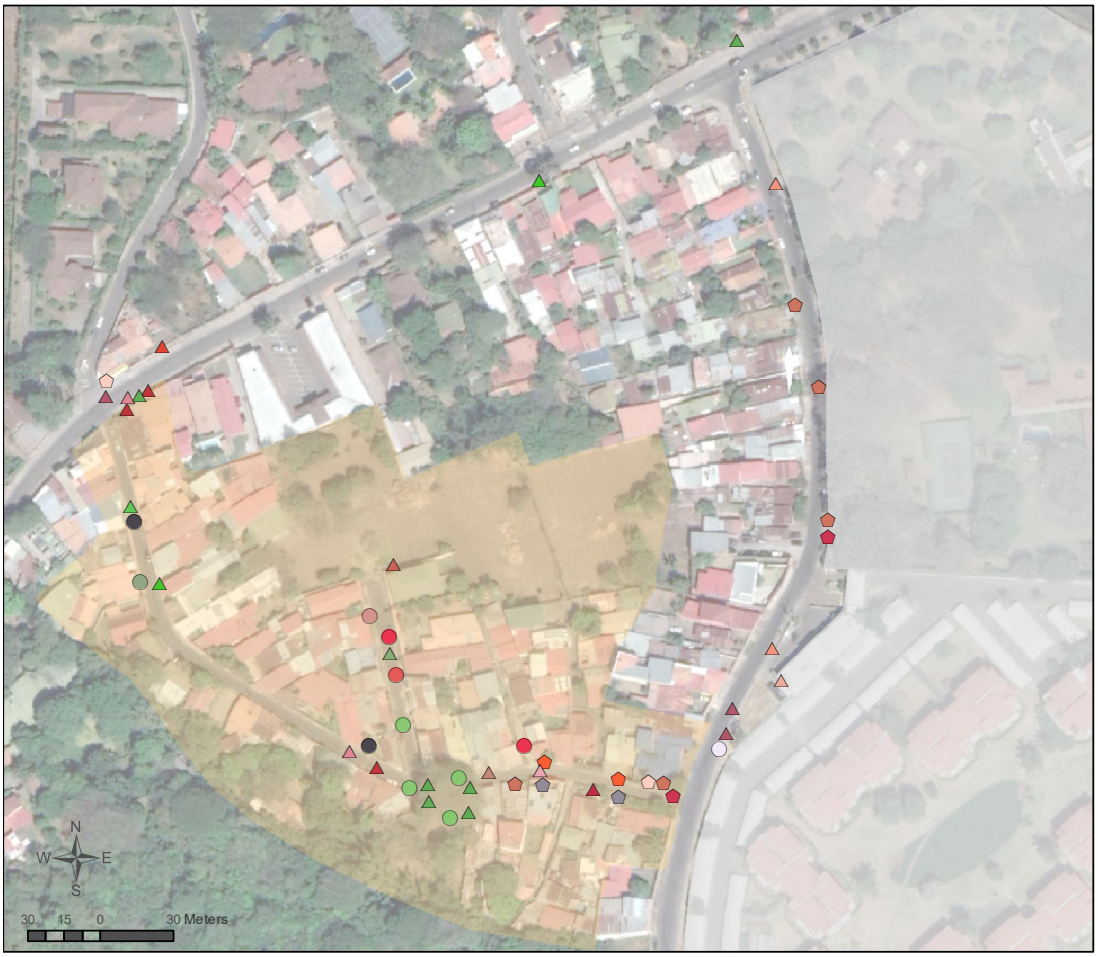
- Bar
- Shopping centre
- Retail
- Bus stop
- Neighbourhood
- Gated community

Participant's comments by subcategories

Attitude (- / +), Sex (F/M) , Subgroup

- +, M, Community ties
- +, M, Drug user/dealer
- +, M, Perceived safety
- +, M, Physical features
- +, M, Public spaces
- -, M, Community ties
- -, M, Drug consumption
- -, M, Drug sale
- -, M, Fear
- -, M, Gated Communities
- -, M, Infrastructure
- -, M, Neighbourhood's atmosphere
- -, M, Noises
- -, M, Organisation
- -, M, People linked to crime
- -, M, Perceived safety
- -, M, Public and private spaces
- -, M, Public spaces
- -, M, Signs of fear
- -, M, Traffic
- -, M, Walking routes
- -, M, alcohol consumption
- 0, M, Drug consumption
- 0, M, Gated Communities
- 0, M, Length of residence
- 0, M, Public and private spaces
- 0, M, Public spaces

Case 2. Talk's track maps by comments: Environmental features and community.



Environmental features and community

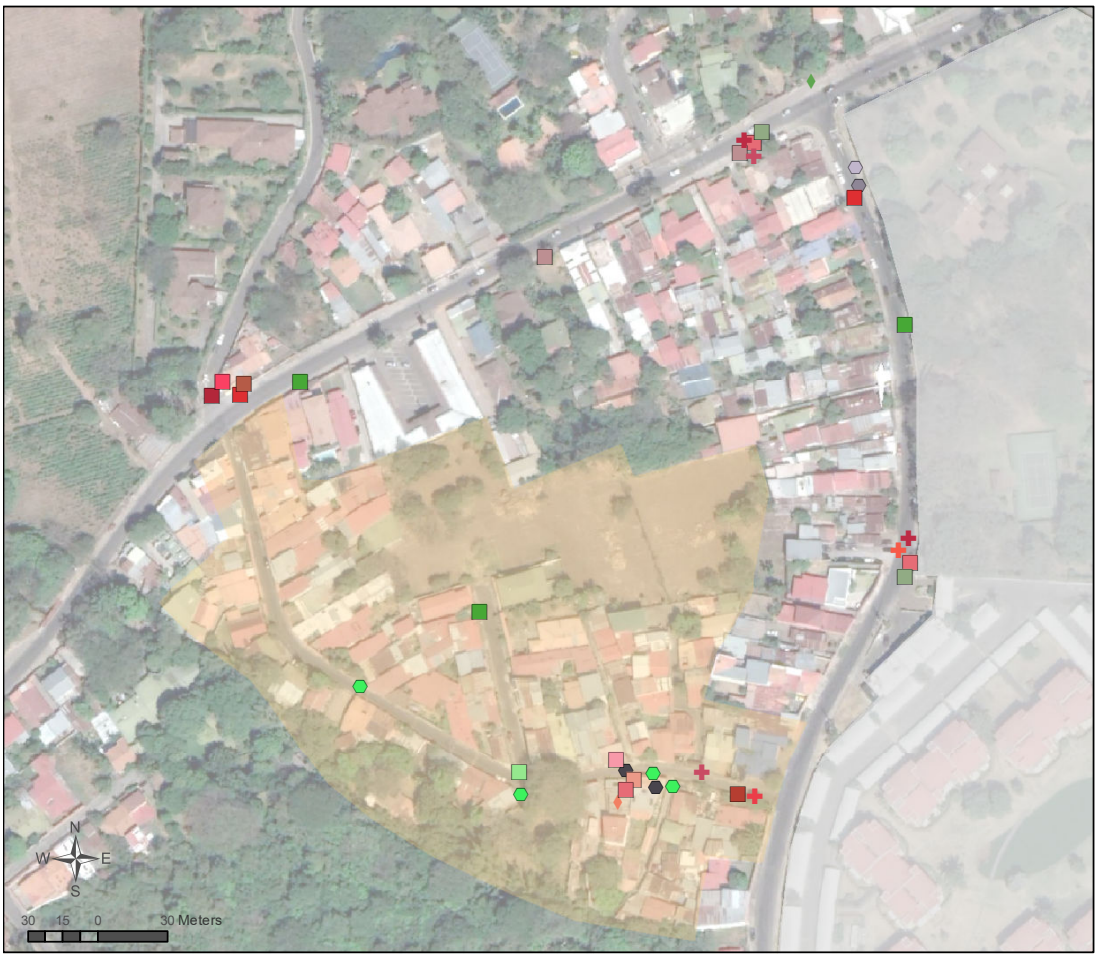
Neighbourhood
Gated community

Community relationships
(attitude, sex, comment)
+, M, Positive attitude towards communal activities
+, M, Safe area people have lived here for many years
-, M, Issues with logistics about public spaces management
-, M, Low socialisation among neighbours
-, M, The community board is overwhelmed
0, M, More than 20 years of living in this neighbourhood
0, M, No relationship with people from gated community

Drugs
(attitude, sex, comment)
-, M, There are conflicts among drug dealers
-, M, This place has alcohol consumption
-, M, This place has drug consumption
-, M, This place has drug sale
0, M, Drug consumers are from outside

Built Environment
(attitude, sex, comment)
+, M, Control of public spaces as safety measure -Police
+, M, Positive attitude towards physical features
+, M, This area is safe because people know each other
+, M, This public space was regenerated
-, M, Dangerous Bus Stop
-, M, Dangerous walking distance to Bus Stop
-, M, Disturbing sounds/noises
-, M, General infrastructure issues
-, M, Heavy traffic
-, M, It is expensive to live in a gated community
-, M, Lack of pavement or pavement in poor conditions
-, M, Negative attitude towards houses for rent
-, M, Parked cars are obstacles for traffic
-, M, The building process of gated communities was disturbing

Case 2. Talk's track maps by comments: Emotions and experiences



Emotions and experiences

Neighbourhood
Gated community

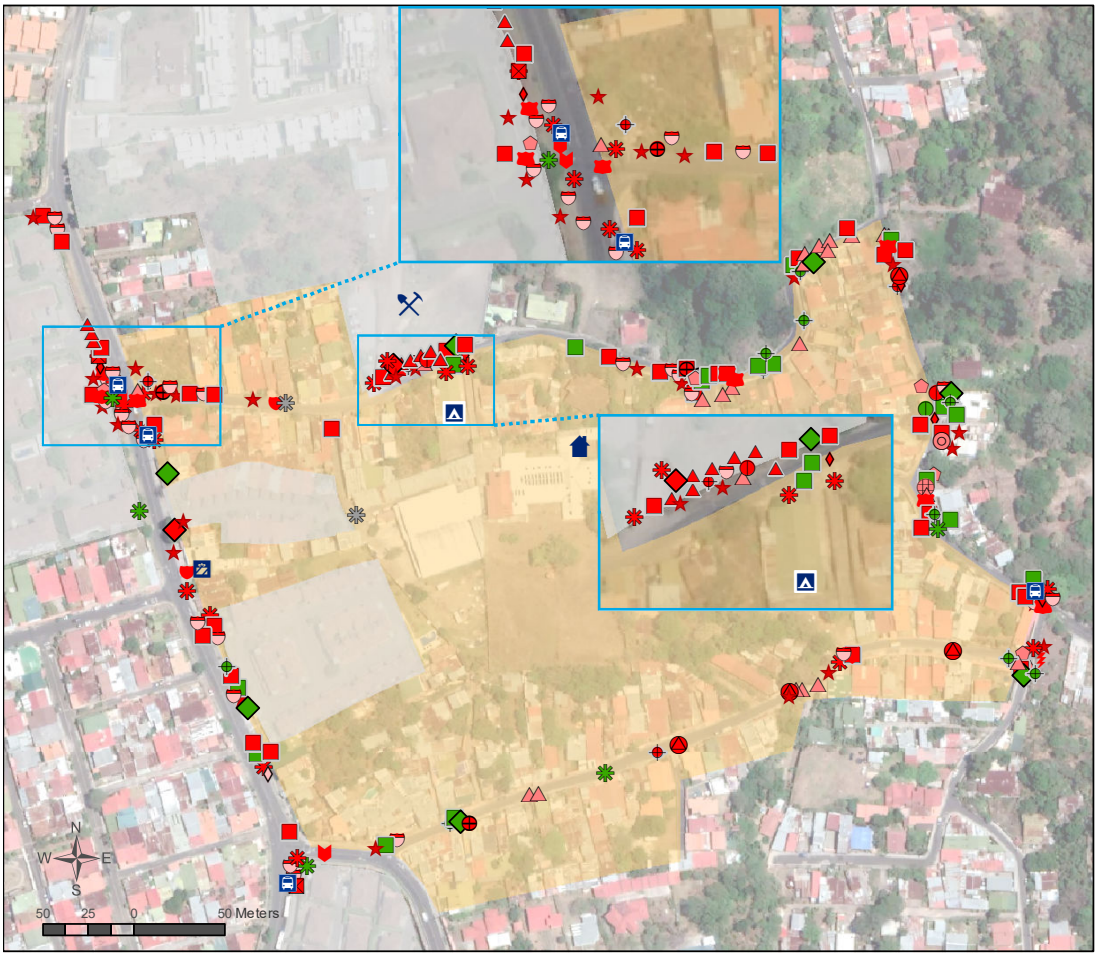
Victimisation
(attitude, sex, comment)
-, M, Attack
-, M, Mugging
-, M, Suspicious situations
-, M, Witness of an episode of victimisation

People
(attitude, sex, comment)
+, M, Good built environment can change drug user/dealer attitude
-, M, Someone was arrested in this place

Precautionary measures
(attitude, sex, comment)
+, M, Control of public spaces as safety measure -CCTV
0, M, Do not walk alone as safety measure
0, M, To fence or lock a space
0, M, To hide belongings

Feelings
(attitude, sex, comment)
+, M, This place is safe during day
+, M, This place is safe during night
+, M, This place is safe most of the time
-, M, Concern about someone else safety
-, M, Fear of burglary
-, M, Fear of immigrants
-, M, Fear of my relative/friend might be sexually harassed
-, M, Fear of reprisals
-, M, Fear of strangers
-, M, This place is unsafe during night
-, M, This place is unsafe most of the time
-, M, This place is very unsafe during night

Case 3. Talk's track map by subcategory



Case 3. Localised attitudes by sex and topic

References

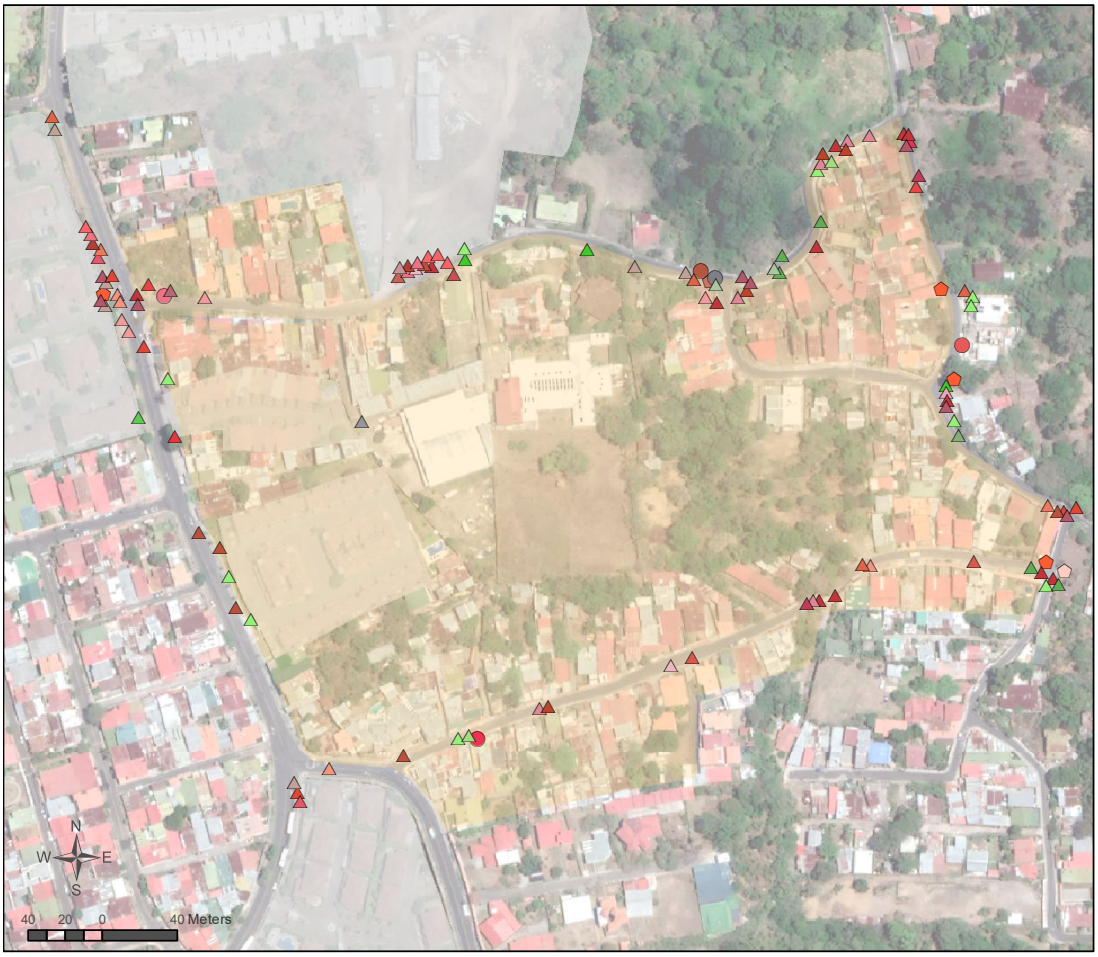
- Retail
- Gated community under construction
- Community hall
- Care home
- Bus stop
- Neighbourhood
- Gated community

Participant's comments by subcategories

Attitude (- / +), Sex (F/M) , Subgroup

- +, M, Incomes
- +, M, Perceived safety
- +, M, Physical features
- +, M, Public spaces
- +, M, Surveillance
- -, M, Community ties
- -, M, Drug consumption
- -, M, Drug sale
- -, M, Fear
- -, M, Gated Communities
- -, M, Incomes
- -, M, Infrastructure
- -, M, Land use
- -, M, Neighbourhood's atmosphere
- -, M, Neighbours
- -, M, Noises
- -, M, Organisation
- -, M, People linked to crime
- -, M, Perceived safety
- -, M, Physical features
- -, M, Private space
- -, M, Public spaces
- -, M, Signs of fear
- -, M, Surveillance
- -, M, Traffic
- -, M, Walking routes
- -, M, alcohol consumption
- 0, M, Community ties
- 0, M, Public spaces

Case 3. Talk's track maps by comments: Environmental features and community.



