

# The Role of Apartment Typology- and Public Space Configurations in Neighbourhood Liveability:

*A Study of Perceived Safety, Social Interaction and Informal Social Control in Historicibuurt, The Hague.*

# GRADUATION REPORT

Designing for Health & Care Graduation Studio

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## 00. Foreword

This graduation research originates from my longstanding interest in the liveability of residential environments and the creation of healthy living conditions in cities. I'm aware that both liveability and health are under pressure as a result of ongoing urban densification. My previous graduation project focused on mitigating urban stressors. This strengthened my understanding that issues such as nuisance, perceived safety, and everyday stress play a crucial role in both the liveability and the health of residential neighbourhoods.

This awareness formed the starting point for this research. It explores how spatial design can contribute to safer and more social supportive living environments. A key challenge in this process is that a big part of the research addresses subjective experiences, such as feelings of safety and social interaction. These are inherently difficult to measure and translate into concrete design decisions. I will therefore seek to carefully interpret and synthesise qualitative insights, with the aim of translating them into a coherent and convincing architectural and urban design proposal.

## 00. Abstract

Urban residential areas characterised by low perceived safety, weak social cohesion, and fragmented public space often experience reduced neighbourhood liveability.

This research focuses on the northern part of the Historicibuurt in Houtwijk, The Hague, where the existing apartment typologies and their adjacent public spaces contribute to limited visibility, ambiguous spatial boundaries, and insufficient opportunities for everyday social interaction.

The central research question is:

*How could a redesign of the apartment typologies and their direct adjacent public space in Historicibuurt, The Hague, improve perceived safety and social cohesion, thereby enhancing neighbourhood liveability?*

The study adopts a research-by-design methodology. It combines literature reviews, spatial analysis, fieldwork, interviews, case study research, and design evaluation.

The findings show that perceived safety, social interaction, and informal social control are strongly interrelated. In the current situation, blind façades, hidden corners, storage areas, unclear thresholds, and poorly overlooked routes weaken the residents' sense of safety and reduce collective responsibility for shared spaces. Social cohesion is present in this area, but it remains fragmented and mainly limited to direct neighbours.

The research concludes that (re)designs could enhance liveability by designing the relationship between housing and public space into an active, visible, and socially meaningful spatial structure. Key solutions include active ground floors, improved sightlines, collective entrances, communal gardens, soft transitions between public and private space, and shared amenities along daily routes. These strategies can strengthen natural surveillance, support informal encounters, and encourage residents to recognise, use, and care for shared spaces. In this way, the project demonstrates how architectural and urban design can contribute to a safer, more cohesive, and more liveable neighbourhood.

# 01

# Introduction

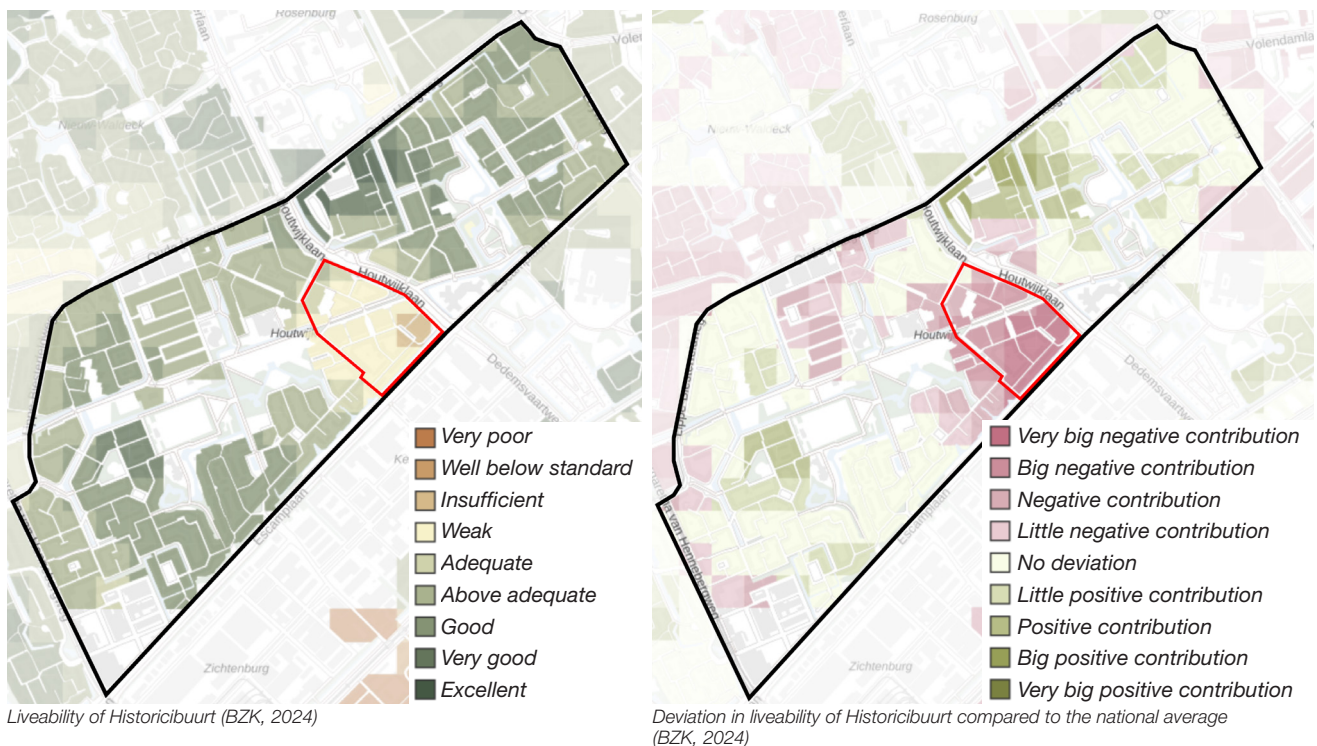
- 01. Problem Statement
- 01.1 Research & Design questions
- 01.2 Scope



## 01. Problem statement

Recent studies highlight the complex challenges the Netherlands faces in maintaining liveability amidst increasing urban densification (Bakker et al., 2024). Houtwijk, a district in The Hague, was developed in response to the housing shortages in the 1970s and 1980s (Wijkberaad, z.d.). According to the “Leefbaarometer” (BZK, 2024), liveability in Houtwijk scores below the national average, with Historicibuurt showing the strongest negative deviation within this neighbourhood. This deviation is mainly caused by low scores in nuisance and unsafety, social cohesion, and housing stock.

To emphasise the importance of neighbourhood liveability, Kress et al. (2020) demonstrate that characteristics of the residential environment are not only directly associated with health outcomes but also exert an indirect effect through social cohesion. Their findings show that poorer neighbourhood conditions are linked to lower levels of social cohesion, reflected in weaker social ties and reduced trust among residents, which subsequently contributes to worse physical and mental health outcomes. This evidence highlights social cohesion as a key mediating mechanism through which low liveability translates into adverse health effects.



A closer analysis shows that the negative deviation is mostly in the northern part of Historicibuurt, particularly in the zone bordering the Escamplaan (BZK, 2024). This is primarily caused by unsafety and nuisance reports. Residents report feelings of (perceived) unsafety and nuisance, including youth disturbance, fireworks-related incidents, and drug-related encounters. These experiences negatively affect how public space is used and perceived, and may further weaken social cohesion (Montanari et al., 2024).

Observations indicate that visibility and natural surveillance are limited within this part of Historicibuurt. This area is characterised by apartment buildings from the early 1980s. These buildings range from two to five storeys with storage spaces on the ground-level and relatively small windows facing the



*Streetprofile of Historicibuurt (own drawing)*

public realm. The direct public space consists of entrance zones, parking areas and green strips that are weakly defined and inconsistently connected to the dwellings. In this neighbourhood sightlines are obstructed by parked cars, overgrown or poorly maintained greenery, access galleries, and building layouts that offer little visual connection between dwellings and the street. The ground floors are largely inactive due to storage functions rather than residential entrances, resulting in fewer “eyes on the street” and reduced informal social control. A study from Cozens & Love (2015) supports this, showing that environments with poor visibility, limited natural surveillance, and underused public spaces are associated with reduced informal social control and higher levels of perceived unsafety.

In addition, the infrastructural layout around these apartment buildings is strongly car-oriented. Parking and access roads dominate the street profile, while green elements mainly serve visual or ecological purposes and function as spatial barriers rather than usable or interactive spaces. As a result, there is a lack of clearly defined, attractive, and accessible shared spaces that encourage residents to meet, linger, or engage in everyday social interaction (Xu et al., 2023).



*Historicibuurt Jan Romeinstraat overgrown/poor maintained green (own picture)*

The core problem, that liveability scores this low in the northern part of Historicibuurt, is therefore not solely social in nature, but spatial. The current configuration of apartment buildings and their directly adjacent public space does not sufficiently support visibility, social interaction, and a sense of safety. This undermines both perceived safety and social cohesion, contributing to the overall low liveability score of the area.

This leads to the need for a spatial and architectural investigation into how the apartment buildings of historicibuurt and their surrounding public spaces can be redesigned to improve perceived safety, strengthen social interaction, and support crime prevention, thereby contributing to a more liveable neighbourhood.



## 01.1 Research & Design questions

### RESEARCH QUESTION

How could a redesign of the apartment typologies and their direct adjacent public space in Historicibuurt, The Hague, improve perceived safety and social cohesion, thereby enhancing neighbourhood liveability?

*Perceived safety refers to residents' subjective experience of safety within the neighbourhood. It is shaped less by actual crime rates than by spatial and social cues that enhance visibility and informal oversight (Cozens & Love, 2015). A key mechanism underpinning perceived safety is "eyes on the street". This is a form of natural surveillance where everyday presence and mutual visibility discourage undesirable behaviour.*

*Social cohesion means the degree of connectivity, trust and shared norms among residents. This is fostered through social interaction in (semi-)public spaces (Qi et al., 2024).*

*Social control operates at the intersection of these concepts. It emerges from social cohesion while reinforcing perceived safety through informal regulation based on shared expectations (Cozens & Love, 2015).*

### SUB QUESTIONS

How do the spatial layout and architectural form of existing apartment typologies and adjacent public spaces in Historicibuurt influence perceived safety, meant eyes on the street?

What role do building access, circulation routes, and public-space configurations in Historicibuurt play in shaping everyday encounters, meant social interaction, among residents?

How does the spatial relationship between public, semi-public, semi-private, and private spaces in Historicibuurt shape informal social control among residents?

## 01.2 Scope

### Research focus

This graduation project investigates how spatial interventions in existing residential environments can contribute to health, safety, and social interaction. The research focuses on the relationship between existing apartment blocks and their immediate adjacent in Houtwijk. The case studies are used to understand how access, circulation, visibility, and the treatment of building edges influence the way residents and visitors experience the neighbourhood.

The main research focus is the connection between the apartment blocks and the surrounding urban fabric. The research will study how the spaces around the blocks relate to neighbouring streets, paths, green areas, and public spaces. Particular attention will be given to spatial transitions, sightlines, accessibility, and inactive ground-floor edges, as these conditions strongly affect the social and spatial quality of the residential environment.

A second focus is on the access and circulation system around the existing apartment blocks. This includes the external staircases, routes towards front doors, entrance sequences, and the way these elements are perceived from the street. These spatial conditions are examined in relation to safety, legibility, social contact, and the transition between private, semi-public, and public space.

The scope also includes an investigation into the potential of underused or problematic building edges. Blank façades, unclear entrances, and leftover spaces will be analysed as opportunities to improve the relationship between the building and its surroundings. The research will also explore whether additional dwellings or shared functions could contribute to a more active and supportive residential environment.

