

The Spirit of a Biophilic Shopping Mall

Biophilic Design in Post-war Shopping Mall while enhancing the value and the spirit of place



AR3AH105 Graduation Studio adapting 20th Century Heritage
MSc Architecture, Delft University of Technology
Roos Bolleboom
4809076

04-11-2023
Federica Marulo and Wido Quist

TABLE OF CONTENTS

1 INTRODUCTION	3
2 PROBLEM	3
3 FRAME OF REFERENCE	3
4 METHODOLOGY	4
5 BIOPHILIC DESIGN ENHANCING THE VALUE OF HERITAGE	5
6 VALUE OF POST-WAR SHOPPING MALL	5
7 SPIRIT OF PLACE IN A POST-WAR SHOPPING MALL	5
8 BIOPHILIC DESIGN	5
9 SPIRIT OF PLACE WINKELCENTRUM LEYWEG	6
10 DISCUSSION	16
11 CONCLUSION	16
12 LITERATURE	17
13 APPENDIX	18

1 INTRODUCTION

In the latter half of the twentieth century, shopping malls emerged in the Netherlands due to urbanization and suburbanization. Initially, they served as community hubs with stores, leisure, and dining, fostering social interactions (Kooijman, 1999). However, as consumerism and profit-seeking took over, malls lost their social appeal, particularly in medium-sized cities and residential areas (Zandbergen, 2018), and were replaced with online shopping. Action is needed to prevent these areas from turning into deprived areas due to the growing vacancy in the malls. (NOS, 2022).

Simultaneously, urbanization turned the built environment into concrete landscapes, leaving no room for greenery. This increasing urbanization and lack of green spaces led to various issues: reduced climate adaptability, increased flooding, heat stress, biodiversity loss, and negative impacts on mental and physical health (Natuur & Milieu, 2022).

These health concerns are rooted in human biophilia, our innate affinity for nature, which makes elements like plants and water captivating, allowing mental restoration. Biophilic design leverages this connection by incorporating natural materials and elements into the built environment. At the same time, this incorporation of natural elements contributes positively to the climate (Kaplan, 2001; Kellert, 2018).

Solving the problem of the lost appeal of post-war heritage 'the post-war shopping malls' by implementing biophilic design could be an interesting step because it solves two problems in one, lack of green space and the lost interest in the shopping mall. Research also proves this solution because Studies by Rosenbaum et al. (2016 & 2018) indicate that biophilic design in shopping malls enhances satisfaction, loyalty, and recommendations, as well as the perception of being away, extent, fascination, and compatibility in retail areas (Rosenbaum et al., 2018).

Biophilic design has been proven effective in shopping malls. However, there's a lack of research on how to properly transform malls to achieve the positive outcomes of biophilic design. If the value and the emotional connection that people have often called 'spirit of place', with the post-war shopping mall are not taken into consideration these transformations can have negative effects.

As Relph(1976) describes it 'spirit of place' emphasizes the importance of creating meaningful connections between people and their built environments. If changes are made that remove the distinctive elements that people connect with or value in a place, that place loses its importance and becomes meaningless, also called 'placeless' (Relph, 1976). Finding the right balance between preserving and transforming is crucial.

To do this effectively, more research is needed to guide the complex process of implementing biophilic design while preserving and enhancing the value and spirit of a place in a post-war shopping mall.

2 PROBLEM

The issue of vacant shopping malls, combined with the growing interest in applying biophilic design, provides an opportunity to add value to these spaces with more nature. Nevertheless, this transformation should carefully consider the mall's value and spirit of place, as disregarding these aspects might reduce the mall's overall worth. In addition, biophilic design should exceed superficial aesthetics and strive to foster genuine interaction, connections, and meaningful contexts (Kaplan, 2001). Conducting this complex biophilic transformation while respecting the mall's values and spirit of place requires further research. The question addressed in this paper is therefore: How can biophilic design enhance the value and spirit of place in a post-war shopping mall?

This question can be broken down into smaller sub-questions:

1. How can biophilic design contribute to heritage value?
2. What are the values of a post-war shopping mall and why is it important to preserve them?
3. Why is it important to maintain the spirit of place in post-war shopping malls?
4. What methods can be employed to transform the existing built environment into a biophilic design to enhance its value?
5. What is the spirit of place in the post-war shopping mall 'Winkelcentrum Leyweg'?

In this paper, the main emphasis is placed on researching biophilic transformations in the built environment, with a particular focus on direct natural experiences, as they have the most substantial influence on climate, biodiversity, and user well-being.

Regarding the part on the spirit of place, the primary focus is on researching the spirit of place in Winkelcentrum Leyweg. This mall was chosen because it serves as a typical example of a post-war shopping mall located in a residential area, which is struggling with vacancy issues.

3 FRAME OF REFERENCE

Machine&Theater, Kooijman(1999)

In the research on the value of a shopping mall, Kooijman's(1999) dissertation 'Machine&Theater' provides insights into the architectural characteristics, origin, and historical development of various shopping mall designs. This information is used in the paper to understand the values associated with post-war shopping malls.

Re-architecture, Pereira Roders(2007)

In the dissertation Re-architecture of Pereira Roders (2007), a value framework is presented with various types of values, such as social, economic, political, historic, aesthetic, scientific, age, and ecological values. In this paper, this framework is applied to analyze and categorize the values discovered during the research process.

Biophilic Cities, Beatley(2011)

For my research on biophilic design, I've chosen Dr. Timothy Beat-

ley's (2011) book 'Biophilic Cities' as a key resource. Beatley is widely recognized for his expertise in biophilic design and urban planning, with a substantial publication record and contributions to international conferences(Wikipedia, 2023). This book offers a comprehensive exploration of biophilic design in urban contexts, highlighting the importance of incorporating natural elements into urban planning. In this paper, his work provides an overview of potential biophilic transformations.

Place and Placelessness, Relph (1976)

The term 'spirit of place'rooted in the Latin "genius loci," originally described the divine presence of a specific location. It now encompasses a broader experience, embracing a place's unique physical, historical, cultural, and symbolic qualities, signifying a sense of belonging and emotional attachment. Various researchers, including Norberg-Schulz, Pallasmaa, Casey, Tuan, and Relph, have explored this concept (Wikipedia, 2023a). In this paper, I adopt Edward Relph's(1976) framework from 'Place and Placelessness', in which the user-centric perspective on the concept of spirit of place is emphasized.

Identity of place, Shamsuddin(1997)

Shamsuddin's research, aligned with Relph's user-centric perspective, serves as the framework for the research on the spirit of place in this paper. Unlike other studies that primarily focus on historical or GIS data to analyze the spirit of place, Shamsuddin's approach considers the current user's viewpoint.

4 METHODOLOGY

The paper includes two main themes: biophilic design and spirit of place, initially explored individually and later connected.

The paper begins with a literature review to form links between biophilic design, heritage, value of post-war shopping malls, and spirit of place, promoting clarity.

First, it examines how biophilic design contributes to heritage improvement.

Then, research is conducted on post-war shopping malls to develop a more profound understanding of the relating values in context of the post-war shopping mall.

Following this, biophilic design is introduced, emphasizing its urban significance. Beatley's work on 'Biophilic Cities (2011)' is introduced, supported by transformative examples showing their impact on the built environment and place improvement.

Building on this theoretical foundation, the paper delves into the spirit of place within Winkelcentrum Leyweg case study using Shamsuddin's (1997) framework. In this framework a diverse approach was adopted, involving ten Winkelcentrum Leyweg users who participated in interviews, sketching exercises, and photo recognition tests. These different methods provided distinct insights into the spirit of place:

- Interviews: Revealing distinctive elements recalled from memory, highlighting what captures people's attention. These interviews were structured in a matrix to showcase the most frequently mentioned elements.
- Photo recognition test: Utilizing images from various areas in and around the shopping mall, as certain aspects are better expressed visually than in words or drawings. The things the participant says about the place are coded, and then the most frequently occurring words represent what is distinctive in the photo.
- Sketching techniques: Allowing participants to draw from memory and identify distinctive elements within the town center, reveals their mental perceptions of its structure and boundaries. The sketches are coded using the Lynch method, classifying elements into:

1. Nodes: Central points with cultural or social significance.
2. Edges: Boundaries or transitional areas that frame and influence the use of space.
3. Paths: Routes and circulation patterns that impact the overall experience.
4. Landmarks: Prominent and easily recognizable reference points.
5. Districts: Cohesive areas with a distinct character or identity within a city or neighborhood.

In the discussion, the main question is answered to provide insight into whether biophilic design can enhance the heritage value and spirit of place in a post-war shopping mall.

See Figure 1 for the methodology in a diagram.

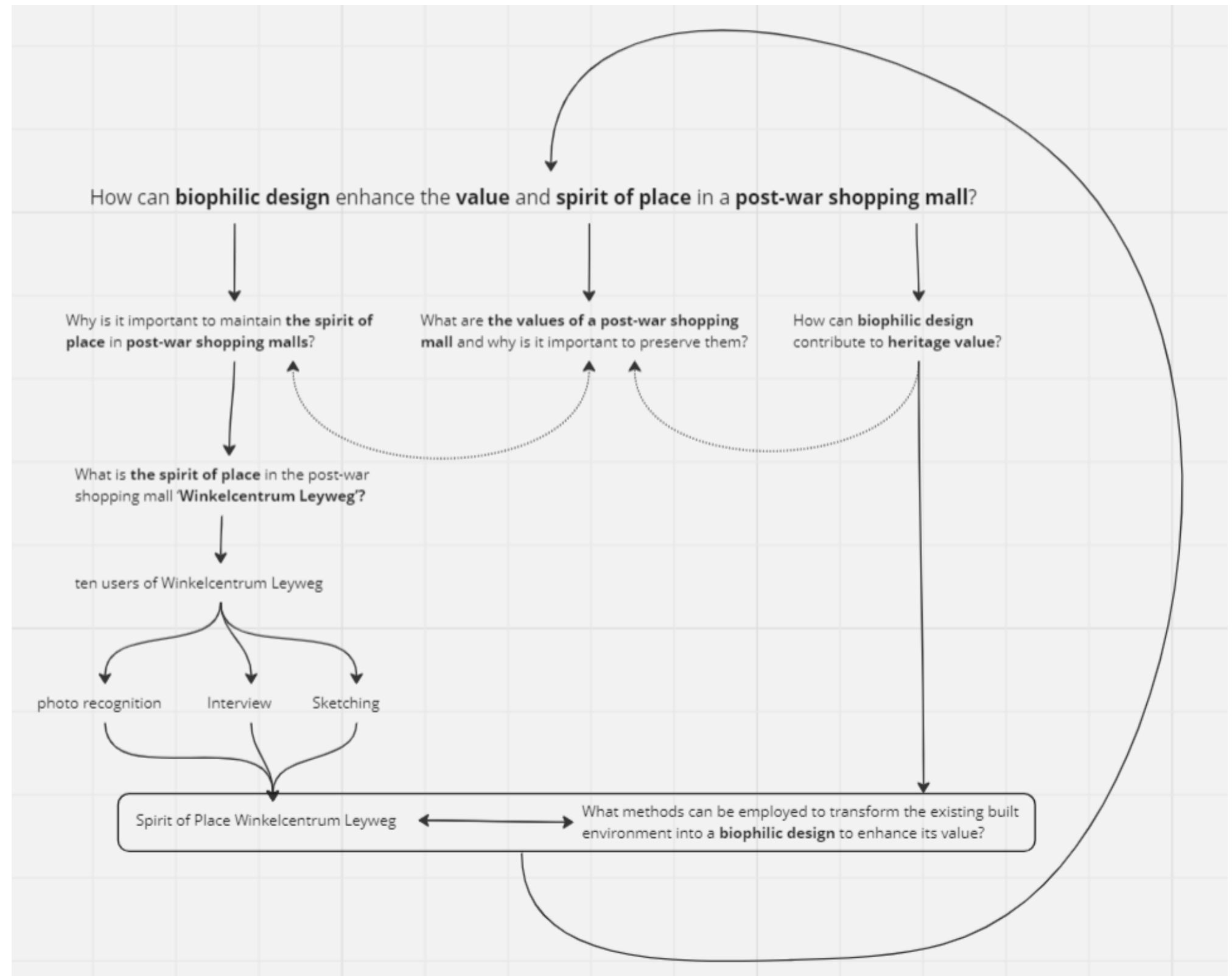


Figure 1. Diagram Methodology (Bolleboom, 2023)

5 BIOPHILIC DESIGN ENHANCING THE VALUE OF HERITAGE

Biophilic design, which involves integrating natural elements into architectural settings, has gained interest as a multipurpose strategy for enhancing the value of heritage buildings. This part of the paper delves into the role of biophilic design within the field of heritage preservation.