Environmental features and community

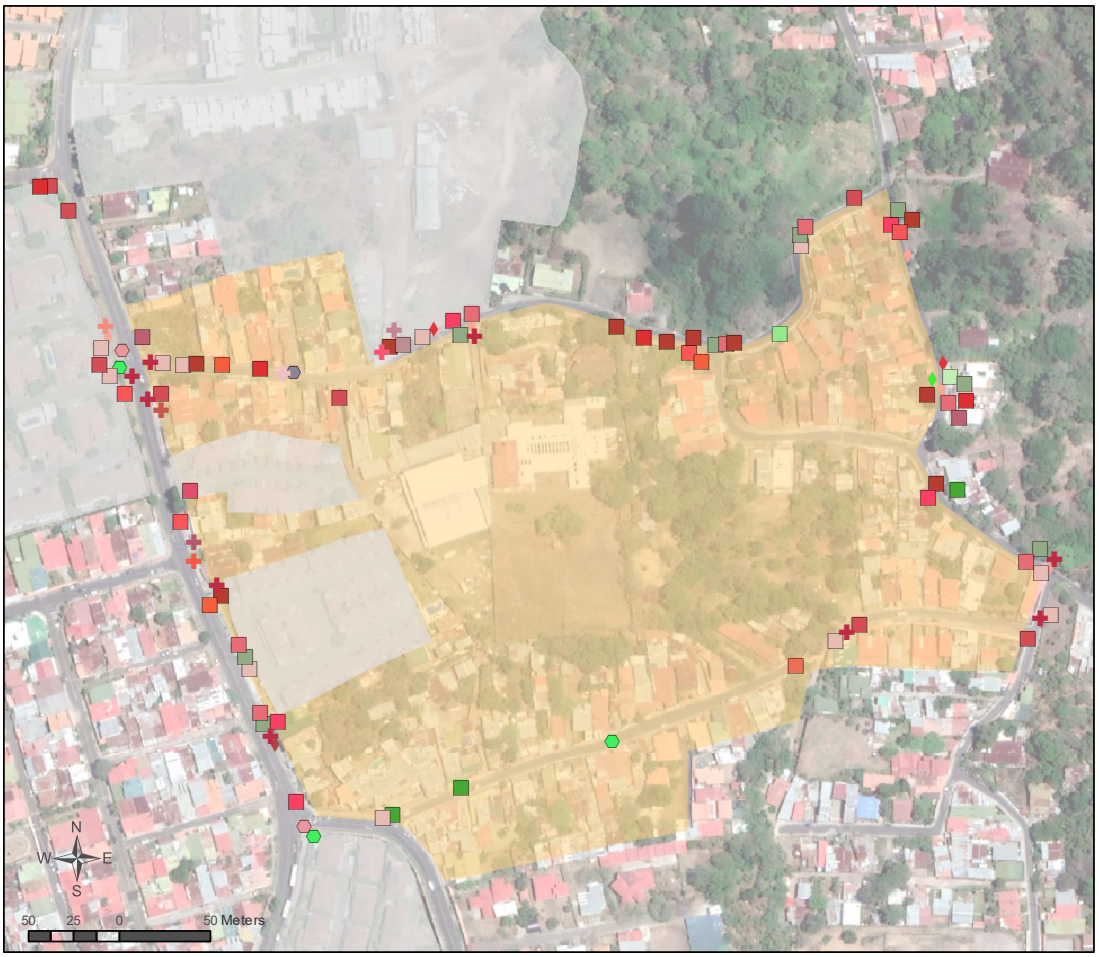
Neighbourhood
Gated community

Community relationships
(attitude, sex, comment)
-, M, Low socialisation among neighbours
-, M, Negative attitude towards neighbours with short time living there
-, M, Neighbours do not contribute or pay
-, M, The community board is overwhelmed
0, M, Neighbourhood divided by sectors

Drugs
(attitude, sex, comment)
-, M, This place has alcohol consumption
-, M, This place has drug consumption
-, M, This place has drug sale

Built Environment
(attitude, sex, comment)
+, M, Control of public spaces as safety measure -Police
+, M, Permeability in neighbourhood is positive for safety
+, M, Positive attitude towards physical features
+, M, The place is safer now
+, M, This area is safe because people know each other
+, M, This public space was regenerated
+, M, Vehicles in movement help safety
-, M, Concerns about supply of public spaces
-, M, Dangerous Bus Stop
-, M, Dangerous walking distance to Bus Stop
-, M, Dangerous walking route
-, M, Dark place
-, M, Disturbing sounds/noises
-, M, Gated Communities do not contribute to our neighbourhood
-, M, Gated communities make the place more insecure
-, M, General infrastructure issues
-, M, Heavy traffic
-, M, Isolated place
-, M, Issues with geometry of roads
-, M, Issues with land uses
-, M, Lack of pavement or pavement in poor conditions
-, M, Negative attitude towards neighbourhood's atmosphere
-, M, Negative attitude towards private security
-, M, Parked vehicles are scary
-, M, Place in poor physical conditions
-, M, The building process of gated communities was disturbing
-, M, The place is less safe now
-, M, This place has many routes for escaping
-, M, This place is a former coffeee plantation-livestock
-, M, Vacant lots are scary
-, M, Vehicles in movement make the place unsafe
-, M, Walls of gated communities are disturbing
-, M, Walls of gated communities are not permeable
0, M, Use of alternative spaces for socialisation - teenagers

Case 3. Talk's track maps by comments: Emotions and experiences



Emotions and experiences

Neighbourhood
Gated community

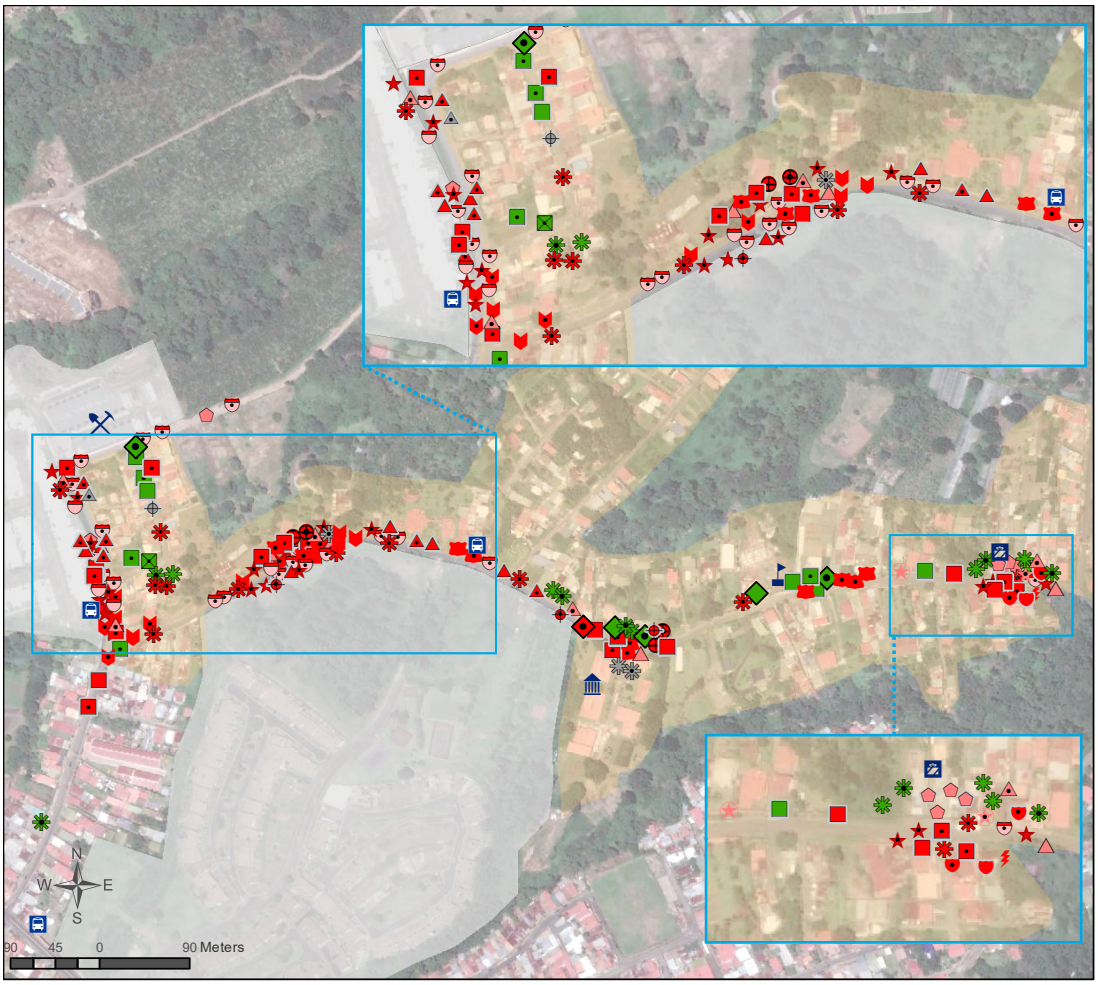
Victimisation
(attitude, sex, comment)
-, M, Attack
-, M, Attempted of burglary
-, M, Burglary
-, M, Fatal traffic accident
-, M, Mugging
-, M, Murder
-, M, Sexual attack or harassment
-, M, Sexual harassment in buildings under construction

People
(attitude, sex, comment)
+, M, Positive attitude towards low/middle-incomes people
-, M, Negative attitude towards upper-income people
-, M, There are people with guns in this place
-, M, To live locked makes the place unsafe

Precautionary measures
(attitude, sex, comment)
+, M, Control of public spaces as safety measure -CCTV
-, M, Negative attitude towards control of public spaces -CCTV
0, M, Do not walk alone as safety measure

Feelings
(attitude, sex, comment)
+, M, This place is safe during day
+, M, This place is safe during night
+, M, This place is safe most of the time
+, M, This place is very safe during day
-, M, Concern about someone else safety
-, M, Fear of being attacked
-, M, Fear of being killed
-, M, Fear of being mugged
-, M, Fear of my relative/friend might be raped
-, M, Fear of someone might be hidden -weed
-, M, Fear of strangers
-, M, This place is unsafe during day
-, M, This place is unsafe during night
-, M, This place is unsafe most of the time
-, M, This place is very unsafe all the time
-, M, This place is very unsafe during night

Case 4. Talk's track map by subcategory



Case 4. Localised attitudes by sex and topic

References

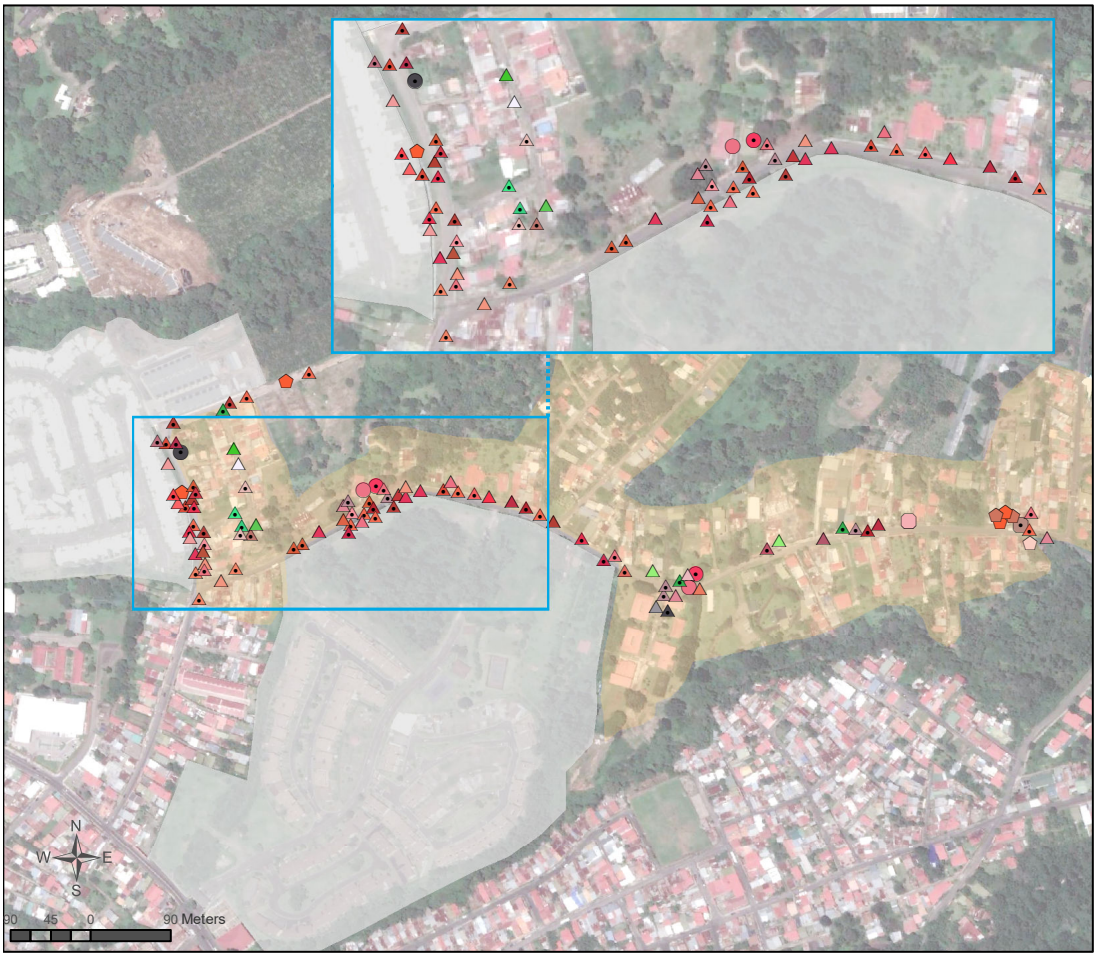
- Retail
- School
- Charity
- Gated community under construction
- Bus stop
- Neighbourhood
- Gated community

Participant's comments by subcategories

Attitude (- / +), Sex (F/M) , Subgroup

- +, F, Neighbourhood's atmosphere
- +, F, Perceived safety
- +, F, Public spaces
- +, F, Surveillance
- +, M, Perceived safety
- +, M, Public spaces
- +, M, Surveillance
- -, F, Community ties
- -, F, Fear
- -, F, Gated Communities
- -, F, Infrastructure
- -, F, Perceived safety
- -, F, Physical features
- -, F, Private space
- -, F, Public and private spaces
- -, F, Public spaces
- -, F, Signs of fear
- -, F, Smells reported by participants
- -, F, Surveillance
- -, F, Traffic
- -, F, Walking routes
- -, M, Community ties
- -, M, Drug consumption
- -, M, Drug sale
- -, M, Fear
- -, M, Gated Communities
- -, M, Infrastructure
- -, M, Perceived safety
- -, M, Physical features
- -, M, Public and private spaces
- -, M, Public spaces
- -, M, Signs of fear
- -, M, Smells reported by participants
- -, M, Traffic
- -, M, Walking routes
- -, M, alcohol consumption
- 0, F, Gated Communities
- 0, F, Public spaces
- 0, M, Physical features
- 0, M, Public spaces

Case 4. Talk's track maps by comments: Environmental features and community.