### Design elaboration

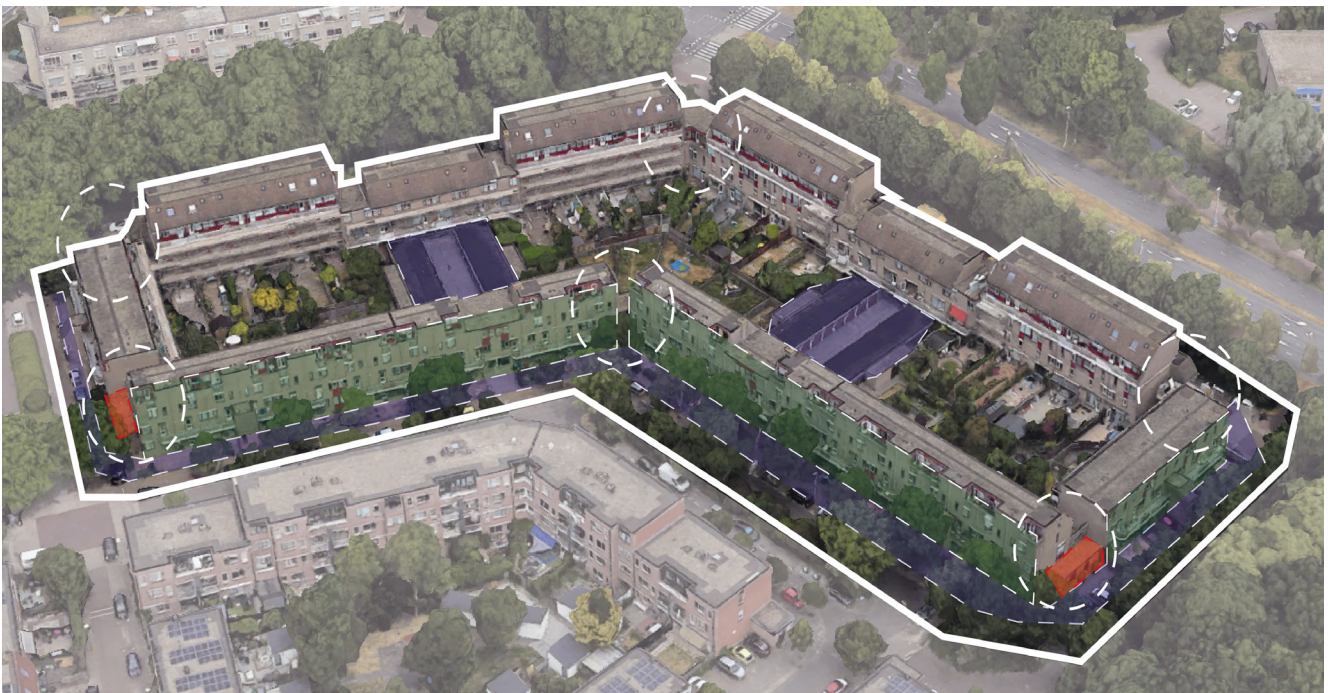
The design elaboration will translate these research findings into a spatial proposal for the selected living environment in Houtwijk. The main task is to develop a new access structure that improves circulation, entrance sequences, and the relationship between the building and public space.

The proposal will test how redesigned access routes, clearer thresholds, façade openings, and active ground-floor edges can make the buildings more inviting, recognisable, and socially connected. The design will investigate how public or shared functions, can activate the edges of the blocks and strengthen the connection with the wider neighbourhood.

The design will explore where new dwellings could be integrated into the existing blocks. These additions will not be treated as a goal in themselves, but as part of a wider investigation into how the existing residential environment can be transformed into a more legible, accessible, inclusive and socially supportive place.



Target location: Historiebuurt in Houtwijk of The Hague, the Netherlands



Target points: Access routes, blind building corners, direct public space.

# 02

# Approach

- 02.1 Methodology
- 02.2 Theoretical framework

## 02.1 Methodology

### Research and Design Approach

This project uses a research-by-design methodology, in which research informs design decisions and design exploration generates new insights into potential solutions.

The approach consists of four main stages:

#### Literature synthesis

Studies on social cohesion, perceived safety, social control and liveable neighbourhoods are examined and compared with observations from the Historicibuurt.

#### Collection of soft data in Historicibuurt

Through fieldwork and interviews qualitative data is gathered on how residents experience their dwellings and neighbourhood. This identifies key problems, needs and opportunities.

#### Spatial analysis and design exploration

The collected knowledge is translated into spatial themes and design criteria. Multiple scenarios are explored to test how visibility, access, boundaries and shared spaces may influence perceived safety and social cohesion.

#### Evaluation and refinement

Evaluation is done against a design toolbox, developed from the research findings. The toolbox consists of design criteria such as visibility, eyes on the street, accessibility, public-private boundaries, social interaction, and connectivity. The design can be assessed against these criteria to determine whether it meets the key requirements.

### Research Techniques and Tools

The approach is supported by 4 different techniques and tools:

#### Fieldwork

On-site spatial analysis, focusing on visibility, routes, spatial boundaries, and public-space use. Behavioural observations are conducted to understand movement patterns, use of shared spaces, and conditions influencing perceived safety and social interaction

#### Interviews

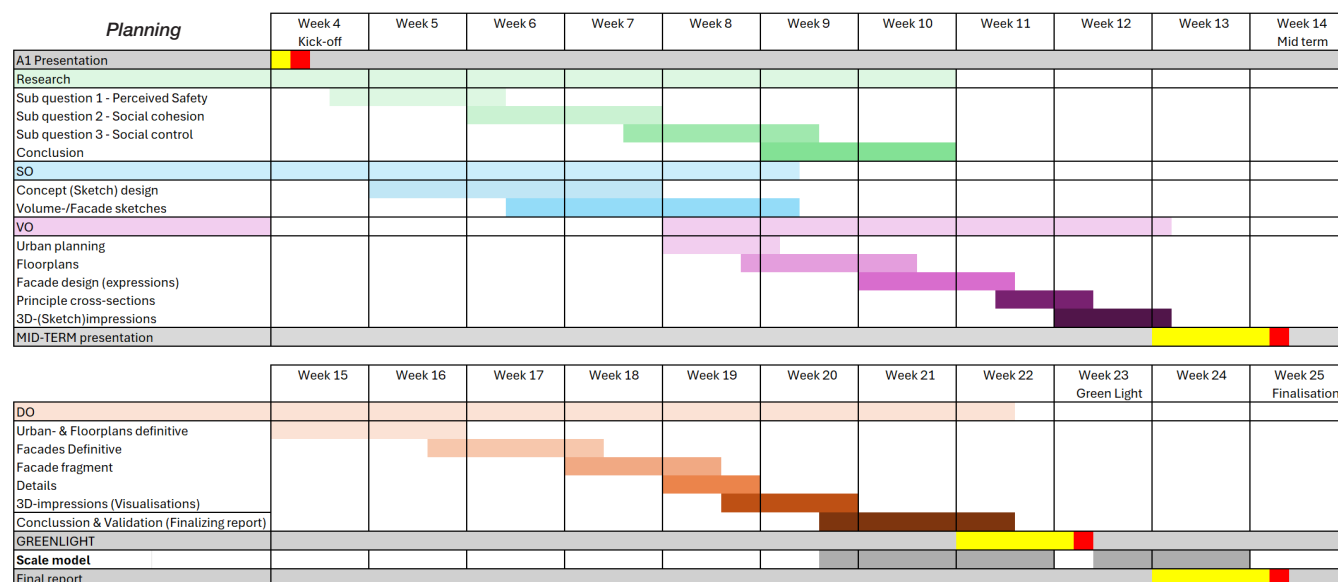
Semi-structured interviews with residents to explore experiences of safety, social cohesion, and public-space use.

#### Case Studies

Analysis of neighbourhood projects addressing safety, social cohesion, and natural surveillance with transformations of low-income neighbourhoods.

#### Mapping and Modelling

Spatial models, diagrams and 2D/3D drawings are used to visualise existing conditions and test alternative spatial scenarios.



## 02.2 Theoretical Framework

As pressures on neighbourhood liveability increase in the Netherlands due to urban densification, growing pressure on public space and changing patterns of urban life, the immediate residential environment has become increasingly important for supporting safety, social interaction, and everyday quality of life (Bakker et al., 2025). This research investigates the relationship between the residential environment, perceived safety, social cohesion, and the role of the built environment. The theoretical framework therefore focuses on how spatial conditions may influence social interaction, informal social control, and perceived safety within neighbourhoods.

### **Neighbourhood liveability & social cohesion**

Neighbourhood liveability refers to the degree to which a residential environment supports quality of life. It is understood as a multidimensional concept, involving physical, social, environmental, and functional aspects of neighbourhood life. In the Dutch context, liveability is assessed through categories such as housing stock, physical environment, facilities, social cohesion, nuisance, and safety (BZK, 2024). Within this concept, social cohesion concerns the strength of social relationships, mutual trust, shared awareness, and the sense of belonging among residents.

Social cohesion is relevant because neighbourhoods are not only physical environments, but also social settings in which everyday encounters, familiarity, and informal relationships develop. Public space could support these processes by creating conditions for co-presence, repeated informal contact, and shared use among residents (Qi et al., 2024). The relationship between public space and social cohesion however, is not automatic. Spatial qualities may create opportunities for interaction, but whether these opportunities lead to stronger cohesion also depends on social, cultural, demographic, and perceptual factors (Qi et al., 2024).

### **Perceived safety & social control**

Perceived safety refers to residents' subjective sense of security in public and semi-public space. It differs from objective crime rates because it is shaped by everyday experiences, visibility, environmental quality, previous incidents, and the presence or absence of other people.

Social control refers to the informal regulation of behaviour through mutual awareness, everyday presence, and shared norms within a residential environment.

Crime Prevention Through Environmental Design (CPTED), provides an important theoretical perspective on the relationship between spatial design and safety. CPTED assumes that the built environment can influence opportunities for crime and perceptions of safety through spatial mechanisms such as natural surveillance, territorial reinforcement, access control, maintenance, and activity support (Cozens & Love, 2015). Natural surveillance concerns the extent to which people can see and be seen in public space. Territorial reinforcement refers to spatial cues that clarify the distinction between public, semi-public, and private space. Access control concerns the legibility and regulation of movement through an area, while maintenance and image management influence whether a space appears cared for, used, and socially regulated (Cozens & Love, 2015).

The concept of "eyes on the street" further explains how active building edges, visible entrances, and overlooking dwellings can increase opportunities for observation and informal social control. Safety is not only produced by formal security measures, but also by everyday presence, visibility, and the continuous use of public space. Later developments in CPTED also emphasise social dimensions, such as community cohesion, social connectivity, and the involvement of residents in their living environment (Cozens & Love, 2015).

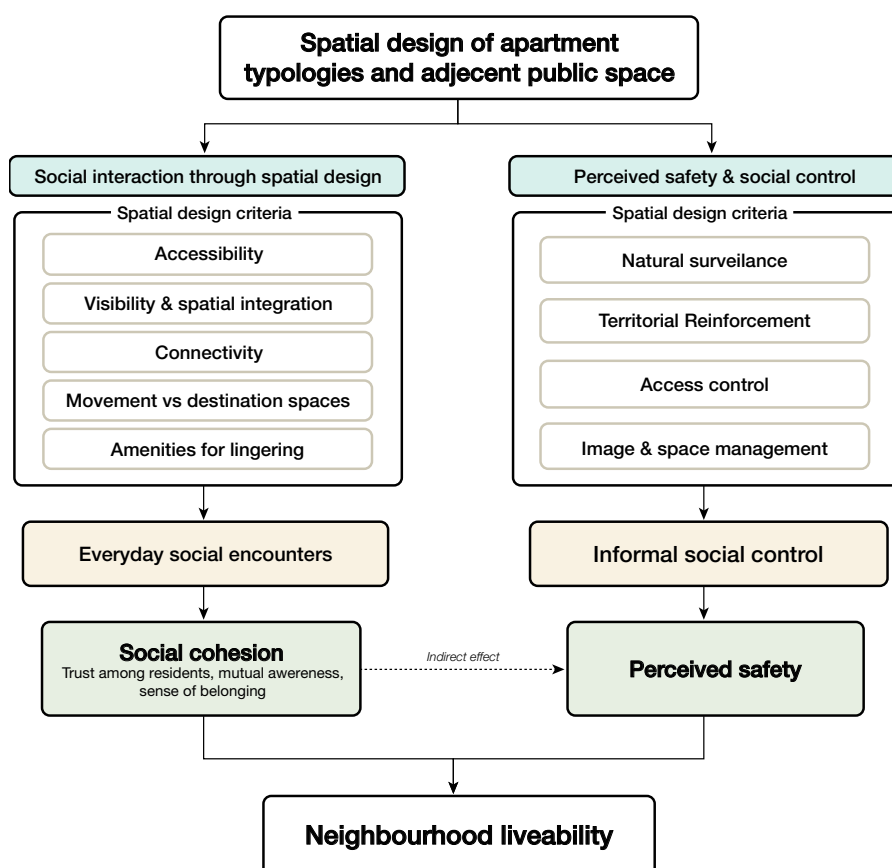
### Social interaction through spatial design

Social interaction through spatial design concerns the role of the built environment in shaping everyday encounters between residents. Urban design literature shows that public and semi-public spaces can support social cohesion when they create conditions for co-presence, repeated informal contact, and opportunities to stay rather than merely pass through (Gehl, 2011; Qi et al., 2024).

Gehl (2011) distinguishes between necessary, optional, and social activities in public space. Necessary activities, like walking to work or waiting for public transport, occur under most physical conditions. Optional activities, such as sitting, lingering, or spending time outdoors, depend more strongly on the quality of the physical environment. Social activities, such as greetings, conversations, passive contact, and children’s play, often emerge when people are present in the same space. This distinction shows that spatial design does not directly create social life, but it can influence whether people have reasons and opportunities to remain in public space.

The spatial qualities, accessibility, spatial integration, pedestrian comfort, seating opportunities, mixed uses, visibility, and the presence of attractive and usable public spaces, are repeatedly associated with social interaction and social cohesion (Gehl, 2011; Qi et al., 2024; Wickes et al., 2019). Such qualities may increase the likelihood of routine encounters and shared use. At the same time, public space must also allow for comfort, choice, and appropriate distance, since social interaction is more likely to occur when people feel both invited and secure.