The key aspect of biophilic design is its ability to foster a deep connection with nature by incorporating features like natural light, greenery, and outdoor scenery into heritage structures. This approach not only increases the well-being of visitors and occupants but also creates spaces that are inviting and emotionally engaging. Consequently, heritage sites become more than just repositories of history, they evolve into spaces where visitors can have an emotional connection, enhancing the social and historic value (Terrapin Bright Green, 2023).

Biophilic design can add economic value because it can contribute to increasing the viability of historical buildings and attracting visitors (Terrapin Bright Green, 2023).

Biophilic design can add an ecological value, since it plays a crucial role in promoting sustainable revitalization. It supports the use of sustainable materials and technologies, aligning itself with the principles of the circular economy. By extending the life cycle of heritage buildings and minimizing resource consumption, it offers an eco-friendly and cost-effective approach to heritage revitalization and adds ecological value (Terrapin Bright Green, 2023). Biophilic design also substantially enhances the visitor experience by making heritage sites more appealing and engaging. It encourages visitors to be part of the historic and social value of the site. At the same time, it reduces the gap between heritage conservation and contemporary environmental concerns (Pinto, et al., 2023).

In conclusion, biophilic design can be applied in various ways in heritage conservation to strengthen it. It can promote the well-being of heritage, encourage sustainable regeneration, and present cost-effective conservation strategies.

6 VALUE OF POST-WAR SHOPPING MALL

As described by Kooijman (1999), post-war shopping malls have a rich history that reflects different values. These malls represent significant stages in the development of shopping malls and underscore the changing dynamics between shopping, urban spaces, and mobility.

A value that emerges from this is the historic value. Post-war shopping malls, such as the Southdale Shopping Mall in Minneapolis, document the different phases of shopping mall development, from the 1920s to the emergence of mega-malls in the 1980s. They offer valuable insights into the development of shopping malls and the transformations in the retail industry throughout the years. The shopping malls also have a social/cultural value. These malls

served as central hubs for community life and recreational activities, with some becoming iconic landmarks in their respective regions. They mirror shifts in consumer culture and how people chose to spend their leisure time. Preserving this value allows us to comprehend the cultural and social significance of shopping malls. Another value is the social/urban value. The evolution of shopping malls closely tracks changes in urban development and mobility. They played a vital role in shaping the social landscape and redefining the relationship between shopping and the urban environment. Preserving this value contributes to a deeper understanding of urban transformation.

The last prominent value in these post-war shopping malls is the aesthetic value. The design features and architectural styles of these post-war shopping malls showcase the architectural ideas and movements of the post-war period (Kooijman, 1999).

In summary, preserving the value of post-war shopping malls is crucial because they are essential to our historical, societal, cultural, and urban development. By preserving them, the values are documented and protected for future generations, gaining valuable insights into the evolution of society and the retail industry.

7 SPIRIT OF PLACE IN A POST-WAR SHOPPING MALL

Preserving the spirit of post-war shopping malls is essential, considering Relph's (1976) concept of 'spirit of place'.

It is crucial to have a spirit of place because, without it, a location can feel placeless. It loses its distinct identity and becomes generic and uninteresting. A place needs to have unique or distinctive elements to which users can attach emotional value. When users no longer attach value to a specific place, the social value based on users' emotional attachment diminishes.

Preserving the spirit of place is essential for preserving the historic value of these malls dating from the suburbanization era, as they mirror the values and aspirations of their time. Protecting this unique spirit that has evolved over the years is essential to historical development (Relph, 1976).

In conclusion, upholding the spirit of place in post-war shopping malls is crucial to maintaining their historical and social value and preventing them from becoming placeless places with no emotional connection.

8 BIOPHILIC DESIGN

The book of Beatley (2011) explores biophilic transformations at different scales: regional, city, and building. Regional transformations include green regions, compact cities, accessible parks, trees, and urban forests within 100-300 meters, daylighting natural rivers, and low-impact development techniques. At the city level, underutilized urban spaces can be turned into biodiverse green areas and biophilic streets and infrastructure. At the building level, inte-

grating agriculture into cities, creating biophilic and healthy buildings, and utilizing facades and roofs for biophilic design can be effective strategies (Beatley, 2011). These transformations outlined by Beatley (2011) provide an overview of the potential of biophilic design. These transformations are further supported with examples of biophilic transformations that show the alteration and effects in the built environment.

The Urban Riverfront Greenway, Italy

This research in Italy focuses on sustainable urban mobility, aiming to reduce air pollution, enhance mobility, connect urban areas with nature, stimulate economic growth, and strengthen community bonds. Key interventions include expanding bike and greenway networks, moderating traffic, enhancing bike-friendly infrastructure, and overcoming physical barriers. By implementing these measures, this research showcases the transformation of urban spaces into more biophilic designs, emphasizing the importance of coordinated planning and execution. These actions contribute to more sustainable, healthy, and livable urban environments, ultimately improving residents' quality of life (Mastrolonardo, 2023).



Figure 2. Plan Riverfront Greenway (Mastrolonardo, 2023)

Green infrastructure, Skt. Kjelds Plads and Bryggervangen

In Copenhagen, the Skt. Kjelds Plads and Bryggervangen project offers a transformative urban approach. It targeted the traffic circle at Skt. Kjelds Plads and Bryggervangen road to create climate-resilient green spaces. Key transformations included depavementation to allow rainwater absorption, introducing 586 native trees to combat CO2 and pollutants, and forming a "green corridor" along Bryggervangen. These changes significantly enhanced biodiversity, reduced flood risk, and improved residents' quality of life. The project highlights how green infrastructure can address climate challenges while promoting community well-being in urban areas (Negrello, 2023).

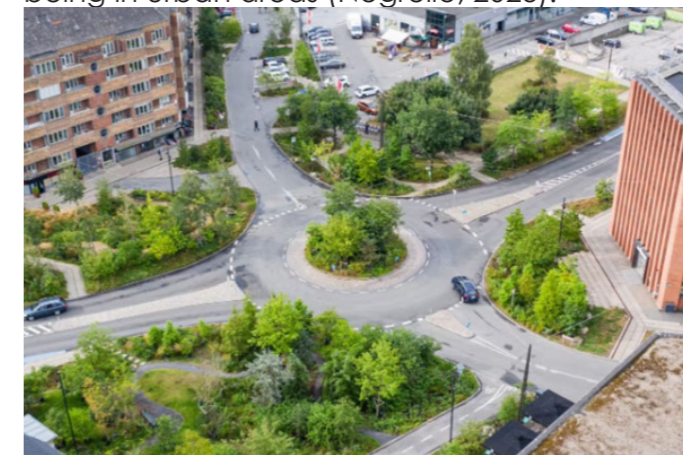


Figure 3. Green infrastructure, Skt. Kjelds Plads and Bryggervangen (Negrello, 2023)

Water Square, Tåsinge Plads

Copenhagen's Tåsinge Plads project demonstrates climate-resilient urban design. It renewed the square with new land morphology, replacing flat asphalt with grassy slopes that collect and channel rainwater into moisture-tolerant vegetation. Elevated pathways ensured usability during heavy rainfall. These adaptations significantly reduced the load on the urban drainage system, enhancing the square's resilience to flooding. Tåsinge Plads demonstrated the potential for urban areas to serve both as functional public spaces and efficient rainwater management systems, aligning with Copenhagen's commitment to climate adaptation (Negrello, 2023).



Figure 4. Water Square, Tåsinge Plads (Negrello, 2023)

Purifying Water Park, Hans Tavsens Park

Copenhagen's Hans Tavsens Park exemplifies climate-resilient urban design. It features an extensive green-blue infrastructure designed to intercept and drain excess rainwater, storing and purifying it before directing it to the city's waterways. This transformation enhances the city's climate resilience by addressing increased rainfall while creating a vibrant community space that improves residents' quality of life (Negrello, 2023).



Figure 5. Purifying Water Park, Hans Tavsens Park (Negrello, 2023)

Green Roof, Belgrade

A Belgrade retrofit project is transforming the "City Housing" building with three distinct green roof areas:

Roof 1. green roof with educational potential.

Roof 2. semi-public space with green elements.

Roof 3. an energy-efficient green roof for staff.

These transformations enhance sustainability, reduce energy usage, address urban heat, and promote well-being (Meletic et al., 2023).



Figure 6. Green Roof, Belgrade (Meletic et al., 2023)

Ford Foundation Building

The Ford Building, with substantial heritage significance in its urban context, had suffered from neglect and decay, undermining its historical value. However, an extensive transformation sought to reverse this decline. The interior space was revitalized, preserving original features while integrating biophilic design. Biophilic design was added to green interior spaces like atriums, connecting occupants with nature. Sustainable upgrades brought energy-efficient lighting, solar systems, and water-saving measures. This transformation not only retained heritage value but also established the Ford Building as a model of sustainability and biophilic design, harmonizing the past and present (Leakas, 2008).



Figure 7. Ford Foundation Building (Leakas, 2008)

9 SPIRIT OF PLACE WINKELCENTRUM LEYWEG

Winkelcentrum Leyweg, located in The Hague, in the residential area called Morgenstond, serves a diverse community of 20,251

residents. Spanning across 48,000 square meters, it houses around 110 shops. This shopping mall has a rich historical evolution, initially designed in the late 20th century to serve the local community's shopping and service needs. While it remains the core of the Morgenstond neighborhood, it currently faces issues related to vacancies.

Interviewees

To understand the spirit of place in Winkelcentrum Leyweg, ten users of the shopping center were interviewed. They were asked about their age, gender, and how often they visit and for how many years they visit the shopping mall. This provides insight into the representativeness of the interviewed audience. The Tables 1, 2, 3 and 4 show that a diverse audience was interviewed, with most of them visiting the shopping mall multiple times per week.

Men	7
Female	3

Table 1. gender interviewees (Bolleboom, 2023)

Younger than 25	
25-35	1
36-45	1
46-55	2
56-65	2
Older than 65	4

Table 2. Age interviewees (Bolleboom, 2023)

Less than a year	
1 to 4 years	3
5 to 10 years	
More than 10 years	7

Table 3. How long you come here? (Bolleboom, 2023)

Everyday	4
Once a week	1
Twice a week	3
Three to four times a week	1
Once per month	
Twice per month	1

Table 4. how often do you visits? (Bolleboom, 2023)

Map Winkelcentrum Leyweg

In order to understand the specific places involved in the research of Winkelcentrum Leyweg, terms were given to spaces in the map of Winkelcentrum Leyweg. This is used in order to refer to it during the research (see Figure 8).



Figure 8. Map with terms Winkelcentrum Leyweg (Bolleboom, 2023)

Analyse Interview

From the interviews, key findings regarding the spirit of place in the shopping mall emerge:

Most Liked Features: Visitors highly value the convenient location and good facilities, contributing to a positive spirit of place (Table 10).

Reason to like the shopping mall?	
Beautiful	
Convenient Location	7
Lots of things to do	1
Good facilities	7
Easy parking	3
Easily accessible by public transport	
Cheap stuff	2
Nice people	2

Table 10. Reason to like the shopping mall (Bolleboom, 2023)

Layout and Familiarity: The mall's clear layout and distinctive features create a comfortable atmosphere, enhancing the spirit of place (Table 11).

Do get lost in de shopping mall?	
No, the shopping mall has a clear layout	10
No, there are features that make places in the shopping mall unique, such as	
Yes, the buildings and/or places look the same	
Yes, the route is confusing	

Table 11. Do get lost in the shopping mall (Bolleboom, 2023)

Leisure Spots: The mall offers diverse leisure options without a specific favorite spot contributing to the overall spirit of place. Table 12).

Where do you go for leisure activities?	
North square	
Benches north square	3
Café	3
Fish kiosk	1
Zuiderpark	1
Melis Stokepark	1
Big passage	1

Table 12. Where do you go for leisure activities (Bolleboom, 2023)

Preservation of Special Places: Most prioritize the overall experience, no specific places need to be preserved (Table 13)

Are there places that shouldn't be demolished?	
No	6
Nothing should be demolished	2
Melis Stokepark	1
Bar at the corner	1

Table 13. places that shouldn't be demolished (Bolleboom, 2023)

Preferred Spaces: "Big passage," "square north," and "Melis Stokepark" are favored areas, with intangible qualities like "coziness" and "atmosphere" shaping the spirit of place (Table 13).