Environmental features and community

Neighbourhood
Gated community

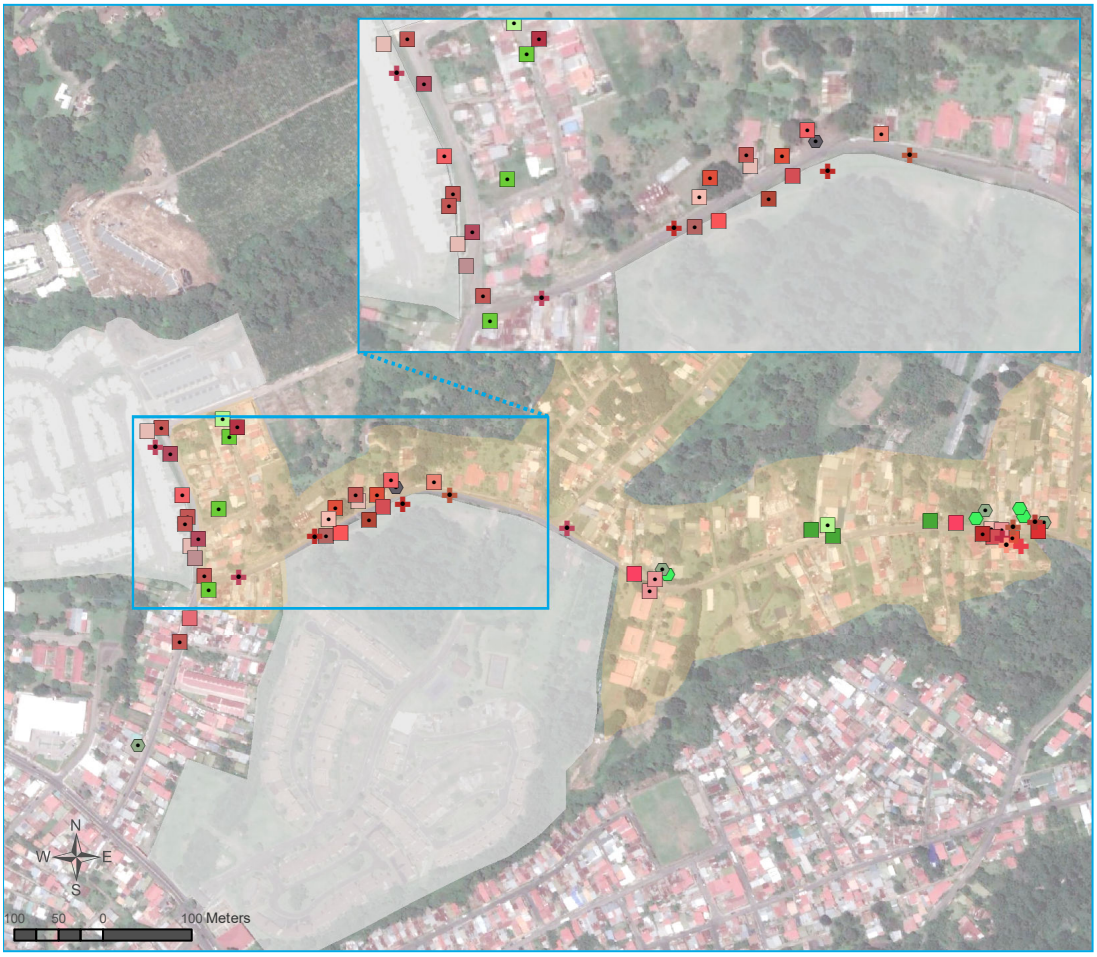
Community relationships
(attitude, sex, comment)
-, F, Neighbours do not contribute or pay
-, M, Neighbours do not contribute or pay
0, F, No relationship with people from gated community

Drugs
(attitude, sex, comment)
-, M, This place has alcohol consumption
-, M, This place has drug consumption
-, M, This place has drug sale

Smells
(attitude, sex, comment)
-, F, Drug smells
-, M, Drug smells

Built Environment
(attitude, sex, comment)
+, F, Permeability in neighbourhood is positive for safety
+, F, Positive attitude towards neighbourhood's atmosphere
+, F, This public space was regenerated
+, M, Permeability in neighbourhood is positive for safety
+, M, This area is safe because people know each other
+, M, This public space was regenerated
-, F, Concerns about supply of public spaces
-, F, Concerns about supply of public spaces for teenagers
-, F, Dangerous walking distance to Bus Stop
-, F, Dangerous walking route
-, F, Dark place
-, F, Gated Communities do not contribute to our neighbourhood
-, F, Gated communities did not change our safety levels
-, F, Gated communities make the place more insecure
-, F, General infrastructure issues
-, F, Heavy traffic
-, F, Isolated place
-, F, Lack of pavement or pavement in poor conditions
-, F, Negative attitude towards private security
-, F, Parked cars are obstacles for traffic
-, F, Parked vehicles are scary
-, F, Place in poor physical conditions
-, F, Public space in poor condition
-, F, There is crime inside gated communities
-, F, Vehicles in movement make the place unsafe
-, F, Walls of gated communities are disturbing
-, M, Dangerous walking distance to Bus Stop
-, M, Dangerous walking route
-, M, Dark place
-, M, Gated Communities do not contribute to our neighbourhood
-, M, Gated communities brings issues such as connection/landscape /land value
-, M, Gated communities make the place more insecure
-, M, General infrastructure issues
-, M, Heavy traffic
-, M, Lack of pavement or pavement in poor conditions
-, M, Parked cars are obstacles for traffic
-, M, Parked vehicles are scary
-, M, The place is less safe now
-, M, This place has many routes for escaping
-, M, Vehicles in movement make the place unsafe
-, M, Walls of gated communities are disturbing
0, F, Use of alternative spaces for socialisation - teenagers
0, M, Housing quality is contrasting
0, M, Use of alternative spaces for socialisation - teenagers

Case 4. Talk's track maps by comments: Emotions and experiences.



Emotions and experiences

Neighbourhood
Gated community

Victimisation (attitude, sex, comment)

-, F, Burglary
-, F, Mugging
-, F, Sexual attack or harassment
-, F, Suspicious situations
-, F, To be followed by someone
-, M, Mugging
-, M, Suspicious situations

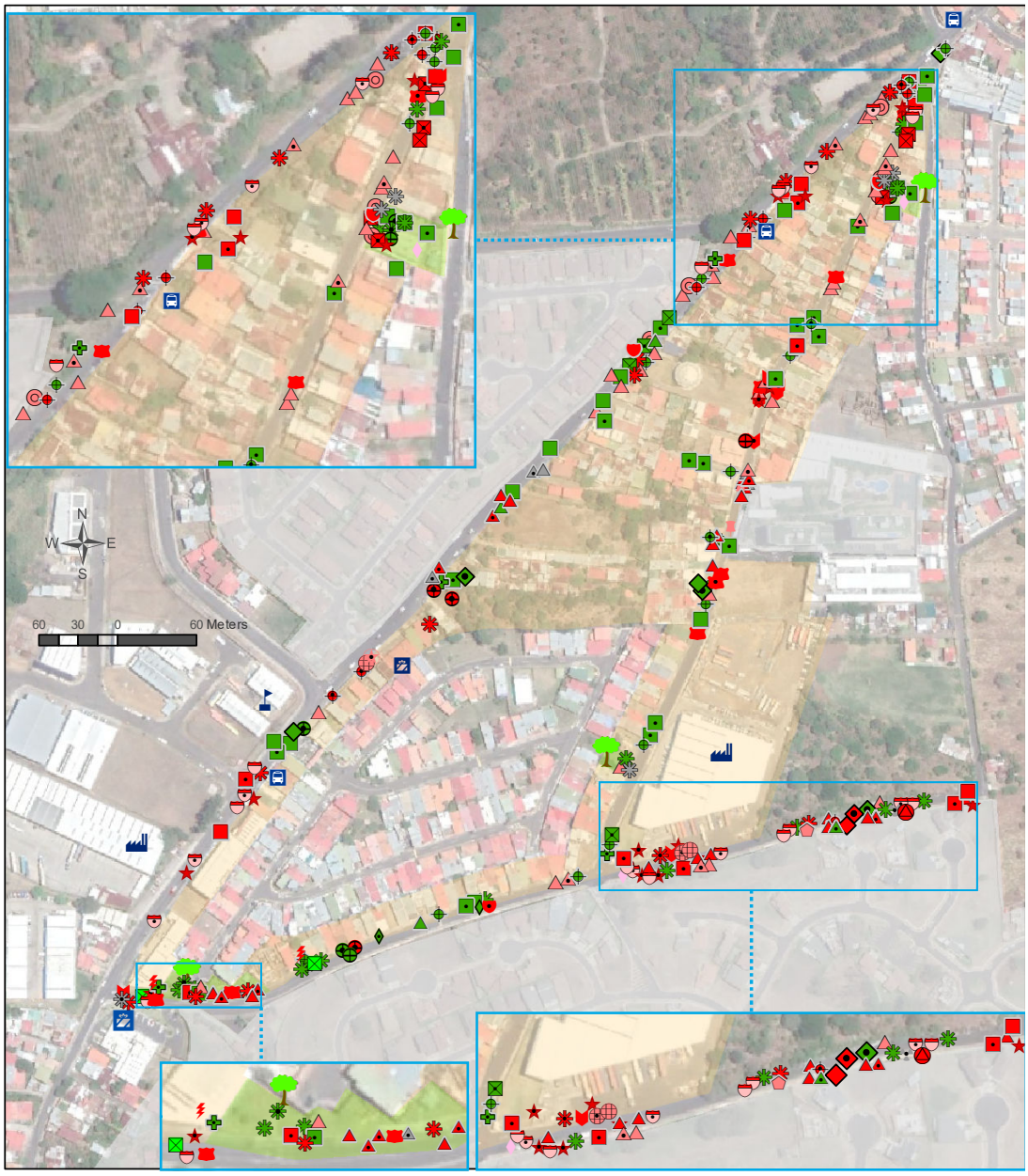
Precautionary measures (attitude, sex, comment)

+, F, Control of public spaces as safety measure -CCTV
+, M, Control of public spaces as safety measure -CCTV
0, F, Do not walk alone as safety measure

Feelings (attitude, sex, comment)

+, F, This place is safe during day
+, F, This place is safe most of the time
+, M, This place is safe most of the time
-, F, Concern about someone else safety
-, F, Fear of being attacked
-, F, Fear of being mugged
-, F, Fear of being sexually harassed
-, F, Fear of someone might abduct my child
-, F, Fear of someone might be hidden -weed
-, F, Fear of strangers
-, F, This place is unsafe during day
-, F, This place is unsafe during night
-, F, This place is unsafe most of the time
-, F, This place is very unsafe all the time
-, M, Concern about someone else safety
-, M, Fear of being mugged
-, M, Fear of someone might be hidden -weed
-, M, Fear of strangers
-, M, This place is unsafe during night
-, M, This place is unsafe most of the time
-, M, This place is very unsafe all the time

Case 5. Talk's track map by subcategory



Case 5. Localised attitudes by sex and topic

References

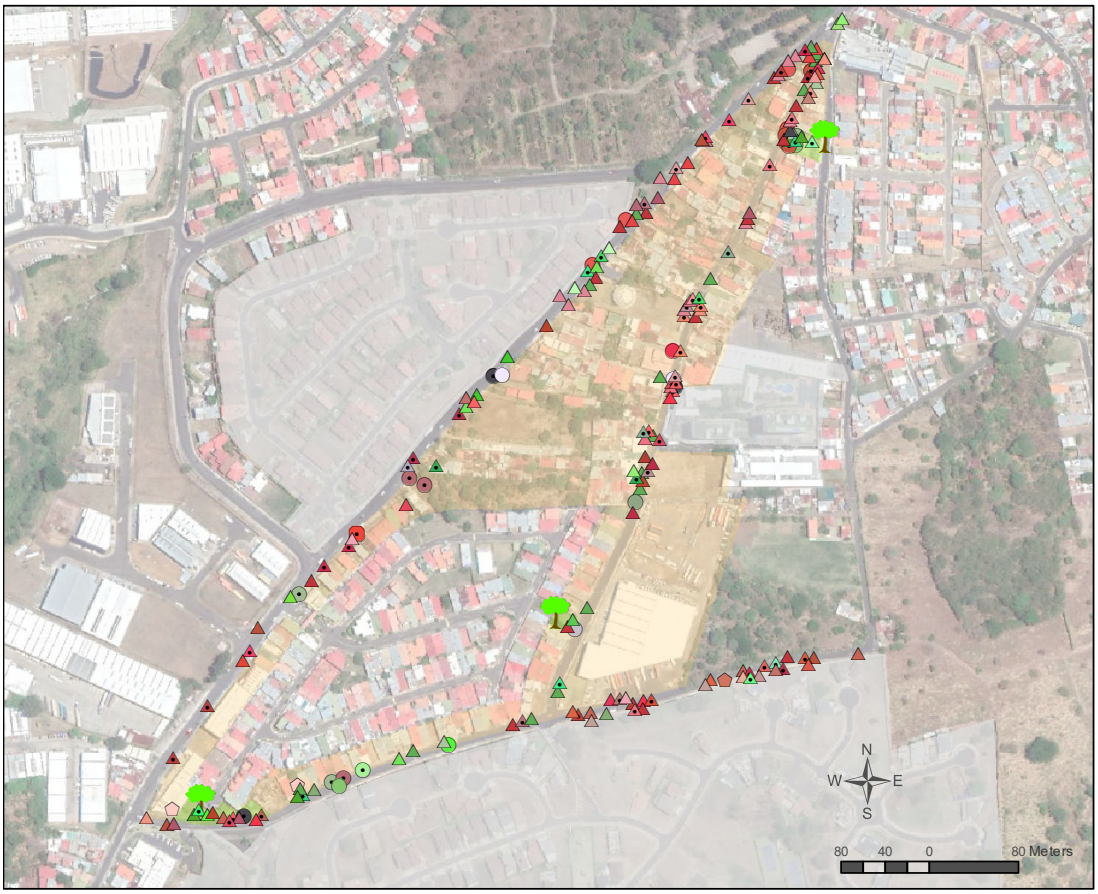
- Shopping centre
- Retail
- Industrial land use
- School
- Bus stop
- Neighbourhood
- Community park
- Gated community

Participant's comments by subcategories

Attitude (- / +), Sex (F/M) , Subgroup

- +, F, Community ties
- +, F, Gated Communities
- +, F, General victimisation
- +, F, Neighbourhood's atmosphere
- +, F, Neighbours
- +, F, Perceived safety
- +, F, Physical features
- +, F, Public spaces
- +, F, Surveillance
- +, M, Community ties
- +, M, Gated Communities
- +, M, Neighbourhood's atmosphere
- +, M, Neighbourhood's perception
- +, M, Neighbours
- +, M, Perceived safety
- +, M, Physical features
- +, M, Public spaces
- +, M, Surveillance
- -, F, Community ties
- -, F, Fear
- -, F, Gated Communities
- -, F, Infrastructure
- -, F, Neighbourhood's atmosphere
- -, F, Noises
- -, F, Perceived safety
- -, F, Physical features
- -, F, Private space
- -, F, Public spaces
- -, F, Signs of fear
- -, F, Smells reported by participants
- -, F, Surveillance
- -, F, Traffic
- -, F, Walking routes
- -, M, Community ties
- -, M, Drug sale
- -, M, Fear
- -, M, Gated Communities
- -, M, Infrastructure
- -, M, Land use
- -, M, National institutions/Local government
- -, M, Neighbourhood's atmosphere
- -, M, Noises
- -, M, Organisation
- -, M, Perceived safety
- -, M, Physical features
- -, M, Public and private spaces
- -, M, Public spaces
- -, M, Signs of fear
- -, M, Surveillance
- -, M, Traffic
- -, M, Uncomfortable behaviours
- -, M, Walking routes
- -, M, alcohol consumption
- 0, F, Gated Communities
- 0, F, Public spaces
- 0, F, Weapons
- 0, M, Gated Communities
- 0, M, Public spaces

Case 5. Talk's track maps by comments: Environmental features and community.