These theories suggest that spatial design can contribute to neighbourhood liveability by shaping the conditions for social interaction, informal social control, and perceived safety. The built environment should therefore be understood as an enabling condition: it does not determine social cohesion or safety by itself, but it can support or limit the everyday practices through which these qualities develop.



Conceptual model of the theoretical framework (Own diagram)

# 03

# Results

- 03.1 Perceived Safety
- 03.2 Social interaction
- 03.3 Informal Social Control
- 03.4 Architectural Toolbox
- 03.5 Implementation in Historicbuurt



## 03.1 Perceived Safety

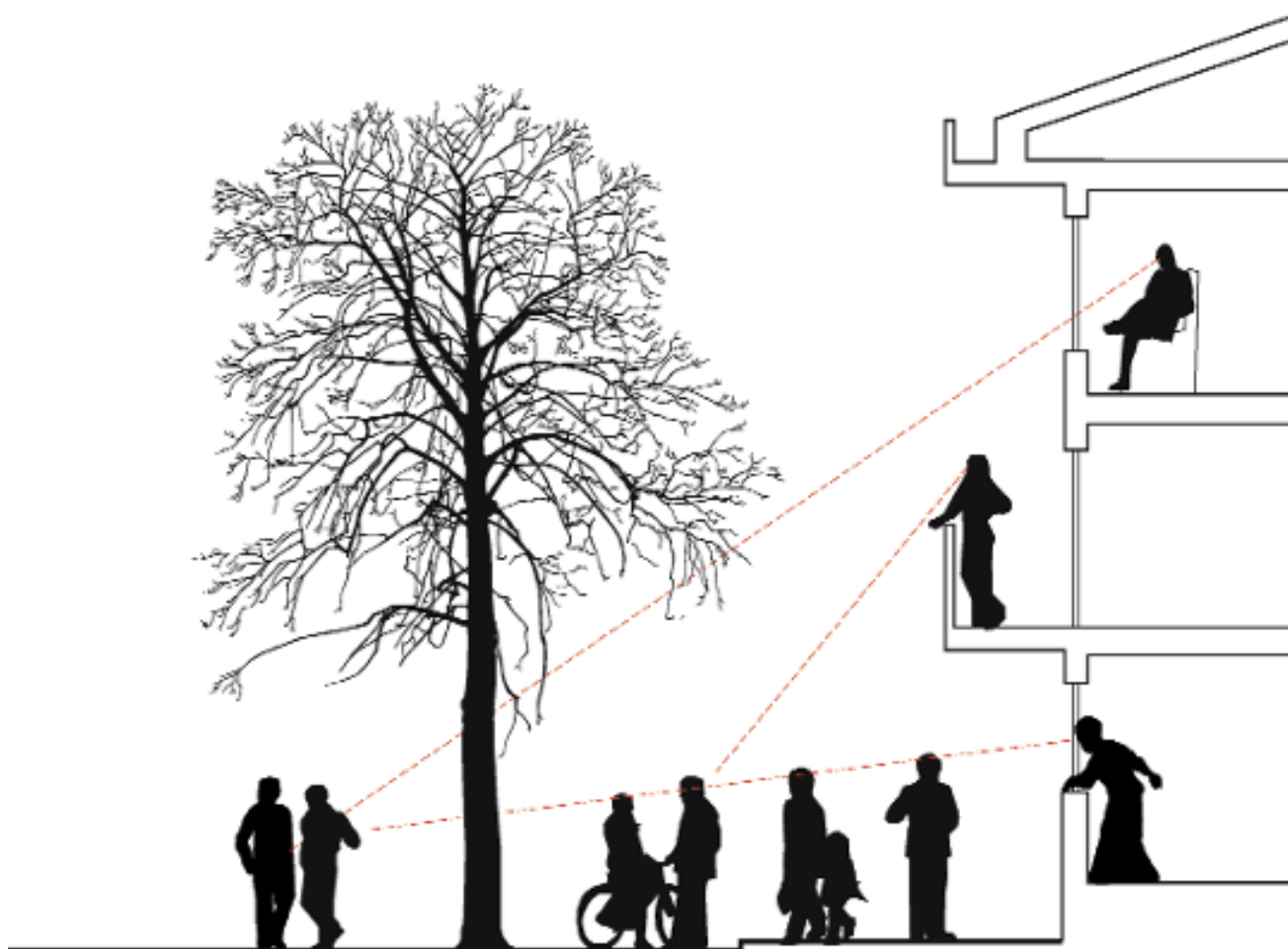
Perceived safety is understood as the subjective appraisal of safety and security in (semi-)public spaces. It is shaped by how people interpret environmental and social cues in their surroundings. A reasearch from Qi et al (2024) on public space and social cohesion positions perceived safety as a key factor that can influence whether people are willing to use a space and engage with others. The CPTED explains that design influences fear of crime and safety perception through strategies like surveillance, territorial reinforcement, and management cues (Cozens & Love, 2015).

### Literature findings

The literature identifies several spatial qualities that can support perceived safety in living environments. These qualities do not automatically produce safety, but they affect how residents read, use, and evaluate (Semi-) public spaces. Perceived safety is affected by visibility, active edges, territorial clarity, maintenance, routine social presence, and human-scale design.

- **Natural surveillance**  
Natural surveillance is about how well people can see and be seen in public or semi-public spaces. In the CPTED theory they consider natural surveillance important because visible routes, entrances, windows, and communal spaces increase opportunities for informal observation (Cozens & Love, 2015). Clear sightlines and visible destinations can also support orientation and reduce uncertainty, especially in spatially complex environments (Gath-Morad et al., 2021). In residential settings, however, surveillance should remain mutual and human-scaled. Excessive exposure without sufficient privacy may create discomfort and can negatively affect the quality of residential life (Cozens & Love, 2015; Gehl et al., 2006; Nguyen et al., 2025).
- **Active edges and fine-grained ground floors**  
Active edges and fine-grained ground floors support perceived safety by increasing pedestrian presence and creating more opportunities for informal supervision. Elements like: doors, transparent façades, small units, façade detail, mixed uses, and visible ground-floor activity can make streets feel more inhabited and socially monitored (Gehl et al., 2006; Gehl, 2011). Pedestrian-oriented design, mixed land use, and rich ground-floor conditions may support interaction, attachment, and safer perceptions of urban space (Qi et al., 2024). However, active edges are most effective when they are located along routes and places that people actually use, such as daily routes, entrances, and local gathering points (Gehl et al., 2006; Gehl, 2011; Qi et al., 2024; Wickes et al., 2019).
- **Territorial clarity**  
Perceived safety is influenced by the legibility of spatial transitions between public, semi-public, semi-private, and private space. Territorial reinforcement concerns the use of spatial cues that help people understand who belongs where and who is responsible for a space (Cozens & Love, 2015). Clear transitions can support informal social control because they make ownership, access, and appropriate behaviour easier to read. But at the same time, territorial boundaries should not become hostile or defensive. They should clarify spatial responsibility while still supporting openness, everyday presence, and social use (Cozens & Love, 2015; Gehl et al., 2006).
- **Maintenance and environmental care**  
Maintenance and environmental care influence perceived safety. The physical condition of a place communicates whether it is looked after, used, and socially regulated. CPTED literature describes maintenance and image management as important factors in reducing fear of crime and strengthening confidence in the environment (Cozens & Love, 2015). at the same time, visible disorder and poor maintenance are relevant indicators when assessing safety-related qualities of the living environment (Sas et al., 2022). A maintained environment can therefore support perceived safety by signalling care, responsibility, and ongoing use. However, maintenance must be continuous. Deterioration can quickly weaken safety perception and social trust (Cozens & Love, 2015; Sas et al., 2022).

*These make perceived safety assessable as a spatial and social design outcome by comparing the baseline and the proposal against observable conditions such as natural surveillance, legible territorial transitions, active ground floors, maintenance, everyday social presence, and human scale.*



*Natural surveillance (DiAP Laboratorio Qualità Urbana e Sicurezza, 2007)*

- Routine social presence and social cohesion**  
 Perceived safety is not only shaped by physical form. It is also by the presence of other people and the social meaning of everyday encounters. Spaces that support routine social presence, local networks, neighbourhood attachment, and social cohesion tend to feel safer over time (Kress et al., 2020; Qi et al., 2024; Wickes et al., 2019). Everyday presence could normalise informal supervision and reduce unease, particularly when people recognise others or feel that a space is collectively used (Gehl, 2011). Therefore, public and semi-public spaces should not only enable movement. It should also provide comfortable conditions for staying. Seating, small-scale gathering places, and flexible communal areas can increase the possibility of social presence and informal contact (Nguyen et al., 2025; Qi et al., 2024).
- Human scale and reduced anonymity**  
 Human-scale design is important because very large, anonymous, or poorly articulated environments may weaken informal social control and reduce residents' sense of connection to their surroundings. Gehl et al. (2006) argue that the first metres of the ground floor are especially important because this is where pedestrians experience buildings at close range. Designing at this scale can influence whether streets feel welcoming, legible, and socially active. Density can support social interaction, but only when combined with walkability, visible activity, active ground-floor edges, and a manageable human scale (Bakker et al., 2025; Cozens & Love, 2015; Gehl et al., 2006; Gehl, 2011; Qi et al., 2024). Density without these qualities may instead contribute to anonymity and weakened control.

## Interview data

*For this chapter, 45 people were interviewed across three different days. The respondents were current or former inhabitants of the target area. Personal data was deliberately not collected to protect participants' anonymity.*

### Questions

- *When do you feel safest here, and when do you feel least safe? (time/place)*
- *Are there places you avoid, and why?*
- *What makes you feel seen, or not seen?*
- *Can you describe a recent moment you felt unsafe?*
- *What spatial or management change would improve your sense of safety?*

## Interview findings

The interviews show that perceived safety in Historicibuurt is strongly shaped by familiarity and personal experience. Several long-term residents describe the neighbourhood as calm and liveable, especially compared with earlier periods of unrest, loitering, and street conflict. For these residents, familiarity with the neighbourhood appears to reduce feelings of insecurity.

Not all residents experience the area as safe. Some indicate that they feel safest inside their own homes or perimeters. Specific incidents, such as robbery or nuisance, continue to influence how they perceive the public space. Feelings of insecurity increase especially in the evening, when the atmosphere is described as more tense and nuisance from loitering youths, scooters, fat bikes, or drug-related behaviour becomes more visible.

The interviews also indicate that certain locations are experienced as more vulnerable. Gates, alleyways, corners and storage areas are mentioned as places where movement and gathering can occur with limited oversight. These spaces are not necessarily unsafe at all times, but they are experienced as less predictable and harder to read.

The interviews suggest that perceived safety in Historicibuurt is relational rather than fixed. Residents who know the area well may feel relatively secure, while newcomers or outsiders may experience the same spaces as unclear or intimidating. Safety is therefore shaped by both social familiarity and the spatial qualities of the neighbourhood.

*These experiences- summaries are constructed on the basis of residents' interview responses. The answers have been reformulated and combined into continuous texts to safeguard the anonymity of the interviewees.*

## Observation findings

The spatial observations and analysis show several conditions that may weaken perceived safety in Historicibuurt. Some public and semi-public spaces have limited visibility from surrounding dwellings. This is especially visible around blind façades, external stairwells, storage areas, gates, and corners. These spaces provide little visual connection between homes and public space.

The photographed examples show how blank façades and small façade openings reduce overlooking. In some locations the leftover spaces are used for bicycle storage, parking, or informal use, which makes the environment harder to read. These spatial conditions may reduce natural surveillance and weaken the sense that spaces are actively cared for or socially monitored.

### Interpretation in relation to perceived safety

The interview and observation findings point to the same issue: perceived safety in Historicibuurt is strongly affected by visibility, legibility, and everyday presence. Residents do not only respond to actual incidents, but also to spatial cues such as hidden corners, unclear thresholds, poor oversight, and signs of unmanaged use.

This means that safety in the neighbourhood depends partly on familiarity. People who know the area may understand these spaces and behaviours better. Others may experience them as unpredictable. This means that the spatial layout does not directly cause insecurity, but it can strengthen or weaken the conditions through which residents feel seen, oriented, and socially supported.



Analysis shows that this is a neighbourhood with poor visibility, not only in the public realm but also from the dwellings into the public realm.



Area's with blind facades cause people to use this space rather as a storage or parking space, which leads to a hard-to-read environment

### Spatial needs related to perceived safety

The findings suggest a need for more visible, legible, and predictable public and semi-public spaces. Vulnerable locations such as alleyways, gates, corners and storage areas require clearer spatial definition and stronger visual relationships with surrounding dwellings. The interviews also point to the importance of reducing evening nuisance and improving the everyday readability of the neighbourhood.

