

Planning for Active Behavior

How the planned environment contributes to stimulating active behavior for the lower-SES population



Amber den Otter
Master Spatial Planning – Planning, Land and Real
Estate Development
Faculty of Management
Radboud University Nijmegen
May 10th, 2023

Blank page

Planning for Active Behavior

How the planned environment contributes to stimulating active behavior for the lower-SES population

Author : Amber den Otter

Student number : s1065001

Date : May 10th, 2023

Institution : Radboud University Nijmegen

Faculty : Faculty of Management

Program : Master of Spatial Planning

Specialization : Planning, Land and Real Estate Development

Radboud University Supervisor : Kevin Raaphorst

Word count : 27.978 excl. (abstract, preface, annex etc.)



Radboud Universiteit Nijmegen

Abstract

This thesis explores the lifestyle and mentality of the lower-SES population with respect to their active behavior. On average, people with a lower-SES population have 6-year lower life expectancy and live 15 years less in good health (Pharos, 2019). Stimulating active behavior in their direct living environment would contribute to improving their health. Therefore, the main research question is: “How can planning for active behavior in the living environment contribute to a more active lifestyle among the Dutch lower-SES population?”

Through observations in the neighborhoods Holtenbroek and Oosterflank, interviews with the lower-SES population, and a focus group among experts on the topic of active mobility, four different mentalities were formulated. The mentalities are distinguished on the level of motivation and ability to be active. This research demonstrates how ‘soft interventions’ in the living environment could contribute to stimulating the desired behavior amongst those mentalities with the least motivation for active behavior. It argues for social initiatives in the living environment, established through citizen participation. This can seduce the lower-SES population to come together or go for a walk more often, from the desire to be part of the neighborhood and join the social initiatives. In turn these soft interventions could result in subconscious lifestyle changes toward more active behavior amongst the lower-SES population.

Keywords

Living environment, lifestyle, lower-SES population, active behavior, participation

Acknowledgements

You are now reading my Master thesis which forms the final product for the master Spatial Planning, specialization 'Planning, Land and Real Estate Development'. In this thesis all the knowledge I absorbed during the past three years of my studies on the Radboud University (pre-master and master) come together into one final product.

I would like to thank my supervisor, Kevin Raaphorst, for supporting me during the last 1,5 year of completing my thesis, and for letting me join his research-team on the event-days in Oosterflank and Holtenbroek. Throughout the process of developing my thesis and during the event-days, I have seen how the municipality tries to keep short lines with their residents and noticed their commitment to develop resilient, livable neighborhoods. I would like to thank the neighborhood manager of the municipality of Zwolle, Wim van Hattum, for explaining more about the neighborhood Holtenbroek and its future plans.

I hope you enjoy reading my master thesis,

Amber den Otter

Amber, 2023

Index

Chapter 1. Introduction	8
1.1 <i>Research problem and statement</i>	8
1.2 <i>Research aim and research questions</i>	9
1.3 <i>Societal and scientific relevance</i>	10
1.3.1 <i>Societal relevance</i>	10
1.3.2 <i>Scientific relevance</i>	10
1.4 <i>Reading guide</i>	11
Chapter 2. Literature review and Theoretical Framework	12
2.1 <i>Literature review</i>	12
2.1.1 <i>Positive Health</i>	12
2.1.2 <i>Lifestyle & mentality</i>	13
2.1.3 <i>Active behavior</i>	14
2.1.4 <i>The living environment</i>	17
2.1.5 <i>Spatial planning and participation</i>	17
2.2 <i>Theoretical Framework</i>	19
2.3 <i>Operationalization</i>	20
Chapter 3. Methodology	21
3.1 <i>Research philosophy</i>	21
3.2 <i>Research approach and strategy</i>	21
3.3 <i>Data collection and analysis</i>	22
3.3.1 <i>Observation</i>	22
3.3.2 <i>Questionnaire</i>	22
3.3.2 <i>Interviews</i>	23
3.3.3 <i>Focus-group</i>	24
3.4 <i>Reliability and validity</i>	25
Chapter 4. Results	27
4.1 <i>Results observations</i>	27
4.1.1 <i>Observation Holtenbroek – Zwolle</i>	27
4.1.2 <i>Observation Oosterflank – Rotterdam</i>	34
4.2 <i>Results interviews</i>	41
4.2.1 <i>Lifestyle & mentality</i>	41
4.2.2 <i>Theory of Planned Behavior</i>	44
4.2.3 <i>Participation</i>	46
4.3 <i>Results experts interviews</i>	47
4.4 <i>Summery general results</i>	51
Chapter 5. Conclusion	52
5.1 <i>Sub-conclusions</i>	52
5.2 <i>Conclusion</i>	55
5.3 <i>Discussion</i>	56
Chapter 6. Recommendations and critical reflection	57

6.1 Recommendations.....	57
6.1.1 Recommendations future research	57
6.1.2 Recommendations municipality Zwolle and Rotterdam	57
6.2 Critical reflection	58
References	59
Annex.....	64
Annex 1. Exemplification of the 10 types of water elements in urban areas	64
Annex 2. Operationalizations	65
Annex 3. Overview of all the codes - interviews (own work via Atlas.ti)	66
Annex 4. Network 'Theory experience respondents'	67
Annex 5. Interviews with respondents	69
Annex 6. Used codes – focus-group.....	82
Annex 7. Network of codes – focus-group (own image via Atlas.ti).....	82
Annex 8. Density and facilities Holtenbroek.....	83
Annex 9. Independence for children Holtenbroek	85
Annex 10. Greenery and water Holtenbroek.....	85
Annex 11. Mobility - Holtenbroek	85
Annex 12. Shared mobility in Zwolle & Rotterdam.....	86
Annex 13. Density and facilities Oosterflank.....	86
Annex 14. Independence for children - Kindlint.....	88
Annex 15. Biosphere reserves + types of water elements - Oosterflank	89
Annex 16. Questionnaire and results	90
Annex 17. Codes later added – Theory of planned behavior.....	93
Annex 18. Three determinants and their positive and negative influences	93
Annex 19. Presentation focus-group	95
Annex 20. Transcript of the focus-group	97
Annex 21. Observation scheme	110
Annex 22. Interview guide – interviews with lower-SES population.....	111
Annex 23. Examples of quotes – Interviews respondents	113
Annex 24. Examples of quotes – focus-group experts.....	114
Annex 25. Design principles - nuances to the framework	115
Annex 26. First analysis of the observation.....	124

Chapter 1. Introduction

In this chapter, the topic is introduced, the aim and the research questions of this thesis are stated. Next, the scientific and societal relevance are discussed.

1.1 Research problem and statement

In the Netherlands, people with a lower Socioeconomic Status (SES) on average have 6 year lower life expectancy and on average live 15 years less in good health (Pharos, 2019). According to Pharos (2019), Socioeconomic Status alludes to systematic differences in life expectancy and health which depend on someone's position in society. SES influences the access to certain resources, this indirectly influences the social capital benefits someone experiences in relation to personal and group social networks (Welsler, et. al., 2011). According to Pharos (2019), there is a clear relationship between someone's SES and their healthy life expectancy: with every step of a lower SES, the chances of a healthy life become smaller. In addition, people living in good health have a better chance to obtain and keep a higher SES, once obtained a higher position in society one has a bigger chance of staying healthy (Pharos, 2019). SES is often considered to consist of three elements: educational achievement, occupational prestige, and economic resources (Williams & Collins, 1995).

This relationship between a lower-SES and decreasing health can be explained by the fact that the lower-SES population more often obtain an unhealthy lifestyle. On average, people with a lower Socioeconomic Status more often have unhealthy habits such as cigarette smoking, a poor diet and excessive alcohol intake (Rapid Science Publishers, 1996). According to Leung, et.al. (2019), the high cost of healthy food and lack of time due to work commitments form the main obstacles to healthy eating habits for the lower-SES population. In addition, the lower-SES population on average consumes fewer fresh fruits and vegetables, and more refined grains and added fats than higher-SES populations. Children in low-SES households are less physically active than children in higher-SES households (Humbert et al., 2006). A study by Gidlow et al. (2006) on the relationship between SES and moderate-vigorous intensive physical activity showed that the lower-SES population less often perform moderate-vigorous intensive physical activity than the higher-SES population. Beenackers et al. (2012) affirm this relationship as their study shows that lower-SES groups participate less in vigorous activities (sports) than higher-SES groups. According to Adler et al. (1994) the lower-SES population takes on a less active lifestyle in comparison to the higher-SES population.

In relation to health improvement and stimulating an active lifestyle, the design of the living environment is closely related to stimulating active mobility, such as walking/cycling (College van Rijksadviseurs, 2020-b). The living environment of the lower-SES population are generally mid-20th century neighborhoods that are more car oriented and spatially planned for car efficiency. These car dominant and oriented environments are uncondusive for stimulating active mobility and are in fact demanding of more car use as result of poor density and accessibility (College van Rijksadviseurs, 2020-b). A big part of the lower-SES population experiences health problems and live a less active lifestyle. In addition, the lower-SES population is more car oriented than higher-SES population, which influences their daily active behavior (Pharos, 2019). Therefore, to make walking/cycling in the direct living environment as accessible and inviting as possible creates opportunities as a quick win in enhancing active behavior. Walking/cycling enhance physical and mental health and the livability of the environment as it enhances encounters between residents (College van Rijksadviseurs, 2020-b).

To successfully enhance the living environment to stimulate active behavior among the lower-SES population, participation in the planning process is essential. The Dutch municipalities are obligated to include participation in their planning processes (Informatiepunt Leefomgeving, n.d.). Public participation established better planning as it reflects the needs and views of the population, helps build consensus for initiatives, and improves the quality and efficiency of decision making (UN Habitat, 2014). To take the reflection of the needs and views of the population one step further, the lifestyle

and mentality of the residents propose an opportunity for stimulating active behavior. This research will try to find the link between the lifestyle and mentality of the lower-SES population and their ideal living environment to stimulate active behavior and a more active lifestyle.