Environmental features and community

Neighbourhood
Community park
Gated community

Community relationships (attitude, sex, comment)

+, F, Positive attitude towards communal activities
+, F, Positive attitude towards neighbours
+, M, Positive attitude towards communal activities
+, M, Positive attitude towards neighbours
+, M, Safe area people have lived here for many years
-, F, Issues among neighbours
-, F, No relationship with contiguous neighbourhood
-, M, Low socialisation among neighbours
-, M, The community board is overwhelmed
0, F, No relationship with people from gated community
0, M, Issues with logistics about public spaces management
0, M, No relationship with people from gated community

Drugs (attitude, sex, comment)

-, M, This place has alcohol consumption
-, M, This place has drug sale

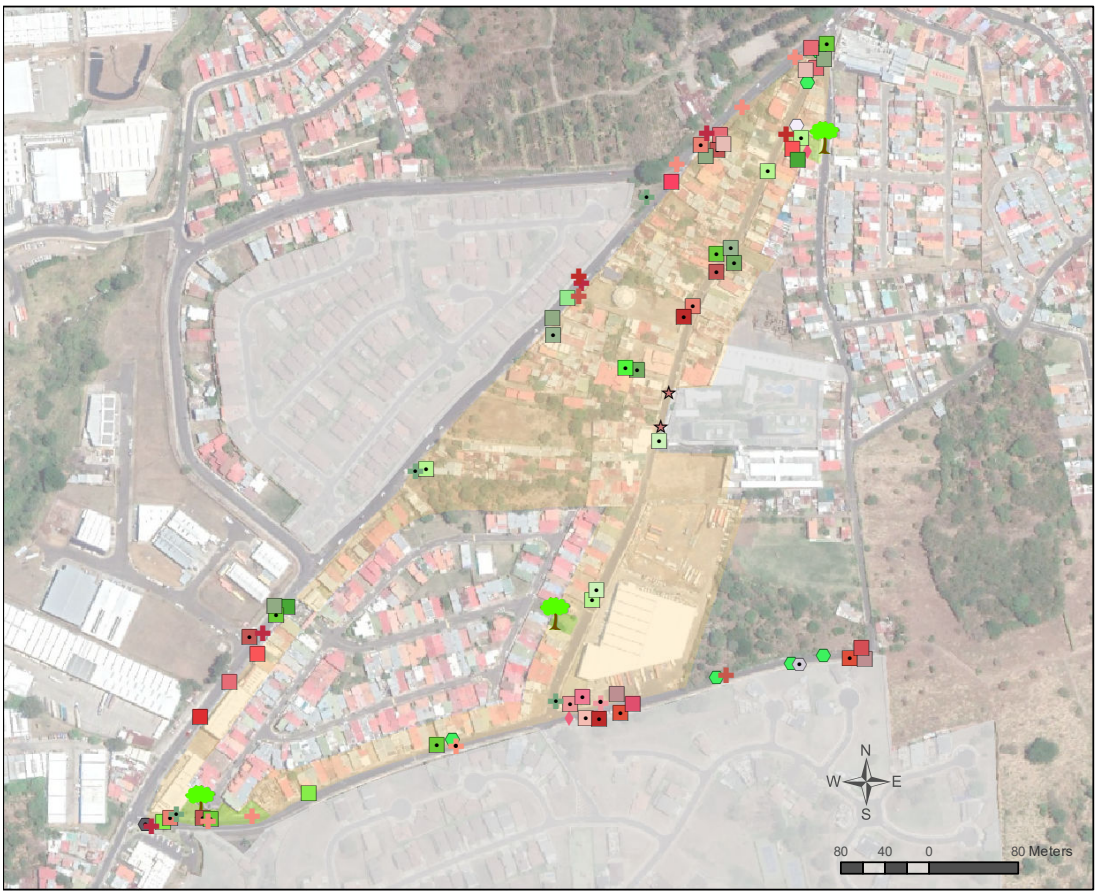
Smells (attitude, sex, comment)

-, F, Unpleasant smells

Built Environment (attitude, sex, comment)

+, F, Good supply and diversity of uses in current parks
+, F, Permeability in neighbourhood is positive for safety
+, F, Positive attitude towards contiguous neighbourhood
+, F, Positive attitude towards neighbourhood's atmosphere
+, F, Positive attitude towards physical features
+, F, Positive attitude towards private security
+, F, This area is safe because people know each other
+, F, This public space was regenerated
+, F, Walls and Safety resources of Gated Communities are positive
+, M, Control of public spaces as safety measure -Police
+, M, Good supply and diversity of uses in current parks
+, M, Permeability in neighbourhood is positive for safety
+, M, Positive attitude towards closing/fencing public spaces as safety measure
+, M, Positive attitude towards neighbourhood's atmosphere
+, M, Positive attitude towards physical features
+, M, Positive attitude towards private security
+, M, The place is safer now
+, M, This area is safe because people know each other
+, M, This public space was regenerated
+, M, Vehicles in movement help safety
+, M, Walls and Safety resources of Gated Communities are positive
-, F, Dangerous Bus Stop
-, F, Dangerous walking distance to Bus Stop
-, F, Dangerous walking route
-, F, Dark place
-, F, Disturbing sounds/noises
-, F, Gated Communities do not contribute to our neighbourhood
-, F, Gated communities brings issues such as connection/landscape /land value
-, F, Gated communities did not change our safety levels
-, F, General infrastructure issues
-, F, Heavy traffic
-, F, Issues with geometry of roads
-, F, Lack of pavement or pavement in poor conditions
-, F, Negative attitude towards houses for rent
-, F, Negative attitude towards private security
-, F, Parked cars are obstacles for traffic
-, F, Parked vehicles are scary
-, F, Place in poor physical conditions
-, F, The building process of gated communities was disturbing
-, F, Vehicles in movement make the place unsafe
-, M, Dangerous Bus Stop
-, M, Dangerous walking distance to Bus Stop
-, M, Dangerous walking route
-, M, Dark place
-, M, Disturbing sounds/noises
-, M, Gated Communities do not contribute to our neighbourhood
-, M, Gated communities brings issues such as connection/landscape /land value
-, M, Gated communities did not change our safety levels
-, M, Gated communities make the place more insecure
-, M, General infrastructure issues
-, M, Heavy traffic
-, M, Isolated place
-, M, Issues with geometry of roads
-, M, It is expensive to live in a gated community
-, M, Lack of pavement or pavement in poor conditions
-, M, Negative attitude towards houses for rent
-, M, Negative attitude towards private security
-, M, Parked cars are obstacles for traffic
-, M, Parked vehicles are scary
-, M, Place in poor physical conditions
-, M, Public space in poor condition
-, M, The building process of gated communities was disturbing
-, M, This place is a former coffeee plantation-livestock
-, M, Vacant lots are scary
-, M, Vehicles in movement make the place unsafe
-, M, Walls of gated communities are disturbing
0, F, I have met someone from the Gated community
0, M, Neighbours' requests about more opening hours in community parks

Case 5. Talk's track maps by comments: Emotions and experiences



Emotions and experiences

Neighbourhood
Community park
Gated community

Institutions
(attitude, sex, comment)
-, M, Law allows to gated communities do not supply public areas

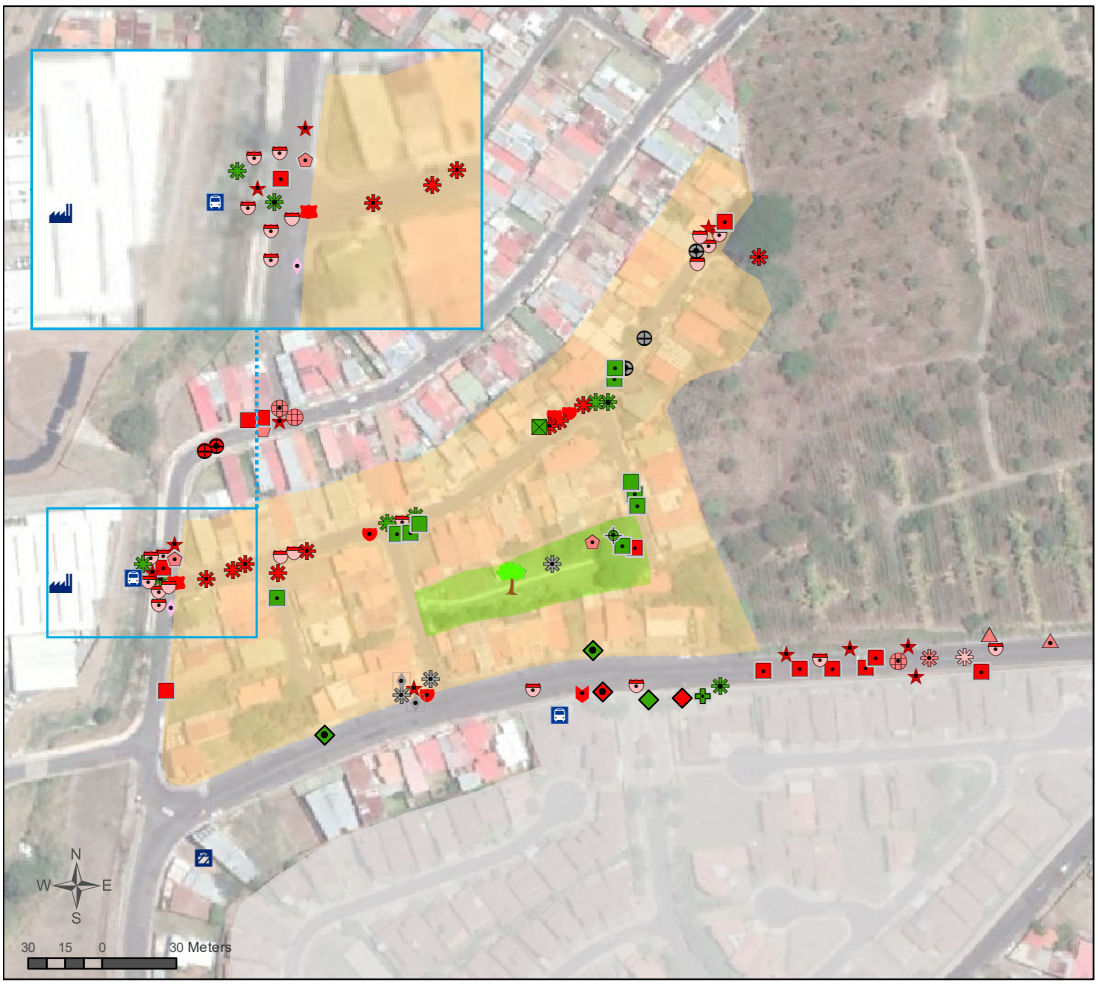
People
(attitude, sex, comment)
-, M, Public display of affection (P.D.A) is disturbing

Victimisation
(attitude, sex, comment)
+, F, There is no previous victimisation in this place
-, F, Burglary
-, F, Shooting
-, M, Fatal traffic accident
-, M, Mugging
-, M, Murder
-, M, Stolen items

Precautionary measures
(attitude, sex, comment)
+, M, Control of public spaces as safety measure -CCTV
0, F, Do not walk alone as safety measure
0, F, To have a stick or gas
0, M, To fence and lock parks

Feelings
(attitude, sex, comment)
+, F, This place is safe during day
+, F, This place is safe during night
+, F, This place is safe most of the time
+, F, This place is very safe during day
+, F, This place is very safe during night
+, F, This place is very safe most of the time
+, M, Proud about our neighbourhood image
+, M, This place is safe during day
+, M, This place is safe during night
+, M, This place is safe most of the time
-, F, Concern about someone else safety
-, F, Fear of being mugged
-, F, Fear of immigrants
-, F, Fear of strangers
-, F, This place is unsafe during night
-, F, This place is unsafe most of the time
-, F, This place is very unsafe all the time
-, M, Concern about someone else safety
-, M, Fear of being attacked
-, M, Fear of being mugged
-, M, Fear of someone might be hidden -weed
-, M, Fear of strangers
-, M, This place is unsafe during night
-, M, This place is unsafe most of the time
-, M, This place is very unsafe all the time

Case 6. Talk's track map by subcategory



Case 6. Localised attitudes by sex and topic

References

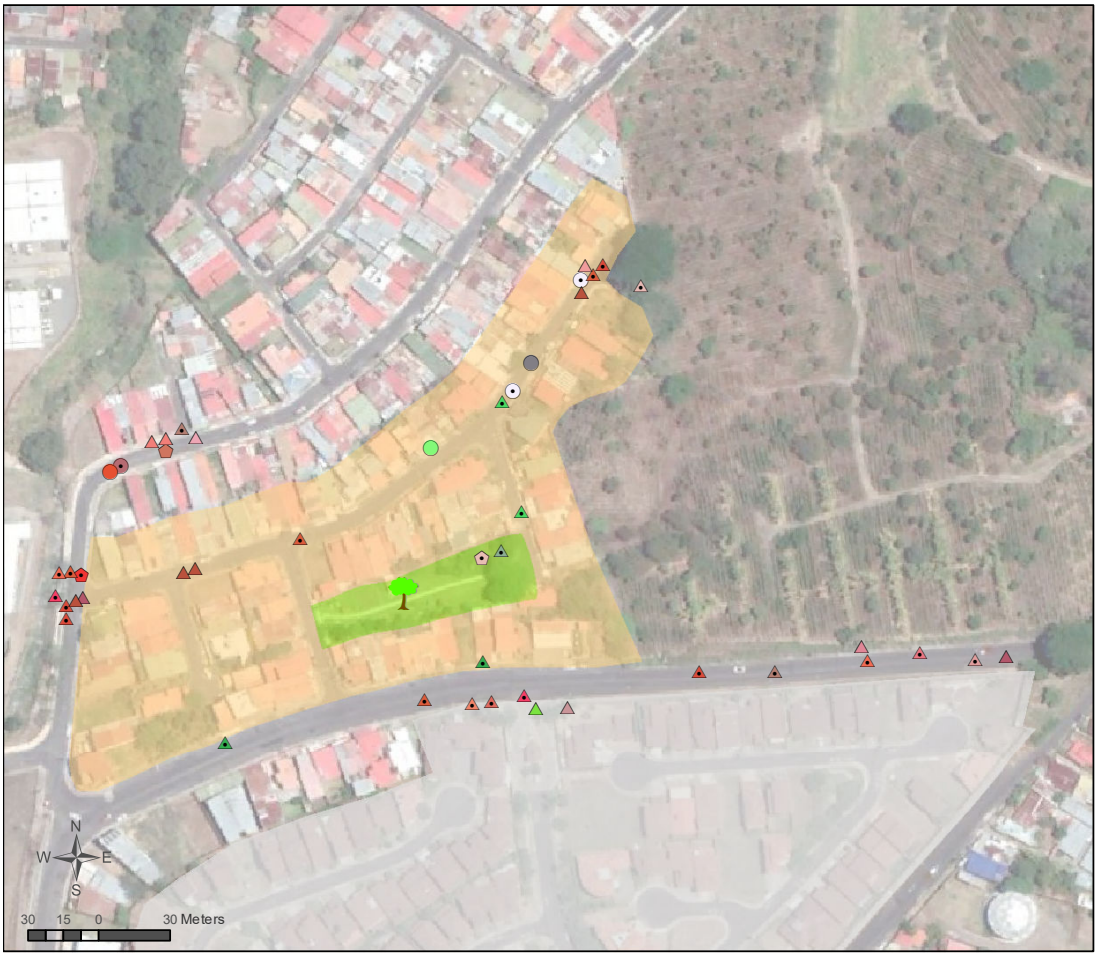
- Retail
- Industrial land use
- Bus stop
- Neighbourhood
- Community Park
- Gated community

Participant's comments by subcategories

Attitude (- / +), Sex (F/M) , Subgroup

- +, F, General victimisation
- +, F, Perceived safety
- +, F, Physical features
- +, F, Public spaces
- +, F, Surveillance
- +, M, Neighbourhood's atmosphere
- +, M, Perceived safety
- +, M, Public spaces
- +, M, Surveillance
- -, F, Community ties
- -, F, Drug consumption
- -, F, Drug sale
- -, F, Fear
- -, F, Infrastructure
- -, F, Noises
- -, F, Perceived safety
- -, F, Private space
- -, F, Public spaces
- -, F, Public spaces -cars are threats
- -, F, Signs of fear
- -, F, Surveillance
- -, F, Uncomfortable behaviours
- -, F, Walking routes
- -, M, Community ties
- -, M, Drug sale
- -, M, Fear
- -, M, Infrastructure
- -, M, Noises
- -, M, Perceived safety
- -, M, Private space
- -, M, Public spaces
- -, M, Public spaces -cars are threats
- -, M, Signs of fear
- -, M, Surveillance
- -, M, Traffic
- 0, F, Community ties
- 0, F, Public spaces
- 0, F, Teenagers
- 0, M, Community ties

Case 6. Talk's track maps by comments: Environmental features and community.