More broadly, perceived safety should not depend only on the residents' familiarity with the area. It should also be supported by spatial qualities that make public space easier to understand, overlook, and use.

## Case study on perceived safety

### ***Clason Point of Five Oaks, Dayton, Ohio, USA***

Five Oaks is a residential neighbourhood in Dayton, Ohio. It is often discussed in relation to Oscar Newman's Defensible Space theory. The area was reorganised in the early 1990's through spatial interventions intended to reduce crime and strengthen residents' sense of control over their living environment. The project divided the neighbourhood into smaller residential areas, reduced through-traffic, and clarified the boundaries between public and resident-controlled spaces (Cisneros, 1995).

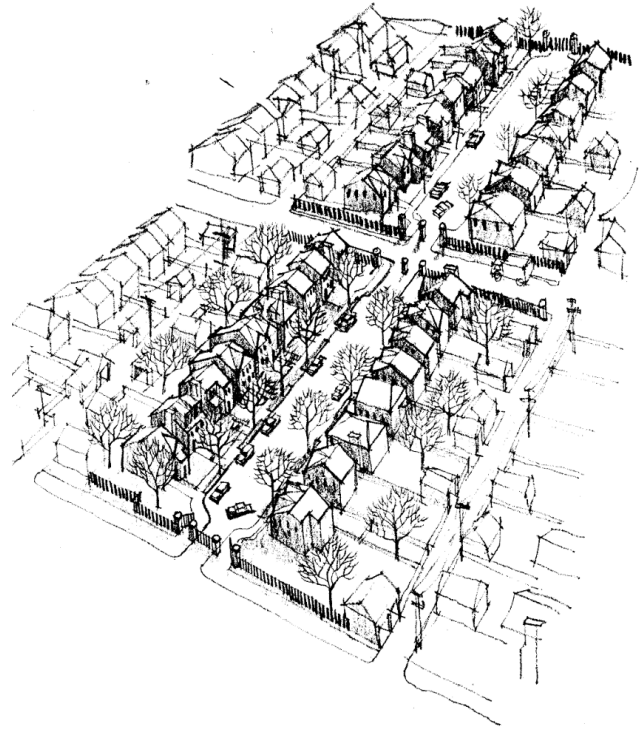
#### **Relevance to perceived safety**

The case shows how perceived safety can be influenced by spatial legibility, territorial definition, and reduced anonymity. Rather than relying only on policing, the project used the layout of the neighbourhood to make space feel more observable, controlled, and connected to residents. This corresponds with CPTED principles, in which territorial reinforcement, natural surveillance, and access control are understood as spatial conditions that can influence perceived safety (Cozens & Love, 2015).

#### **Lessons for this research**

The main strategies applied in Five Oaks were the reduction of through-traffic, the creation of smaller residential enclaves, and the strengthening of territorial definition. The neighbourhood became less anonymous and less accessible to non-residents by closing or restricting some streets. This increased the visibility of unfamiliar behaviour and made everyday spaces feel more defensible.

The case shows that perceived safety is not only related to individual buildings, but also to the organisation of routes, boundaries, and collective spaces. The strategies of the case, however, should not be copied directly; its relevance lies in the underlying principles of legibility, territorial clarity, and informal supervision.



*Five Oaks neighbourhood in Dayton, Ohio (Cisneros, H. G., 1995)*

## Chapter conclusion

*How do the spatial layout and architectural form of existing apartment typologies and adjacent public spaces in Historicibuurt influence perceived safety, meant eyes on the street?*

The literature research shows that perceived safety is strongly related to natural surveillance, territorial clarity, maintenance, active edges, and everyday social presence. The CPTED theory explains that people tend to feel safer in environments where they can see and be seen, where public and private domains are legible, and where spaces show signs of care and informal supervision (Cozens & Love, 2015). Gehl further shows that active ground floors, human-scale edges, and daily pedestrian presence can strengthen informal observation and make public space feel more inhabited (Gehl et al., 2006; Gehl, 2011).

The interviews and observations in Historicibuurt show that these spatial conditions are only partly present. Public and semi-public spaces are not always well overlooked by surrounding dwellings, especially around blind façades, hidden corners, gates, alleyways, garage boxes, and storage areas. These areas weaken “eyes on the street” because they reduce visibility, make movement less predictable, and create spaces that are harder to read.

The interviews also show that perceived safety is shaped by familiarity and time of day. Long-term residents often describe the neighbourhood as relatively calm, while others feel less secure, especially when nuisance from loitering youths, scooters, fat bikes, and drug-related behaviour becomes more visible around nighttime. This confirms the literature’s view that perceived safety is not only determined by physical form, but also by social cues, daily use, and residents’ interpretation of their environment (Qi et al., 2024).

In conclusion, the spatial layout and architectural form of Historicibuurt influence perceived safety by either supporting or limiting natural surveillance and informal social control. Where homes, entrances, windows, and active edges relate clearly to public space, residents are more likely to feel seen, oriented, and socially supported. Where façades are closed, spaces are hidden, or transitions are unclear, perceived safety is weakened.

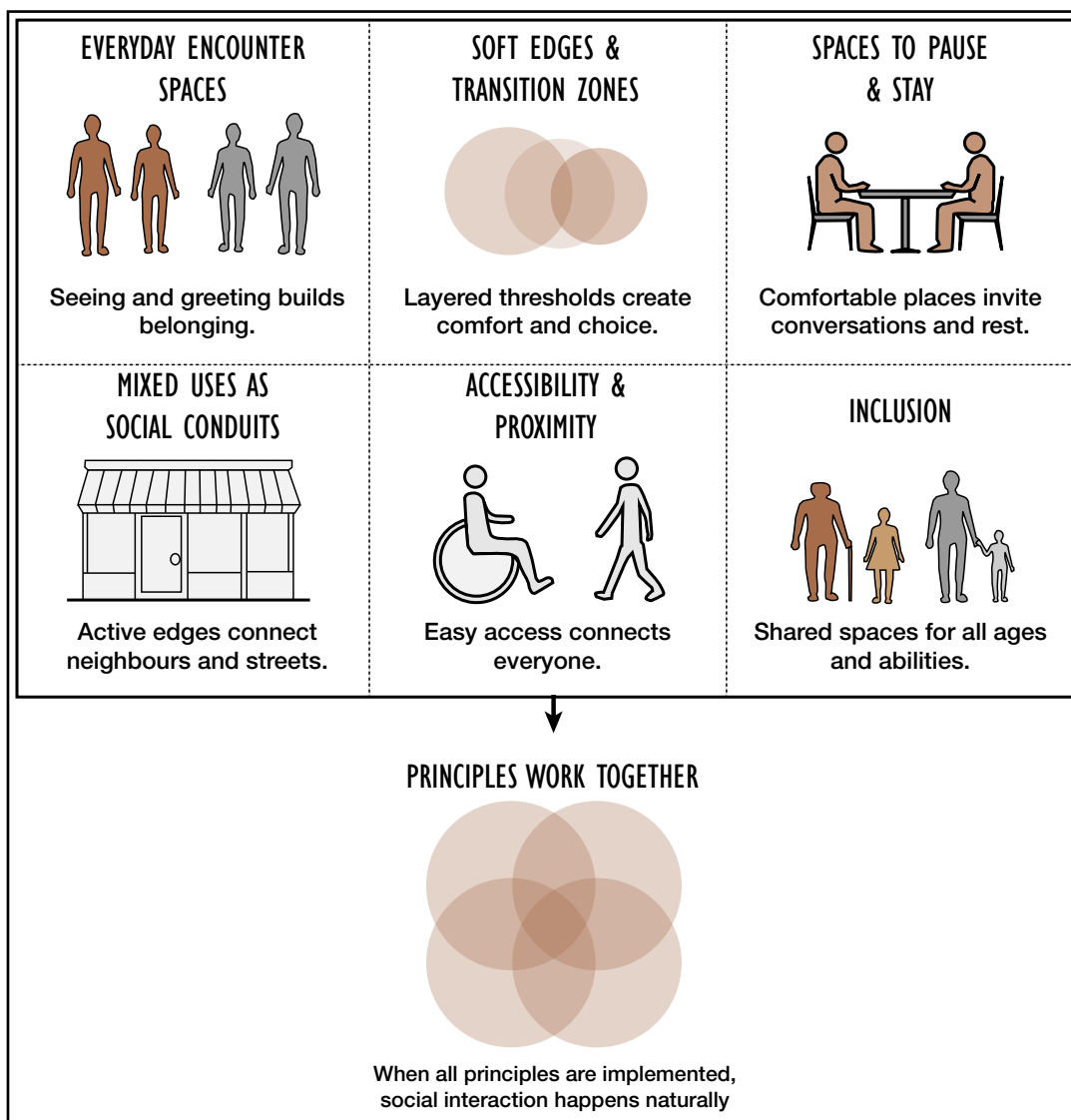
## 03.2 Social Interaction

Social interaction refers to everyday encounters, exchanges, and forms of co-presence in shared residential and public spaces. These interactions do not emerge from spatial proximity alone, but are shaped by accessibility, visibility, spatial configuration, and the social qualities of the built environment (Gehl, 2011; Qi et al., 2024). Shared spaces can support informal contact, mutual recognition, and community formation when they are part of residents' daily routines and function as recurring social conduits (Gehl & Svarre, 2013; Wickes et al., 2019).

### Literature findings

The literature identifies several spatial qualities that can support everyday encounters and social cohesion. These qualities do not automatically create community. They influence how often residents meet, whether they feel invited to stay, and whether contact can develop over time.

- **Everyday encounter spaces**  
Social interaction is more likely when residents repeatedly meet in ordinary daily settings. Parks, local shops, schools, entrances, community rooms, and shared outdoor spaces can function as low-threshold places for casual contact (Gehl, 2011; Gehl & Svarre, 2013; Qi et al., 2024; Wickes et al., 2019). These spaces are most effective when they are embedded in daily routines, because social cohesion grows through repeated ordinary encounters instead of occasional contact alone (Qi et al., 2024; Wickes et al., 2019).
- **Soft edges and transition zones**  
intermediate spaces between private dwellings and public life. Stoops, porches, buffer zones, front gardens, semi-private thresholds, and shared corridors can allow residents to regulate contact with others (Gehl et al., 2006; Gehl, 2011; Nguyen et al., 2025). These spaces are important because they balance interaction and privacy, making social contact possible without forcing exposure.
- **Accessibility and proximity**  
Accessibility and proximity influence whether shared spaces are actually used. Social spaces have more possibility to support interaction when they are close to daily routes, easy to enter, and perceived as welcoming (Gehl, 2011; Qi et al., 2024). Accessibility is therefore not only physical. It is also social and perceptual: residents must feel that the space is reachable, comfortable, and relevant to them (Qi et al., 2024).
- **Spaces to linger**  
Social interaction often depends on whether people have a reason to remain in a space. Seating, lighting, ventilation, open views, and small amenities can make shared spaces more comfortable and support lingering (Gehl, 2011; Qi et al., 2024). Such conditions are important because conversations and informal encounters usually follow from people first feeling comfortable enough to stay.
- **Mixed uses as social conduits**  
Mixed-use environments can support interaction when local functions attract repeated use by residents. Amenities such as small shops, schools, civic facilities, or communal services can work as social conduits because they create reasons for residents to cross paths in daily life (Qi et al., 2024; Wickes et al., 2019). However, mixed use only contributes to cohesion when the functions support local social life, rather than only serving external users or through-movement.
- **Visible and integrated communal spaces**  
Communal spaces are more likely to support interaction when they are visible and connected to daily movement routes. Residents are more likely to join or notice social activity when it is located along routes they already use (Gath-Morad et al., 2021; Gehl, 2011; Nguyen et al., 2025). Visibility therefore matters not only for orientation, but also for making social life observable and accessible.



(Own diagram)

- Inclusion**

Social spaces need to work for different ages, household types and cultural groups. The same space may be experienced differently depending on age, ethnicity, home ownership, length of residence, safety perception, and comfort perception (Bakker et al., 2025; Kress et al., 2020; Qi et al., 2024). Inclusive design is therefore important. Social cohesion depends on whether different residents feel welcome and able to use shared spaces.

**Summary of literature findings**

The literature findings shows that social interaction is supported by repeated encounters, accessible shared spaces, visible communal areas, soft thresholds, and comfortable places to stay. However, spatial design does not automatically create social cohesion. Shared spaces must be connected to daily routines, socially inclusive, and balanced between contact and privacy.

## Interview data

*For this chapter, 45 people were interviewed across three different days. The respondents were current or former inhabitants of the target area. Personal data was deliberately not collected to protect participants' anonymity.*

### Questions

- Do you have daily contact with your neighbours?
  - If yes: where does this usually happen?
  - If no: what do you think limits this contact?
- Which destinations do you visit (almost) every day in or around the block?
- Where do you most often run into people you know?
- Are there places where people tend to stop and chat? Why there?
- What makes you stop for a moment versus walk through?
- Which amenities or "destinations" draw people?
- If you could improve one place to encourage meeting others, which would it be and how?