To conclude, the lower-SES population on average is less active and has more unhealthy habits. The Dutch Ministry of Health, Welfare and Sports aims to stimulate sports and an active lifestyle amongst their population. They want to do this by planning for and creating a healthier environment by making it more attractive to walk/cycle (Rijksoverheid, n.d.-a). Involvement of the residents is an essential element of successfully planning for healthier living environments. To design the optimal and fitting living environment for stimulating active behavior, the current lifestyle and mentality of the lower-SES population is included in this research as well. Therefore, the research will focus on how planning for active behavior in the living environment of the Dutch lower-SES population, fitting to their lifestyle and mentality, can stimulate them to undertake a healthier lifestyle.

1.2 Research aim and research questions

The aim of this thesis is to explore the lifestyle of the lower-SES population with respect to their active behavior. It will identify the mentality of the lower-SES population, how they can be encouraged to undertake a more active lifestyle and in what way certain planning of the living environment and participation could contribute to this.

Context

The field that will be studied to answer the research question, is the field of (re-)designing the living environment. Here the focus will be on designing the living environment in such a way that active behavior among the lower-SES population is encouraged. Insights from organizations such as Pharos, CROW, the Dutch bureau for statistics, and the Dutch Bureau for Planning for the Living Environment will be explored as they obtained relevant information on the lower-SES population, their lifestyle, mentality, and current living environment. In addition, a questionnaire and interviews with the lower-SES population will be conducted to obtain firsthand data on their lifestyle and active behavior. Also, experts on the topic of active mobility in the living environment will be interviewed via a focus-group which will help identify the optimal design of the living environment.

Research question

Based on the research problem and the formulated research aim, the following research question was drafted:

'How can planning for active behavior in the living environment contribute to a more active lifestyle among the Dutch lower-SES population?'

Sub-questions

- 1) What kind of lifestyle with respect to active behavior does the lower-SES population take on?
- 2) How should the living environment be designed, to stimulate the lower-SES population to take on a more active lifestyle?
- 3) What does the current living environment of the lower-SES population look like in relation to stimulating active behavior?
- 4) How can the lower-SES population be engaged in the planning process for their living environment to stimulate them to take on a more active lifestyle?

1.3 Societal and scientific relevance

In this chapter, the societal relevance of the research is discussed first. This will show what the outcome of the research could offer society and in case of this research, the lower-SES population. In addition, the scientific relevance is discussed, to identify which gaps in the current literature this research aims to fill.

1.3.1 Societal relevance

According to a study by the Dutch Ministry of Health, Welfare and Sports conducted in 2017, 48,7% of Dutch adults are overweight and 13,7% of them are obese, and these numbers are still rising (2018). The Dutch government has set goals to tackle these health issues, focusing on three main aspects: healthy diet, more sports and movement, and a healthier environment and better health care systems (Rijksoverheid, n.d.-d). The goals for the aspect 'healthier environment' refer to lifestyle interventions, stimulating activities for children and preventing child obesity (Rijksoverheid, n.d.-d).

Because of the pressing issues with obesity, it is even more important to involve residents in the planning of their living environment. Involvement will stimulate them to become more active and residents will be more willing to act on certain matters as well. In addition, people with health problems are generally less actively involved in society. Being socially involved has a positive effect on someone's health (Rijksinstituut voor Volksgezondheid en Milieu, n.d.). This shows the importance of participation, especially with the planning of the living environment as it will both involve residents *and* improve their health.

However, these goals don't explore the opportunity of planning a living environment fitting specifically for the lifestyle of the residents that live/will be living somewhere so that an active lifestyle can be stimulated optimally. This research is societal relevant because it aims to understand the relation between lifestyle and supporting active behavior in the living environment via participation.

1.3.2 Scientific relevance

One of the societal tasks of the Dutch Government is to create a healthy living environment for their citizens. Through the 'Guide Healthy Living Environment' they aim to hand municipalities tools and inspirational examples to help them develop healthy living environments (Rijksoverheid, n.d.-b). Important themes in this guide are Energy Transition, Air Quality, Climate and Cycling (policy). In this guide the Dutch Government explains how healthy mobility (walking, cycling and public transport) contributes to the health of the residents and the quality of the environment (Rijksoverheid, n.d.-c). However, the recommendations on planning for healthy mobility lack any connection with the lifestyle of the residents in a certain area.

According to Groen & Versluys (2018) studying the lifestyle (needs, values, and norms) of a group will contribute to developing concepts that will improve the quality of life for this group. In other words, studying the lifestyle of the lower-SES population and using these insights in the planning process will improve the chances of succeeding in stimulating active behavior amongst them. In addition, the soon to be accomplished Dutch 'Omgevingswet' expresses the need for a healthy living environment and the importance of more participation in spatial planning. Those are two qualitative indicators for spatial policies that will become even more important when the 'Omgevingswet' will be accomplished (Informatiepunt Leefomgeving, n.d.-b).

There is a gap between generating knowledge on the lifestyle of the residents in a certain area, in this case the lower-SES population, and using this knowledge in the planning process to stimulate active behavior in their environment. In addition, it is juristically relevant to research the meaningful implementation of a healthy living environment considering the coming 'Omgevingswet'. This research aims to generate knowledge on the lifestyle of the lower-SES population, how they can be involved in

the planning process, and how active behavior can be encouraged in the planning of the living environment. Therefore, this paper is scientifically relevant.

1.4 Reading guide

The remainder of this thesis consists of the following chapters: Chapter 2 starts with a literature study on the topics of positive health, lifestyle, active behavior, the living environment, and spatial planning and participation. These topics help to build a theoretical framework, which is then operationalized. The third chapter discusses the research philosophy, research approach and strategy, and the data collection and analysis for each research method: observation, questionnaire, interviews, and focus-group. Chapter three also discusses the reliability, and validity of the research. Lastly the research design is discussed. Next, chapter 4 presents the analysis of the results of each research method. Chapter 5 aims to conclude on the presented results. Lastly, chapter 6 discusses recommendations for future research, closing with a reflection on the overall research.

Chapter 2. Literature review and Theoretical Framework

In this chapter the theoretical framework will be presented for positive health, lifestyle, active behavior, the living environment, and participatory planning. Each of these dimensions is operationalized, meaning the abstract concepts are turned into measurable observations.

2.1 Literature review

First the relevant literature on different topics related to the research will be discussed. Starting with positive health, followed by lifestyle and next active behavior. Then the definition of a living environment will be discussed. Lastly, participatory planning is studied.

2.1.1 Positive Health

“Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”

– Preamble of the Constitution of the World Health Organization (1946).

Traditionally, being healthy was defined by the absence of disease. However, with the rise of positive psychology research over the last few decades, and its conclusions that mental health is more than the absence of mental illness, so came the link between positive psychology and positive health: subjective well-being, such as positive emotions and optimism, influences one’s physical well-being (Seligman, 2008). Meaning, if someone experiences positive feelings, optimism, and positive mental health, this might influence the degree of physical illnesses they experience in a positive manner. Nature Publishing Group (1963) says that in times where most diseases are coming under control, it is becoming more important to pay attention to slight aberrations, physical, mental, social, or spiritual, that can encourage people from living their fullest life. Which substantiates the claim that positivity, in different forms, can influence someone’s health and even prevent becoming ill.

Seligman (2008) breaks down positive health into three independent aspects: subjective, biological, and functional. Here, subjective positive health refers to when a person feels great, defined by high measures of several psychological states. Biological positive health refers to the biological variables that are relevant to health (BMI, blood pressure, blood sugar, etc.). Lastly, functional is about how well a person functions based on the laboratory speed of reaction test and physical capacity such as flexibility and grip strength. Seligman (2008) explains how, based on the subjective, biological, and functional aspects, positive health is not just a desirable, it is also a buffer against physical and mental illness.

The Institute for Positive Health (2020) defines positive health as a broader approach towards health, not just health as a static element or to be reached goal. Their definition of positive health includes the resilience of people to adjust to life and all it entails. The Institute for Positive Health created the ‘my positive health’ diagram, existing of six dimensions that are understood to be part of good health (see image 1. My Positive Health). The accent is on the people, their resilience and that what makes their live meaningful, instead of the illnesses (Institution for Positive Health, 2020). This definition of positive health seems the most fitting for this research, as it aims to understand the broader reasoning for active behavior with respect to lifestyle, mentality,

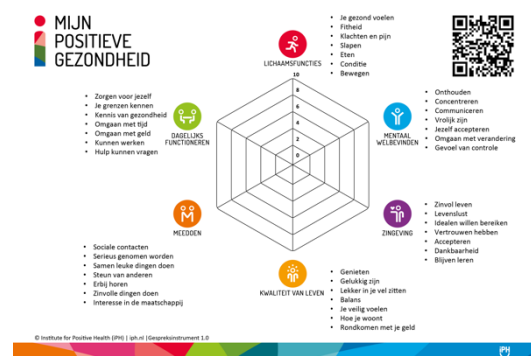


Image 1. My Positive Health (Institution for Positive Health, 2020-b).

and the living environment. These elements fit within the broad approach of this definition of positive health.

2.1.2 Lifestyle & mentality

Psychologist Alfred Adler defines 'lifestyle' as the connection between our habits and several social dimensions such as economic factors, place of living, values and preferences, social status, etc. (Sociology Group, n.d.). According to Groen & Versluys (2018), the term 'lifestyle' refers to the symbolic, style, and communicative dimension of the observable social behavior. Meaning the way one develops and/or presents their obtained prosperity. This definition of lifestyle relates to preferences, hobbies, political opinions, cultural orientation, material consumption and expression of taste that people use to express their social position. Important to note is that in the current individualized society, one does not have to live conform only *one* lifestyle. Lifestyles are mixed and matched, which creates unique and personal combinations. I.e., a person can have an extremely healthy lifestyle during the week but live a party lifestyle during the weekends. Therefore, in describing the lifestyle of a person or a group of people, it is important to note in what context the lifestyle applies (Groen & Versluys, 2018).

Sutmuller & van Belkom (2014) define lifestyle as a set of specific manifested values a group has. These manifested values are ideals and motives that a society or group views as worthy, as desired. They distinguish two sets of values: intrinsic and instrumental values. *Intrinsic values* are values that should be accomplished because one should desire to do the right thing (i.e., love, freedom, equality). *Instrumental values* are those values that become worthy and desirable because people grant them to people or situations (i.e., perfection, adventurous, authenticity) (Sutmuller & van Belkom (2014).