Most unique spaces and why?	Façade	Atmosphere	Style of architecture	The activities	The decorations	Good layout	Good facilities	It is cozy	It is comfortable	Normal	Nice memories	Cheap activities for children	
Square south		3					1	3	1	1			9
Square north		1						1					2
Park zuiderpark		1		1				1	1				4
Park Melis Stokepark		1		2							1	1	5
Street furniture		1			1			1					3
Plants and trees					1								1
Residential Blocks	1						1						2
Big passage	1	1	1			2	2	1	2				10
Middle zone	1		1										2
	3	8	2	3	2	2	4	7	4	1	1	1	

Table 13. Most unique spaces (Bolleboom, 2023)

Least Preferred Spaces: "Square north," "square south," and "residential blocks" receive criticism due to a bad atmosphere, untidiness, and poor maintenance, affecting the spirit of place (Table 14).

Unpleasant places and why?	Bad atmosphere	Lots of mess/untidy	Lots of litter	Negative activities	Buildings bad maintained	No activity	Empty buildings	Ugly architecture	Not functional, there isn't enough	
Square north	3	3	2	4	4			1	1	18
Square South	2	2	1	1	3	1	2			12
Park										
Street furniture					1					1
Plants and trees										
Residential Blocks	2	2		1	4			1		10
Big passage		1			2					3
Small passage		1			2					3
Shopping street		1		1	1					3
kiosk		1								1
	7	11	3	7	17	1	2	2	1	

Table 14. Unpleasant places (Bolleboom, 2023)

Sketching

Participants created memory-based drawings highlighting place elements. Categories inspired by Lynch's concepts grouped sketches, identifying common patterns to understand distinct areas.

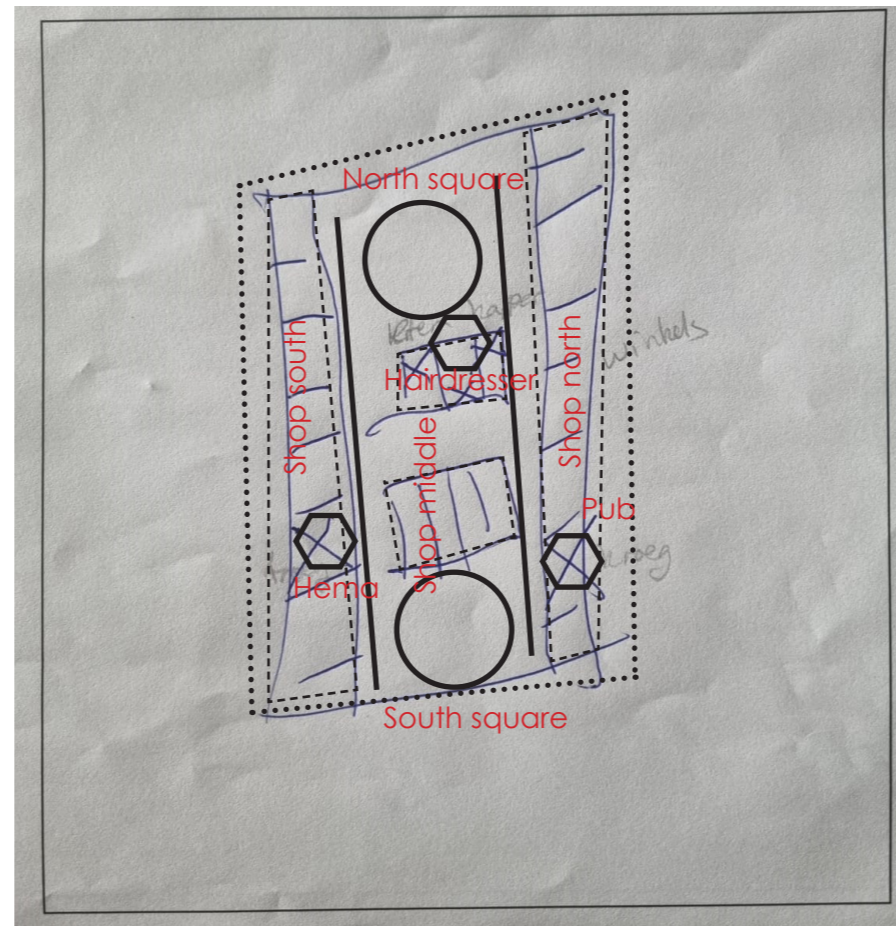


Figure 9. Lynch map over drawing participant 1 (Bolleboom, 2023)

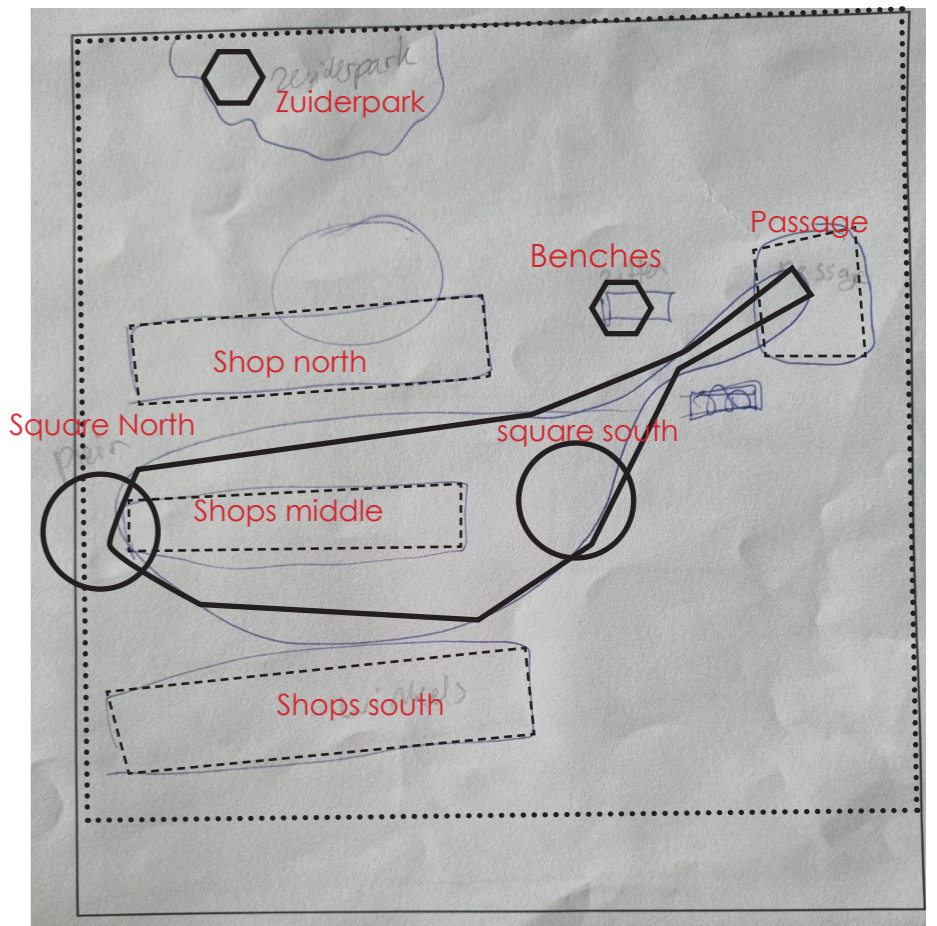


Figure 11. Lynch map over drawing participant 3 (Bolleboom, 2023)

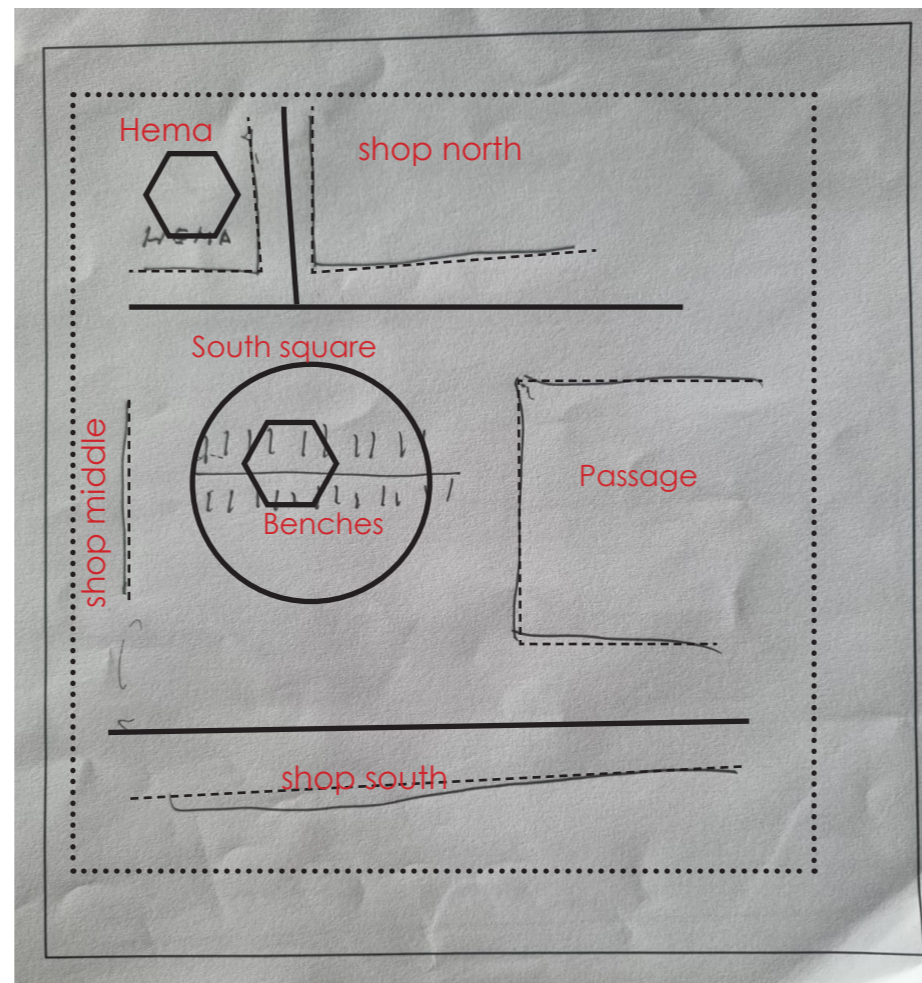


Figure 10. Lynch map over drawing participant 2 (Bolleboom, 2023)

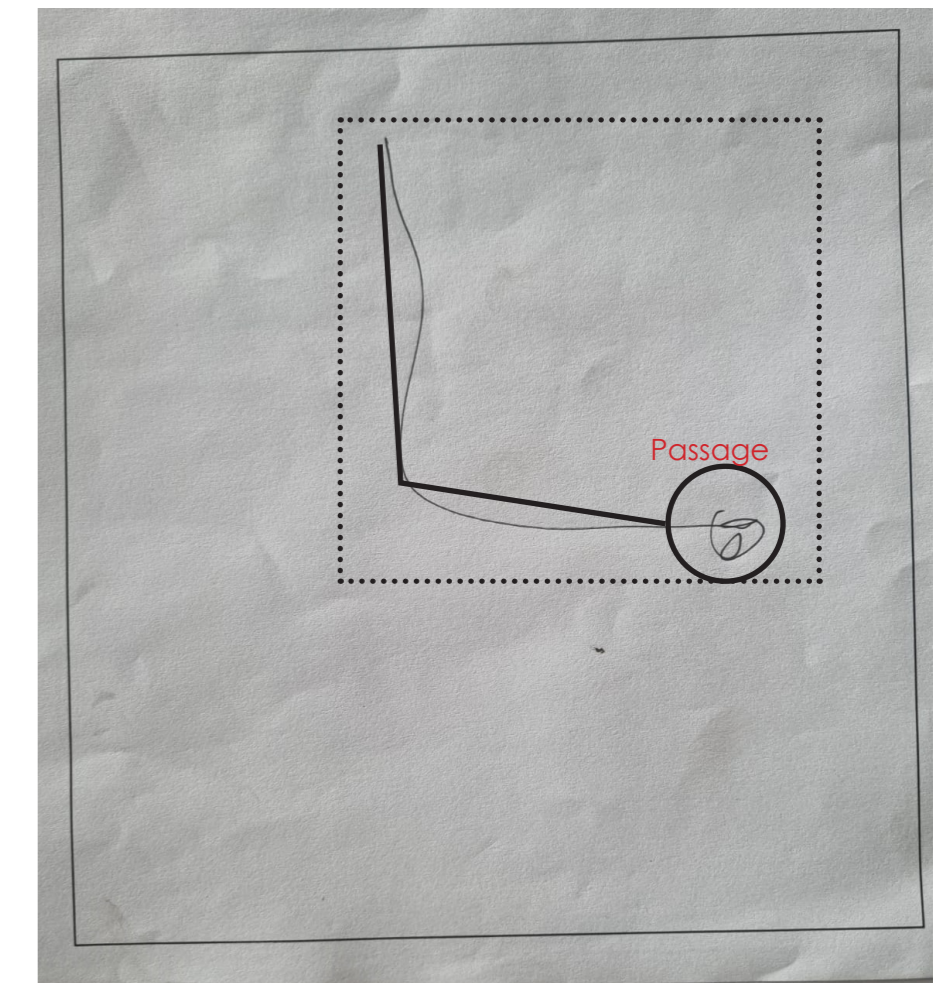


Figure 12. Lynch map over drawing participant 4 (Bolleboom, 2023)