### Interview findings

The interviews show that Historicibuurt is socially diverse, with different generations, lifestyles, and household types. Contact between residents appears to be limited. Most interaction takes place between immediate neighbours: People living next door, upstairs, or downstairs. There is little evidence of broader contact across the block or with residents living at the rear of the housing complex.

When interaction does occur, it is mostly connected to everyday routines. Garden maintenance is mentioned as one of the few moments when residents speak to one another. These encounters are informal and practical. They rarely seem to develop into wider neighbourhood relationships. Social cohesion therefore appears to be small-scale and based mainly on proximity.

A recurring issue is the lack of shared amenities and meeting places. Residents indicate that there are no facilities in the neighbourhood that naturally bring people together. As a result, many residents remain within their own private or semi-private outdoor spaces, such as front gardens or small private areas. Some of these spaces are actively used, but others appear neglected, which limits visible social life in the street.

The interviews suggest that demographic change affects neighbourhood interaction. Several residents refer to the ageing population and the decline of older social networks. This does not mean that social cohesion is absent, but it is fragmented. Familiarity exists mainly in small neighbour-circles, while broader community life remains limited.

### Observation findings

The observations show that Historicibuurt has few social facilities or shared functions. The public spaces between dwellings mainly support access, parking, storage, or private use, rather than collective activity. As a result, interaction between residents is most likely to occur directly near individual dwellings.

The photographs show that outdoor space is unevenly distributed between dwelling types. Ground-floor dwellings often have large front or rear outdoor spaces, and upper dwellings mainly have balconies. This limits the need for upper-floor residents to move along shared outdoor spaces or pass by neighbours' private thresholds. As a result, daily routes do not create much overlap between different residents.

Some outdoor spaces show signs of personal use and care, while others appear less active or poorly maintained. This creates an inconsistent streetscape in which some places support informal presence, while others contribute little to everyday social interaction.

### Interpretation in relation to social interaction

The interview and observation findings suggest that social interaction in Historicibuurt is limited by both social and spatial conditions. Socially, residents know some immediate neighbours, but broader networks across the block are weak. Spatially, there are few shared destinations, no comfortable public places to stay, and limited overlap between daily movement routes.

This means that the neighbourhood does not lack residents, but it lacks recurring situations in which residents naturally meet on a daily basis. Interaction depends mainly on chance encounters near private dwellings, rather than on shared spaces or amenities that regularly bring people together. In relation to the literature, this weakens the role of the built environment as a social conduit.

*These summaries are constructed on the basis of residents' interview responses. The answers have been reformulated and combined into continuous texts to safeguard the anonymity of the interviewees.*



Observational analysis shows that this neighbourhood has no social facilities or functions. Interaction between residents could only occur near their own dwellings.



Bottom dwellings have a large outdoor spaces while top dwellings only have a balcony. Top dwellings sometimes are 3x larger than bottom dwellings which makes it seem unfairly distributed. Residents from top dwellings have no reason to move along the outdoorspaces of others, which prevents them from running into other neighbours

### Spatial needs related to social interaction

The findings indicate a need for more opportunities for everyday contact beyond immediate neighbour relations. Shared spaces, local amenities, and comfortable places to pause could help create more routine encounters. These spaces should be connected to daily movement patterns and should support both contact and privacy.

More broadly, Historicibuurt needs stronger spatial conditions for community formation. Social cohesion is not absent, but it remains fragmented. The key issue is therefore not to force interaction, but to create more spaces for ordinary moments in which residents can see, greet, and gradually recognise one another.

## Case study on social interaction

### ***Marmalade Lane, Cambridge***

Marmalade Lane is a cohousing project in Cambridge, England, completed in 2018 as the city's first built cohousing community. The project contains 42 homes and combines private dwellings with a range of shared amenities. This includes a large communal garden, a car-free lane, and community facilities. The physical layout was conceived to support daily encounters and a strong sense of neighborhood life.

#### **Relevance to social interaction**

The case is relevant because it shows how spatial organisation can create conditions for repeated informal contact. The central car-free route and communal garden are not separate additions, but form the main spatial structure of the project. Residents pass through, overlook, and use these spaces in daily life. It connects to research on social cohesion, which shows that interaction is more likely when shared spaces are visible, accessible, and embedded in everyday routines (Qi et al., 2024; Wickes et al., 2019).

#### **Lessons for this research**

Marmalade Lane is mainly useful in this research as a precedent for understanding how collective space can support social interaction. The case shows that shared routes, communal gardens, and visible gathering spaces can increase the chances of casual encounters. Its relevance lies in the underlying principles: shared spaces should be connected to daily movement, offer reasons to stay, and balance collective use with residential privacy.



(Marmalade Lane, n.d.)



(Marmalade Lane, n.d.)



(Marmalade Lane, n.d.)

## Chapter conclusion

*What role do building access, circulation routes, and public-space configurations in Historicibuurt play in shaping everyday encounters, meant social interaction, among residents?*

The literature findings shows that social interaction is supported by shared spaces that are accessible, visible, comfortable, and repeatedly used in everyday routines. Social cohesion develops more easily when residents have ordinary opportunities to meet, pause, and recognise one another over time (Gehl, 2011; Qi et al., 2024; Wickes et al., 2019). This means that building access, circulation routes, and public-space configurations can shape whether residents merely pass through a neighbourhood or develop repeated informal contact.

The interviews show that social interaction in Historicibuurt is currently limited and fragmented. Although the neighbourhood is socially diverse, contact mostly occurs between immediate neighbours and through small daily routines, such as garden maintenance. There are few shared amenities, meeting points, or comfortable places to stay, which limits broader neighbourhood-level interaction.

The observations support this finding. The neighbourhood contains few social facilities or collective functions, and most interaction can only occur close to individual dwellings. Ground-floor dwellings have direct access to larger outdoor spaces, while upper-floor dwellings mainly have balconies and fewer reasons to move through shared outdoor areas. As a result, residents' daily routes overlap only to a limited extent.

In conclusion, building access, circulation routes, and public-space configurations in Historicibuurt currently play a weak role in shaping everyday encounters. They do not consistently create visible, accessible, and repeated moments of contact between residents. Social interaction therefore remains mainly localised around individual homes, rather than developing into broader neighbourhood cohesion.

## 03.3 Informal Social Control

Informal social control refers to the everyday capacity of residents and users to notice, interpret, and respond to what happens in shared and public spaces. Informal social control is understood as a condition that can be supported by spatial design, rather than as formal enforcement. Visibility, clear boundaries, readable routes, signs of care, and regular everyday activity can reduce anonymity and make undesirable behaviour more visible or less likely to remain unchallenged (Cozens & Love, 2015; Sas et al., 2022; Gehl, 2011; Qi et al., 2024).

### Literature findings

The literature identifies several spatial conditions that can support informal social control in residential environments. These conditions do not directly produce control, but they influence whether residents can observe shared spaces, recognise behaviour, and feel responsible for their surroundings.

- **Natural surveillance**  
Natural surveillance concerns the possibility for residents and users to see and be seen in shared spaces. Streets, paths, entrances, ground floors, and communal areas can support informal oversight when they are visually connected to everyday movement and dwelling activity (Cozens & Love, 2015; Sas et al., 2022). This form of surveillance works best when it is mutual, continuous, and human-scaled, instead of depending only on cameras or formal enforcement.
- **Legible and predictable routes**  
Readable routes help users understand where paths lead, who belongs where, and how spaces are meant to be used. Clear path hierarchies, visible destinations, and understandable transitions can reduce uncertainty and concealed movement (Cozens & Love, 2015; Gath-Morad et al., 2021). Legibility therefore supports informal social control by making movement more predictable and easier to interpret.
- **Territory and ownership cues**  
Territorial cues help clarify who a space is for and who may feel responsible for it. Boundaries, thresholds, material changes, semi-private zones, and signs of care can make ownership and responsibility more visible (Cozens & Love, 2015; Sas et al., 2022). These cues should remain legible without becoming hostile, because territoriality should support presence and stewardship rather than exclusion alone.
- **Access control through spatial definition**  
Access control can support informal social control when movement is guided through readable entrances, clear approach routes, and limited uncontrolled shortcuts. This does not mean closing off space completely, but making access understandable and appropriate to the character of each area (Cozens & Love, 2015). It is most effective when legitimate users can move easily, while vulnerable or private spaces are not casually penetrated.
- **Maintenance and visible care**  
Maintenance influences informal social control because a well-kept environment signals ownership, order, and shared responsibility. Visible care, lighting maintenance, repair, and cleanliness can increase the possibility that inappropriate behaviour is noticed or challenged (Cozens & Love, 2015; Sas et al., 2022). In contrast, poor maintenance can suggest neglect and weaken residents' sense of responsibility.
- **Legitimate everyday activity**  
Informal social control is strengthened when lawful and ordinary users are present in shared spaces. Everyday activities such as passing through, sitting, gardening, meeting, or using amenities can increase informal oversight. These need to occur in visible and socially legitimate locations (Cozens & Love, 2015; Gehl, 2011). Activity support therefore matters because it makes social control part of ordinary use rather than formal monitoring.

*These make informal social control assessable as a design outcome by comparing plan-based metrics and observable spatial conditions in the baseline and the proposal, showing whether the proposal creates better conditions for natural surveillance, predictable movement, territorial definition, and shared oversight through everyday use (Cozens & Love, 2015; Nguyen et al., 2025).*



*Communal responsibility and social control (Own image)*

- Transitional spaces**  
 Transitional spaces can allow residents to observe activity without being forced into direct contact. Semi-private thresholds, lift lobbies, corridors, front gardens, and entrance zones can provide intermediate spaces between private dwellings and collective life (Gehl et al., 2006; Nguyen et al., 2025). These spaces are important, they balance oversight, privacy, and social comfort.
- Human scale**  
 Informal social control works best at a manageable human scale. When buildings, groups, or shared spaces become too large or anonymous, residents may find it harder to recognise others, read behaviour, or feel responsible for what happens there (Cozens & Love, 2015; Gehl, 2011). Density and activity can support social control, but only when combined with pedestrian use, visibility, and a scale that remains socially legible.
- Summary of literature findings**  
 The findings show that informal social control depends on visibility, legibility, territorial clarity, maintenance, everyday activity, and human scale. These factors help residents understand who belongs where, observe shared spaces, and feel some responsibility for what happens there. However, spatial design does not create informal control by itself. It creates conditions in which mutual awareness and shared responsibility can develop.

## Interview data (Soft data)

*For this chapter, 45 people were interviewed across three different days. The respondents were current or former inhabitants of the target area. Personal data was deliberately not collected to protect participants' anonymity.*

### Questions

- Do you feel people look out for each other here? Why/why not?

- What usually happens when someone behaves inappropriately?

- Would you step in or speak up? In what situations would you/wouldn't you?

- Which places feel like "nobody's space" versus clearly "residents' space"?

- Are there places where unwanted behavior happens more often? Why do you think that is?

- Do maintenance and cleanliness matter for how people behave here? What do you notice?

### Interview findings

The interviews show that informal social control is present in Historicibuurt at a small scale. Some residents describe attentiveness between immediate neighbours, such as noticing when someone has not been seen for a while. This suggests that social control is linked less to intensive social contact and more to proximity, routine, and mutual recognition.

This form of control appears to weaken beyond the direct residential environment. In more public or ambiguous spaces, such as alleyways, gates, garage boxes, storage corners, and blank façades, residents seem to feel less responsibility. These places are also associated with more nuisance or undesirable behaviour. When a space is not clearly visible, used, or claimed, it can more easily be perceived as "nobody's space."

Residents try to create control through spatial appropriation. Some external stairwells or front gardens are partly closed off or marked by fences and boundaries. This shows a need for demarcation and ownership. Where shared space does not provide enough clarity or safety, residents appear to reinforce their private domain by themselves instead.

The interviews indicate that informal social control in Historicibuurt is unevenly distributed. It exists between direct neighbours, but is weaker in anonymous or unclear parts of the block. The degree to which residents experience a space as belonging to them appears to influence whether they feel responsible for what happens there.

### Observation findings

The observations show that informal social control is limited in several parts of the neighbourhood. Some façades have only small window openings, and many windows are oriented toward private areas rather than shared or public spaces. As a result, the visual relationship between dwellings and collective outdoor areas is weak.

Several spatial conditions further reduce oversight. This includes blank façades, storage corners, blocked sightlines, and access routes that are partly used as informal extensions of private outdoor space. These areas are difficult to observe and are not clearly connected to collective residential responsibility.

The observations also show signs of spatial appropriation. In several places residents have added fences or physical boundaries to mark their own territory. This suggests that the existing transitions between private, semi-private, semi-public, and public space are not always clear enough to support shared responsibility.

### Interpretation in relation to informal social control

The interview and observation findings point to the same issue: informal social control in Historicibuurt is strongest where residents have direct proximity, visibility, and a sense of ownership. It is weakest in spaces that are visually unclear, poorly overlooked, or not clearly claimed by anyone.