When specifically trying to explain the relation between health behavior and lifestyles, Mirowsky & Ross (2003) use the term 'structural amplification', which refers to situations where poorly educated people accumulate disadvantages which impact their health negatively over time, whilst well-educated people accumulate advantages that impact their health positively. This shows the important role of education in the selection of health lifestyle. Level of education should be included in lifestyle studies, as it is an important factor in the decision-making process of the individual on health behavior and therefore influences the lifestyle (Mirowsky & Ross, 2023).

To further analyze the concept of lifestyle, two relevant lifestyle models will be discussed next. In their book 'Serious Concepting: Value through values', Sutmuller & van Belkom (2014) mention two lifestyle research models; the Brand Strategy Research-model by SAMR, and the Mentality-model by Motivation.

Lifestyle models

Sutmuller & Van Belkom (2014) define the goal of lifestyle research as follows: "creating a clear and accurate view of the target group and the corresponding manifested values and needs as possible". To create this clear and accurate view of the target population, segmentation criteria's can be used; geographical, demographical, social-economical, cultural, psychographic, and behavioral characteristics (Groen & Versluys, 2018). To systematically analyze lifestyles and explain certain behavior, the mentality of the target population is crucial. There are a few models used to analyze the mentality of a group or individual.

One of these mentality models is the Brand Strategy Research-model (BSR-model) of SAMR. The BSR-model does not only describe the lifestyle and behavior of a group, but it also aims to explain the reason for this behavior. It explains the needs and expectations of the analyzed group (Bureau Buhrs, n.d.). The model consists of the creative red, harmonic yellow, controlling blue, and safe green world (see image 3. BSR-model). The model distinguishes the four groups based on social dimensions such as individualism and group oriented, and the psychological dimensions such as introverted and extraverted (Bureau Buhrs, n.d.). The BSR-model forms a great tool for a first analysis of the mentality and will provide basic insights on the reason of the behavior of the mentality group. However, the BSR-model is not that precise, and it is not specific enough to be used as a in depth analysis of the mentality of a group or individual.

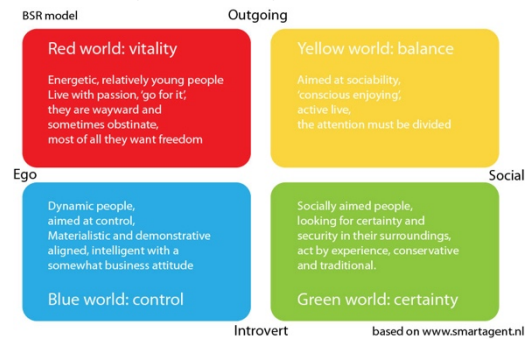


Image 2. BSR-model (Refinity, 2014).

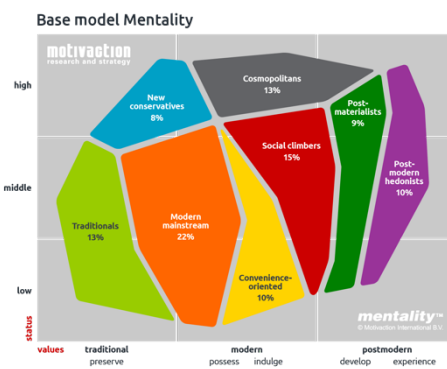


Image 3. Base model Mentality (Motivation, n.d.-b).

Another model that can be used to analyze the mentality of a group is the Mentality-model by Motivation. This model distinguishes eight different mentalities based on the social environment and values someone has (Motivation, n.d.). The eight mentalities are New Conservatives, Cosmopolitans, Traditionals, Modern Mainstream, Convenience-oriented, Social Climbers, Post-Materialists, and Post-modern hedonists. They are based on a combination of value clusters (horizontal axis) and status (vertical axis) and are visualized in the Base model Mentality (see image 2. Base model Mentality). People of the same social environment share values with respect to work, politics, ambitions, and leisure. The Motivation-model is a general describing model and gives a cross section of the mentalities of different groups in the Netherlands. It is a good addition to the BSR-model and helps create a more in depth understanding of the mentalities of the Dutch population.

Both these models are used as a first analysis on the lifestyle of the lower-SES population based on the insights of the interview. As Groen & Versluys explain in their book *'People are weird creatures'*, when analyzing the lifestyle of a big target population such as the lower-SES population it might be best to create your own mentality-model. This can be done by building on existing models (such as the Motivation-model) and using the insights from the research to create categories for the mentalities within the target population of the research. The discussed lifestyle models form a basis for the development of a new mentality model specifically to describe the lifestyle of the lower-SES population with regards to health behavior in their neighborhood.

2.1.3 Active behavior

When defining the concept of lifestyle, 'behavior' is mentioned multiple times. Behavior is an important element of a lifestyle as behavior is how one *expresses* their lifestyle. In addition, the combination of a lifestyle analysis and behavioral analysis creates a deeper understanding of the behavior of the lower-SES population in relation to their active behavior in the living environment. The theory of planned behavior by Icek Ajzen (1991) helps to understand the different indicators for certain behavior and to get a deeper understanding of behavior.

According to the theory of planned behavior (TPB), conscious behavior is a direct result of the intention to behave a certain way. TPB predicts the intention of an individual to engage in a specific behavior at

a certain time and place. The behavior is driven by behavior intentions, which consists of three determinants:

- the attitude toward behavior: the degree to which the feelings of a person towards the behavior are positive or negative (iSALT Team, 2014).
- subjective norms: the belief that significant others believe the person will perform certain behavior or not (iSALT Team, 2014).
- perceived behavioral control: the persons perception on the performance of the behavior to be easy or difficult, certain resources and confidence might increase the perception (iSALT Team, 2014).

TPB explains that behavior is the product of *behavioral intentions*, which come from the persons' attitudes (beliefs, values) and subjective norms (norms of significant others) (Ajzen & Fishbein, 2010). These attitudes and norms can also be called the 'lifestyle' of that person, as discussed earlier on. The image below gives a schematic overview on the TPB.

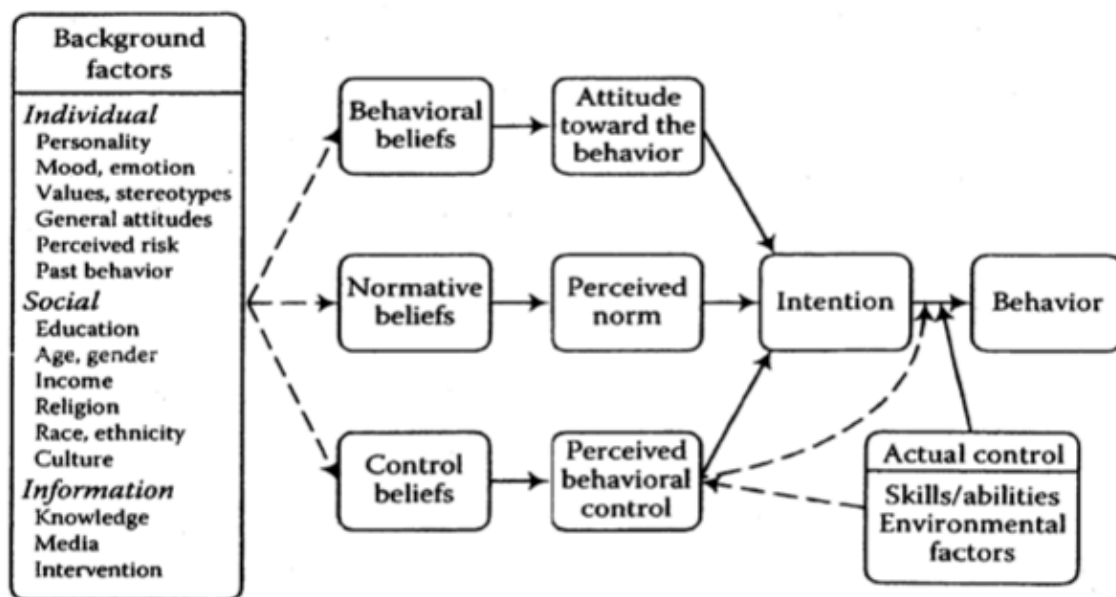


Image 4. Schematic of the Theory of Planned Behavior (Ajzen & Fishbein, 2010)

Desired active behavior

The schematic of the TPB builds up to the eventual behavior. Behavioral, normative, and control beliefs result in the three determinants, which result in intention and eventually the behavior. As discussed before with the mentality model, the lower-SES population performs certain behavior of not being active enough which in some cases could both be a result as well as a cause of their poorer health conditions. Improving their health conditions by enhancing their active behavior (as far as their health conditions will let them), alludes to the desired behavior for the lower-SES population. In this research the desired behavior is more active behavior in the living environment.

Active behavior can be understood as physical activity; physical activity can help maintain a healthy mind and body and contributes to prevent illness. Wang (2001) emphasizes the importance of an active lifestyle as it functions as a protective factor for dementia. According to Lee et al. (2012) maintaining muscular fitness and a healthy weight are two important reasons to perform regular physical activity. Bouchard et al. (2012) define physical activity as "any bodily movement produced by skeletal muscles that results in an increase in metabolic rate over resting energy expenditure". They breakdown this broad concept of physical activity by considering leisure-time physical activity, exercise, sport,

transportation, occupational work, and chores. In the model by Tremblay et al. (2017) the division of light, moderate and vigorous physical activity is made.

In this study, the term desired 'active' behavior is used to describe an active lifestyle that at least meets the recommendations for activity by The Dutch Information center for Sports and Movements (n.d.). They distinguish four types of exercise every adult should undertake to stay healthy and fit:

- Moderate intensive movements, increasing heartrate and accelerated respiration. Breathing accelerates but one can still speak normally and is not sweating (cycling, walking);
- Muscle strengthening activities, strength exercises, endurance, and the size of muscles (jogging, fitness, bootcamp);
- Bone strengthening activity, bodyweight exercises (jump rope, trampoline, pushups);
- Balance exercises, improving balance while standing or moving (yoga).

Based on these four categories of physical activity, the Dutch Information Centre for sports and movement (n.d.) drew up the following guidelines for an active lifestyle for healthy adults.

- Moving is good, moving more is even better;
- At least 150 minutes of moderate intensive movement;
- At least 120 minutes of muscle and bone strengthening activities;
- Prevent a lot of sitting.