Environmental features and community

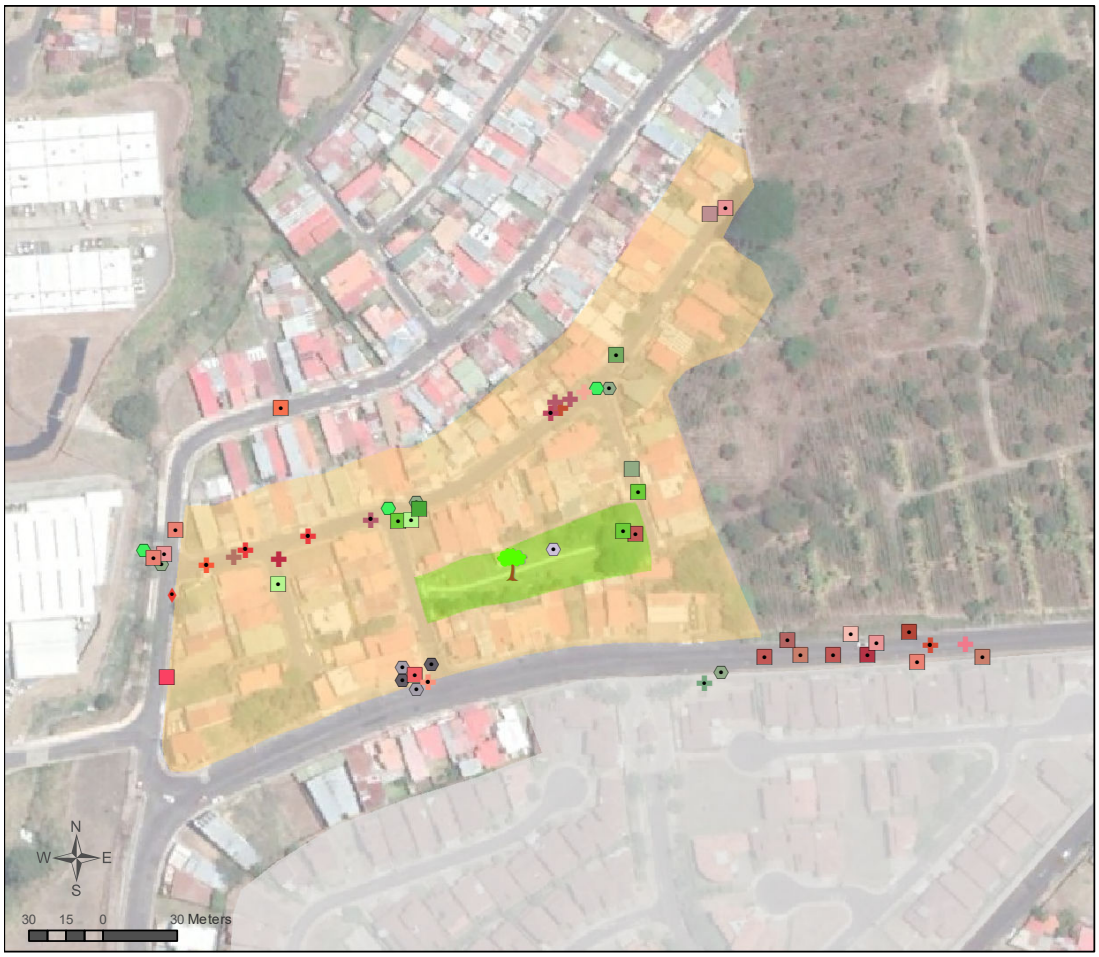
Neighbourhood
Community Park
Gated community

Community relationships
(attitude, sex, comment)
+, M, To live locked is safer
-, F, No relationship with contiguous neighbourhood
-, M, No relationship with contiguous neighbourhood
0, F, Neighbourhood divided by sectors
0, M, Neighbourhood divided by sectors

Drugs
(attitude, sex, comment)
-, F, This place has drug consumption
-, F, This place has drug sale
-, M, This place has drug sale

Built Environment
(attitude, sex, comment)
+, F, Permeability in neighbourhood is positive for safety
+, F, Positive attitude towards physical features
+, F, This area is safe because people know each other
+, M, Positive attitude towards private security
-, F, Concerns about supply of public spaces
-, F, Dangerous Bus Stop
-, F, Dangerous walking distance to Bus Stop
-, F, Disturbing sounds/noises
-, F, Isolated place
-, F, Issues with geometry of roads
-, F, Lack of pavement or pavement in poor conditions
-, F, Negative attitude towards private security
-, F, Parked vehicles are scary
-, F, Vehicles in movement make the place unsafe
-, M, Disturbing sounds/noises
-, M, Heavy traffic
-, M, Lack of pavement or pavement in poor conditions
-, M, Negative attitude towards contiguous neighbourhood
-, M, Negative attitude towards private security
-, M, Parked vehicles are scary
-, M, Vehicles in movement make the place unsafe

Case 6. Talk's track maps by comments: Emotions and experiences



Emotions and experiences
- Neighbourhood
- Community Park
- Gated community

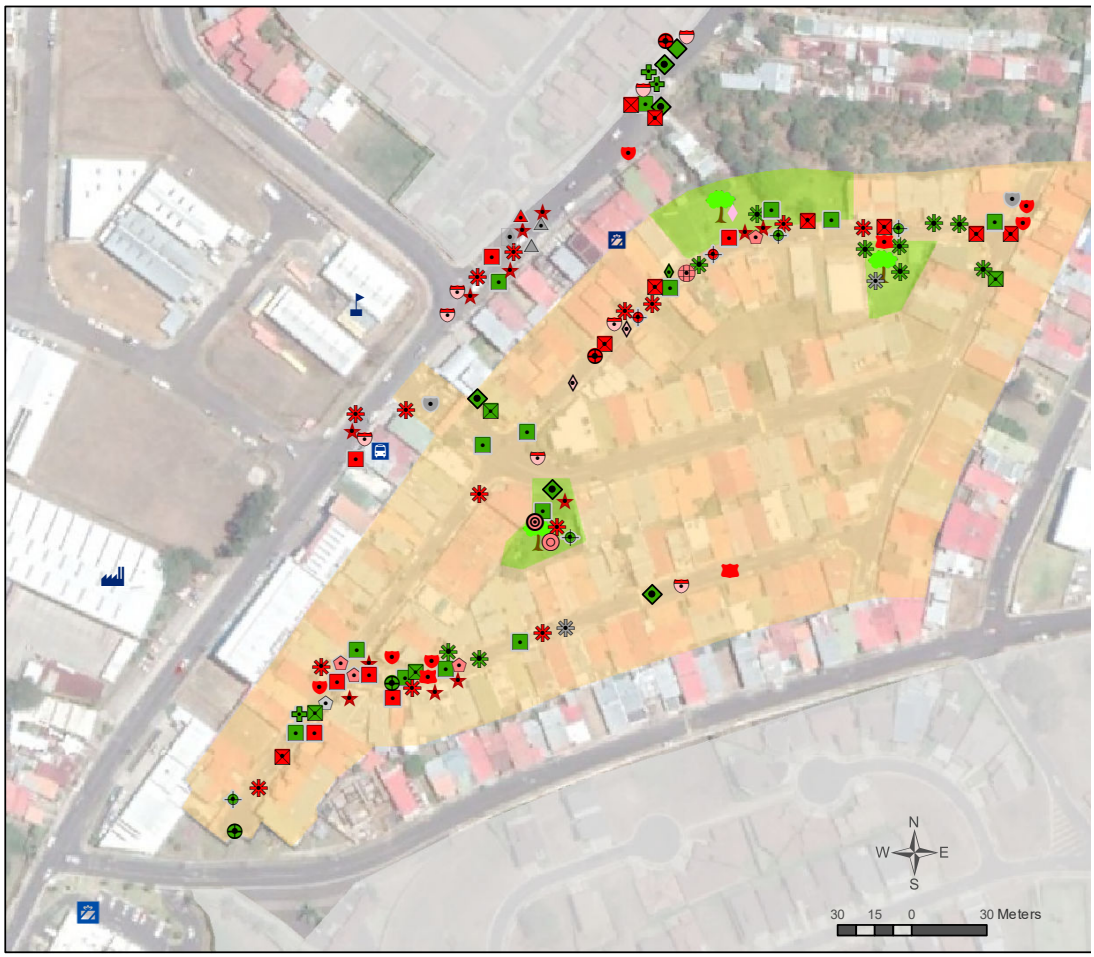
People
(attitude, sex, comment)
- -, F, Skateboarders are disturbing

Precautionary measures
(attitude, sex, comment)
- +, F, Control of public spaces as safety measure -CCTV
- +, M, Control of public spaces as safety measure -CCTV
- 0, F, Do not walk alone as safety measure
- 0, F, To ban teenagers going out or visiting certain places
- 0, F, To fence and lock parks

Victimisation
(attitude, sex, comment)
- +, F, There is no previous victimisation in this place
- -, F, Attempted of burglary
- -, F, Burglary
- -, F, Murder
- -, F, Street racing
- -, F, To be followed by someone
- -, F, Traumatic episodes
- -, M, Burglary
- -, M, Mugging
- -, M, Shooting
- -, M, Street racing
- -, M, To be followed by someone
- -, M, Traumatic episodes

Feelings
(attitude, sex, comment)
- +, F, This place is safe during day
- +, F, This place is safe most of the time
- +, F, This place is very safe during day
- +, M, This place is safe during day
- +, M, This place is safe most of the time
- -, F, Concern about someone else safety
- -, F, Fear of being mugged
- -, F, Fear of being sexually harassed
- -, F, Fear of shootings
- -, F, Fear of someone might abduct my child
- -, F, Fear of someone might be hidden -weed
- -, F, This place is unsafe during day
- -, F, This place is unsafe during night
- -, F, This place is unsafe most of the time
- -, F, This place is very unsafe during night
- -, M, Fear of strangers
- -, M, This place is unsafe most of the time

Case 7. Talk's track map by subcategory



Case 7. Localised attitudes by sex and topic

Shopping centre
Retail
Industrial land use
School
Bus stop
Neighbourhood
Community park; Community park; Community park

Participant's comments by subcategories
Attitude (- / +), Sex (F/M) , Subgroup

+, F, Community ties
+, F, General victimisation
+, F, Neighbourhood's atmosphere
+, F, Neighbours
+, F, Perceived safety
+, F, Physical features
+, F, Public spaces
+, F, Surveillance
+, M, Surveillance
-, F, Community ties
-, F, Drug consumption
-, F, Drug sale
-, F, Fear
-, F, Gated Communities
-, F, Neighbourhood's atmosphere
-, F, Noises
-, F, Organisation
-, F, People linked to crime
-, F, Perceived safety
-, F, Physical features
-, F, Private space
-, F, Public spaces
-, F, Signs of fear
-, F, Traffic
-, M, Neighbourhood's atmosphere
-, M, Organisation
-, M, Signs of fear
-, M, Traffic
-, M, Uncomfortable behaviours
0, F, Drug consumption
0, F, Gated Communities
0, F, Public and private spaces
0, F, Public spaces
0, F, Teenagers
0, M, Gated Communities

Case 7. Talk's track maps by comments: Environmental features and community.



Environmental features and community

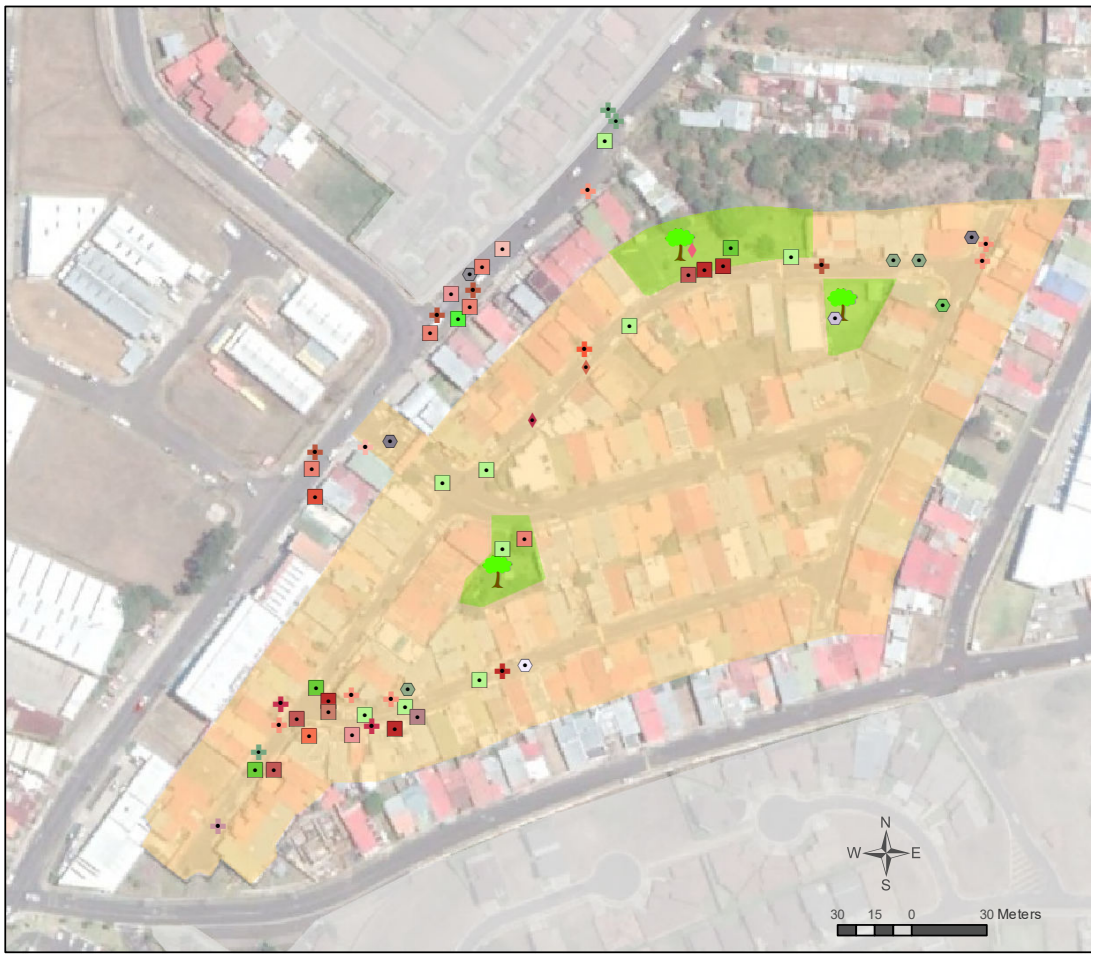
Neighbourhood
Community park; Community park; Community park
Gated community

Community relationships
(attitude, sex, comment)
+, F, Positive attitude towards communal activities
+, F, Positive attitude towards neighbours
-, F, Issues among neighbours
-, F, Issues with logistics about public spaces management
-, F, Neighbours do not contribute or pay
-, F, No relationship with contiguous neighbourhood
-, F, The community board is overwhelmed
-, M, The community board is overwhelmed
0, F, No relationship with people from gated community
0, M, No relationship with people from gated community

Drugs
(attitude, sex, comment)
-, F, This place has drug consumption
-, F, This place has drug sale
0, F, Drug consumers are from outside

Built Environment
(attitude, sex, comment)
+, F, Control of public spaces as safety measure -Police
+, F, Good supply and diversity of uses in current parks
+, F, Permeability in neighbourhood is positive for safety
+, F, Positive attitude towards neighbourhood's atmosphere
+, F, Positive attitude towards physical features
+, F, Positive attitude towards private security
+, F, The place is safer now
+, F, Vehicles in movement help safety
+, M, Permeability in neighbourhood is positive for safety
-, F, Abandoned cars make the place unsafe
-, F, Dangerous Bus Stop
-, F, Disturbing sounds/noises
-, F, Negative attitude towards houses for rent
-, F, Negative attitude towards neighbourhood's atmosphere
-, F, Parked cars are obstacles for traffic
-, F, Parked vehicles are scary
-, F, Place in poor physical conditions
-, F, There is crime inside gated communities
-, F, Vehicles in movement make the place unsafe
-, M, Dark place
-, M, Heavy traffic
-, M, Isolated place
-, M, Negative attitude towards neighbourhood's atmosphere

Case 8. Talk's track map by comments: Emotions and experiences



Emotions and experiences

Neighbourhood

Community park; Community park; Community park

People
(attitude, sex, comment)

-, F, Someone was arrested in this place

-, F, There are hitmen in this place

-, M, Public display of affection (P.D.A) is disturbing

Precautionary measures
(attitude, sex, comment)