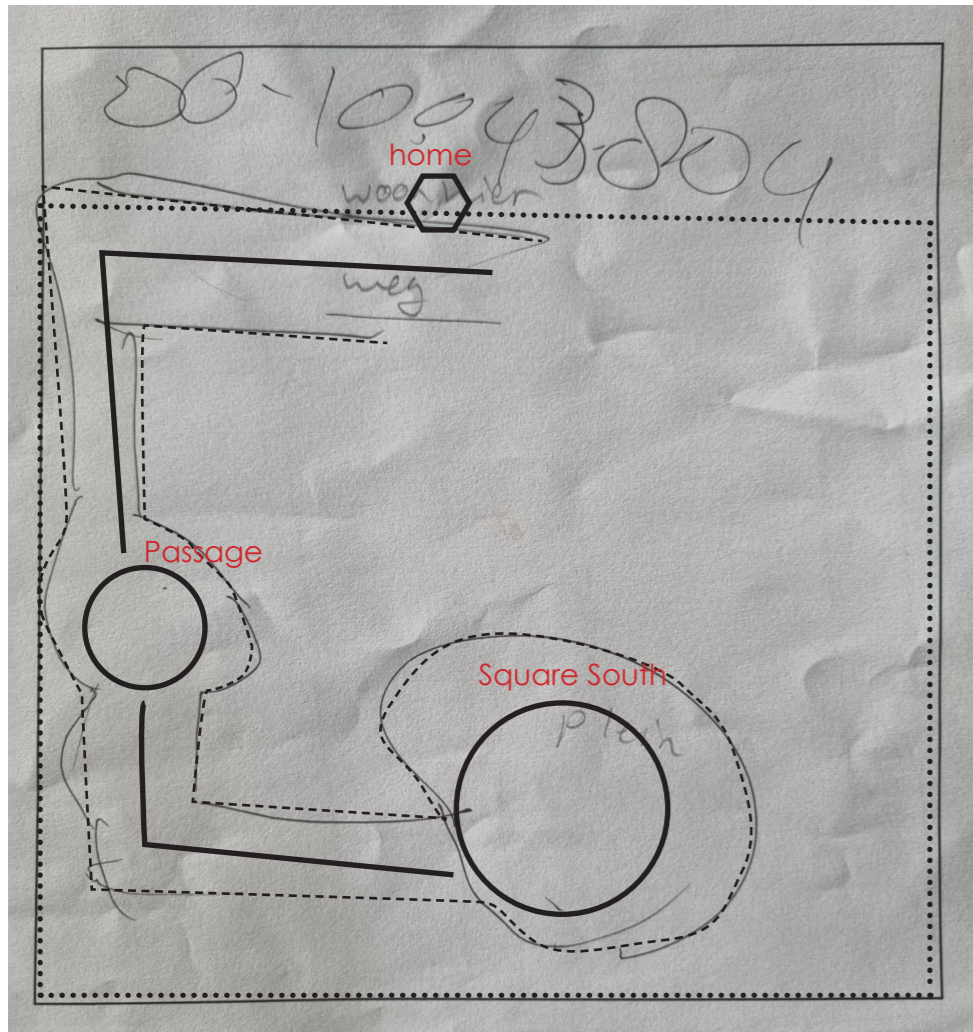


Figure 13. Lynch map over drawing participant 5 (Bolleboom, 2023)

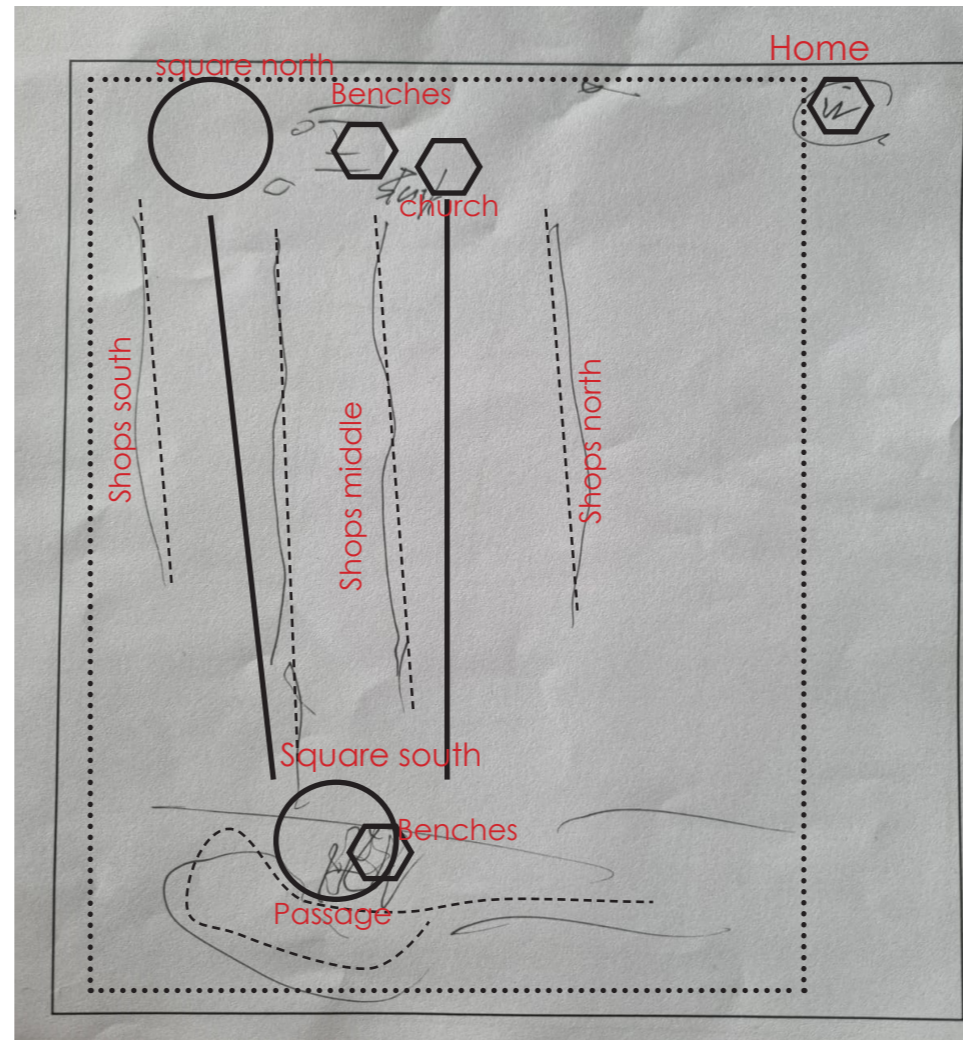


Figure 15. Lynch map over drawing participant 7 (Bolleboom, 2023)

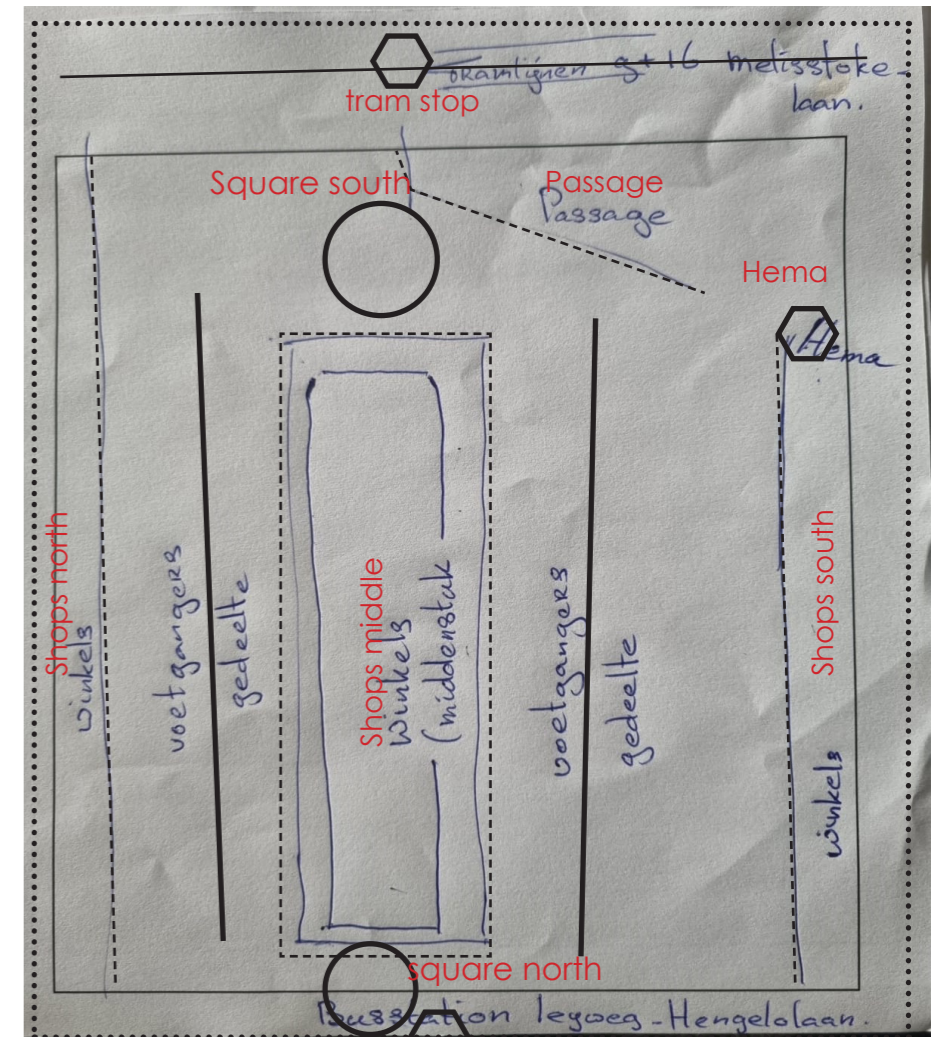


Figure 17. Lynch map over drawing participant 9 (Bolleboom, 2023)

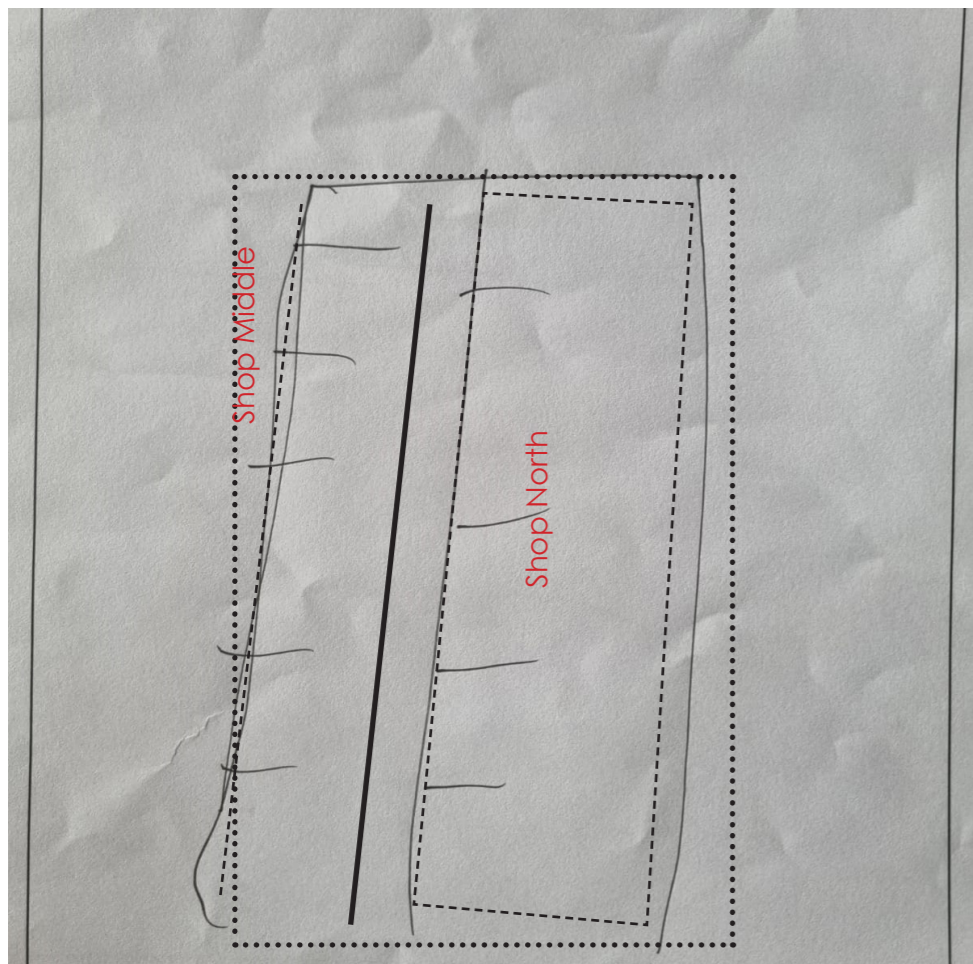


Figure 14. Lynch map over drawing participant 6 (Bolleboom, 2023)