These four guidelines will serve as an approximation for measuring the active behavior of the lower-SES population and as input for formulating the questionnaire and the interview guide. The aim is to improve the active behavior of the lower-SES population toward the desired active behavior by planning the living environment a certain way.

Active behavior in the living environment

Physical activity is a broad and complex concept and therefore, the definition of physical activity used in this research should be specified. A main element of the research question is 'active behavior in the living environment'. Whilst 'active behavior' refers to the broad concept of physical activity, 'in the living environment' makes it possible to specify the concept. When looking at the categories of physical activity given by Bouchard et al. (2012), we can analyze which of these categories are typically performed in the living environment. Exercise and sport *can* be performed in the living environment. However, this paper is on the 'planning' aspect of the living environment, and exercise and sport are not the focus of spatial planning. Occupational work is typically not performed in the living environment, but in the work environment. Chores are performed in and surrounding the house and not in the public living environment. Therefore, occupational work and chores as physical activity are irrelevant for this paper. Transportation as physical activity can be seen as a planning element for the living environment. In this case transportation refers to cycling and walking (Bouchard et al., (2012), which can be performed in the living environment. Leisure time physical activity contains many forms of activity, meaning it also contains cycling and walking which is planned for in the living environment (Bouchard et al., 2012). Therefore, 'active behavior in the living environment' in this paper refers to *cycling and walking with respect to transportation and leisure time physical activity*.

2.1.4 The living environment

Tiwari et al. (2015) define the living environment “as an assembly of the natural and built environment which is offered to the inhabitants of the place who perform various kinds of social, cultural, economic, and political activities which induce peculiarities of the character of the living environment”. According to this definition, the living environment is all the space occupied by humans and/or living things. This definition is simply too broad for this study. Therefore, the choice has been made to define ‘living environment’ as a slightly moderated and less complicated version of the definition by Tiwari et al. (2015): ‘the living environment is the natural and build environment which is offered to the inhabitants of a certain neighborhood.’

The Kenniscentrum Sport en Bewegen (2021) presents a framework that helps create a movement friendly living environment, named the ‘Framework for building blocks of the movement-friendly environment’ (see image 5). This Framework exists of building blocks of three categories: active movement, recreative movement, and sporty movements. The three categories are examined at three spatial scales: Place, Neighborhood and Street. The category ‘sporty movements’ does not fit within the scope of this research, as explained in 2.1.3 subheading ‘active behavior in the living environment’.



Image 5. Framework for building blocks of the movement-friendly environment (Kenniscentrum sport en beweging (2021).

This framework gives a great conceptual explanation of what a movement friendly living environment should look like. However, it lacks specific instructions for designing and does not suffice for the analysis of the observed environments. Therefore, each building block is given nuances using other theories and recommendations that can be used in the analysis of the observations. The following section describes the different nuances to the framework ‘Building blocks for the movement friendly environment’, created by Kenniscentrum Sport & Bewegen (2021). The design principles of the framework are combined in the following groups:

- Cycling network
- Density and facilities
- The child friendly neighborhood
- Greenery and water
- Mobility
- Small networks
- Reside in the neighborhood

These seven groups and their nuances are further discussed in annex 25.

2.1.5 Spatial planning and participation

Spatial planning in the Netherlands is set down in the Spatial Planning Act (WRO). This act describes how spatial planning decisions are made at all governmental level. Spatial visions of the municipalities, provinces and the national government describe the expected spatial developments and how they will be implemented (Government of the Netherlands, n.d.). These spatial visions are further defined in land-use plans, which set down where certain constructions will take place, what can be built there, also allowed size and use of the structures are stated (Government of the Netherlands, n.d.).

Looking at the definitions of spatial planning above, planning for active behaviour concerns setting down structures for an environment so that an active lifestyle is encouraged. When planning to encourage an active lifestyle, walkability and bikeability are often mentioned terms. Walkability is about comprehensive planning for pedestrians in corresponding way to other nodes of transportation (Lo, 2011). Southworth (2005) refers to walkability as: “the extent to which the built environment supports and encourages walking by providing for pedestrian comfort and safety”. Bikeability refers to the ability and convenience in reaching a destination by bike comfortably (Grigore, et al., 2019). Both walkability and bikeability consider aspects of accessibility, safety, and attractiveness of the route (Grigore, et al., 2019). There is plenty of research on the topic of walkability and bikeability, however, the found literature uses examples in America or Canada.

Participatory planning

According to Metternicht (2018) participatory planning is used for planning common property land, arrangements are regulated through negotiations between stakeholders. It is described as a people-centred and bottom-up approach to spatial planning. Another approach to participatory planning is the active engagement of citizens in sharing knowledge, ideas, and experiences to construct sustainable settings collaboratively with governmental institutions (Nared & Bole, 2020). Holland & Hope (2010) explain how they believe 21st Century planning should be collaborative and led by an engaged and public-minded citizenry. According to them participatory planning, or comprehensive planning as they call it, “exemplifies a consensus-building process, statutorily convened by government, but driven forward by its citizens. Together the community constructs an informed reality about place and implements the plan’s recommendations over time” (Holland & Hope, 2010).

As Arnstein writes in her article “A ladder of citizen participation” (1969), most good initiatives of participatory planning represent an empty ritual of participation; “participation without redistribution of power is just an empty and frustrating process for the powerless [the citizens]” (Arnstein, 1969). To illustrate the different levels of citizen participation, she created the *Ladder of Citizen Participation* (see image 7. The Ladder of Citizen Participation) with eight rungs, each representing a certain level of citizen involvement.

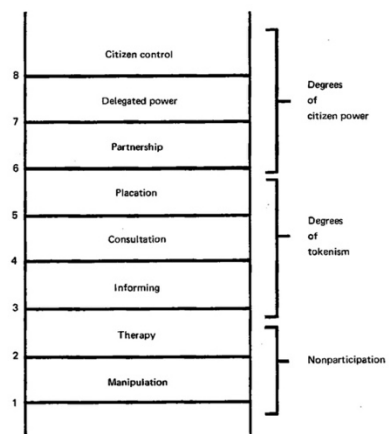


Image 7. The Ladder of Citizen Participation (Arnstein, 1969).

Step one till four on this ladder only represent a sham of citizen participation, according to Arnstein (1969). Manipulation and therapy are categorised as ‘nonparticipation’, which means citizens are influenced and “educated” for them to agree with the proposed plans of the powerholders. Informing, consultation and placation are accommodated in ‘degrees of tokenism’, which means citizens are informed on plans and get a chance to speak up and give their opinion. However, there is no way to assure that ideas and concerns will be used in the further process (Arnstein, 1969).

Lastly, partnership, delegated power and citizen control are labelled ‘degrees of citizen power’ and are considered to truly take citizens’ opinions and preferences into consideration. For partnership this entails redistributing power through negotiations between citizens and powerholders. Delegated power even goes one step further, where citizens can achieve dominant decision-making authority. Community control means citizens demand full control of a program or institution, and therefore can control certain outcomes. Even though delegated power is on top of the ladder and would therefore seem to be the most desirable level of citizen participation, it is in fact not as it is very costly and might create separatism within citizenry (Arnstein, 1969). The participation ladder of Arnstein will function as an analysis-tool for the desired and realistically achievable level of citizen participation in the casus-neighbourhoods. Which is the level of partnership citizen participation as this level is a balanced level

of communication between the citizens and municipality, whilst leaving the responsibility with the municipality (Arnstein, 1969). This seems most fitting for Dutch planning processes, especially for lower-SES neighbourhoods.

2.2 Theoretical Framework

Based on the literature study, the following components should be considered in planning for active behavior: *positive health, lifestyle, (desired) active behavior, the living environment, participatory planning*. The starting point for the theoretical framework will be positive health: aiming for not only the absence of illness, but for maintaining physical and mental health and living a healthy lifestyle. Therefore, it is important to understand the lifestyle of the lower-SES population: their mentality, values and needs, their day-to-day behavior. In line with the lifestyle of the lower-SES population, it is important to find the reasoning behind their behavior as it will show how the desired active behavior could be achieved. This makes it important to further study their active behavior in the living environment, and what elements of the living environment can influence their lifestyle and stimulate the desired behavior. Then, the relation between active behavior and the planning-process of the living environment will show how all the different elements (positive health, lifestyle, active behavior, and (participatory) planning) influence each other. The following framework can be created.

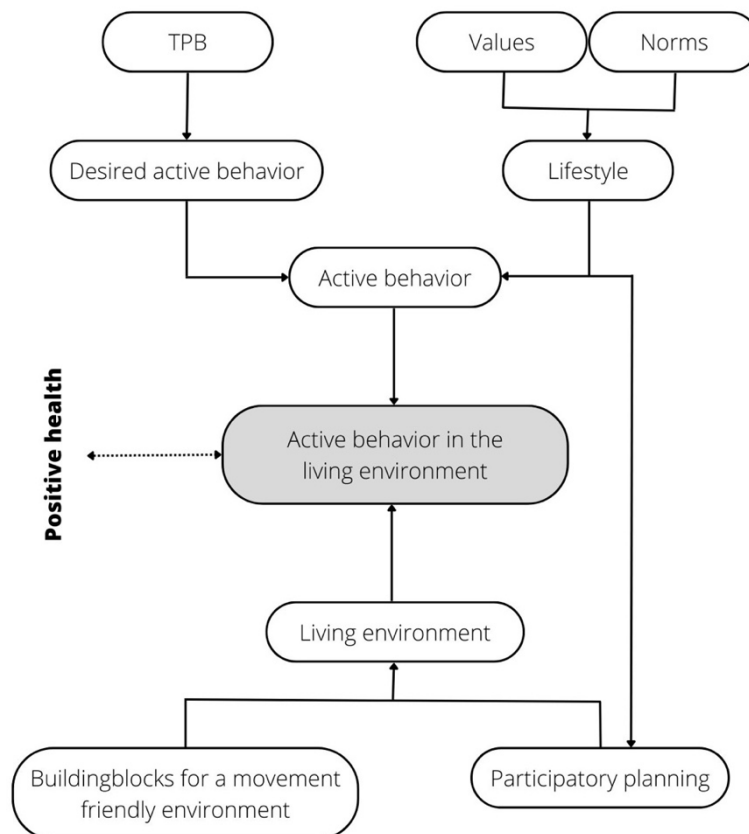


Image 8. Theoretical framework, own image.