This means that the problem is not simply a lack of social control. It is an uneven distribution of control. Direct neighbours may look out for one another, while shared or semi-public spaces remain less supervised. In relation to the literature, this weakens the conditions for natural surveillance, territorial clarity, and collective stewardship.



*Due to a lack of large windows/facade openings, the opportunities for informal social control are low, natural surveillance is very poor. These windows are mainly focussed on private spaces instead of shared-/public spaces. Blockages from large sightline cause this neighbourhood to have poor visibility. The neighbourhood has a high spatial appropriation, which in this case shows that the design lacks territorial boundaries. Residents have created their own fences or physical boundaries.*

### Spatial needs related to social control

The findings suggest a need for clearer territorial definition and stronger shared responsibility in semi-public spaces. Transitions between territorial boundaries should become easier to read, so that residents can better understand where their responsibility begins and ends.

There is also a need for spatial conditions that make shared spaces easier to observe and maintain. Historicbuurt requires stronger conditions for collective stewardship, especially in the anonymous parts of the block where nuisance and undesirable behaviour tend to concentrate.

## Case study on social interaction

### ***Wohnprojekt Wien, Vienna, Austria***

Wohnprojekt Wien is a self-managed co-housing project in Vienna. It is located in Leopoldstadt near the former Nordbahnhof site. Completed in 2013, it includes approximately 39–40 apartments, commercial space, and around 700 m<sup>2</sup> of shared community areas. The project was developed through a participatory process and is based on collective living, shared responsibility, and active resident involvement in both design and management (Zilker et al., n.d.).

#### **Relevance to informal social control**

The case shows how informal social control can be supported by both spatial organisation and social structure. Shared spaces, circulation areas, and collective facilities make everyday life visible and create opportunities for residents to recognise one another. This relates to CPTED theory, which argues that natural surveillance, territorial clarity, and signs of ownership can support informal control in residential environments (Cozens & Love, 2015). It also connects to research on public life and social cohesion, which shows that repeated encounters and shared use can strengthen mutual awareness and responsibility (Gehl, 2011; Qi et al., 2024).

#### **Lessons for this research**

Wohnprojekt Wien is useful as a precedent for understanding the relation between shared space, resident participation, and collective responsibility. The case shows that informal social control is not only created by visibility, but also by repeated use, familiarity, and a sense of shared ownership. Its relevance lies in the underlying principles: shared spaces should be visible, regularly used, and connected to a form of collective stewardship.



(Hurnaus, n.d.)



(Hurnaus, n.d.)

## Chapter conclusion

*How does the spatial relationship between public, semi-public, semi-private, and private spaces in Historicibuurt shape informal social control among residents?*

The literature shows that informal social control is supported by natural surveillance, territorial clarity, readable routes, visible maintenance, and everyday activity. These conditions help residents observe shared spaces, understand who belongs where, and feel responsible for their surroundings (Cozens & Love, 2015; Sas et al., 2022). It shows that Informal control is not only a social process. It also depends on how clearly spatial boundaries and responsibilities are organised.

The interviews from Historicibuurt show that informal social control is present at the scale of direct neighbours. Residents describe forms of mutual awareness, such as noticing when someone has not been seen for a while. However, this awareness weakens in more ambiguous spaces, such as alleyways, gates, garage boxes, storage corners, and blank façades. These areas are more likely to be experienced as “nobody’s space,” where responsibility is unclear and undesirable behaviour is less likely to be challenged.

The observations support this finding. Small façade openings, poorly positioned windows, blocked sightlines, and façades that mainly face private instead of shared spaces limit opportunities for natural surveillance. The presence of self-made fences and physical boundaries further suggests that residents try to create territorial clarity where the existing spatial structure does not provide it.

In conclusion, the spatial relationship between public, semi-public, semi-private, and private spaces in Historicibuurt currently weakens informal social control. Boundaries are often unclear, shared spaces are not always visible or clearly claimed, and responsibility remains concentrated around private dwellings and direct neighbours. As a result, informal social control is unevenly distributed rather than collectively supported across the block.

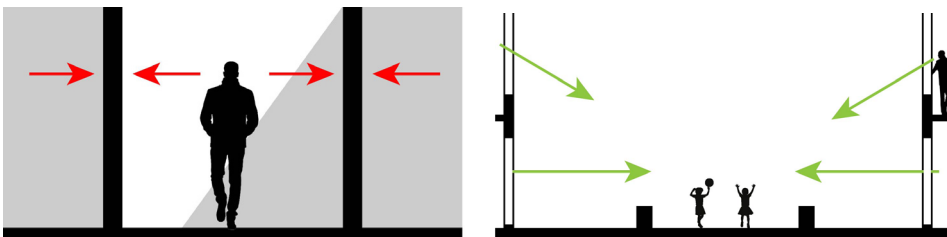
### 03.4 Architectural Toolbox for Safe and Social Neighbourhoods.

The toolbox translates the research findings into a set of architectural principles for redesigning apartment typologies and their adjacent public spaces. Rather than treating safety and social cohesion as separate goals, the toolbox understands them as mutually reinforcing spatial conditions. Perceived safety is supported by visibility, legibility, and signs of care; social cohesion is supported by repeated everyday encounters; and informal social control emerges when residents can recognise, use, and feel responsible for shared spaces. The principles therefore operate across three scales: the dwelling edge, the collective threshold, and the neighbourhood route.

#### Perceived safety

##### Natural surveillance

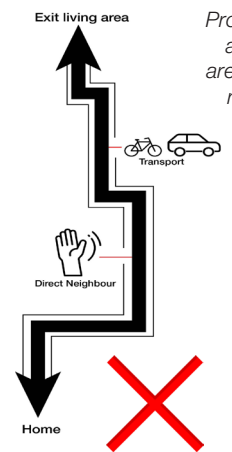
Design shared and vulnerable spaces so they are casually overlooked by residents during everyday activities, strengthening visibility and reducing spatial ambiguity.



#### Social interaction

##### Everyday encounters

Provide low-threshold spaces as entrances, ground floors, and shared areas, and shared functions repeated every day between residents naturally.



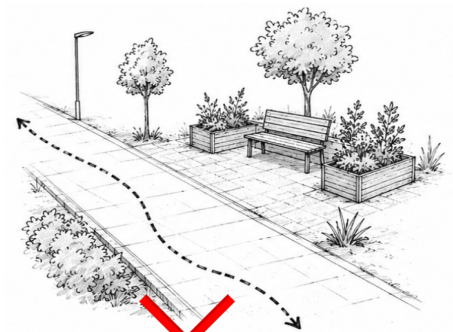
##### Active ground floors and edges

Activate ground floors with entrances, transparent façades, shared functions, and fine-grained edges that generate pedestrian presence and make streets feel inhabited.



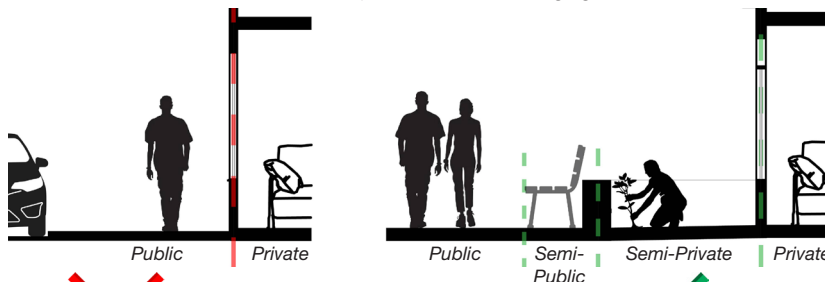
##### Social spaces

Position communal spaces along residents' daily routes of movement rather than a separate area.



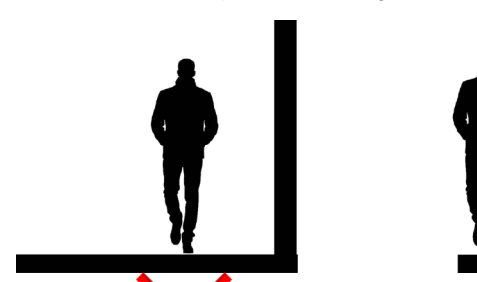
##### Legible public-private transitions

Create clear but soft transitions between public, collective, semi-private, and private space so users can understand ownership, access, and belonging.



##### Soft edges and corners

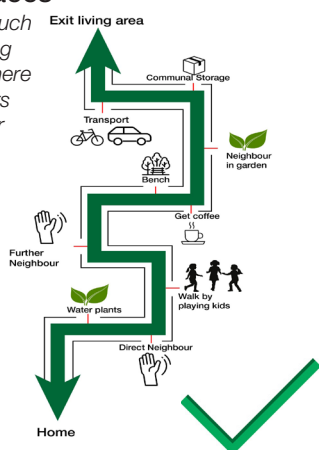
Design stoops, benches, porches, front gardens, and other features that allow residents to pause, observe, greet, and interact.



## Interaction

### Encounter spaces

Hold spaces such as gardens, seating and amenities where day encounters can occur naturally.



## Informal social control

### Visibility combined with legitimate activity

Combine overlooking with everyday uses such as play, gardening, sitting, entering, and cycling so shared spaces are both visible and actively inhabited.



### Routes on daily routes

Design routes so social interaction becomes part of ordinary separate or forced activity.



### Legible and predictable routes

Make routes clear, visible, and purposeful by reducing hidden shortcuts, confusing backspaces, and ambiguous access points.



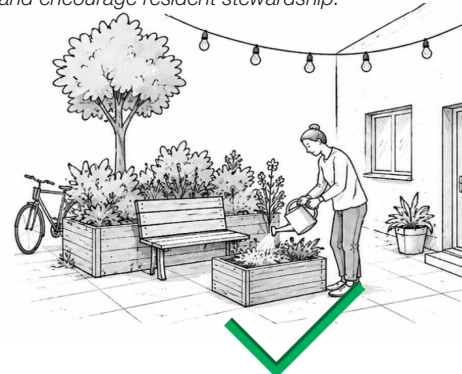
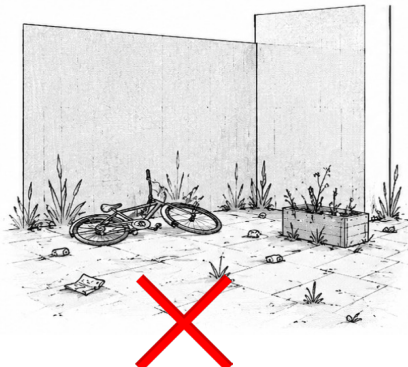
### Places to stay

Design and sheltered thresholds that allow residents to interact at their own pace.



### Shared ownership and visible care

Design collective spaces with clear responsibility, durable materials, planting, lighting, and maintenance cues that communicate care and encourage resident stewardship.

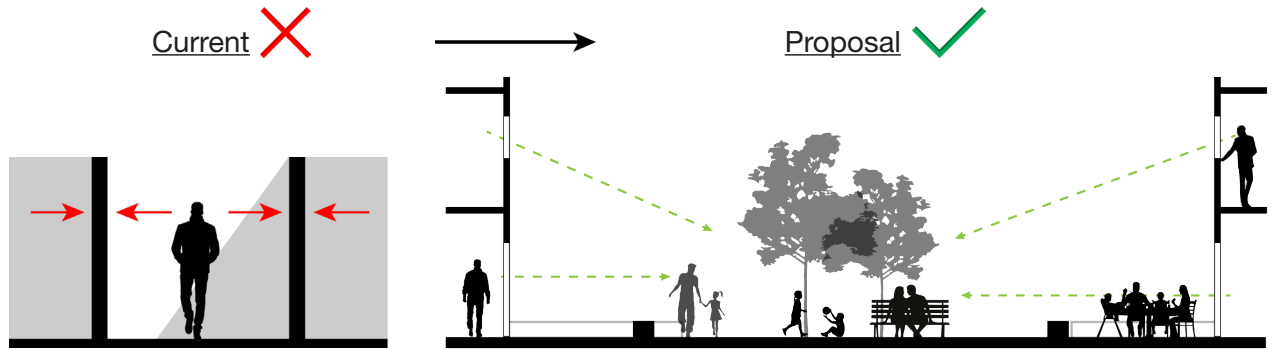


### 03.5 Implementation in Historicibuurt (Perceived safety)

Perceived safety is implemented by strengthening visibility, orientation, and the relationship between dwellings and public space.