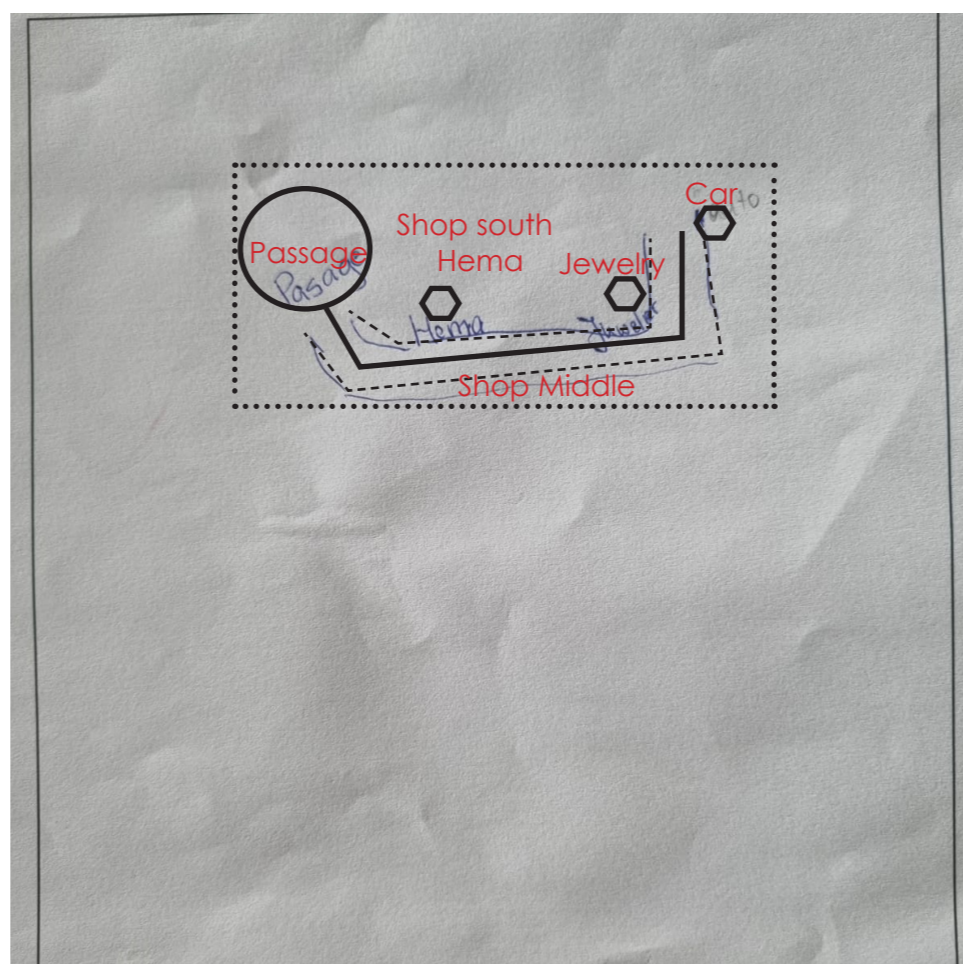


Figure 16. Lynch map over drawing participant 8 (Bolleboom, 2023)

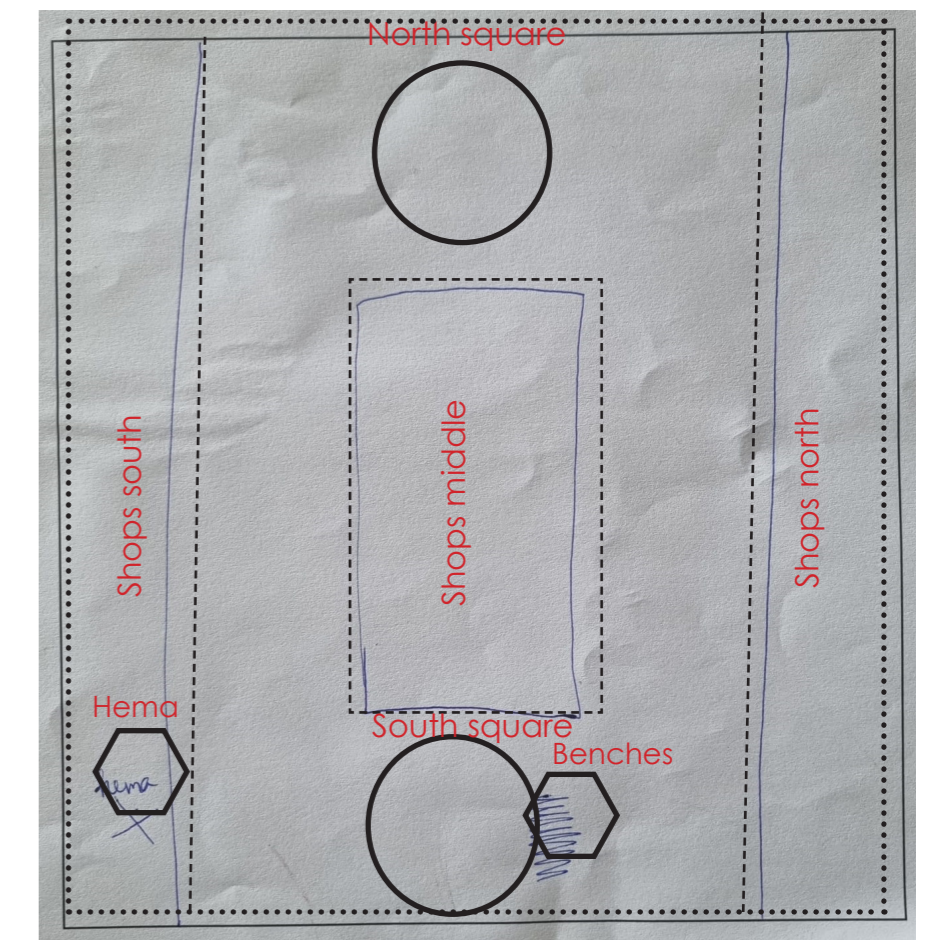


Figure 18. Lynch map over drawing participant 10 (Bolleboom, 2023)

Concluding Lynch map

Ten sketches were analyzed (Figure 9-18). Areas drawn by five or more people, following Lynch's drawing technique are summarized in the map (Figure 19).

The district covered Leyweg, from the passage to the northern square. Notably, the small passage was often left out, while the shopping mall consistently stood out.

Facades of Middle Shop, Shops North, and Shops South acted as edges. Pathways form naturally between Leyweg North and South Shops. These paths link the North Square and South Square, central gathering points with social and cultural significance. The South Square, featured the Hema as a landmark, serving as a reference point.

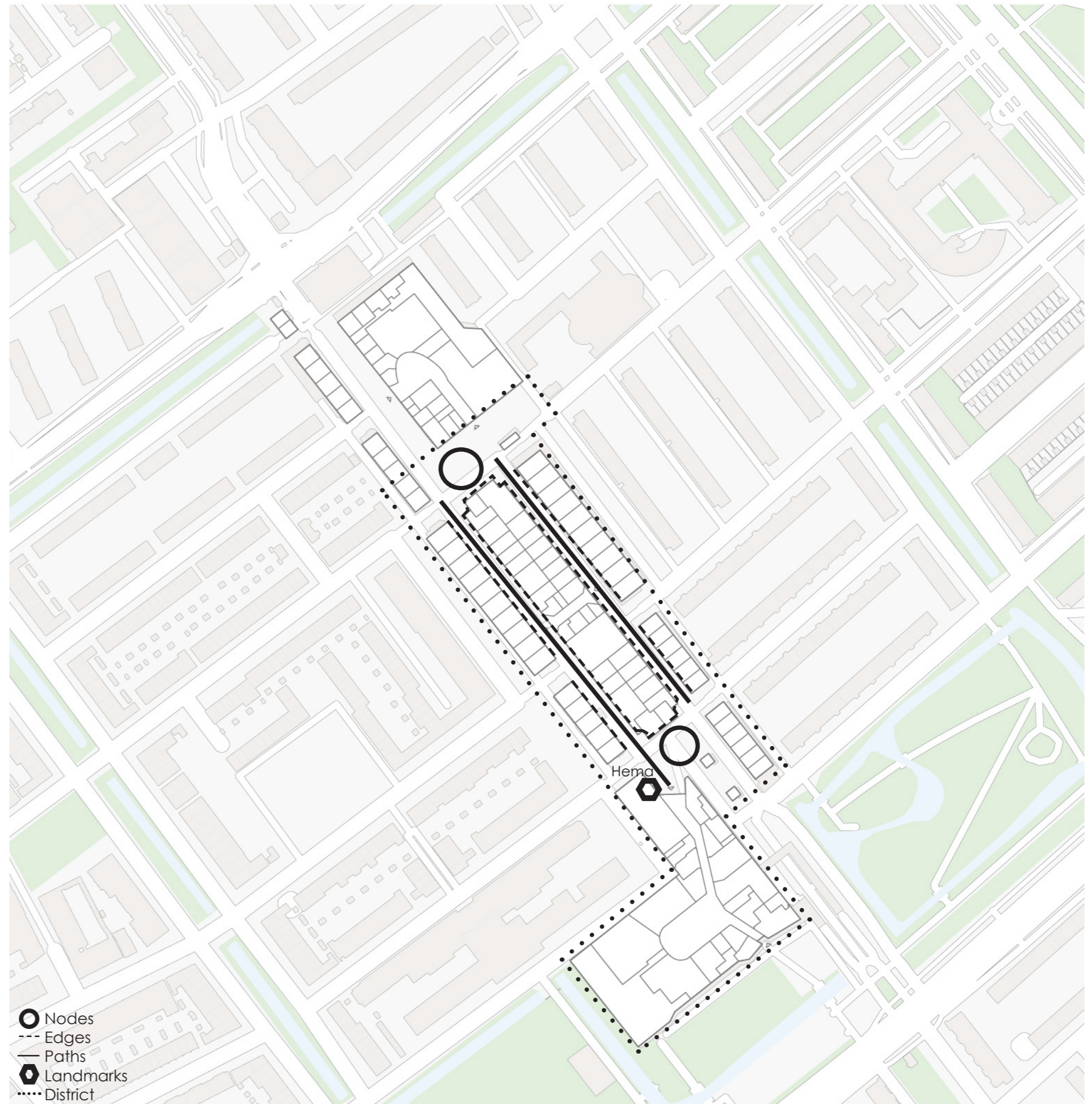


Figure 19. Concluding Lynch map Winkelcentrum Leyweg (Bolleboom, 2023)

Photo Recognition

In the photo recognition test, participants viewed photos of Winkelcentrum Leyweg and its surroundings (see Figure 20), providing insights through visual cues. Words mentioned by at least half of the participants were considered representative:

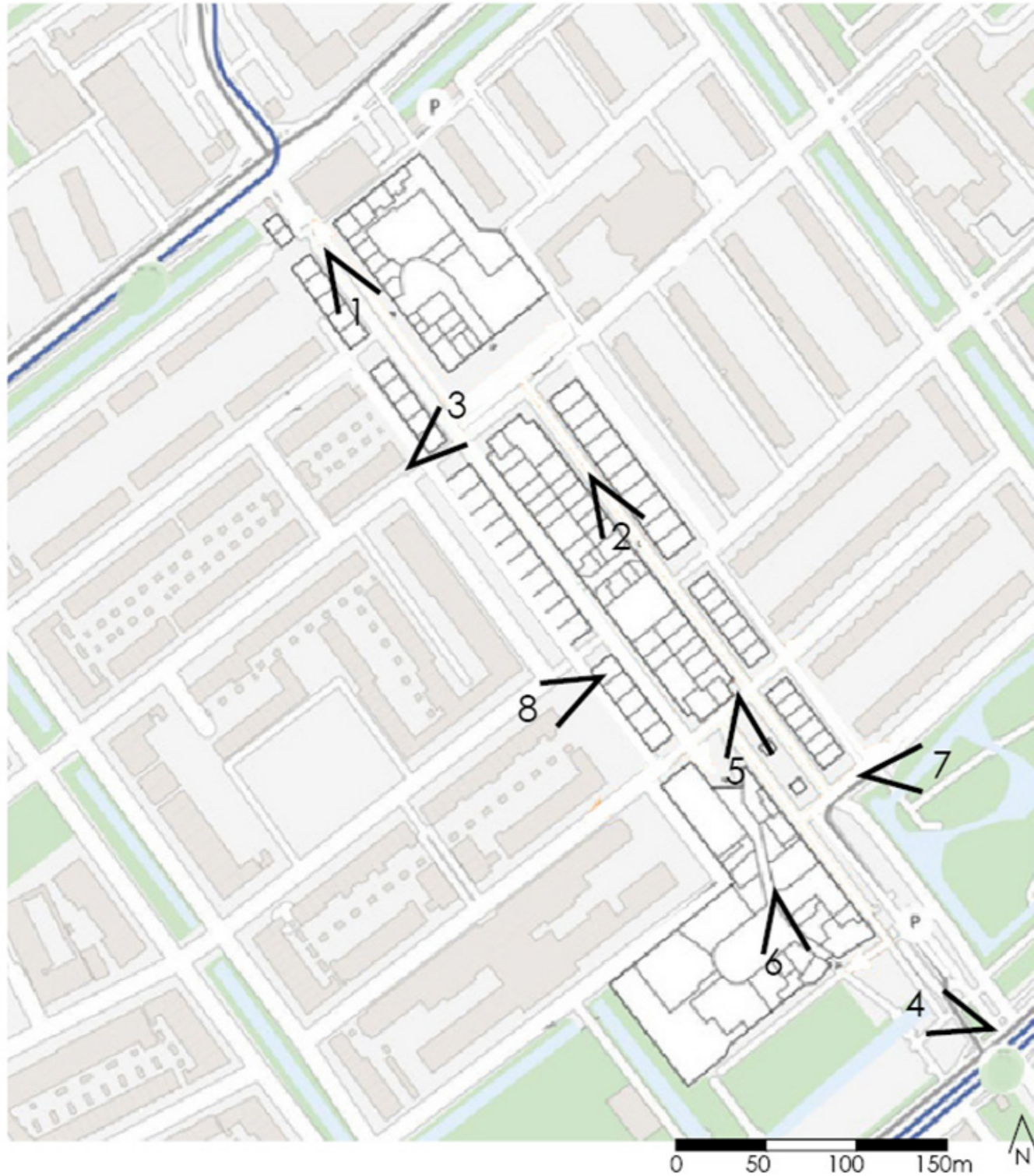


Figure 20. Photo's Winkelcentrum Leyweg with corresponding area in the map (Bolleboom, 2023)



Figure 21. Photo 1 Winkelcentrum Leyweg(Bolleboom, 2023)

Both Leyweg North Shop and Leyweg South Shop have distinctive features like benches with trees and the town hall in the background (Figure 21 and 22).



Figure 23. Photo 3 Winkelcentrum Leyweg(Bolleboom, 2023)

The South Square is seen as "empty," with memories of the 'V&D' store and the 'church' (Figure 23).



Figure 22. Photo 2 Winkelcentrum Leyweg(Bolleboom, 2023)

Both Leyweg North Shop and Leyweg South Shop have distinctive features like benches with trees and the town hall in the background (Images 1 and 2).



Figure 23. Photo 4 Winkelcentrum Leyweg(Bolleboom, 2023)

The Big Passage is often recognized as being the passage, it has a distinctive facade(Figure 23).



Figure 24. Photo 5 Winkelcentrum Leyweg(Bolleboom, 2023)

The South Square provokes varied opinions, reflecting individual interpretations(Figure 24).



Figure 26. Photo 7 Winkelcentrum Leyweg(Bolleboom, 2023)

Old housing units are linked to services, participants express a desire for new housing. Melis Stokepark is recognized aspect in the site(Figure 26).



Figure 25. Photo 6 Winkelcentrum Leyweg(Bolleboom, 2023)

The Big Passage is often associated with 'beautiful,' with mention of the 'arches' (Figure 25).



Figure 27. Photo 8 Winkelcentrum Leyweg(Bolleboom, 2023)

Identifying new housing units around the mall, especially newly added ones, is challenging, suggesting a potential disconnect (Figure 27).

Conclusion: Spirit of place Leyweg

The spirit of place in Winkelcentrum Leyweg, as revealed in the interviews, is based on its convenient location, good facilities, and clear layout, which are positively valued. However, there are also criticisms, such as bad atmosphere, untidiness, and poor maintenance.

By combining sketches and photos, specific features at different locations become evident. The North and South Squares act as nodes and are associated with landmarks like V&D, Hema, and the Church. The areas between the squares form clear paths with benches and trees, with the shops serving as an edge.

The Big and Small Passages appear somewhat detached from the not covered part of the shopping mall, yet they have their distinctive features. The Big passage is associated with 'Beautiful' and the 'arches'. The small Passage is distinctive due to the 'canopies'.

The area outside the shopping mall district is not strongly associated with the shopping mall and does not contribute to the spirit of the place, except for the 'town hall' and 'Melis Stokepark'.



Figure 28. Concluding spirit of place Winkelcentrum Leyweg (Bolleboom, 2023)

10 DISCUSSION

This research provides valuable insights into how biophilic design can enhance post-war shopping malls in terms of value and spirit of place, with a specific focus on Winkelcentrum Leyweg.

It becomes evident that biophilic design is not merely about superficially incorporating natural elements but can also contribute to ecological, social, and historical values when integrated adequately. In post-war shopping malls, values such as historical, cultural, societal, and architectural significance are prominent. These particular values are inherently linked to the spirit of place, as the historic value and social value are shaped by the spirit of place. Biophilic design can complement these values and introduce ecological value.

In the case study of Leyweg, research was conducted on the spirit of place within Winkelcentrum Leyweg, as it represents an example of the post-war shopping mall. This investigation reveals that Winkelcentrum Leyweg embodies the spirit of place through different scales. These include elements like benches with a tree or buildings like the V&D en the church, and even extend to the site as a whole, including the town hall. This demonstrates that Winkelcentrum Leyweg holds value on multiple scales.

Biophilic design, as observed through its transformations, also requires adjustments on multiple scales to enhance the environment. At the site scale, this involves reintroducing a river and creating bike paths alongside it, thereby altering the site. Additionally, it entails modifying the space plan to incorporate green intersections or redesigning buildings to accommodate plants within the structure. This illustrates that biophilic design exerts its influence on multiple scales, emphasizing the need for changes at different levels to implement it effectively.

Biophilic design calls for adjustments on various scales, and the "spirit of place" in post-war shopping malls manifests on multiple levels. Consequently, conflicts may arise, but they also offer the potential for harmony and balance. Not all elements have equal value in the post-war shopping mall, and not all aspects change when undergoing biophilic transformations. What this means is that transformations can occur without compromising the spirit of place. As the literature indicates, when implemented considerately, biophilic design can enhance specific values. Therefore, when biophilic transformations are considered in conjunction with the spirit of place, it appears to strengthen various values.

In conclusion, the incorporation of biophilic design into Leyweg's built environment presents a promising approach to enriching the spirit of place and improving its values. However, this must be approached with sensitivity to Leyweg's unique identity. Striking the right balance between biophilic design principles and Leyweg's distinct character is the challenge.

11 CONCLUSION

In conclusion, this research highlights the potential of biophilic design to enhance the value and spirit of place in post-war shopping malls, with a particular focus on Winkelcentrum Leyweg.

Biophilic design offers a pathway to revitalize heritage value by incorporating natural elements, such as light and greenery, into the built environment. This goes beyond preserving history; it enriches the historical and cultural experience, reinforcing societal and historical values.

Preserving the spirit of place in post-war shopping malls is crucial. It prevents places from becoming 'placelessness' and maintains the emotional connection users have with these spaces. This, in turn, upholds their societal and historic value rooted in user attachment.

Biophilic design and the spirit of place can have a negative impact on each other if not handled with care, but a balanced approach is possible. Not all elements hold equal value, and not all aspects require transformation during biophilic design implementation. By aligning these two, multiple values can strengthen within these post-war shopping malls.

In the case of Winkelcentrum Leyweg, incorporating biophilic design offers a promising way to enrich the values including the spirit of place. However, this transformation requires careful consideration of Winkelcentrum Leyweg's unique identity, striking a balance between biophilic design principles and the mall's distinct character.

In summary, biophilic design revitalizes post-war shopping malls, enhancing their value and spirit of place. It preserves history, enhances well-being, promotes sustainability, and presents cost-effective conservation strategies while respecting the essence of these unique post-war shopping malls.

12 LITERATURE

Beatly, T. (2011). *Biophilic Cities*. US: ISLAND PRESS. <https://doi.org/10.5822/978-1-61091-621-9>

Coombes, M.A., (2021). Integrating nature-based solutions and the conservation of urban built heritage: Challenges, opportunities, and prospects, *Urban Forestry & Urban Greening*. Science-direct.com. https://www.sciencedirect.com/science/article/pii/S161886672100217X?casa_token=NuH3ptbonYgAAAAA:Mvn-u00EA-OseeHp9msm0u3WEi-Hu0UKULOMJVeKYzPpgZd0Uxp4TbV4kPkn9vX1KwJsTXuM7U

Kaplan, S. (2001). Meditation, Restoration, and the Management of Mental Fatigue. *Environment and Behavior*, 33(4), 480–506. <https://doi.org/10.1177/00139160121973106>

Kellert, S.R. (2018). *Nature by Design : The Practice of Biophilic Design*. Yale University Press. ProQuest Ebook Central, <https://ebookcentral-proquest-com.tudelft.idm.oclc.org/lib/delft/detail.action?docID=5340626>.

Kooijman, D.C. (1999, November 4). *Machine en Theater*. 010 Publisher, Rotterdam. <http://resolver.tudelft.nl/uuid:667ea131-2cc7-4664-b566-ef9b675a610c>

Leakas, D. (2008). "Biophilia in Designing". OhioLINK Electronic Theses and Dissertations Center. http://rave.ohiolink.edu/etdc/view?acc_num=ucin1218652944

Mastrolonardo, L. (2023). *The Urban Riverfront Greenway: A Linear Attractor for Sustainable Urban Development*. link.springer.com. https://link.springer.com/chapter/10.1007/978-3-031-29515-7_76

Miletic, M., Zekovic, B.M., Ignjatovic, N.C., Ignjatovic, D. (2023). Challenges and Potentials of Green Roof Retrofit: A Case Study Miletic. link.springer.com. https://link.springer.com/chapter/10.1007/978-3-031-29515-7_76

Natuur & Milieu (2022). *Stad van Steen?*. Natuur & Milieu. <https://natuurenmilieu.nl/app/uploads/Rapport-Verstening-Openbare-Ruimte.pdf>

Negrello, M. (2023). *Designing with Nature Climate-Resilient Cities: A Lesson from Copenhagen*. link.springer.com. https://link.springer.com/chapter/10.1007/978-3-031-29515-7_76

NOS., (2022, March 24). Winkelstraten steeds leger: "Met alleen verkopen, verkopen, verkopen overleef je niet". NOS.nl. <https://nos.nl/regio/noord-holland/artikel/248287-winkelstraten-steeds-leger-met-alleen-verkopen-verkopen-verkopen-overleef-je-niet>

Pereira Roders, A., (2007). *Re-architecture: lifespan rehabilitation of built heritage*. research.tue.nl. <https://research.tue.nl/en/publications/re-architecture-lifespan-rehabilitation-of-built-heritage-scapus>

Pinto, M.R., Bosone, M., Ciampa, F. (2023). *Sustainable*

Reuse Indicators for Ecclesiastic Built Heritage Regeneration. link.springer.com. https://link.springer.com/chapter/10.1007/978-3-031-29515-7_76

Relph, E. (1976). *Place and Placelessness*. London: Pion

Rosenbaum, M. S., Otolara, M. L., & Ramirez, G. C. (2016). The restorative potential of shopping malls. *Journal of Retailing and Consumer Services*, 31(1), 157-165. <https://doi.org/10.1016/j.jretconser.2016.02.011>

Rosenbaum, M. S., Ramirez, G. C., & Camino, J. R. (2014). A dose of nature and shopping: The restorative potential of biophilic lifestyle center designs. *Journal of Retailing and Consumer Services*, 40(1), 66-73. <https://doi.org/10.1016/j.jretconser.2017.08.018>

Terrapin Bright Green. (2023). *The Economics of Biophilia: Why designing with nature in mind makes financial sense*. terrapinbrightgreen.com. <https://www.terrapinbrightgreen.com/report/economics-of-biophilia/>

Wikipedia. (2023). Timothy Beatly. Wikipedia. https://en.wikipedia.org/wiki/Timothy_Beatley

Wikipedia. (2023a). Edward Relph. Wikipedia. https://en.wikipedia.org/wiki/Edward_Relph

Zandbergen, G., (2018, September 27). Hoe nu verder met de middelgrote stad?. Locatus.nl. <https://locatus.com/blog/hoe-nu-verder-met-de-middelgrote-stad/>

13 APPENDIX 1 - Reflection

1. What is the studio about, and what did I do in this studio?

The studio I have been a part of is called AR3AH105 Adapting 20th Century Heritage: The Modern Mall. This studio focuses on the design challenge of the modern mall. The post-war malls, initially vibrant centers of post-war urbanization, evolved from community hubs to centers primarily driven by economic functions. With the rise of online shopping, these malls lost their significance in the heart of communities, becoming abandoned and empty spaces. Our studio explored how to address this issue from an architectural perspective. We collectively analyzed various shopping malls and individually researched specific fascinations to tackle the problem.