2.3 Operationalization

Here the different elements of the research are operationalized, based on the literature presented above in relation to the research questions. For the operationalization scheme of each topic, see annex 2. Operationalizing certain aspects of the research, allows the researcher to systematically collect data that isn't directly observable (Bhandari, 2022).

Operationalization Positive Health

One thing all these definitions have in common, is that positive health is more than absence of illness: it is about living a healthy lifestyle to prevent illness where possible. The operationalization of positive health is done in relation to the research questions and based on the model "My Positive Health" by Institution for Positive Health (2020-b). It shows the relationship between positive health and the lifestyle (mentality, values & needs) someone has. Therefore, the dimension of lifestyle will be analyzed next.

Operationalization Lifestyle

The operationalization of 'lifestyle' shows the way mentality and the values & needs of a target group are a reason for their behavior and living standards. With the research questions in mind, the aspects of active behavior in the living environment will be analyzed further.

Operationalization Active behavior

The operationalization of 'Active behavior' and shows the different elements physical behavior and the Theory of Planned Behavior. It could be concluded from this operationalization that the way the active behavior in the living environment is composed of the performed physical behavior and the theory behind this behavior. Living environment will be further operationalized next.

Operationalization Living environment

The operationalization of 'Living environment' shows the different elements that together compose to the living environment. These elements are important in the planning of the living environment so that active behavior will be stimulated, therefore, this will be operationalized next.

Operationalization Planning the living environment

The operationalization of 'Planning the living environment' briefly touches upon participatory planning, as it is a planning-process that can contribute to the feeling of belonging and satisfaction for the citizens.

Chapter 3. Methodology

In this chapter the strategy of the research, the research methods, data collection and data analysis are stated. Also, the validity and reliability of the research will be discussed.

3.1 Research philosophy

In what way certain data about a certain phenomenon could best be gathered and analyzed, is what we call the 'research philosophy'. It is about the process of turning things that are 'believed' into things that can be 'known' (Galliers, 1991). According to Saunders et al. (2015) there is not one best philosophy, and all philosophies have a unique approach that help understand the assumptions of a researcher. Research philosophy refers to a belief system and certain assumptions about the development of knowledge. Van Thiel (2014) explains how a research philosophy is not always consciously decided upon by the researcher. She explains how familiarity, personal habit and style play a role in choosing the philosophy as well.

This research aims to understand what will influence the behavior of the lower-SES population, find the elements they perceive as important in their living environment and study the reasoning behind behavioral decisions. It aims to understand the relation between the planned environment and the lifestyle, mentality, and behavior of the lower-SES population. This is in line with the philosophy of interpretivism, which proposes to create new and richer understandings of the social worlds and its contexts (Saunders et al., 2015). It aims to find the elements that are meaningful to their participants and creates understanding of behavior and explains it from the perspective of the participant (Scotland, 2012). Therefore, interpretivism is the suitable research philosophy for this study.

3.2 Research approach and strategy

In line with the interpretivism, the research follows a qualitative approach, as the core of the data is about finding the experience, motivation, and interpretation of the lower-SES population. It aims to develop understanding of the lifestyle, mentality, and active behaviour of the lower-SES population, and what influences them to be more active within their direct living environment.

According to van Thiel (2014), the research strategy is the overall logical procedure that will be followed during the process. The choice for a certain strategy depends on the amount of prior known knowledge and the subject of study. The research aims to contribute to the solution for the issue of the less active lifestyle of the lower-SES population, by analysing their everyday setting in the living environment. There is a small number of units within the research (lower SES-population), and a larger number of variables (variety in age, gender, ethnicity, etc.). To achieve these insights two neighbourhoods in the Netherlands with a generally high amount of lower-SES population will be studied: Holtenbroek – Zwolle, and Oosterflank - Rotterdam. The chosen research strategy is therefore the comparative case study. A comparative case study covers two or more cases, aims to produce generalizable knowledge, often explores solutions for concrete social issues and aims to find an in-depth overview of the phenomenon studied (Goodrick, 2014; van Thiel, 2014). According to McCombes (2022) a comparative case study studies a specific subject in detail, and is commonly used in social, educational, and business research. A comparative case study allows to explore and understand a complex issue and is particularly interesting to use when community-based issues such as poverty, unemployment or health are raised (Zainal, 2007). Since this research aims to understand how certain behavior can be stimulated to improve the health of the lower-SES population, comparative case study is a suitable research strategy.

Establishing the research philosophy (interpretivism), the approach (qualitative), and the strategy (comparative case study), the choice for certain methodologies can be made. This will be discussed in the next part.

3.3 Data collection and analysis

Here the data collection and analysis methods used for the observations, questionnaire, interviews, and focus-group will be discussed.

3.3.1 Observation

To get a better understanding of the current living environment of the lower-SES population, observations were executed in Holtenbroek and Oosterflank using an observation scheme (see annex 21.) for five different streets: one main route, two ‘stamp’ streets, and two streets within public greenery. The observation scheme follows the operationalization of the living environment as established in annex 2. The scheme is filled in factually for each street (annex 26). During the observation, photos were taken from the streets, greenery, and traffic situations. The observation scheme and photos, together with Google street view images, were analyzed using the framework ‘Building blocks for the movement friendly environment’, created by Kenniscentrum Sport & Bewegen (2021) (see annex 26.). This Framework exists of three building blocks (active movement, recreative movement, sporty movements), and three spatial scales (place, neighborhood, street) and aims to support the urban design for a movement friendly environment (Kenniscentrum Sport & Bewegen, 2021).

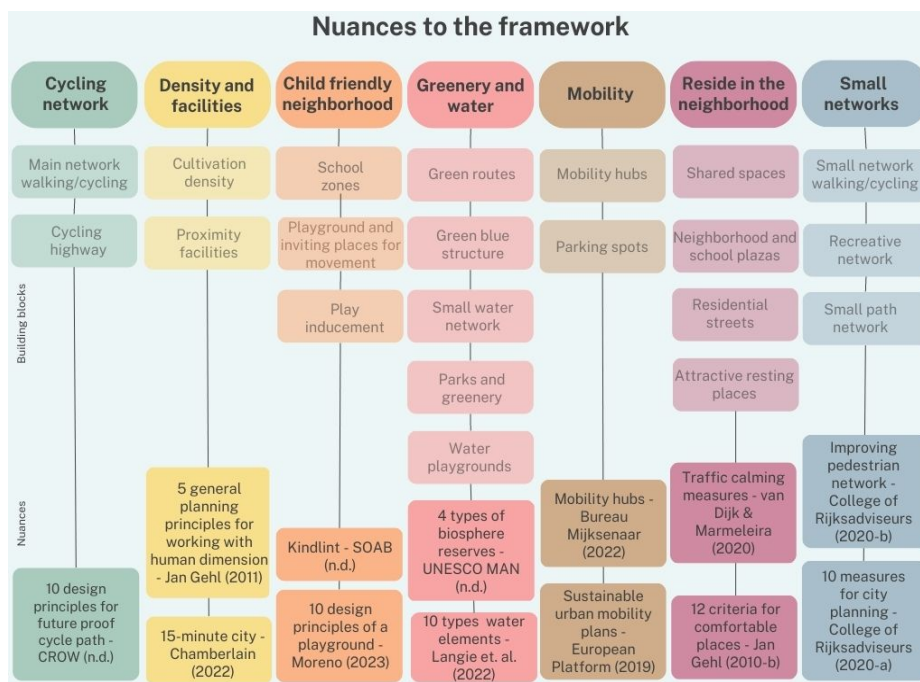


Image 9. Visualization of the theories applied as nuances to the building blocks, own image.

Even though, the framework gives a first impression of the level of the movement friendly environment in the two neighborhoods, it lacks a deeper understanding of how the building blocks should be applied to achieve the desired situation. To bring this deeper layer to the observations, nuances are brought to the design principles of the framework by using literature and design principles of other experts and institutions (see image 9). The design principles for the nuances are discussed in annex 25. The visualization above shows how the nuances (different theories) are applied to the framework.

3.3.2 Questionnaire

A questionnaire is characterized by the large-scale approach and allows to gather a large body of data in an efficient way (van Thiel, 2014). Data collected via questionnaires can easily be generalized and is relatively easy to analyze. Therefore, it was decided to conduct a questionnaire to gather information

on the daily active behavior of the lower-SES population. There are risks of receiving incomplete or untruthful answers (van Thiel, 2014). Another risk of the questionnaire lies with the possible misinterpretation of the questions, especially with the lower-SES population which generally has more difficulties with reading and have a smaller vocabular than the average Dutch person (Pharos, 2022). Therefore, the wording of the questionnaire was adjusted, following the guidelines of 'understandable language – the basis for good healthcare' by Pharos (2022). See annex 16 for the questionnaire. The questions were formulated in a clear way, with short sentences and language level A2. The number of answers was kept to a minimum, with exhaustive answers and short sentences, as recommended by Pharos (2022).

Also, it was decided to hold the questionnaires in face-to-face situations. In both Holtenbroek and Oosterflank the questionnaires were held during the event-day, organized by the municipality and research bureau Pharos. During these event-days, the questionnaire was orally held with the lower-SES population. This way misinterpretation was prevented, and additional explanations to the questions could be given by the researcher. The researcher obtained a neutral position on the matter and tried to make the respondent feel as comfortable as possible. The questionnaire was conducted via Google Forms, the answers of the respondents were filled in on a mobile phone (by the researcher).

The answers were downloaded into an excel format and the data was visualized in multiple tables (annex 16). This gave a first insight to the level of active behavior of the lower-SES population. However, a questionnaire prevents from gathering in depth information and does not allow for gathering further explanation. Therefore, interviews were conducted amongst the lower-SES population. The questionnaire served as input for the interview guide.

3.3.2 Interviews

For this research, three semi-structured interviews were held amongst the lower-SES population (annex 22. interview guide) to obtain insight in their lifestyle, active behavior, and mentality. A semi-structured interview was chosen as it allows for a more informal conversation which helps the respondent be more comfortable, and at the same time guides the interviewer through the most important topics (van Thiel, 2014). The respondents were selected during the event day in Zwolle, after they participated in the questionnaire. At the end of the questionnaire, if the respondents matched the criteria of being lower-SES population, they were asked if they would be interested in participating in the interview.