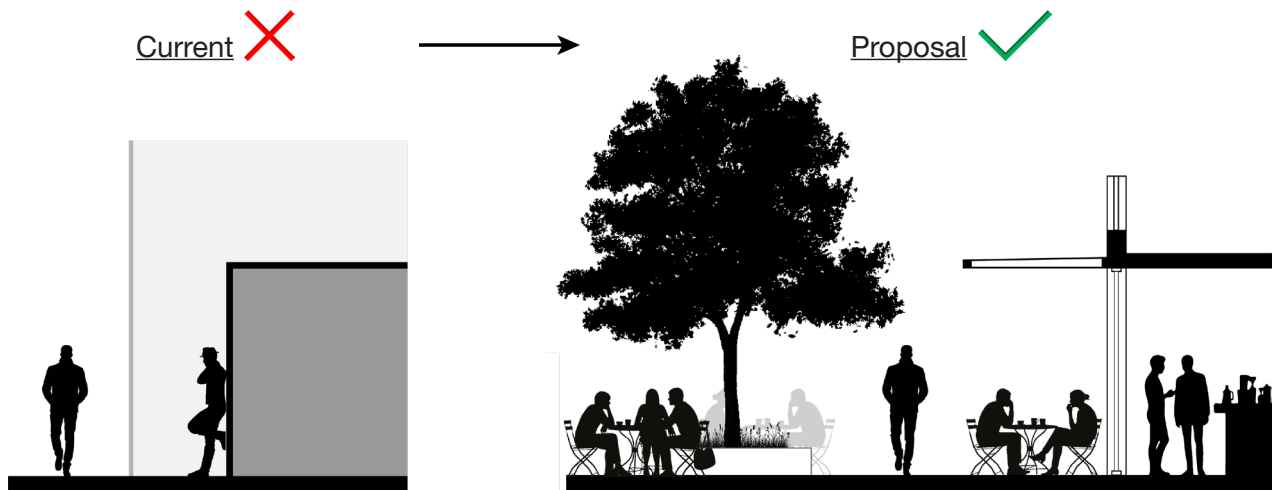
#### Natural surveillance

The proposal increases natural surveillance by positioning windows, entrances, balconies, and communal spaces toward key routes. This improves “eyes on the street” and reduces hidden or ambiguous spaces, which CPTED literature identifies as important for perceived safety (Cozens & Love, 2015).



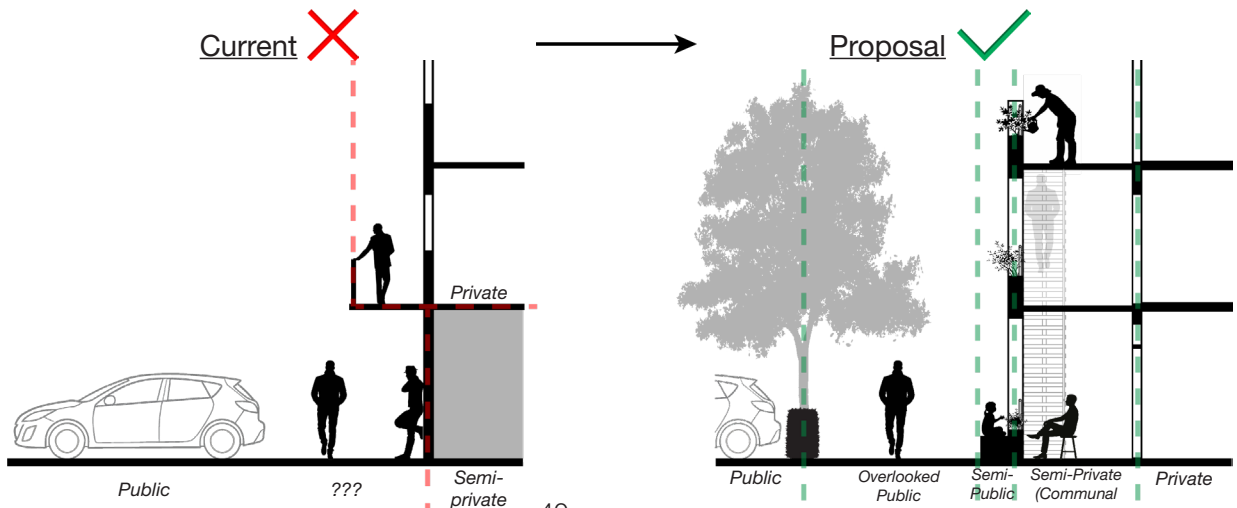
#### Active ground floors and edges

The design activates ground floors and edges by adding more transparent façades, readable entrances, and functions like a coffee corner and bakery. This supports Gehl’s argument that active edges and human-scale ground floors make streets feel more inhabited and secure (Gehl et al., 2006; Gehl, 2011).



#### Legible public-private transitions

Public-private transitions are made more legible through a living gallery, which functions as an access route. It has semi-private zones, planting, material changes, and maintained shared spaces. These help residents and visitors understand who belongs where. The design supports safety perception through visibility, activity, territorial clarity, and visible care.



Current Storage area



Current Storage area (Own picture)



Proposal Storage area



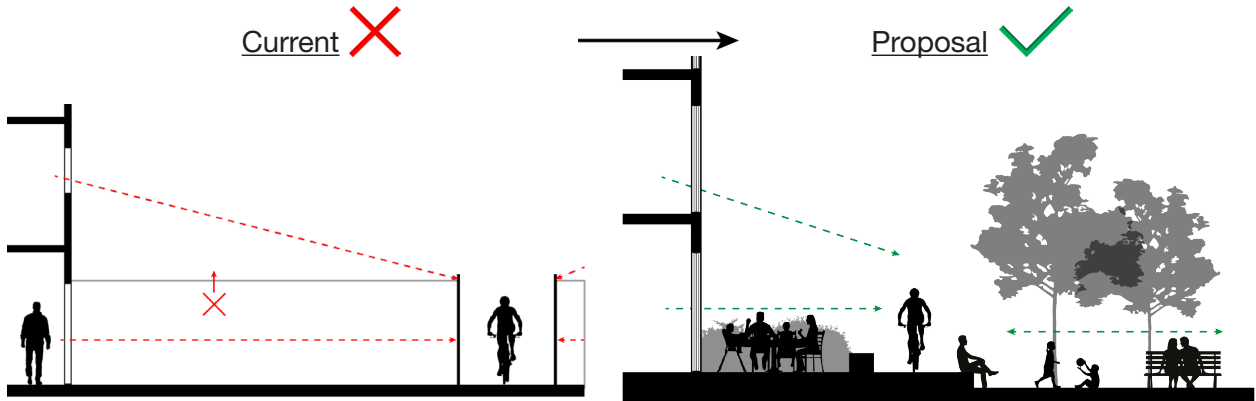
Proposal Storage area (Own picture)

### 03.5 Implementation in Historiebuisbuurt (Social interaction)

Social interaction is implemented by implementing legible and accessible social-/communal spaces along daily routes to creating more everyday reasons for residents to meet, pause, and recognise one another.

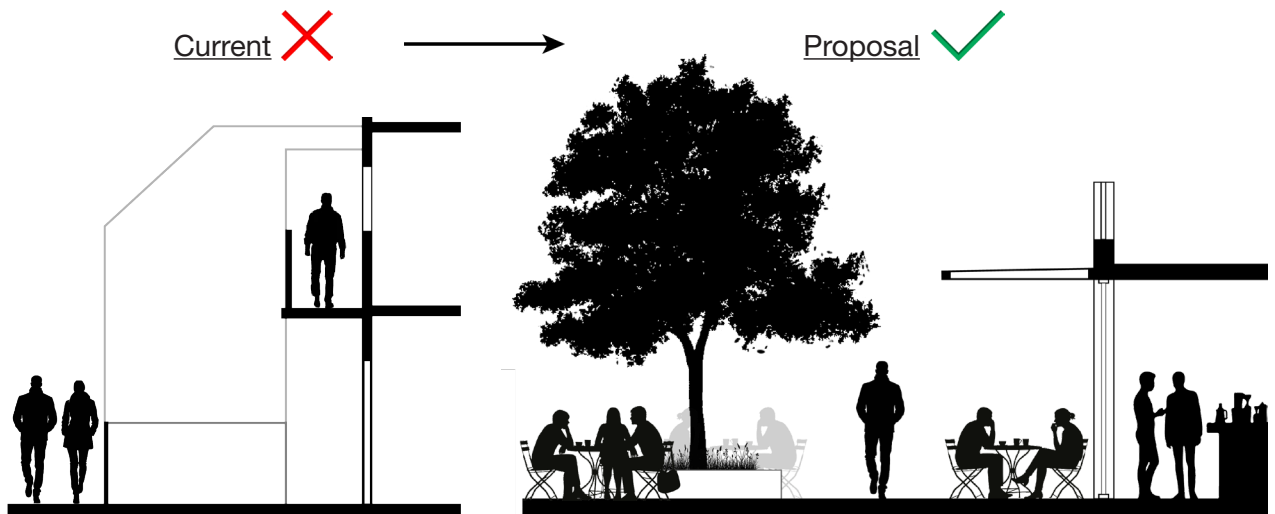
#### Everyday encounter spaces

Social interaction is implemented by creating more everyday reasons for residents to meet, pause, and recognise one another. The proposal introduces shared spaces and communal functions along daily movement routes, so that encounters become part of ordinary routines rather than separate activities. This is f.e. done by replacing personal backgardens with a big communal courtyard park (Qi et al., 2024; Wickes et al., 2019).



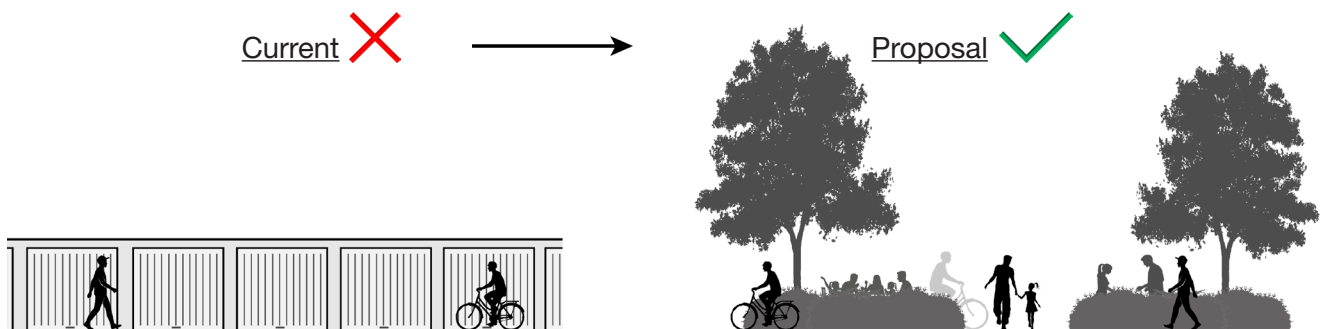
#### Social spaces on daily routes

The proposal adds social and communal spaces along daily routes. Front gardens, shared thresholds, seating areas, and public communal outdoor spaces allow residents to regulate contact: they can observe, greet, join, or withdraw. This balance between contact and privacy is important for comfortable social interaction (Gehl, 2011; Nguyen et al., 2025).



#### Soft edges and places to stay

Communal spaces are made visible, accessible, and inclusive. By placing them in or around passage ways, like the current garage alleys, and by supporting different ages and household types, the design creates stronger conditions for informal contact, neighbour recognition, and community formation.



Current Building corner



Current building corner (Own picture)



Proposal Building corner



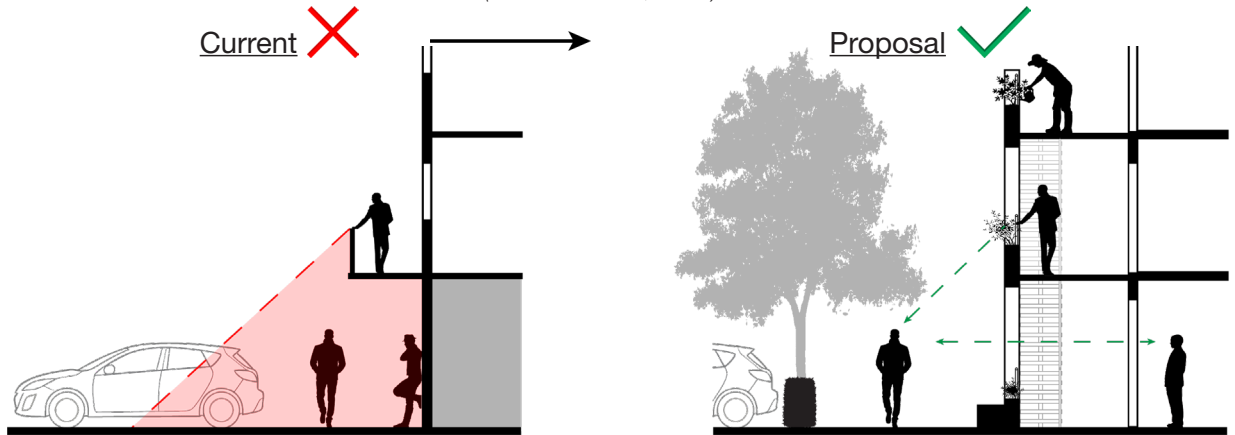
Proposal Building corner (Own picture)

### 03.5 Implementation in Historicibuurt (Informal social control)

Informal social control is implemented by strengthening the spatial conditions that allow to observe shared spaces, understand territorial transitions, recognise legitimate use and feel responsible for collective care.