My research direction resulted from a fascination with nature, leading me to explore biophilic design—a design approach that integrates nature into the built environment. This led me to investigate the inherent value of post-war shopping malls, considering whether they could be repurposed or transformed into something more meaningful with biophilic design. The value, mainly from a user perspective, prompted me to use the Spirit of Place as a indicator for assessing value. The question arose: How can biophilic design enhance the value and spirit of place in a post-war shopping mall?

I conducted research on the transformation possibilities of biophilic design and examined the spirit of place in a post-war shopping mall. I compared these two aspects in a study addressing the main question. I applied these findings in a design for Winkelcentrum Leyweg in The Hague. Focusing on climate problems, both current and projected over 50 years, I used biophilic design to find solutions. The result is an urban farming community that aims to produce more food within the city, allowing outer areas to return to nature. The neighborhood is designed with greenhouses, aquaponics, pig farming, biodiversity, etc., creating a closed food production cycle beneficial to nature, humans, and animals.

At the core of the urban farming neighborhood is the vacant V&D building, which holds special significance in terms of the spirit of place. Revitalized with various functions such as rooftop greenhouses, indoor greenhouses, aquaponics, pig farming, kitchen, restaurant, office, education, and housing, the building serves as the central hub for this self-sufficient community. It acts as a machine for the neighborhood while also serving as a showcase for a broader audience. Users can engage with the building, becoming a part of its heritage strengthened by the addition of biophilic design. As a result, the building and its surrounding neighbourhood have regained purpose, breathing new life into the once-deserted Winkelcentrum Leyweg, gaining renewed interest and functionality.

2. What is the relation between your graduation project topic, your master track (Ar, Ur, BT, LA, MBE), and your master programme (MSc AUBS)?

My project centers around the repurposing of a post-war shopping mall, requiring both functional and architectural solutions to

breathe new life into this post-modern shopping malls. This aligns with the Ar track, as it involves addressing technical, social, and spatial challenges in the built environment through innovative architectural design.

Moreover, Urbanism (Ur) plays a significant role in my project, as the mall is embedded in a community. I had to consider the social, cultural, economic, and political perspectives to adapt the mall effectively to the urban environment. Management in the Built Environment (MBE) was also crucial, as I had to strategize the necessary steps to improve the shopping mall. Additionally, I considered the existing landscape in my design, incorporating it and its historical structure into the mall's revitalization, which ties into the Landscape Architecture (LA) aspect.

3. How did your research influence your design/recommendations and how did the design/recommendations influence your research?

My research meaningfully influenced my design. Investigating how biophilic design can enhance heritage and the spirit of place in an existing shopping mall environment provided valuable insights. I learned about the possibilities and benefits of biophilic design within an architectural context. Additionally, my spirit of place research revealed how understanding the perceptions and feelings of the people who use a space can shape the design process. It taught me to approach a project not just from an architectural standpoint but from the user's perspective, yielding different ideas and insights that I might not have otherwise considered. Conversely, my design work also impacted my research. The design phase uncovered gaps in my knowledge, particularly regarding specific applications of biophilic design in unique situations. This prompted me to revisit my research to fill in these information gaps and refine my recommendations.

4. How do you assess the value of your way of working (your approach, your used methods, used methodology)?

My approach began with a personal fascination for nature in urban environments, which provided a strong motivational foundation. However, it was challenging to link this passion to the specific graduation topic. Finding a balance between my fascination for biophilic design and the research topic revitalizing the post-war shopping mall was a learning experience. I found it challenging to establish a connection between two distinct components, namely heritage and biophilic design. There is limited existing research on how heritage and biophilic design intersect. Therefore, I took it upon myself to explore methods and developed approaches to investigate and compare them. During this process, I discovered that creating such a method often encounters challenges. Sometimes, the method aligns well with the results, but on occasion, the results don't fit within the framework and categorization I had established.

For instance, I utilized "The Layers of Brand" to categorize the Spirit of Place, but some results proved difficult to fit into these categories. Taking a step back, I assessed whether the methods I employed were needlessly complex. It became apparent that indeed they were, emphasizing the importance of continuous

reflection on methodology during the research process.

5. How do you assess the academic and societal value, scope and implication of your graduation project, including ethical aspects?

From an academic perspective, my research fills an important gap in the field, as there is limited existing research on heritage and biophilic design. This project contributes to the understanding of how biophilic design can provide new meaning and strength to heritage in the built environment, making it academically significant.

On a societal level, my project addresses the potential for biophilic design to enhance the quality of life within urban areas. It also emphasizes the importance of considering the spirit of place when undertaking transformations. This societal relevance lies in the potential to improve the lives of communities while preserving and celebrating the essence of the place. Ethically, the project underscores the importance of responsible design practices, ensuring that changes to the built environment are thoughtful and considerate of the people who inhabit it.

6. How do you assess the value of the transferability of your project results?

Reflecting on my project, I believe the results can be transferable to similar contexts or projects. The principles of biophilic design and considering the spirit of place are adaptable concepts that can be applied to various urban redevelopment initiatives. However, the success of this transferability depends on factors like the specific characteristics of the project site, the needs of the community, and the cultural context. Understanding these factors will be crucial when applying the findings to different settings.

7. What role will biophilic design play in the future of the architectural world?

I find biophilic design to be a highly compelling approach. I totally agree that nature is deeply rooted in our brains, influencing our well-being to a significant extent. When we consider design from a biophilic perspective, many aspects of what we find beautiful, comfortable, and pleasing become more understandable. Simultaneously, it provides a means to reintegrate plants and animals into our world, rather than exclusion them to the sidelines or allowing them to face extinction. Biophilic design is a way to restore balance to the world, especially in the context of climate considerations. It seems like such a logical solution for improving the world, but the challenge lies in adapting our existing environments, which have strayed far from nature due to human influence. However, I firmly believe that if we start embracing biophilic principles now, it holds great promise for the future.

8. Specifically about my design, do you think urban farming will become a reality?

My design represents a rather radical approach to reimagining the existing urban environment, featuring the coexistence of pigs and fish with a significant reduction in cars on the streets. When delving into the specific execution, it's likely that numerous challenges will arise, making such a drastic transformation a complex

strive. The world may not change to this extreme, but if we never contemplate or attempt such ideas, we may overlook the untapped potential that urban environments hold. Too often, we tend to think in a linear and short-term manner when it comes to improvements. However, beautiful and unique living environments that integrate with nature can be created when we think more creatively and with a longer-term perspective.

9. What was an important learning experience?

For me, it was a valuable learning experience that, while designing and creating a concept, you develop a kind of idealized vision of how humans, plants, and animals can coexist seamlessly. You envision pigs roaming in your garden, food being produced on your balcony, and facades being utilized for food production. However, as I delved into the specifics of refining the design, I realized that there exists a certain degree of coexistence among humans, animals, and nature, but not every combination is ideal. I discovered that plants used for food production require a significantly different climate than the one suitable for human habitation. Thus, there needs to be a thermal separation between people and plants for food production. Similarly, while animals like pigs can form a connection with humans, it remains crucial for these animals to live separately from humans for hygiene reasons. It was, therefore, enlightening to test how to bring together humans, nature, and animals while still appropriately separating them from each other. Through this, I've learned that it's beneficial to think big during the development of a concept. However, it is crucial to engage in extensive testing and reflection to determine its feasibility and desirability. Subsequently, refining the concept based on these insights becomes essential.

10. What is the future of the Modern Mall?

Currently, the future of the modern mall is uncertain. The biggest problem of the shopping mall is that the current shopping malls often lack diversity and are focused on economic goals. What I believe is crucial is the restoration of the social value for which they were built. The approach to achieving this is by making them more attractive through a transformation that preserves the heritage value of the 1960s mall while simultaneously adding elements that make the place socially appealing and future-proof.

I am convinced that the 'spirit of place' method, used to assess and assign value to existing shopping malls, is a powerful approach that should be applied universally before their transformation. Currently, there are no clear methods providing an assessment of the value of 1960s architecture, making it challenging to evaluate the 1960s shopping mall before it undergoes transformation. Considering that shopping malls are constructed from a social perspective, it is relevant to employ a valuation method from the user's standpoint, and this is exemplified by the Spirit of Place method, as described by Edward Relph. Users distinctly appreciate specific aspects that create an attachment and make the place socially appealing, setting the shopping mall apart from other

locations. Therefore, I believe the 'spirit of place' method is valuable in the transformation of shopping malls, especially when evaluating the heritage value of 1960s malls.

With the Spirit of Place research serving as a crucial valuation for the 1960s shopping mall, it is essential to bring back and improve the social value that in a way that it also improves the specific shopping mall and its surrounding area. In the case of the Leyweg, where climate issues are prevalent, I have tackled the design challenge to address both social and climate problems. My design includes climate machines with educational and social appeal, simultaneously greening the environment. It works well for this area as it not only solves climate problems but also creates a strong identity and sense of social connection through the formation of an urban farming community.

While not every shopping mall needs to be an urban farm because each shopping mall and its surrounding area has a different "spirit of place" and different needs and problems, it is essential to employ a method during the transformation of a shopping mall that specifically considers its past, future, and current situation, as well as the context of the mall. This approach aims to arrive at an appropriate solution that not only provides the shopping mall with renewed social value but also ensures its future resilience, thereby strengthening its heritage value.

This research is part of a research project to obtain the MSc Architecture at TU Delft. The aim of the research is to discover how visitors and residents view the shopping center and its surroundings.

You have been randomly selected to participate in the interview and I hope you will help me in this research by participating in the interview.

The information you provide will remain confidential and will be used for academic purposes only.

Thank you in advance!

1. Sex

- Men
- Woman
- Other

2. Age

- Younger than 25 years
- 25-35 years
- 36-45 years
- 46-55 years
- 56-65 years
- Older than 65 years

3. Hoe lang komt u hier al?

- Less than a year
- 1 to 4 years
- 5 to 10 years
- More than 10 years

4. Hoe vaak bezoekt u het winkelcentrum?

- Everyday
- Once a week
- Twice a week
- Once per month
- Twice per month
- Other.....

5. Which transportation did you use to get here?

- Walking
- Bike
- Scooter
- Car
- Public transport
- Other.....

6. Reason for visiting the shopping mall?

- Work
- Shopping
- Entertainment
- Business
- Live here
- Eating
- Other.....

1. Why do you like this shopping center?

- Beautiful
- Lots of things to see and do
- Convenient location
- Good/fine facilities
- Easy parking
- Easily accessible by public transportation
- Other.....

2. Do you ever find the shopping center confusing?

- No, the shopping center has a clear layout
- No, there are features that make places in the shopping center unique, such as.....
- Yes, the buildings and/or places look the same
- Yes, the route is confusing
- Other.....

3. What places, buildings, and/or objects in or around the shopping center do you find the most unique?

- Square:
- Park:
- Street furniture such as benches, statues, signs, or lighting
- The plants and trees
- Residential blocks
- Specific buildings such as: passage/church/shops/.....

4. Why do you find this unique?

- The facade/front
- The decorations
- The height
- The size
- The atmosphere
- The style of architecture
- The location in which it is situated
- By how it is used, the activities
- It has a good layout
- There are good facilities
- The colors
- The shape of the roof
- The material
- It is cozy

- It is comfortable
- Good memories
- Other.....

5. What places, buildings, and/or objects do you find ugly or unpleasant in and around the shopping mall?

- Square: square near the church/square near the Hema/.....
- Park: Melis Stokepark/Zuiderpark/.....
- Street furniture such as benches, statues, signs, or lighting
- The plants and trees
- Residential blocks
- Specific buildings such as: small passage/large passage/church/shops/.....