To analyze the interviews, transcripts were made (see annex 5) which were later coded using the functions of Atlas.ti. According to Miles and Huberman (1994), the process of coding is one with trial and error; one has to divide data into units (codes) of different 'sizes' and then compare them with each other. This is an iterative process and asks for creativity and logical thinking of the researcher (Miles & Huberman, 1994). According to van Thiel (2014) a code is a quick way of indicating the actual meaning of a qualitative data unit, assigning the codes to multiple similar units enables the researcher to compare them. The theory of van Thiel (2014) on different steps in the coding process is used to analyze the transcript of the interviews. Most used codes (annex 3) are substantive codes; codes that indicate the motive mentioned. An inductive approach to forming the codes is used; the codes are developed gradually and are later refined during the analysis process (Flick, 2002). The transcripts of the interviews are studied by looking for similarities and differences between the fragments.

First, the fragments were coded with thematic codes, which helps to indicate their interrelation. The thematic codes (i.e., safety) help to indicate different themes, and are then specified further into smaller themes (i.e., social safety, traffic safety, school zones) (Flick, 2022). The thematic codes show the interrelation between them and the research subject. In addition, descriptive coding (i.e., positive experience, negative experience) is used to further distinguish the codes. According to van Thiel (2014) a good code can be assigned multiple fragments that all indicate similar information.

Open and Axial coding

First, the process of open coding is applied to the transcripts. With open coding the data is opened-up in different fragments and labeled with a code (van Thiel, 2014). Open coding helps to 'open you up' to new insights and possibilities in relation to your data. Some examples of the codes applied in the process of open coding: urban furniture, maintenance, reason for walking. Next, axial coding was applied to group or subdivide the codes into categories (van Thiel, 2014). Axial coding is typically used in research to ensure compactness of the analysis, and to ensure the comparability of the codes. Examples of the axial codes are 'experience the neighborhood', and 'activities'.

To show the interrelation of the different codes and the code categories. A network gives an overview of how the different elements the respondents mentioned during the interview (quotes + codes) influence their experience. Their experience being either positive or negative will influence the number of activities in the public spaces and the number of problems with the public spaces. Annex 4 shows this network, the relations between the codes will be explained next.

Network of codes

How the respondents experience the neighborhood, the green and blue, and the safety influences whether they have a positive or negative experience of the neighborhood. In addition, the health and mobility of the respondent influences whether they experience the neighborhood in a positive or negative way. See annex 23 for examples of quotes, translated from Dutch to English. Also, the health and mobility of the respondent influence if and why they would choose to travel by car, public transport, bike or by foot.

Furthermore, the way of communicating between the municipality and the residents of Holtenbroek, on how the neighborhood could be improved is crucial in the improvement of the neighborhood: communication in a way the residents experience as positive will most likely give a better view on what the respondents think of Holtenbroek (what situations can be improved, what would they like, etc.). Communication in a way that residents experience as either positive or negative may influence the activities and problems experienced in the neighborhood. If the residents experience the communication between the residents and municipality as problematic (negative) the resident might not feel heard and not speak their minds. This will result in the loss of opportunity to improve the neighborhood in a way the residents see fit. This less-than-ideal way of communicating will likely lead to less activities and more problems. If the communication between municipality and residents is experienced in a positive way, the residents are more likely to speak their mind on possible improvements. There will be more opportunity to improve the neighborhood, which will result in more activities and less problems.

The neighborhood manager of the municipality of Zwolle (expert) was also interviewed to gather his expert opinion on certain topics in Holtenbroek. However, the interview was not conducted in a sufficient way, and did not result in significant insights. Since the focus-group with the experts gave a lot more insights, it was decided to leave the single interview with the expert out of the research. The focus-group will be discussed next.

3.3.3 Focus-group

The focus-group was held amongst three experts on the field of walking/cycling. The experts of CROW have experience with designing the environment in such a way to achieve optimal experience and usage for cyclists and pedestrians. Therefore, their opinion will give valuable insights. The focus-group was held at the CROW office in Ede and took about 1,5 hours. The focus-group started with an introduction on the topic, the insights of the research and the presentation of found the mentality model (annex 19). The interview intended to create a natural discussion between the experts on

certain topics. The interviewer would take a listeners-role and only intervene when necessary or if the experts would have a question or when clarification was needed.

To analyze the focus-group, a transcript was made (see annex 20), the transcript was coded using the functions of Atlas.ti. Annex 6 gives an overview of the used codes; some codes correspond with the codes used in the coding process of the interviews with the lower-SES population, other codes are specifically used for the focus-group. The coding process of the focus-group has an inductive approach; the codes are refined during the process (Flick, 2002). In the process the relevant codes of the interviews are used, and extra codes were created where necessary. The quotes were coded using thematic codes, for the same reasons as explained in chapter 3.3.2. The thematic codes (i.e., safety) help to indicate different themes, and are then specified further into different sorts of themes (i.e., social safety) (Flick, 2022). The thematic codes show the interrelation between them and the research subject. In addition, descriptive coding (i.e., positive experience) is used to further distinguish the codes. According to van Thiel (2014) a good code can be assigned multiple fragments that all indicate similar information. Annex 7 shows the interrelations between the codes. The network of codes will be explained next.

Network of codes

The experts have either a negative or positive opinion on the different elements of a neighborhood and the way the design contributes to a better living environment. There are two main topics on which the experts give their opinion: 'Neighborhood' and 'Green and blue'. See annex 24 for quotes of positive and negative expert opinions on the two topics, translated from Dutch to English. FG relates to the transcript of the focus-group, S refers to the sentence number of the quote (see annex 20). According to the expert's opinion on elements of the living environment, a positive phenomenon will cause more activities and a negative phenomenon will cause less activities. These activities consist of the following quotes: to reside, active behavior – spare time, reason transportation – bike, reason transportation – car, reason transportation – walking.

Negative elements or phenomenon in the neighborhood form a problem for stimulating active behavior in the living environment. Inspiration on improvement of the living environment and solutions might resolve problems and in turn stimulate more active behavior. Participation is a part of the solutions, according to the experts.

3.4 Reliability and validity

As this is a comparative case study research, the limited number of cases studied (two) endangers the reliability and validity of the study (Timney Bailey, 1992). To tackle this problem, triangulation will be applied using observations, interviews, and a focus-group. This helps to make sure the obtained information from the case studies can be tested with other sources.

When conducting interviews, the more structured the interview, the more reliable the answers are (van Thiel, 2014). In the case of this research, semi-structured interviews were held with follow-up questions that served as guidelines for the interview. The interview guide followed the operationalization in the theoretical framework, and the semi-structure ensured replicability which makes the study more valid and reliable (van Thiel, 2014). The answering tendencies of the respondents, adapting the answer because they are aware of being in a research situation, also endanger the validity and reliability of the research. This error is tackled by asking open questions and using understandable language, as recommended by van Thiel (2014).

The observations are held in open, public spaces to study the environment, not the behaviour of people. Therefore, there can be no error caused by the researcher being noticed as observer. However, the interpretation of the public area by the researcher do form a tread for the objective observations

(van Thiel, 2014). Therefore, the observation scheme was designed to support the researcher during the observation, functioning as a reminder of the important topics and elements to be observed. The observed data was factually written down and recorded by taking photo's (see annex 26). This way the quality of the analysis of the data can be ensured to be optimal and the reliability of the observation is enhanced.

Chapter 4. Results

This chapter explains the results as an empirical basis for the answering of the research questions. First the results of the observations in Holtenbroek, Zwolle, and Oosterflank, Rotterdam, are discussed. Next, the interviews give insight to the lifestyle, mentality, and active behavior of the lower-SES population. Based on the insights from the interviews, a mentality model will be formed. Lastly, the insights of the experts will help bring an extra understanding to the behavior of the target group. The experts' insights from the focus-group help bring together the observations and the interviews. During the analysis of the results of the questionnaire it became clear that there were no valuable insights that would contribute to the answering of the research question. Annex 16 shows the results of the questionnaire, they will not be used for the rest of this thesis.

4.1 Results observations

There results of the observation were first analyzed using the framework 'Building blocks for the movement friendly environment', created by Kenniscentrum Sport & Bewegen (2021), this analysis can be found in annex 26. Next, the two neighborhoods Holtenbroek and Oosterflank are analyzed using the seven design principles (see annex 25).

4.1.1 Observation Holtenbroek – Zwolle

Here the nuances to the framework 'Building blocks for the movement friendly environment', created by Kenniscentrum Sport & Bewegen (2021) for Holtenbroek Zwolle are discussed.

Cycling Network (AP1, AP2)

Holtenbroek has 1 main route from North to South on the West-side of the neighborhood (image 10, red line), connecting the area with surrounding cities, towns, and other parts of Zwolle. Then there are a few Top local cycling routes (image 10, purple line) that connect the main parts of the neighborhood to the surrounding areas and main route. The main routes and the top local routes are not designed to fungate as a recreational network as they are designed to enable residents of Holtenbroek and surrounding neighborhoods to travel to i.e., work by bike via a direct route. However, these routes do have some recreational characteristics; they enable people to cycle longer distances as they create direct routes between areas, towns and cities and are located alongside blue and green areas, making them more attractive for recreational use.

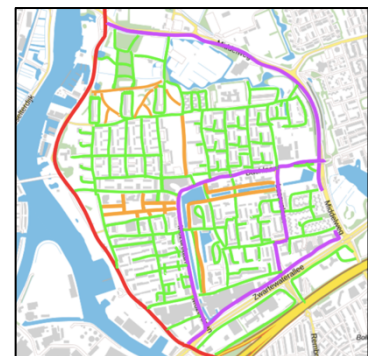


Image 10. Cycle routes Holtenbroek - Zwolle

Lastly, there are the local cycling routes (image 10, green lines). These are the smaller streets in Holtenbroek that mainly lead to the housing areas and greenery and connect to the top local and main routes. The local cycling routes mainly function as a utility network as these streets enable cyclists to reach homes, shops, schools, work, and the top local and main cycling routes. They facilitate good connectivity from A to B and are not designed to explore the neighborhood and surrounding areas nor to exercise or socialize. The remaining paths are the pedestrian areas (image 10, orange lines) in these areas cyclists are forbidden.