+, F, Control of public spaces as safety measure -CCTV

+, F, Positive attitude towards activate/improvement of public spaces as safety measure

0, F, To avoid public spaces as safety measure

0, F, To fence and lock parks

0, F, To fence or lock a space

0, F, To warn teenagers

Victimisation
(attitude, sex, comment)

+, F, There is no previous victimisation in this place

-, F, Burglary

-, F, Mugging

-, F, Murder

-, F, People have been bitten by a dog

-, F, Sexual attack or harassment

-, F, Threats and intimidation

-, F, Witness of an episode of victimisation

Feelings
(attitude, sex, comment)

+, F, This place is safe during day

+, F, This place is safe most of the time

+, F, This place is very safe during night

-, F, Concern about someone else safety

-, F, Fear of being mugged

-, F, Fear of burglary

-, F, Fear of shootings

-, F, Fear of strangers

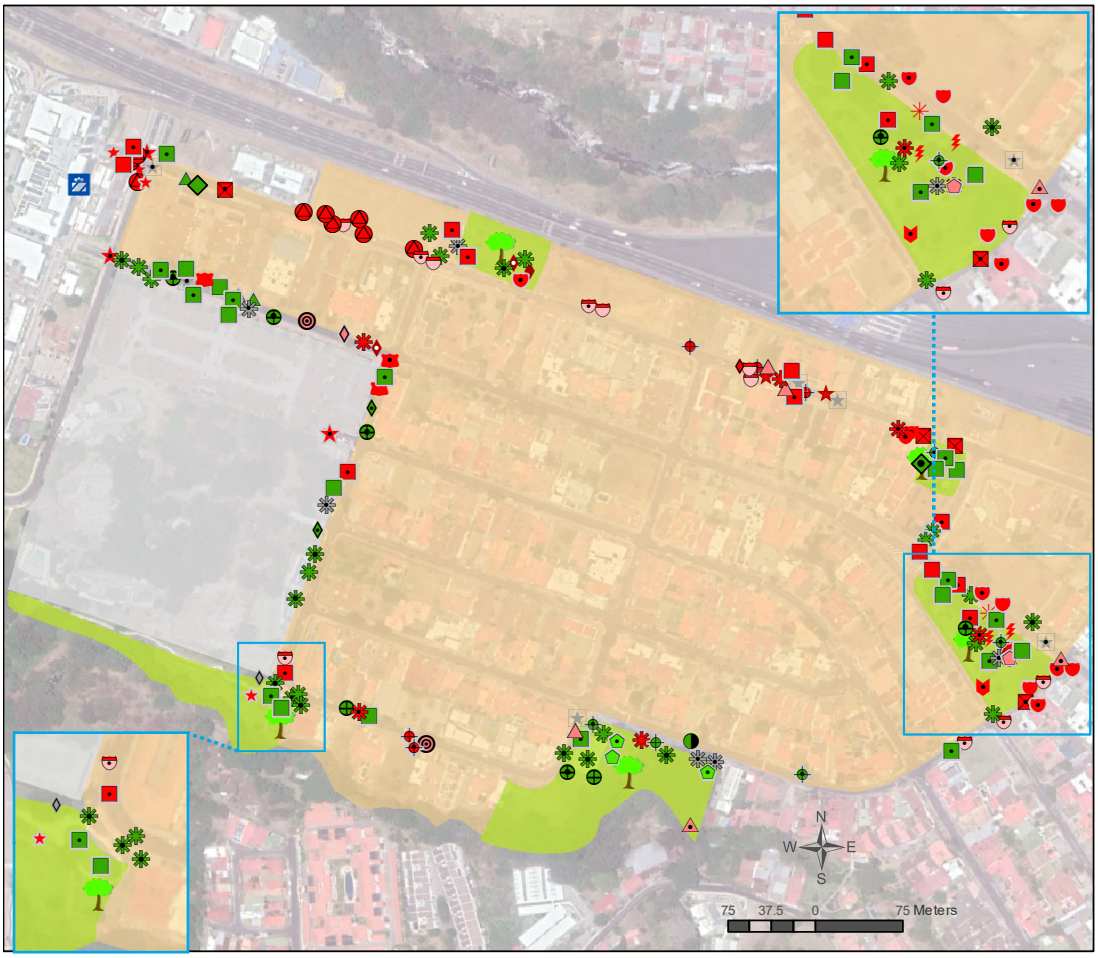
-, F, This place is unsafe during night

-, F, This place is unsafe most of the time

-, F, This place is very unsafe all the time

-, F, This place is very unsafe during night

Case 8. Talk's track maps by subcategories



Case 8. Localised attitudes by sex and topices

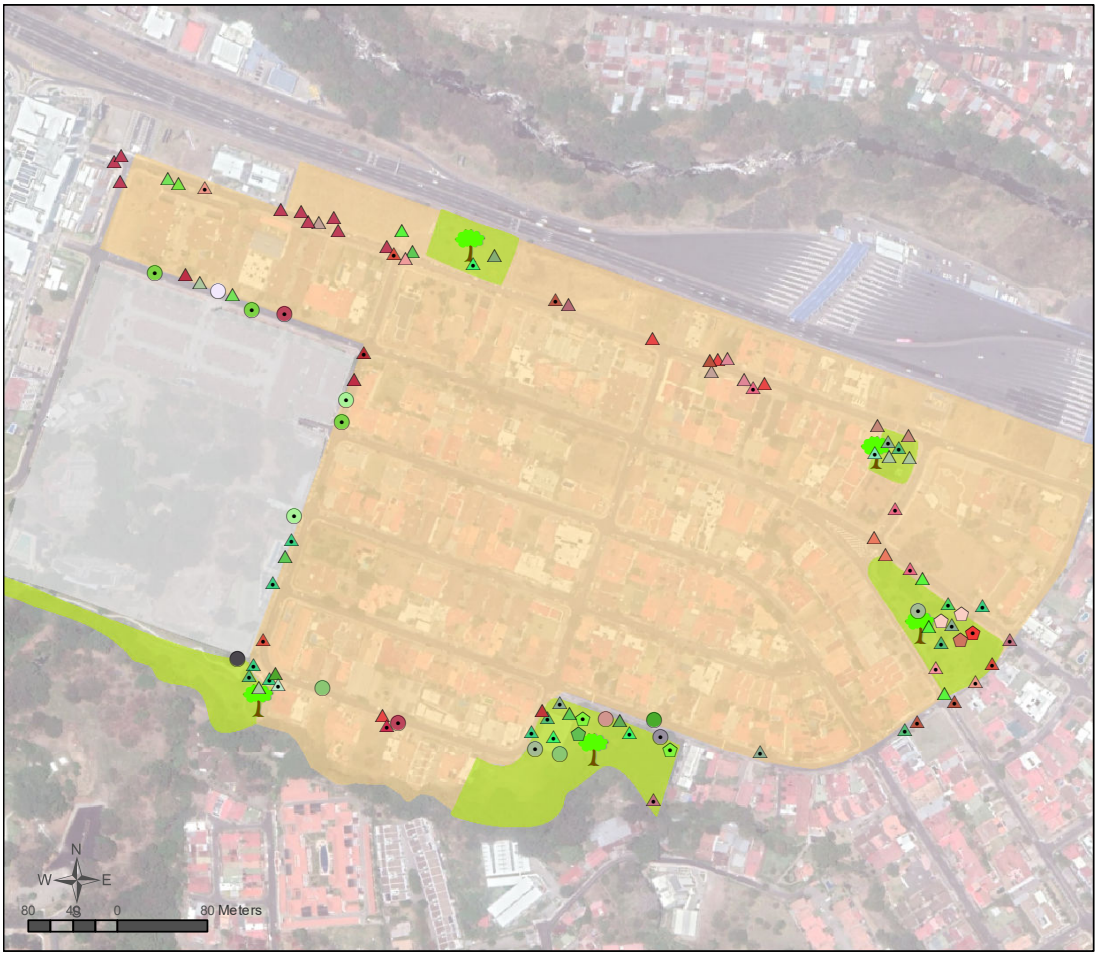
Shopping centre

Neighbourhood
Community park
Gated community

Participant's comments by subcategories
Attitude (- / +), Sex (F/M) , Subgroup

+, F, Community ties
+, F, Drug sale or consumption
+, F, Neighbours
+, F, Perceived safety
+, F, Physical features
+, F, Public and private spaces
+, F, Public spaces
+, F, Surveillance
+, M, Community ties
+, M, Developers
+, M, Drug sale or consumption
+, M, Gated Communities
+, M, Perceived safety
+, M, Physical features
+, M, Public and private spaces
+, M, Public spaces
+, M, Surveillance
-, F, Drug sale
-, F, Homeless
-, F, Infrastructure
-, F, Local government
-, F, Neighbourhood's atmosphere
-, F, Organisation
-, F, Perceived safety
-, F, Physical features
-, F, Private space
-, F, Public and private spaces
-, F, Public spaces
-, F, Signs of fear
-, F, Traffic
-, F, Walking routes
-, M, Anger
-, M, Drug sale
-, M, Drug user
-, M, Fear
-, M, Homeless
-, M, Infrastructure
-, M, Land use
-, M, Local government
-, M, Neighbourhood's atmosphere
-, M, Neighbours
-, M, Perceived safety
-, M, Physical features
-, M, Public and private spaces
-, M, Public spaces
-, M, Signs of fear
-, M, Traffic
-, M, alcohol consumption
0, F, Institutional measures
0, F, Public spaces
0, M, Gated Communities
0, M, Institutional measures
0, M, Length of residence

Case 8. Talk's track maps by comments: Environmental features and community.



Environmental features and community

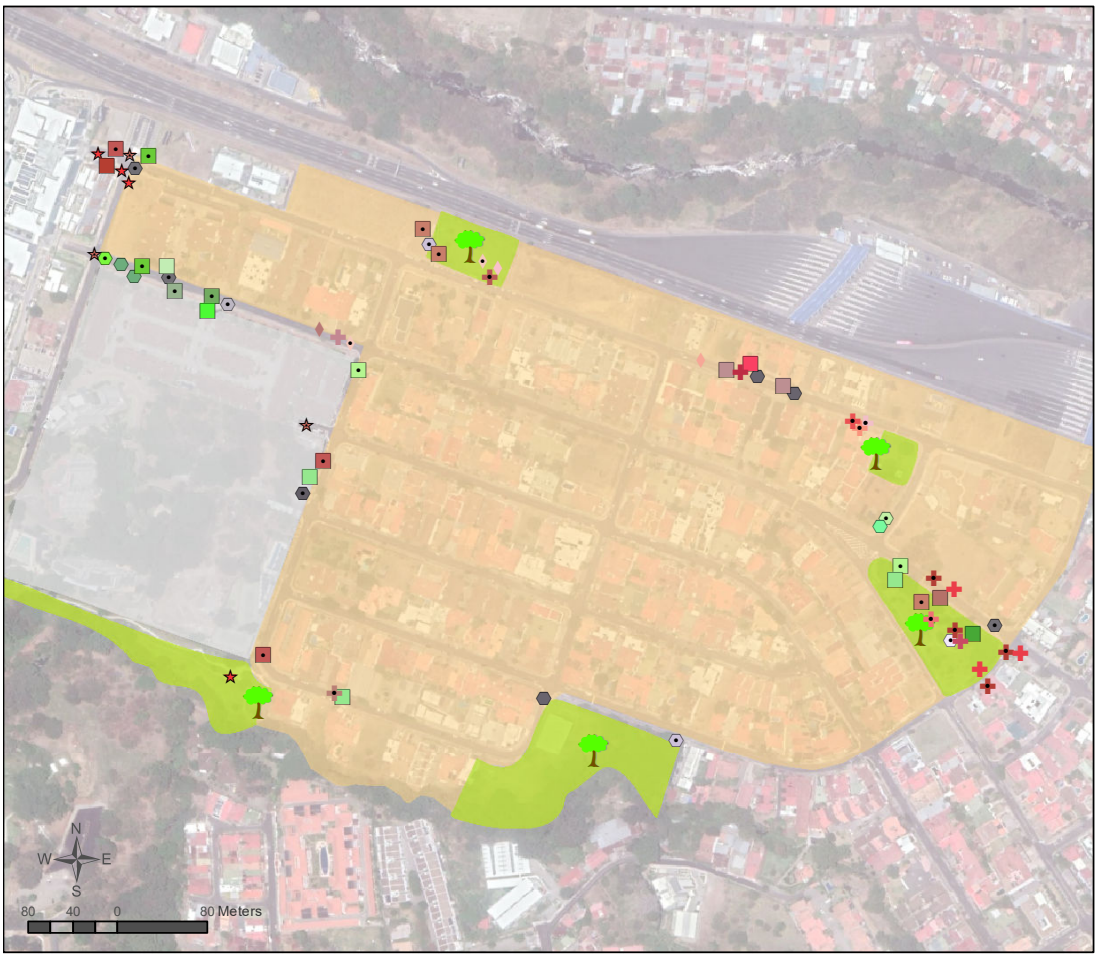
Neighbourhood
Community park
Gated community

Drugs
(attitude, sex, comment)
+, F, There were drug issues in the past
+, M, There were drug issues in the past
-, F, This place has drug sale
-, M, This place has alcohol consumption
-, M, This place has drug sale

Community relationships
(attitude, sex, comment)
+, F, Good relationship with people from gated communities
+, F, Positive attitude towards communal activities
+, F, Positive attitude towards neighbours
+, M, Positive attitude towards communal activities
+, M, Real Estate developers belong to our neighbourhood
-, F, The community board is overwhelmed
-, M, Issues with logistics about public spaces management
0, F, Issues with logistics about public spaces management
0, M, More than 20 years of living in this neighbourhood
0, M, No relationship with people from gated community

Built Environment
(attitude, sex, comment)
+, F, Good supply and diversity of uses in current parks
+, F, Positive attitude towards closing/fencing public spaces as safety measure
+, F, Positive attitude towards physical features
+, F, Positive attitude towards private security
+, F, The place is safer now
+, F, This area is safe because people know each other
+, F, This public space was regenerated
+, M, Control of public spaces as safety measure -Police
+, M, Good supply and diversity of uses in current parks
+, M, Positive attitude towards closing/fencing public spaces as safety measure
+, M, Positive attitude towards physical features
+, M, Positive attitude towards private security
+, M, The place is safer now
+, M, This public space was regenerated
+, M, Walls and Safety resources of Gated Communities are positive
-, F, Dangerous walking route
-, F, General infrastructure issues
-, F, Negative attitude towards houses for rent
-, F, Parked cars are obstacles for traffic
-, F, Parked vehicles are scary
-, F, Place in poor physical conditions
-, F, To live in an open neighbourhood is less safe
-, F, Vacant lots are scary
-, M, General infrastructure issues
-, M, Isolated place
-, M, Issues with land uses
-, M, Lack of pavement or pavement in poor conditions
-, M, Negative attitude towards houses for rent
-, M, Parked cars are obstacles for traffic
-, M, Parked vehicles are scary
-, M, Place in poor physical conditions
-, M, This place has many routes for escaping
-, M, Vacant lots are scary
-, M, Vehicles in movement make the place unsafe

Case 8. Talk's track maps by comments: Emotions and experiences



Emotions and experiences
- Neighbourhood
- Community park
- Gated community

Institutions
(attitude, sex, comment)
- -, F, Local government allowed irregular commercial development
- -, M, Local government allowed irregular commercial development

People
(attitude, sex, comment)
- -, F, There are homeless in this place
- -, M, Drug users are local
- -, M, There are homeless in this place
- -, M, To live locked makes the place unsafe

Precautionary measures
(attitude, sex, comment)
- +, F, Control of public spaces as safety measure
- +, F, Surveillance among neighbours
- +, M, Control of public spaces as safety measure
- +, M, Surveillance among neighbours
- 0, F, Do not walk alone as safety measure
- 0, F, To avoid public spaces as safety measure
- 0, F, To fence and lock parks
- 0, F, To hide belongings
- 0, F, To make a formal complaint to the police or local government
- 0, M, To make a formal complaint to the police or local government

Victimisation
(attitude, sex, comment)
- -, F, Attack
- -, F, Attempted of abduction
- -, F, Burglary
- -, F, Fatal traffic accident
- -, F, Rape
- -, F, Stolen items
- -, F, Suspicious situations
- -, M, Mugging
- -, M, Sexual attack or harassment
- -, M, Suspicious situations
- -, M, Witness of an episode of victimisation