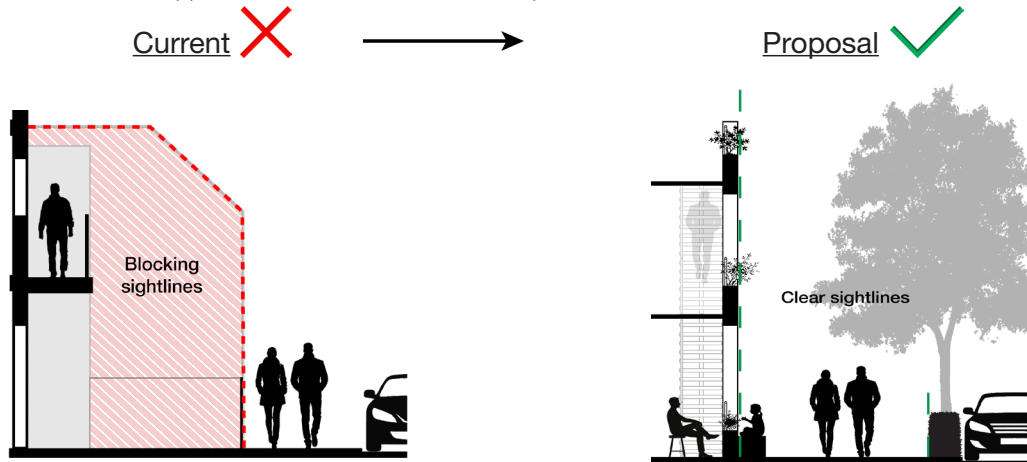
#### Visibility combined with legitimate activity

Informal social control is implemented by clarifying ownership, responsibility, and oversight over public spaces. The proposal strengthens territorial clarity by making transitions between private, semi-private, semi-public, and public space more readable with the help of the living gallery. Entrances, gardens, galleries, shared routes, and collective outdoor spaces are designed as clear thresholds that show who uses and cares for each space. This supports CPTED principles of territorial reinforcement and natural surveillance (Cozens & Love, 2015).



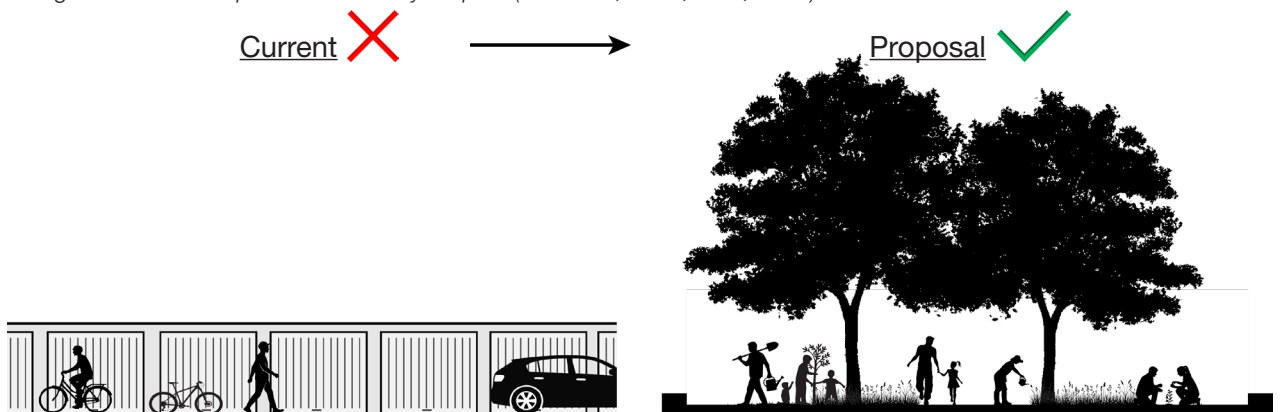
#### Legible and predictable routes

The design improves legibility and predictability by reducing the building's protrusion, hidden corners, and poorly claimed leftover spaces. Routes become easier to understand, and shared areas become more visible. This makes it easier for residents to notice what happens around them and to feel responsible for their immediate environment.



#### Shared ownership and visible care

Informal social control is supported through everyday activity and visible maintenance. Shared spaces, like gardening plots, are positioned where they can be used regularly and overseen naturally. This shifts control from isolated private ownership toward collective stewardship and responsibility. Residents can recognise others, read behaviour, and feel supported in caring for the shared space in the courtyard park (Sas et al., 2022; Gehl, 2011).



Current Storage area



Current Storage area (Own picture)



Proposal Storage area



Proposal Storage area (Own picture)

# 04

# Conclusion

- 04.1 Conclusion
- 04.2 Discussion
- 04.3 Reflection



## 04.1 Conclusion

This research asked: *How could a redesign of the apartment typologies and their direct adjacent public space in Historicbuurt, The Hague, improve perceived safety and social cohesion, thereby enhancing neighbourhood liveability?*

A redesign of the apartment typologies and adjacent public spaces in Historicbuurt could improve liveability by transforming the current fragmented, poorly visible, and weakly claimed spatial structure into a more legible, active, and socially supportive environment. The findings show that perceived safety, social interaction, and informal social control are strongly connected. People are more likely to use public space when it feels visible, cared for, and socially meaningful, while repeated everyday encounters can strengthen familiarity, trust, and shared responsibility.

Perceived safety is currently weakened by blind façades, hidden corners, alleyways, gates, garage boxes, and storage areas. These spaces are poorly overlooked and often function as ambiguous or residual zones. Interviews show that safety is strongly linked to familiarity. Long-term residents often experience the neighbourhood as relatively calm, while others feel safest inside their homes, especially during the evening when nuisance becomes more present. This confirms that perceived safety is shaped not only by actual risk, but also by visibility, legibility, environmental cues, and social presence (Cozens & Love, 2015; Qi et al., 2024).

To improve this, the redesign should strengthen “eyes on the street” by reorienting dwellings and shared spaces towards public and semi-public areas. Entrances, windows, balconies, galleries, communal rooms, and seating areas should overlook important routes and vulnerable corners. Ground floors should become more active, transparent, and fine-grained, especially along daily pedestrian routes. In this way, the apartment typologies can support natural surveillance and make public space feel more readable and secure (Gehl et al., 2006; Gehl, 2011).

The interviews show that social cohesion in Historicbuurt is present but fragmented. Contact mainly occurs between direct neighbours and through practical routines, such as garden

maintenance. Broader interaction is limited by the lack of shared amenities, comfortable meeting places, and circulation routes that naturally bring residents together.

A redesign should introduce communal gardens, collective entrances, small neighbourhood amenities, seating areas, and flexible shared spaces along everyday routes. These spaces could create opportunities for casual encounter without forcing interaction, using soft thresholds, comfort, visibility, and choice (Qi et al., 2024; Wickes et al., 2019).

Informal social control forms the bridge between safety and cohesion. Residents currently look out for direct neighbours. Looking over anonymous spaces such as alleys, garage areas, and blank façades doesn't regularly happen. This is partly because of unclear boundaries between public, semi-public, semi-private, and private spaces.

The redesign should create readable transitions through front gardens, collective entrances, material changes, lighting, visible maintenance, and clear access routes. These elements can strengthen ownership, responsibility, and collective stewardship without creating hostile barriers (Cozens & Love, 2015; Sas et al., 2022).

In conclusion, a redesign of Historicbuurt can enhance neighbourhood liveability by making the relationship between housing and public space more active, visible, and socially meaningful. Perceived safety can be improved by transforming hidden and ambiguous spaces into overlooked, legible, and maintained places. Social cohesion can be strengthened by creating inclusive spaces for daily encounters. Informal social control can grow when residents recognise each other, understand spatial boundaries, and feel responsible for shared areas. These interventions together can help Historicbuurt develop from a collection of separate households and leftover spaces into a neighbourhood where residents feel safer, meet more often, and share greater responsibility for their living environment.



## 04.2 Discussion

This research shows that perceived safety, social interaction, and informal social control in Historicibuurt are closely connected. The neighbourhood contains familiarity and small-scale neighbourly care, but these qualities remain fragmented. Public and semi-public spaces are often poorly visible, weakly programmed, or unclear in terms of ownership, which limits everyday encounters and reduces the feeling that shared spaces are collectively monitored.

These findings align with CPTED theory, which emphasises natural surveillance, territorial clarity, access control, maintenance, and activity support as important conditions for safety and informal control (Cozens & Love, 2015). They also correspond with Gehl's argument that social life develops more easily when people have comfortable reasons to walk, pause, stay, and meet in shared space (Gehl, 2011). In Historicibuurt, many spaces currently function mainly as passages, storage zones, or private extensions, rather than as shared environments that invite repeated contact.

The findings also support Qi et al. (2024) and Wickes et al. (2019), who show that social cohesion depends on accessible, visible, and repeatedly used spaces. However, the research also confirms that spatial design alone cannot produce cohesion. Perceived safety depends partly on familiarity, and social interaction depends on residents' willingness to use and appropriate shared spaces. Design can therefore create better conditions for safety, encounter, and stewardship, but it cannot guarantee them.

### Recommandation

Further research should examine how residents use and experience the proposed interventions after implementation. Post-occupancy evaluation, repeated observations, and follow-up interviews could show whether improved visibility, shared spaces, and clearer thresholds actually strengthen perceived safety, social interaction, and informal social control.

### Implications

The main implication is that future design in Historicibuurt should focus on strengthening the relationship between dwellings, thresholds, routes, and shared spaces. For perceived safety, this means improving visibility and reducing hidden or ambiguous areas. For social interaction, it means creating accessible shared spaces and everyday reasons to meet. For informal social control, it means clarifying the transitions between private, semi-private, semi-public, and public space.

At the same time, the research shows the importance of balance. More visibility is not always better if it reduces privacy or creates discomfort. Transitional spaces such as front gardens, entrances, galleries, and semi-private thresholds are therefore important because they allow residents to regulate contact. This balance between interaction and privacy is especially relevant in residential environments (Gehl et al., 2006; Nguyen et al., 2025).

### Limitations

A limitation of this research is that the interviews involved 45 participants over three days and did not collect personal data. This protected anonymity, but limited comparison between different resident groups. The observations also captured specific moments in time, while safety, interaction, and social control may vary by season, time of day, or social context. The design proposal can show improved spatial conditions, but it cannot yet prove how residents will experience or use the redesigned spaces after implementation.

## 04.3 Reflection

This graduation project started from the ambition to investigate how to improve the liveability of residential areas. From the start, the research taught me that the topics: perceived safety, social interaction and informal social control were more important than I thought.

The research showed me that these themes are more connected than I initially expected. At first, I approached safety and social cohesion mainly as spatial issues. But during the interviews and observations, it became clear that the experiences of residents are also shaped by familiarity, personal history, daily routines, and the social meaning of specific places. That changed the role of the design. Instead of trying to “solve” safety or cohesion directly, the project aimed at creating better spatial conditions, which could develop visibility, daily encounter, and shared responsibility.

A key learning point was the importance of separating research findings, interpretation, and design decisions. This has always been one of my weaker areas. In earlier stages of the report, these elements were too closely mixed. The feedback helped me understand that the analysis chapters should first explain what the literature, interviews, and observations show, before translating these findings into design principles. This made the structure of the report clearer.

The interviews were valuable. They revealed differences between how residents experience the same neighbourhood. Some residents described Historicbuurt as familiar and relatively calm. Others associated certain places or times of day with insecurity. This made me more aware that architectural design cannot assume one general user experience. It also showed the importance of designing spaces that allow choice and own interpretation: places where residents can observe, meet and greet, or withdraw. The balance between privacy and interaction became one of the most important themes in the project.

The observations helped me to understand how architectural details influence everyday behaviour. The elements of the building environment are not only physical features; they shape how people move, whether they stop, and whether they feel responsible for a place.

I learned that spatial design has limits. A design proposal can improve sightlines, routes, thresholds, and shared spaces, but it cannot guarantee that residents will use them in the intended way. Long-term management, maintenance, and resident involvement are equally important.

If I would continue this research, I would expand the empirical part by conducting more structured observations and interviews at different times of day and in different seasons.

I would also include follow-up interviews with specific resident groups, such as older residents, families and newcomers. This could provide a more detailed understanding of how different users experience safety, interaction, and responsibility in a neighbourhood. A post-occupancy evaluation after implementation would also be necessary to test whether the proposed spatial interventions actually improved residents' lived experience.

Overall, the project taught me that architecture plays a more important role in neighbourhood liveability than most people think. If it is understood as part of a wider social and spatial system it could shape not only the environment but also society. The value of the design does not lie in forcing community or controlling behaviour, but in creating conditions that make everyday contact, recognition, and collective care more likely. This insight has shaped both the final proposal and my broader understanding of architecture as a practice that works between space, behaviour, and social life.

# 05

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