Looking at image 10 there is a strong hierarchy visible in the cycling network. There is one main route, followed by a few top local routes, and lastly a strong network of local routes. The Main and Top local routes will be analyzed following the 10 design principles of CROW (2021). Google Street view and Google Maps are used for this analysis.

1. Width of the path

The Main cycle route follows along the Holtenbroekerdijk. Using the measure function of PDOK (PDOK, n.d.) it becomes clear that the width of the path is between 4,5 and 5 meters (see

image 11). Assuming the main cycle route on Holtenbroekerdijk facilitates the average amount of cyclists on a Dutch main route, an average intensity of 400 cyclists per hour, the recommended width of a two-way cycle path is 5,60 meters (CROW, 2021). The main route in Holtenbroek does not meet these recommendations as can be seen from image 18.

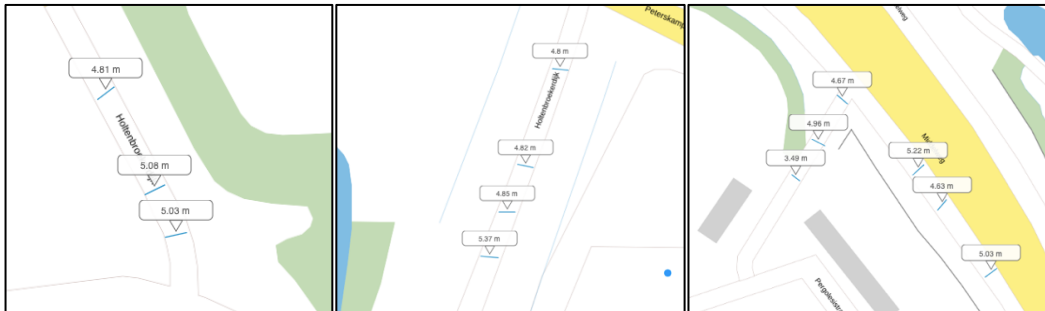


Image 11. Width of Holtenbroekerdijk (Main route), width of Holtenbroekerwijk (Main route), width of Middleweg (Top local route)

The recommended width for a two-way Top local route with an average intensity of 400 cyclists per hour, is 4,40 meters (CROW, 2021). The top local route in Holtenbroek is between 4,5 and 5 meters (see image 11). The Top local route in Holtenbroek meets the recommendations.

2. Profile division

CROWs (2021) recommendations for a utilitarian two-way cycle path are white axle and edge marking. The Main route on the Holtenbroekerdijk only has axle marking and does therefore not meet the recommendations.

The Top local route alongside Middleweg only has axle marking and does therefore not meet the recommendations.

3. Edge of the path

To visualize where the cycle path ends and the verge starts, contrasting pavement and edge marking are recommended. Both the Main route and the Top local route have contrasting paving next to the grass in the verge. However, the red paving of the Top local route creates more contrast than the grey paving on the Main route. Both routes do not have edge marking to indicate where the verge starts.

4. Verge of the path

CROW (2021) recommends an obstacle free verge of 1 meter between the cycle path and surrounding trees, roads etc. The Main route in Holtenbroek has an obstacle free verge of at least 1 meter, the Top local route does not.

5. Pavement of the path

An even and whole pavement of the cycle path is recommended for safety measures. Asphalt or concrete are therefore recommended. Both the Main (concrete) and Top local (asphalt) route meet these recommendations.

6. Wayfinding

Every crossroad that includes a cycle path should signal what kind of cycle path it is (not mandatory, mandatory for cyclists, mandatory for cyclists and small motorized vehicles). If the path is part of a regional or national cycle route, there should be a board for this as well. On the main route (which is part of a regional cycle network) both the kind of path and the regional route are signaled. On the Top local route (not part of regional/national route) the kind of path is signaled.

7. Pedestrian area

Recommendation by CROW (2021) on pedestrian areas within the urbanized environment is to always facilitate a footpath alongside a cycle path. This is to prevent pedestrians and cyclists to disturb each other; if there is no footpath, pedestrians will probably use the cycle path as this is likely the most direct way toward facilities. Both a foot- and cycle path will create safe,

smooth and comfortable networks for both groups. Both the Main route and the Top local route have pedestrian areas nearby or alongside the cycle path.

8. Lighting

On larger parts of the Main route there is no lighting and no spatial guidance, whilst CROW (2021) does recommend lighting in cases where there is hardly any spatial guidance (housing, trees, etc.). The Top local route has adequate lighting, and likely also profits from the lighting alongside the adjacent car road.

9. Bends and slopes

Bends



Image 12. Example A, B, C, D. Bends in Top local cycle path.

CROW (2021) explains that bends in the cycle path should be avoided as much as possible as it can be dangerous and inconvenient for the cyclists on the Main and Top local routes. The Top local route, however, has a few sharp bends (small radius) which can be inconvenient for cyclists. As you can see in example A to D (see image 19), the bends have an angle of (almost) 90°. This does not follow the CROW recommendations. Looking at image 13. we see that the Main route doesn't have any sharp bends (small radius), all bends are faint (bigger radius), which improves the quality of the path according to CROW (2021), see example E and F, image 14.



Image 13. Examples on map of Holtenbroek



Image 14. Examples E and F Bends in Main cycle path

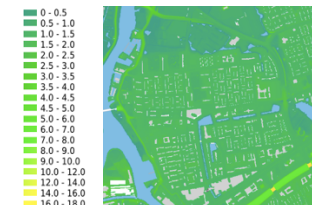


Image 15. Height differences in Holtenbroek

Slopes

According to CROW (2021) the ideal slope rate is between 7,5% and 2%, depending on different factors. Image 15 shows the height differences in Holtenbroek, an example of a color visualized slope are the two yellow stripes in the right bottom corner. The yellow stripes represent a height of 14 to 16 meters above 0, the rest of the road is green representing 7 to 8 meters above 0. As image 15 shows, the Main route does not show any significant sloping in the path. The route is the same color of green (approximately 3 to 4 meters high) the entire way, meaning it does not change in height. The Top local route shows a small sloping along the route, a difference of approximately 2 meters in total: the lower parts of the route are between 1 and 2 meters high, the higher parts are between 3 and 4 meters high. The sloping seems to be spread out over a longer part of the road; this can be seen from the slight transition of the colors. Both routes follow the recommendations of CROW.

10. Poles and speed decelerators

CROW (2021) recommends the use of poles and speed decelerators to be as little as possible as they both have a negative impact on the comfort and safety of cyclists. The Main route counts 5 speed decelerators (i.e., speed bumps) and 0 poles. The speed decelerators are at

intersections where the route crosses with routes of bigger motorized vehicles. The reason for the use of the speed decelerators is to slow down the motorized vehicles and are therefore valid. However, they do disturb the cyclists according to CROW (2021), and therefore the Main route does not score well on this design principle.

The Top local route counts 4 speed decelerators (i.e., traffic light) and 0 poles. The speed decelerators are used on parts of the route that cross with routes for cars, where the car has priority and not the cyclists. According to CROW (2021) this disturbs the comfort of the cyclists, as cyclists should ideally have priority as much as possible.

Density and facilities (AN3, AN4)

Image 16 shows that, measured from the shopping center Holtenbroek which is the area with the most facilities (red circle), the 15-minute city ideology is applied in Holtenbroek. The five principles for general city planning for working with the human dimension by Gehl (2011) will be used to analyze the center of the 15-minute city of Holtenbroek (red circle).

Shopping center Holtenbroek is designed to assemble people and activities: the fronts of the shops are all located inwards to the plaza, facing each other. This means that visitors, shops, and activities are within sight and hearing distance, which can invite socializing, and staying. The fronts of the shops however are longer than the recommended 5 meters, they are all on the same level which resonates with the recommendations of Gehl (2010). See annex 8. Image 1 and 2. There is some degree of integration, as here are different types of shops located, i.e., supermarket, bakery, florist, and clothing store. However, there could be more segregation by integrating other types of facilities such as sport facilities, library, or medical institutions. Cars are not allowed, but cyclists and pedestrians share this space (see annex 8, image 3).



Image 16. Measurement of 15-minute city in Holtenbroek - Zwolle

An inviting area, according to Gehl (2011), is one with places that have different, interweaving motives for visiting. Holtenbroek has some variety in those places (shops, restaurants, community center), but there is room for improvement, i.e., sport facilities, library, etc. (see annex 8., image 3). The shopping center has an opened-up design, especially from the plaza and the main entrance of the center. However, the back side is closed in (see annex 8., image 4 and 5). An attractive space for sitting, walking, standing, seeing hearing, and talking, is very important to increase the stays of people. The plaza of the shopping center has a few benches, some greenery, and a terrace by the restaurant. There is no real space for activities, of recreational walking/cycling. Socializing (seeing, hearing, talking) is increased by the two benches and the terrace, however this could be improved with a few more benches and more greenery (see annex 8., image 6).

An inviting area, according to Gehl (2011), is one with places that have different, interweaving motives for visiting. Holtenbroek has some variety in those places (shops, restaurants, community center), but there is room for improvement, i.e., sport facilities, library, etc. (see annex 8., image 3). The shopping center has an opened-up design, especially from the plaza and the main entrance of the center. However, the back side is closed in (see annex 8., image 4 and 5). An attractive space for sitting, walking, standing, seeing hearing, and talking, is very important to increase the stays of people. The plaza of the shopping center has a few benches, some greenery, and a terrace by the restaurant. There is no real space for activities, of recreational walking/cycling. Socializing (seeing, hearing, talking) is increased by the two benches and the terrace, however this could be improved with a few more benches and more greenery (see annex 8., image 6).

The child friendly neighborhood (AN5, AS3, RN3, RS2)

Holtenbroek will here be analyzed on the possibility to independence for children and the amount of play inducement and opportunities to play in the neighborhood.

Independence for children

Holtenbroek has a few playgrounds and playfields (grass fields, soccer fields etc.). These play areas need to be within hearing and sight of residence of the parents or at least within hearing and/or sight

of other users of the public area (i.e., neighbors passing by). If we look at annex 'observation Zwolle', we see that the play areas are car-free pedestrian areas situated away from the car traffic. There is clear view on the play areas; they are open, and the entire area can be overlooked easily. The areas are all on one level and the amount of greenery around the play areas creates an inviting situation. The play areas are experience-oriented to some degree: play facilities are colorful and there are trees and grass to make it enjoyable. The playfields in Holtenbroek can be seen as socially safe (within seeing and hearing of others) which will allow children to play independently.