Feelings
(attitude, sex, comment)
- +, F, This place is safe during day
- +, F, This place is safe during night
- +, F, This place is safe most of the time
- +, F, This place is very safe during day
- +, M, This place is safe during night
- +, M, This place is safe most of the time
- +, M, This place is very safe during day
- +, M, This place is very safe during night
- -, F, This place is unsafe during night
- -, F, This place is very unsafe during night
- -, M, Anger because sale and consumption of drugs
- -, M, Fear of strangers
- -, M, This place is unsafe most of the time
- -, M, This place is very unsafe during night

Appendix 7- 2. Matrices of comments about the Built Environment

Comments in both focus groups and walking interviews

Row Labels	Case 1.	Case 2.	Case 3.	Case 4.	Case 5.	Case 6.	Case 7.	Case 8.
Communal infraestructure	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**0**
Community room underused	0	0	3	2	0	0	0	0
Gated Communities	**4**	**20**	**36**	**38**	**52**	**1**	**2**	**12**
Gated communiites make the place more insecure	2	1	10	2	1	0	0	0
Gated communities are exclusionary	1	7	7	10	10	0	1	2
Gated communities brings issues such as connection/landscape /land value	0	1	2	4	8	0	0	0
Gated communities did not change our safety levels	0	0	0	1	4	0	0	1
Gated Communities do not contribute to our neighbourhood	0	0	3	6	7	0	0	0
Gated Communities improved public infrastructure	0	0	0	0	3	0	0	0
Inside gated communities people do not share	0	1	0	2	0	0	0	1
It is expensive to live in a gated community	0	1	1	0	1	0	0	0
Particular issue with a gated community	0	1	1	4	2	0	0	1
The building process of gated communities was disturbing	0	5	7	3	12	0	0	0
There is crime inside gated communities	0	0	0	1	1	1	1	4
Walls of gated communities are disturbing	0	3	5	5	2	0	0	0
Walls or Safety resources of Gated Communities are positive	1	0	0	0	1	0	0	3
Infrastructure	**4**	**9**	**24**	**24**	**45**	**14**	**0**	**8**
General infrastructure issues	3	3	12	2	23	8	0	5
Issues with geometry of roads	0	4	4	4	7	1	0	0
Lack of pavement or pavement in poor conditions	1	2	8	18	15	5	0	3
Land use	**0**	**1**	**4**	**1**	**4**	**0**	**0**	**19**
Issues with land uses	0	0	2	1	2	0	0	17
This place is a former coffe plantation-livestock	0	1	2	0	2	0	0	2
Neighbourhood's atmosphere	**8**	**11**	**8**	**10**	**17**	**12**	**12**	**21**
Negative attitude towards houses for rent	3	4	0	0	4	4	3	12
Negative attitude towards neighbourhood's atmosphere	1	0	2	1	0	4	1	1
Positive attitude towards neighbourhood's atmosphere	4	7	6	9	13	4	8	8
Noises	**3**	**3**	**2**	**0**	**3**	**7**	**1**	**0**
Disturbing sounds/noises	3	3	2	0	3	7	1	0
Perceived safety	**6**	**2**	**7**	**4**	**12**	**6**	**3**	**22**
Negative attitude towards contiguous neighbourhood	0	0	0	1	0	1	0	0
Positive attitude towards contiguous neighbourhood	2	0	0	0	4	1	0	0
The place is safer now	2	0	2	0	4	0	2	14
This area is safe because people know each other	2	2	3	1	4	2	1	1
This place has many routes for escaping	0	0	2	2	0	0	0	2
To live in an open neighbourhood is less safe	0	0	0	0	0	2	0	5
Physical features	**2**	**10**	**16**	**12**	**47**	**1**	**7**	**23**
Housing quality is contrasting	0	0	0	1	0	0	0	0
Permeability in neighbourhood is positive for safety	0	0	5	0	1	0	0	0
Place in poor physical conditions	0	0	2	2	10	0	2	5
Positive attitude towards physical features	2	7	5	2	32	1	5	15
Positive attitude towards regenerated/ improved place	0	2	1	1	4	0	0	3
The place is less safe now	0	1	3	6	0	0	0	0

Continuation

Row Labels	Case 1.	Case 2.	Case 3.	Case 4.	Case 5.	Case 6.	Case 7.	Case 8.
Public spaces	**11**	**6**	**5**	**15**	**22**	**16**	**13**	**36**
Concerns about supply of public spaces	5	1	2	4	0	1	0	0
Concerns about supply of public spaces -land invasion	2	0	0	0	0	0	0	0
Concerns about supply of public spaces for kids	2	2	1	0	1	0	0	0
Concerns about supply of public spaces for teenagers	1	0	0	2	0	3	0	0
Good supply and diversity of uses in current parks	0	0	0	0	2	3	9	16
I do not go to the community park -my kids have grown up	0	0	0	0	0	2	1	0
Neighbours' requests about more opening hours in community parks	0	0	0	0	2	1	0	0
Positive attitude towards closing/fencing public spaces as safety measure	0	0	0	0	8	3	1	5
Public space in poor condition	0	0	0	2	2	0	0	0
Socialisation take place on the street	0	1	0	0	1	1	1	0
Socialisation take place on the street -teenagers	0	0	0	0	0	1	0	0
This public space was regenerated	0	1	1	2	5	0	1	15
Use of alternative spaces for socialisation	1	0	0	3	1	0	0	0
Use of alternative spaces for socialisation - teenagers	0	0	1	2	0	1	0	0
Withdraws of having community parks	0	1	0	0	0	0	0	0
Signs of fear	**5**	**16**	**33**	**33**	**21**	**20**	**7**	**14**
Abandoned cars make the place unsafe	0	0	1	0	0	0	1	0
Dangerous Bus Stop	2	2	7	1	3	3	1	2
Dark place	0	4	4	9	7	0	1	0
Isolated place	3	2	6	11	2	2	1	4
Parked vehicles are scary	0	2	3	6	2	4	1	4
Vacant lots are scary	0	0	1	0	3	0	0	3
Vehicles in movement make the place unsafe	0	6	11	6	4	11	2	1
Survilliance	**5**	**7**	**12**	**8**	**11**	**15**	**12**	**10**
Issues monitoring CCTV	0	2	0	0	0	0	1	0
Negative attitude towards private security	2	3	3	1	3	6	1	0
Permeability in neighbourhood is positive for safety	0	0	5	6	4	2	2	1
Positive attitude towards private security	1	0	0	0	3	3	3	3
This neighourhood has/had gates	0	0	0	0	0	3	3	0
To control public spaces is important for keeping the place safe	0	0	1	0	0	0	1	6
Vehicles in movement help safety	2	0	2	0	1	1	1	0
Walls of gated communities are not permeable	0	2	1	1	0	0	0	0
Traffic	**9**	**9**	**8**	**16**	**14**	**2**	**6**	**4**
Heavy traffic	9	8	8	13	10	2	1	1
Parked cars are obstacles for traffic	0	1	0	3	4	0	5	3
Walking routes	**6**	**2**	**6**	**15**	**11**	**1**	**0**	**3**
Dangerous walking distance to Bus Stop	4	2	4	5	8	1	0	0
Dangerous walking route	2	0	2	10	3	0	0	3
Grand Total	**63**	**96**	**164**	**178**	**259**	**95**	**63**	**172**

List of georeferenced comments by main theme and subcategory

Comments by main theme	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8	Total
Built Environment	**38**	**25**	**111**	**90**	**175**	**37**	**38**	**94**	**608**
Gated Communities	**1**	**2**	**10**	**13**	**31**		**1**	**2**	**60**
Gated communities brings issues such as connection/landscape /land value				1	4				5
Gated communities did not change our safety levels				1	5				6
Gated Communities do not contribute to our neighbourhood			3	3	6				12
Gated communities make the place more insecure			4	2	1				7
I have met someone from the Gated community					1				1
It is expensive to live in a gated community		1			1				2
The building process of gated communities was disturbing		1	1		7				9
There is crime inside gated communities				1			1		2
Walls and Safety resources of Gated Communities are positive	1				4			2	7
Walls of gated communities are disturbing			2	5	2				9
Infrastructure	**3**	**5**	**22**	**9**	**36**	**3**		**7**	**85**
General infrastructure issues	2	3	12	2	15			5	39
Issues with geometry of roads			4		6	1			11
Lack of pavement or pavement in poor conditions	1	2	6	7	15	2		2	35
Land use			**4**		**1**			**11**	**16**
Issues with land uses			2					11	13
This place is a former coffeee plantation-livestock			2		1				3
Neighbourhood's atmosphere	**5**	**1**	**2**	**1**	**6**		**7**	**5**	**27**
Negative attitude towards houses for rent	2	1			2		1	5	11
Negative attitude towards neighbourhood's atmosphere	1		2				2		5
Positive attitude towards neighbourhood's atmosphere	2			1	4		4		11
Noises	**1**	**1**	**1**		**3**	**3**	**1**		**10**
Disturbing sounds/noises	1	1	1		3	3	1		10
Perceived safety	**6**	**2**	**7**	**2**	**8**	**4**	**1**	**15**	**45**
Negative attitude towards contiguous neighbourhood	1					2			3
Positive attitude towards contiguous neighbourhood	2				1				3
The place is safer now	1		2		3		1	9	16
This area is safe because people know each other	2	2	3	1	4	2		1	15
This place has many routes for escaping			2	1				2	5
To live in an open neighbourhood is less safe								3	3
Physical features	**3**	**6**	**14**	**4**	**28**	**1**	**6**	**13**	**75**
Housing quality is contrasting				1					1
Permeability in neighbourhood is positive for safety			5		1				6
Place in poor physical conditions			2	2	9		2	5	20
Positive attitude towards physical features	3	6	5		18	1	4	8	45
The place is less safe now			2	1					3
Public spaces	**3**	**1**	**3**	**8**	**13**	**1**	**5**	**19**	**53**
Concerns about supply of public spaces			1	2		1			4
Concerns about supply of public spaces -land invasion	2								2
Concerns about supply of public spaces for kids	1								1
Concerns about supply of public spaces for teenagers				1					1
Good supply and diversity of uses in current parks					2		5	7	14
Neighbours' requests about more opening hours in community parks					1				1
Positive attitude towards closing/fencing public spaces as safety measure					4			2	6
Public space in poor condition				1	1				2
This public space was regenerated		1	1	2	5			10	19
Use of alternative spaces for socialisation - teenagers			1	2					3
Signs of fear	**5**	**1**	**26**	**24**	**21**	**17**	**8**	**14**	**116**
Abandoned cars make the place unsafe							1		1
Dangerous Bus Stop	3	1	5		4	2	1	3	19
Dark place			4	5	7		1		17
Isolated place	2		6	9	2	2	1	2	24
Parked vehicles are scary			4	5	2	5	2	4	22
Vacant lots are scary			1		1			4	6
Vehicles in movement make the place unsafe			6	5	5	8	2	1	27
Surveillance	**1**		**9**	**6**	**8**	**5**	**6**	**2**	**37**
Negative attitude towards private security	1		1	1	2	2			7
Permeability in neighbourhood is positive for safety			5	5	3	2	2		17
Positive attitude towards private security					2	1	3	2	8
Vehicles in movement help safety			2		1		1		4
Walls of gated communities are not permeable			1						1
Traffic	**7**	**4**	**8**	**11**	**10**	**2**	**3**	**3**	**48**
Heavy traffic	7	3	8	6	7	2	1		34
Parked cars are obstacles for traffic		1		5	3		2	3	14
Walking routes	**3**	**2**	**5**	**12**	**10**	**1**		**3**	**36**
Dangerous walking distance to Bus Stop	3	2	4	6	7	1			23
Dangerous walking route			1	6	3			3	13
Community Relationships	**5**	**12**	**5**	**5**	**26**	**6**	**19**	**17**	**95**
Community ties		**6**	**4**	**4**	**9**	**5**	**4**	**7**	**39**
Good relationship with people from gated communities								3	3
Low socialisation among neighbours		2	1		1				4
Negative attitude towards neighbours with short time living there			1						1

Comments by main theme	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8	Total
Neighbourhood divided by sectors			1			3			4
Neighbours do not contribute or pay			1	4			1		6
No relationship with contiguous neighbourhood					3	2	1		6
Positive attitude towards communal activities		4			5		2	4	15
Developers								**1**	**1**
Real Estate developers belong to our neighbourhood								1	1
Gated Communities	**2**	**1**		**1**	**5**		**2**	**1**	**12**
No relationship with people from gated community	2	1		1	5		2	1	12
Length of residence		**2**						**1**	**3**
More than 20 years of living in this neighbourhood		2						1	3
Neighbourhood's atmosphere					**3**	**1**	**6**		**10**
Issues among neighbours					3		6		9
To live locked is safer						1			1
Neighbours					**2**		**1**	**2**	**5**
Positive attitude towards neighbours					2		1	2	5
Organisation		**1**	**1**		**5**		**2**	**2**	**11**
The community board is overwhelmed		1	1		5		2	2	11
Perceived safety	**3**	**1**			**1**				**5**
Safe area people have lived here for many years	3	1			1				5
Public spaces		**1**			**1**		**4**	**3**	**9**
Issues with logistics about public spaces management		1			1		4	3	9
Drugs	**12**	**13**	**6**	**7**	**3**	**3**	**5**	**7**	**56**
alcohol consumption	**1**	**2**	**1**	**1**	**2**			**2**	**9**
This place has alcohol consumption	1	2	1	1	2			2	9
Drug consumption	**4**	**4**	**4**	**4**		**1**	**3**		**20**
Drug consumers are from outside		2					1		3
This place has drug consumption	4	2	4	4		1	2		17
Drug sale	**7**	**7**	**1**	**2**	**1**	**2**	**2**	**2**	**24**
There are conflicts among drug dealers	1	2							3
This place has drug sale	6	5	1	2	1	2	2	2	21
Drug sale or consumption								**3**	**3**
There were drug issues in the past								3	3
Feelings	**42**	**19**	**70**	**42**	**53**	**27**	**32**	**23**	**308**
Anger								**1**	**1**
Anger because sale and consumption of drugs								1	1
Fear	**11**	**8**	**24**	**16**	**15**	**9**	**12**	**2**	**97**
Concern about someone else safety	2	2	4	3	2	1	1		15
Fear of being abducted	1								1
Fear of being attacked			1	2	1				4
Fear of being killed	3		1						4
Fear of being mugged			11	4	5	3	5		28
Fear of being sexually harassed	1			1		1			3
Fear of burglary	2	1					1		4
Fear of immigrants		1			1				2
Fear of my relative/friend might be raped			2						2
Fear of my relative/friend might be sexually harassed		1							1
Fear of reprisals		1							1
Fear of shootings						1	1		2
Fear of someone might abduct my child				2		1			3
Fear of someone might be hidden -weed	1		4	2	2	1			10
Fear of strangers	1	2	1	2	4	1	4	2	17
Neighbourhood's perception					**2**				**2**
Proud about our neighbourhood image					2				2
Perceived safety	**31**	**11**	**46**	**26**	**36**	**18**	**20**	**20**	**208**
This place is safe during day	6	2	8	3	9	4	3	2	37
This place is safe during night	1	1	1		3			4	10
This place is safe most of the time	3	3	3	5	6	3	9	3	35
This place is unsafe during day	1		3	1		1			6
This place is unsafe during night	5	3	7	7	8	3	3	3	39
This place is unsafe most of the time	7	1	5	5	2	4	2	1	27
This place is very safe during day			1		2	1		2	6
This place is very safe during night					1		1	1	3
This place is very safe most of the time					2				2
This place is very unsafe all the time	8		8	5	3		1		25
This place is very unsafe during night		1	10			2	1	4	18
Institutions					**2**			**7**	**9**
Local government								**7**	**7**
Local government allowed irregular commercial development								7	7
National institutions/Local government					**2**				**2**
Law allows to gated communities do not supply public areas					2				2
People	**3**	**2**	**9**		**2**	**1**	**3**	**5**	**25**
Drug user	**1**							**1**	**2**
Drug users are local	1							1	2
Drug user/dealer		**1**							**1**