6. What do you find ugly about it?

- Bad atmosphere
- Lots of mess/untidy
- It smells
- Lots of litter
- Too crowded
- Bad memories
- Lots of negative activities such as graffiti, vandalism, or crime
- The buildings are not well-maintained
- The plants are poorly maintained
- Ugly architecture
- It is not functional, there is little there
- The location is not nice

7. Do you think these places should be demolished or would you prefer them to be renovated?

- Demolish
- Renovate
- Do nothing

8. Which stores in the shopping center do you mainly go to?

- Supermarket
- Food stores: bakery, butcher, grocery store, greengrocer, fruit store, etc.
- Restaurant
- Clothing stores
- Specialty stores
- Optician
- Pharmacy
- Toy stores

- Electronics stores
- Market
- Second-hand stores
- Drugstore
- Stores with all kinds of low-priced products such as: Action, Big Bazar, Hema, etc.....

9. Are there places in the shopping center or around the shopping center where you go for leisure activities such as relaxing, eating, chatting, events, etc.?

.....

.....

10. If you had to describe the shopping center to someone who has never been there, how would you describe it?

.....

.....

11. What can be improved to make the shopping mall and its surrounding more attractive?

.....

.....

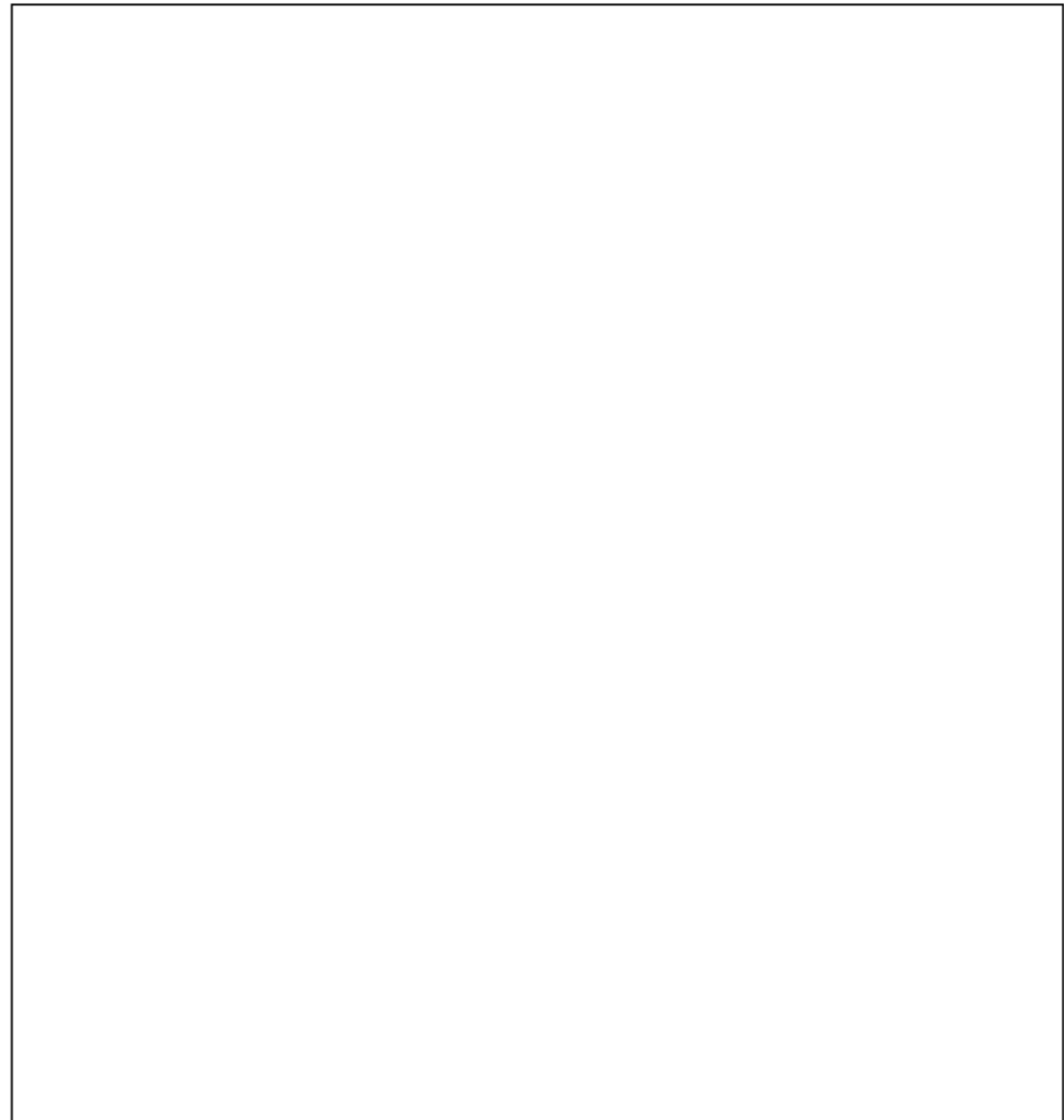
12. Are there place that have a special meaning to do you and shouldn't be demolished

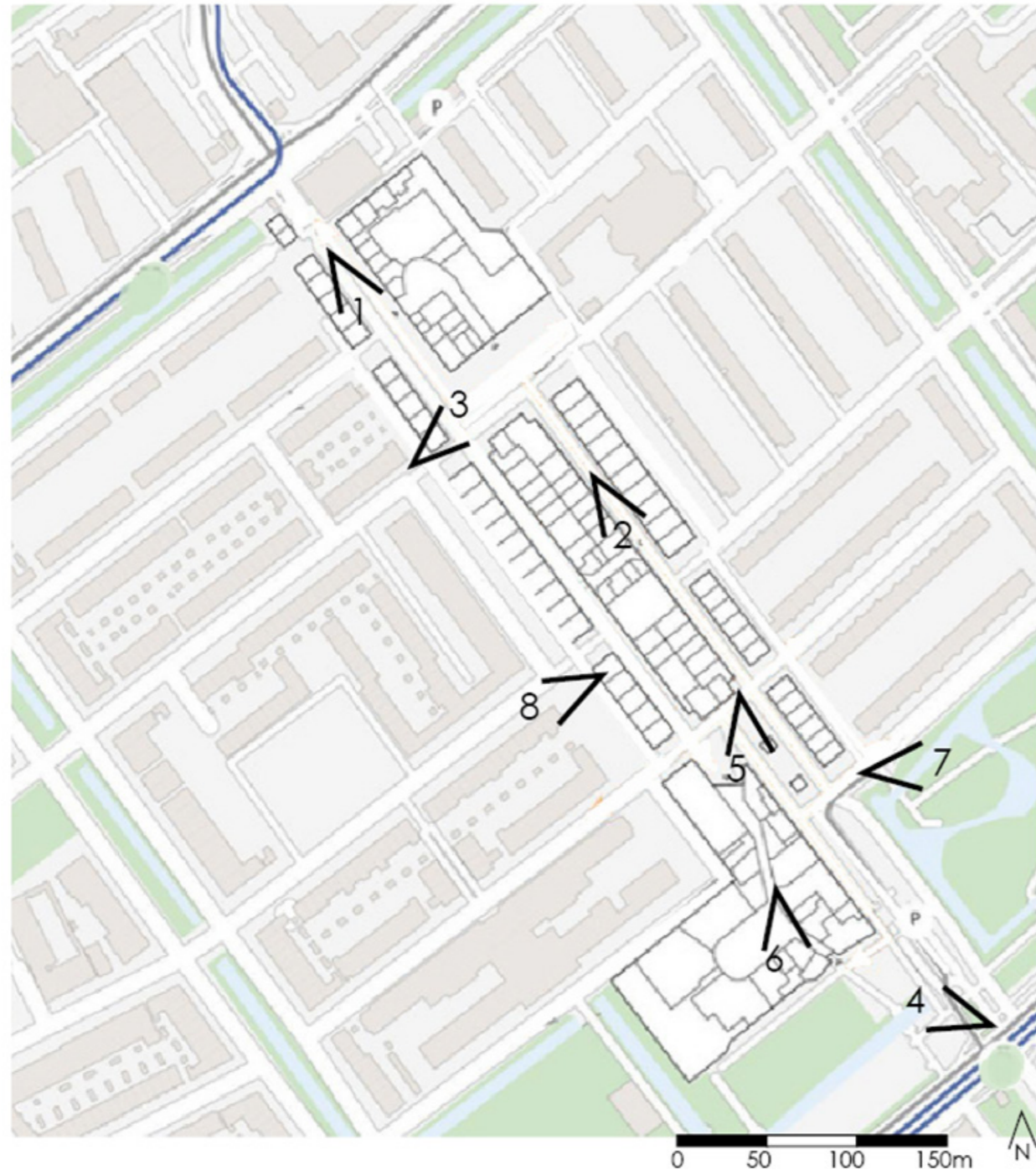
Schets opdracht

Zou je een snelle tekening kunnen maken van het winkelcentrum en de omgeving?

Beeld je in dat een toerist vraagt of je de route kan uitleggen in het winkelcentrum, wat voor kaart zou je voor hem/haar tekenen? Denk hierbij aan:

- Plekken of dingen waaraan de toerist de route kan herkennen
- Waar de grenzen zijn
- Wat je tijdens de route kan tegenkomen
- Wat namen zijn van plekken of winkels





Biop

Foto opdracht

1

In de volgende opdracht worden er een aantal foto's laten zien, zou je kunnen aangeven:

- Welke plek of gebouw het is?
- Waaraan herken je de plek of het gebouw aan?
- Wat zijn dingen die jij vindt opvallen aan het gebouw of de plek?
- Vind je dat de plek onderdeel uitmaakt van het winkelcentrum en de omgeving ervan?
- Vind je het mooi of lelijk en waarom?



2

In de volgende opdracht worden er een aantal foto's laten zien, zou je kunnen aangeven:

- Welke plek of gebouw het is?
- Waaraan herken je de plek of het gebouw aan?
- Wat zijn dingen die jij vindt opvallen aan het gebouw of de plek?
- Vind je dat de plek onderdeel uitmaakt van het winkelcentrum en de omgeving ervan?
- Vind je het mooi of lelijk en waarom?



3

In de volgende opdracht worden er een aantal foto's laten zien, zou je kunnen aangeven:

- Welke plek of gebouw het is?
- Waaraan herken je de plek of het gebouw aan?
- Wat zijn dingen die jij vindt opvallen aan het gebouw of de plek?
- Vind je dat de plek onderdeel uitmaakt van het winkelcentrum en de omgeving ervan?
- Vind je het mooi of lelijk en waarom?



4

In de volgende opdracht worden er een aantal foto's laten zien, zou je kunnen aangeven:

- Welke plek of gebouw het is?
- Waaraan herken je de plek of het gebouw aan?
- Wat zijn dingen die jij vindt opvallen aan het gebouw of de plek?
- Vind je dat de plek onderdeel uitmaakt van het winkelcentrum en de omgeving ervan?
- Vind je het mooi of lelijk en waarom?



5

In de volgende opdracht worden er een aantal foto's laten zien, zou je kunnen aangeven:

- Welke plek of gebouw het is?
- Waaraan herken je de plek of het gebouw aan?
- Wat zijn dingen die jij vindt opvallen aan het gebouw of de plek?
- Vind je dat de plek onderdeel uitmaakt van het winkelcentrum en de omgeving ervan?
- Vind je het mooi of lelijk en waarom?



6

In de volgende opdracht worden er een aantal foto's laten zien, zou je kunnen aangeven:

- Welke plek of gebouw het is?
- Waaraan herken je de plek of het gebouw aan?
- Wat zijn dingen die jij vindt opvallen aan het gebouw of de plek?
- Vind je dat de plek onderdeel uitmaakt van het winkelcentrum en de omgeving ervan?
- Vind je het mooi of lelijk en waarom?



7

In de volgende opdracht worden er een aantal foto's laten zien, zou je kunnen aangeven:

- Welke plek of gebouw het is?
- Waaraan herken je de plek of het gebouw aan?
- Wat zijn dingen die jij vindt opvallen aan het gebouw of de plek?
- Vind je dat de plek onderdeel uitmaakt van het winkelcentrum en de omgeving ervan?
- Vind je het mooi of lelijk en waarom?



8

In de volgende opdracht worden er een aantal foto's laten zien, zou je kunnen aangeven:

- Welke plek of gebouw het is?
- Waaraan herken je de plek of het gebouw aan?
- Wat zijn dingen die jij vindt opvallen aan het gebouw of de plek?
- Vind je dat de plek onderdeel uitmaakt van het winkelcentrum en de omgeving ervan?
- Vind je het mooi of lelijk en waarom?