Comments by main theme	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8	Total
Good built environment can change drug user/dealer attitude		1							1
Homeless								**3**	**3**
There are homeless in this place								3	3
Incomes			**3**						**3**
Negative attitude towards upper-income people			2						2
Positive attitude towards low/middle-incomes people			1						1
Neighbours			**5**					**1**	**6**
To live locked makes the place unsafe			5					1	6
People linked to crime	**2**	**1**	**1**				**2**		**6**
Someone was arrested in this place		1					1		2
There are hitmen in this place							1		1
There are people with guns in this place	2		1						3
Uncomfortable behaviours					**2**	**1**	**1**		**4**
Public display of affection (P.D.A) is disturbing					2		1		3
Skateboarders are disturbing						1			1
Precautionary measures	**9**	**9**	**7**	**11**	**11**	**12**	**10**	**18**	**87**
Institutional measures								**6**	**6**
To make a formal complaint to the police or local government								6	6
Public and private spaces		**2**					**2**	**2**	**6**
Surveillance among neighbours								2	2
To fence or lock a space		2					2		4
Public spaces	**9**	**7**	**7**	**11**	**10**	**10**	**7**	**10**	**71**
Control of public spaces as safety measure								3	3
Control of public spaces as safety measure -CCTV	2	4	3	8	6	7	3		33
Control of public spaces as safety measure -Police	3	1	1	2	2		1	2	12
Do not walk alone as safety measure	1	1	1	1	1	2		1	8
Negative attitude towards control of public spaces -CCTV			2						2
Positive attitude towards activate/improvement of public spaces as safety measure							1		1
To avoid public spaces as safety measure	1						1	1	3
To fence and lock parks					1	1	1	2	5
To greet dangerous people	2								2
To hide belongings		1						1	2
Teenagers						**2**	**1**		**3**
To ban teenagers going out or visiting certain places						2			2
To warn teenagers							1		1
Weapons					**1**				**1**
To have a stick or gas					1				1
Smells				**2**	**1**				**3**
Smells reported by participants				**2**	**1**				**3**
Drug smells				2					2
Unpleasant smells					1				1
Victimisation	**24**	**6**	**16**	**11**	**19**	**17**	**19**	**16**	**128**
Private space	**3**		**2**	**1**	**1**	**4**	**6**	**2**	**19**
Attempted of abduction								1	1
Attempted of burglary			1			1			2
Burglary	3		1	1	1	3	6	1	16
Public and private spaces		**1**		**2**	**2**			**8**	**13**
Stolen items					2			1	3
Suspicious situations		1		2				7	10
Public spaces	**21**	**5**	**14**	**8**	**16**	**11**	**13**	**6**	**94**
Attack		1	1					1	3
Fatal traffic accident			1		5	2		1	9
Mugging	4	2	9	3	4	1	4	1	28
Murder	2		1		2	1	1		7
People have been bitten by a dog							2		2
Rape								1	1
Sexual attack or harassment	2		2	2			1	1	8
Shooting	3				1	1			5
Stabbing	1								1
There is no previous victimisation in this place	5				4	1	3		13
Threats and intimidation							1		1
To be followed by someone				3		2			5
Traumatic episodes						3			3
Witness of an episode of victimisation	4	2					1	1	8
Public spaces -cars are threats						**2**			**2**
Street racing						2			2
Total	**133**	**86**	**224**	**168**	**292**	**103**	**126**	**187**	**1319**

List of georeferenced interactions and sounds captured by the author.

Those sounds and interactions do not correspond to participant's comments, they are sound and interactions captured by the author from the audios.

Classification by main theme	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8	Total
Interactions (Author)	**1**								**1**
Captured by author	**1**								**1**
Kids playing on the stree	1								1
Sounds (Author)	**18**	**9**	**26**	**24**	**31**	**7**	**11**	**6**	**132**
Captured by author	**18**	**9**	**26**	**24**	**31**	**7**	**11**	**6**	**132**
Advertising			2		1				3
Birds		1	1	1	1	1	2		7
Construction				4					4
Dogs	1		4	1	6	2	6		20
Music	5		2	6	2		1		16
Traffic	12	8	17	12	21	4	2	6	82
Total	**19**	**9**	**26**	**24**	**31**	**7**	**11**	**6**	**133**

Appendix 7- 3. Matrices of comments - Out and Next to gated community's edge

List of georeferenced comments about Built Environment. Out and Next to gated community's edge

Comments by subcategories	No wall	Next to wall/edge	Total
Gated Communities	**13**	**47**	**60**
Gated communities brings issues such as connection/landscape /land value		5	5
Gated communities did not change our safety levels		6	6
Gated Communities do not contribute to our neighbourhood	4	8	12
Gated communities make the place more insecure	3	4	7
I have met someone from the Gated community		1	1
It is expensive to live in a gated community		2	2
The building process of gated communities was disturbing	3	6	9
There is crime inside gated communities		2	2
Walls and Safety resources of Gated Communities are positive	1	6	7
Walls of gated communities are disturbing	2	7	9
Infrastructure	**57**	**28**	**85**
General infrastructure issues	27	12	39
Issues with geometry of roads	7	4	11
Lack of pavement or pavement in poor conditions	23	12	35
Land use	**15**	**1**	**16**
Issues with land uses	13		13
This place is a former coffeee plantation-livestock	2	1	3
Neighbourhood's atmosphere	**19**	**8**	**27**
Negative attitude towards houses for rent	11		11
Negative attitude towards neighbourhood's atmosphere	1	4	5
Positive attitude towards neighbourhood's atmosphere	7	4	11
Noises	**6**	**4**	**10**
Disturbing sounds/noises	6	4	10
Perceived safety	**35**	**10**	**45**
Negative attitude towards contiguous neighbourhood	2	1	3
Positive attitude towards contiguous neighbourhood	3		3
The place is safer now	11	5	16
This area is safe because people know each other	12	3	15
This place has many routes for escaping	4	1	5
To live in an open neighbourhood is less safe	3		3
Physical features	**59**	**16**	**75**
Housing quality is contrasting	1		1
Permeability in neighbourhood is positive for safety	5	1	6
Place in poor physical conditions	12	8	20
Positive attitude towards physical features	38	7	45
The place is less safe now	3		3
Public spaces	**38**	**15**	**53**
Concerns about supply of public spaces	3	1	4
Concerns about supply of public spaces -land invasion	2		2
Concerns about supply of public spaces for kids	1		1
Concerns about supply of public spaces for teenagers	1		1
Good supply and diversity of uses in current parks	12	2	14
Neighbours' requests about more opening hours in community parks	1		1
Positive attitude towards closing/fencing public spaces as safety measure	2	4	6
Public space in poor condition	1	1	2
This public space was regenerated	12	7	19
Use of alternative spaces for socialisation - teenagers	3		3
Signs of fear	**60**	**56**	**116**
Abandoned cars make the place unsafe	1		1
Dangerous Bus Stop	15	4	19
Dark place	7	10	17
Isolated place	7	17	24
Parked vehicles are scary	12	10	22
Vacant lots are scary	5	1	6
Vehicles in movement make the place unsafe	13	14	27
Surveillance	**21**	**16**	**37**
Negative attitude towards private security	2	5	7
Permeability in neighbourhood is positive for safety	11	6	17
Positive attitude towards private security	5	3	8
Vehicles in movement help safety	3	1	4
Walls of gated communities are not permeable		1	1
Traffic	**26**	**22**	**48**
Heavy traffic	18	16	34
Parked cars are obstacles for traffic	8	6	14
Walking routes	**19**	**17**	**36**
Dangerous walking distance to Bus Stop	13	10	23
Dangerous walking route	6	7	13
Total	**368**	**240**	**608**

List of georeferenced comments made by women about built environment. Out and Next to gated community's edge.

Comments by subcategories	No wall	Next to wall/edge	Total
Gated Communities	**2**	**20**	**22**
Gated communities brings issues such as connection/landscape /land value		1	1
Gated communities did not change our safety levels		4	4
Gated Communities do not contribute to our neighbourhood	1	4	5
Gated communities make the place more insecure		1	1
I have met someone from the Gated community		1	1
The building process of gated communities was disturbing	1	2	3
There is crime inside gated communities		2	2
Walls and Safety resources of Gated Communities are positive		2	2
Walls of gated communities are disturbing		3	3
Infrastructure	**10**	**11**	**21**
General infrastructure issues	4	3	7
Issues with geometry of roads	2	2	4
Lack of pavement or pavement in poor conditions	4	6	10
Land use	**1**		**1**
Issues with land uses	1		1
Neighbourhood's atmosphere	**15**	**3**	**18**
Negative attitude towards houses for rent	7		7
Negative attitude towards neighbourhood's atmosphere	1	1	2
Positive attitude towards neighbourhood's atmosphere	7	2	9
Noises	**3**	**2**	**5**
Disturbing sounds/noises	3	2	5
Perceived safety	**16**	**3**	**19**
Negative attitude towards contiguous neighbourhood		1	1
Positive attitude towards contiguous neighbourhood	3		3
The place is safer now	5	1	6
This area is safe because people know each other	5	1	6
To live in an open neighbourhood is less safe	3		3
Physical features	**17**	**6**	**23**
Place in poor physical conditions	4	5	9
Positive attitude towards physical features	13	1	14
Public spaces	**18**	**8**	**26**
Concerns about supply of public spaces	2	1	3
Concerns about supply of public spaces for teenagers	1		1
Good supply and diversity of uses in current parks	8	1	9
Positive attitude towards closing/fencing public spaces as safety measure		1	1
Public space in poor condition	1		1
This public space was regenerated	5	5	10
Use of alternative spaces for socialisation - teenagers	1		1
Signs of fear	**26**	**30**	**56**
Abandoned cars make the place unsafe	1		1
Dangerous Bus Stop	6	1	7
Dark place	3	5	8
Isolated place	3	10	13
Parked vehicles are scary	7	6	13
Vacant lots are scary	3		3
Vehicles in movement make the place unsafe	3	8	11
Surveillance	**10**	**8**	**18**
Negative attitude towards private security	1	3	4
Permeability in neighbourhood is positive for safety	5	3	8
Positive attitude towards private security	4	1	5
Vehicles in movement help safety		1	1
Traffic	**12**	**9**	**21**
Heavy traffic	8	6	14
Parked cars are obstacles for traffic	4	3	7
Walking routes	**10**	**5**	**15**
Dangerous walking distance to Bus Stop	7	3	10
Dangerous walking route	3	2	5
Total	**140**	**105**	**245**

List of georeferenced comments made by men about built environment. Out and Next to gated community's edge.

Comments by subcategories	No wall	Next to wall/edge	Total
Gated Communities	**11**	**27**	**38**
Gated communities brings issues such as connection/landscape /land value		4	4
Gated communities did not change our safety levels		2	2
Gated Communities do not contribute to our neighbourhood	3	4	7
Gated communities make the place more insecure	3	3	6
It is expensive to live in a gated community		2	2
The building process of gated communities was disturbing	2	4	6
Walls and Safety resources of Gated Communities are positive	1	4	5
Walls of gated communities are disturbing	2	4	6
Infrastructure	**47**	**17**	**64**
General infrastructure issues	23	9	32
Issues with geometry of roads	5	2	7
Lack of pavement or pavement in poor conditions	19	6	25
Land use	**14**	**1**	**15**
Issues with land uses	12		12
This place is a former coffeee plantation-livestock	2	1	3
Neighbourhood's atmosphere	**4**	**5**	**9**
Negative attitude towards houses for rent	4		4
Negative attitude towards neighbourhood's atmosphere		3	3
Positive attitude towards neighbourhood's atmosphere		2	2
Noises	**3**	**2**	**5**
Disturbing sounds/noises	3	2	5
Perceived safety	**19**	**7**	**26**
Negative attitude towards contiguous neighbourhood	2		2
The place is safer now	6	4	10
This area is safe because people know each other	7	2	9
This place has many routes for escaping	4	1	5
Physical features	**42**	**10**	**52**
Housing quality is contrasting	1		1
Permeability in neighbourhood is positive for safety	5	1	6
Place in poor physical conditions	8	3	11
Positive attitude towards physical features	25	6	31
The place is less safe now	3		3
Public spaces	**20**	**7**	**27**
Concerns about supply of public spaces	1		1
Concerns about supply of public spaces -land invasion	2		2
Concerns about supply of public spaces for kids	1		1
Good supply and diversity of uses in current parks	4	1	5
Neighbours' requests about more opening hours in community parks	1		1
Positive attitude towards closing/fencing public spaces as safety measure	2	3	5
Public space in poor condition		1	1
This public space was regenerated	7	2	9
Use of alternative spaces for socialisation - teenagers	2		2
Signs of fear	**34**	**26**	**60**
Dangerous Bus Stop	9	3	12
Dark place	4	5	9
Isolated place	4	7	11
Parked vehicles are scary	5	4	9
Vacant lots are scary	2	1	3
Vehicles in movement make the place unsafe	10	6	16
Surveillance	**11**	**8**	**19**
Negative attitude towards private security	1	2	3
Permeability in neighbourhood is positive for safety	6	3	9
Positive attitude towards private security	1	2	3
Vehicles in movement help safety	3		3
Walls of gated communities are not permeable		1	1
Traffic	**14**	**13**	**27**
Heavy traffic	10	10	20
Parked cars are obstacles for traffic	4	3	7
Walking routes	**9**	**12**	**21**
Dangerous walking distance to Bus Stop	6	7	13
Dangerous walking route	3	5	8
Total	**228**	**135**	**363**

List of georeferenced comments about Feelings. Out and Next to gated community's edge

Comments by subcategories	No wall	Next to wall/edge	Total
Anger	**1**		**1**
Anger because sale and consumption of drugs	1		1
Fear	**56**	**41**	**97**
Concern about someone else safety	9	6	15
Fear of being abducted		1	1
Fear of being attacked		4	4
Fear of being killed	4		4
Fear of being mugged	16	12	28
Fear of being sexually harassed		3	3
Fear of burglary	4		4
Fear of immigrants	1	1	2
Fear of my relative/friend might be raped	1	1	2
Fear of my relative/friend might be sexually harassec	1		1
Fear of reprisals	1		1
Fear of shootings	2		2
Fear of someone might abduct my child		3	3
Fear of someone might be hidden -weed	4	6	10
Fear of strangers	13	4	17
Neighbourhood's perception	**1**	**1**	**2**
Proud about our neighbourhood image	1	1	2
Perceived safety	**147**	**61**	**208**
This place is safe during day	26	11	37
This place is safe during night	6	4	10
This place is safe most of the time	30	5	35
This place is unsafe during day	4	2	6
This place is unsafe during night	26	13	39
This place is unsafe most of the time	19	8	27
This place is very safe during day	4	2	6
This place is very safe during night	1	2	3
This place is very safe most of the time	2		2
This place is very unsafe all the time	15	10	25
This place is very unsafe during night	14	4	18
Total	**205**	**103**	**308**

List of georeferenced comments made by women about Feelings. Out and Next to gated community's edge.

Comments by subcategories	No wall	Next to wall/edge	Total
Fear	**25**	**23**	**48**
Concern about someone else safety	3	4	7
Fear of being abducted		1	1
Fear of being attacked		2	2
Fear of being killed	3		3
Fear of being mugged	7	5	12
Fear of being sexually harassed		3	3
Fear of burglary	3		3
Fear of immigrants		1	1
Fear of shootings	2		2
Fear of someone might abduct my child		3	3
Fear of someone might be hidden -weed		3	3
Fear of strangers	7	1	8
Perceived safety	**78**	**37**	**115**
This place is safe during day	14	7	21
This place is safe during night	2	1	3
This place is safe most of the time	17	4	21
This place is unsafe during day	2	1	3
This place is unsafe during night	13	10	23
This place is unsafe most of the time	10	6	16
This place is very safe during day	3	1	4
This place is very safe during night	1	1	2
This place is very safe most of the time	2		2
This place is very unsafe all the time	10	4	14
This place is very unsafe during night	4	2	6
Total	**103**	**60**	**163**

List of georeferenced comments made by men about Feelings. Out and Next to gated community's edge.

Comments by subcategories	No wall	Next to wall/edge	Total
Anger	**1**		**1**
Anger because sale and consumption of drugs	1		1
Fear	**31**	**18**	**49**
Concern about someone else safety	6	2	8
Fear of being attacked		2	2
Fear of being killed	1		1
Fear of being mugged	9	7	16
Fear of burglary	1		1
Fear of immigrants	1		1
Fear of my relative/friend might be raped	1	1	2
Fear of my relative/friend might be sexually harassec	1		1
Fear of reprisals	1		1
Fear of someone might be hidden -weed	4	3	7
Fear of strangers	6	3	9
Neighbourhood's perception	**1**	**1**	**2**
Proud about our neighbourhood image	1	1	2
Perceived safety	**69**	**24**	**93**
This place is safe during day	12	4	16
This place is safe during night	4	3	7
This place is safe most of the time	13	1	14
This place is unsafe during day	2	1	3
This place is unsafe during night	13	3	16
This place is unsafe most of the time	9	2	11
This place is very safe during day	1	1	2
This place is very safe during night		1	1
This place is very unsafe all the time	5	6	11
This place is very unsafe during night	10	2	12
Total	**102**	**43**	**145**