There is no kindlint in Holtenbroek. However, there is a lot of potential for creating one. As annex 9 shows, the so called 'green axile' in Holtenbroek connects the entire neighborhood with many schools, daycares, and playgrounds in the neighborhood. If this green axile would be improved with child safe crossovers, more play inducement, art and color along the way, this route would form a great kindlint. It would allow children to travel to destinations safely and independently whilst having fun.

Play inducement

The playground "De Regenboog" will be analyzed here using the 10 principles of playground design by Moreno (2023). See annex 26 and Image 17.

1. Design for different types of play. Most of the play area is designed for active play (ping-pong, slide and climbing, swings, basketball field, etc.), there is some degree of sensory play around the colored tower and slide. However, the focus is on active play. Incorporating more types of play could improve the play area.
2. Create a sense of place. There is no connection between the cultural or communal spirit of the neighborhood and the play area.
3. Trust children's creativity. The play area has some loose elements that can spike the creativity within playing children. Also, there is a statue that might induce play. However, there is room for improvement; by incorporating more lose elements, instead of the current straight forward play elements (swing, slides, soccer field).
4. Make room for secrets and surprises. There is only one element that fits this design principles, which is the colorful tower. This tower is closed (people cannot look in from the outside) with windows to overlook the playground.
5. Consider the flow of the space. This design principles is not applied to the current play area as the different play elements are segregated and are only connected via a simple pedestrian path (see image 17). Implementing more playful routes between the areas would improve the playground.
6. Create zones for different energy levels. There are only areas for high level of energy: areas to play, climb, run etc. But there are no quiet areas.
7. Don't get too preoccupied with looks. Parts of the play area are colorful and have interesting shapes. Other parts have clear, straight boundaries too them with no messiness or chaos around them: the soccer field, basketball field do not have any play inducement around them, only the fields themselves.
8. Design for intersection. The play area is not accessible for all children, there are no levels of difficulties: either the children can use the elements (slide, swing, soccer fields) or they cannot.
9. Work with, not against nature. The playground is surrounded with greenery. There is a lot of grass and trees. This creates a great experience of the nature and the play area.
10. Don't forget the basics. The trees provide a lot of shade. There are only a few benches, more benches would improve the area. There are multiple trashcans within the area, however there are no facilities for drinking water.



Image 17. Playground "de Regenboog" Holtenbroek - Zwolle. A. playground, B. basketball field, C. soccer field, D. basketball field, E. playground

Greenery and water (AP3, RP2, RP3, RN2, RN5)

Holtenbroek is a generally green neighborhood. There are many green fields with trees and bushes, multiple recreational green paths alongside water, and streets with trees, hedges, and green front yards (see annex 'observation Zwolle'). Generally, there are no green roofs, green facades, or natural playgrounds. The areas with the least green are the residential stamp streets, like the Chopinstraat. There is some greenery (trees and front yards), but in general the brick and asphalt dominate the street view. These stamp-streets do not fit the characteristics of an attractive and inviting green living area by Bureau KM (2016). However, streets like Verhulstraat and Vivaldistraat have a lot of greenery and create camouflage for all the brick and paving which creates inviting and attractive living environments.

When considering the different categories of urban biosphere reserves according to the theory of UNESCO MAN (n.d.), Holtenbroek has two types of biosphere reserves. The green axle classifies as a category 2 biosphere reserve, in addition there are some clusters of greenery throughout the rest of the neighborhood that classify as category 3 biosphere reserves (see annex 10., image 1). Following the theory of Langie et al. (2022) on the 10 types of water elements in public spaces, the semi-natural pond can be distinguished a few times (see annex 10., image 2). In addition, Holtenbroek is located next to the Zwarte Water, which is a river. However, the theory of Langie et al. (2022) only applies on man-made water elements, therefore the Zwarte Water cannot be categorized within one of the water elements.

Mobility (AN2, AS2)

Holtenbroek does not have a mobility hub. In the future, a mobility hub might be interesting for Holtenbroek as it can help reduce the amount of (private) cars within the neighborhood. Especially since cars and carparking have a very prominent place within the general street view of the neighborhood, mobility hubs can create opportunities to reduce car ownership. Around shopping center Holtenbroek might be the most potential for a mobility hub as it lays within the center of the neighborhood. However, for now it is not a relevant element for Holtenbroek, it is a possibility for the near future (10 years). First bigger city centers need to adapt mobility hubs.

The parking spaces in Holtenbroek are dominantly present within the landscape of the neighborhood. Surrounding the shopping center Holtenbroek are three larger parking lots, cars also have a dominant place in the rest of the area. Some houses have small parking lots in front of them, most residential streets have carparking alongside the road. In general cars have a prominent place in the street view of the neighborhood (see annex 11.).

Small network (AN1, RP1, RN1)

Here the 10 measures for city planning to improve the cycling network (College van Rijksadviseurs, 2020-a) is used to analyze the small cycle network in Holtenbroek. See annex 26. 'Observation Zwolle' for examples.

1. Lower speed limit to 30km/h within the city: all streets in Holtenbroek have a speed limit of 30km/h, with a few exceptions: Middelweg and small part of Mozartlaan (Gemeente Zwolle, 2019).
2. Prioritize cyclists within the build-up area: on most streets, cyclists are equal to car traffic as they share the same space (Gemeente Zwolle, 2019).
3. Create cycle-free zones and streets for pedestrians: pedestrians have their own space alongside bigger roads (sidewalk), share areas with cyclists or have their own (recreational) path (annex 'Observation Zwolle').
4. Create sufficient parking facilities at the borders of the city center: parking is allowed throughout the entire neighborhood and has a prominent role in the street view (Gemeente Zwolle, 2019).
5. Promote use of OV-fiets during the 'night' (take a public transport bike home, bring it back the next day when you go to work): no train station, irrelevant for Holtenbroek.
6. Facilitate park and bike mobility hubs: no mobility hubs (Gemeente Zwolle, 2019).
7. Create a car-bike sharing system (like train-bike systems at stations): no car-bike sharing system in Holtenbroek.
8. Introduce the bicycle-porch (seasonal parking facility for bikes): could be introduced in the more crowded areas like the shopping center.
9. Facilitate a public platform for shared mobility: Zwolle facilitates a few shared mobility platforms (Gemeente Zwolle, 2019) (see annex 12.).
10. Go for a beautiful *and* efficient cycle network: The existing network is efficient but could be more aesthetic.

The three criteria for decision making for walking or not, nearness, comfort, and enrichment, are used to analyze the pedestrian network in Holtenbroek (College van Rijksadviseurs, 2020-b). *Nearness*: There is a mixed use of facilities within the neighborhood. Greenery, public transport and facilities are within walking distance, as discussed in 'density and facilities' above. Carparking is allowed through the entire neighborhood, there is no clustered parking (Gemeente Zwolle, 2019). *Comfort*: There are a few pedestrian areas in Holtenbroek, connecting different parts of the area with the facilities, see 'Greenery and water'. The shopping center has an active plinth, see 'Density and facilities'. *Enrichment*: Holtenbroek has natural shores and diversity in greenery, see 'Greenery and water' and Annex 'observation Zwolle'. However, there are no waterparks, façade gardens or water forests.

Reside in the neighborhood (AS1, RN4, RS1, RS3)

Safety is an important principle in the use of a street for residing activities (van Dijk & Marmeleira, 2021). Traffic calming measures are important elements in a safe street. In annex 'Observation Zwolle', it shows that there are speedbumps throughout the different street-types and areas in Holtenbroek. Streets are shared between cars and cyclists, there is hardly any physical or visual barriers for narrowing the streets. Parking is allowed on both sides of the street on the smaller streets alongside the houses. Speed limit is 30 km/h throughout the most parts of the Neighborhood (Gemeente Zwolle, 2019). There are a few cycle routes (main and top local routes), as discussed in 'Cycling network' above.

Looking at the 12 quality criteria for comfortable and inviting spaces, according to Gehl (2010), *protection*, *comfort*, and *delight* are important criteria. The criteria will be used to analyze the five streets from annex 'Observation Zwolle'. *Protection*: the traffic in Holtenbroek is quite safe (speed limit 30 km/h, pedestrian and cycle area separated when speed limit is 50 km/h, car free areas in Holtenbroek), but it could be improved by giving more priority to pedestrians and cyclists (priority when crossing a street). Holtenbroek deals with higher burglary numbers compared to the rest of Zwolle, the municipality is working with the police to reduce these numbers (Probleemwijk Holtenbroek, n.d.). There also is a lot of littering (Probleemwijk Holtenbroek, n.d.) which influences the sensory experience of Holtenbroek.

Comfort: The quality of the pedestrian areas throughout Holtenbroek varies: some paths are obstacle free, and have good surfaces, others do not. There is no support for standing, there are hardly any benches. The view for pedestrians is quite far and unhindered, there are a few interesting views (art statues, greenery) but in the residential streets there are no interesting views). There are many opportunities to play and exercise for children, no opportunities for adults. *Delight*: There are many opportunities to enjoy the sun and shade (grass fields with trees), and areas of coolness (water, shores). There is a lot of greenery and water. Buildings are designed on a human scale, only one area on the North-side of Holtenbroek (Palestrinalaan) where buildings are not on human scale. Here the buildings have 10 levels.

4.1.2 Observation Oosterflank – Rotterdam

Here the nuances to the framework ‘Building blocks for the movement friendly environment’, created by Kenniscentrum Sport & Bewegen (2021) are discussed for Oosterflank Rotterdam are discussed.

Cycling Network (AP1, AP2)

Oosterflank has two main cycling routes (image 18, red lines): one from the West side of the neighborhood connecting to the North and the South of Rotterdam, and one on the South side connecting to the West and the East of Rotterdam. The top local routes (image 18, purple lines) are in the heart of Oosterflank and connect the different areas of Oosterflank to the main and local routes. The main routes and the top local routes are not designed to fungate as a recreational network as they are designed to enable residents of Oosterflank to travel to i.e., work by bike via a direct route. However, these routes do have recreational characteristics; they enable people to cycle longer distances as they create direct routes between areas towns and cities and are located alongside blue and green areas, which makes them more attractive for recreational use.

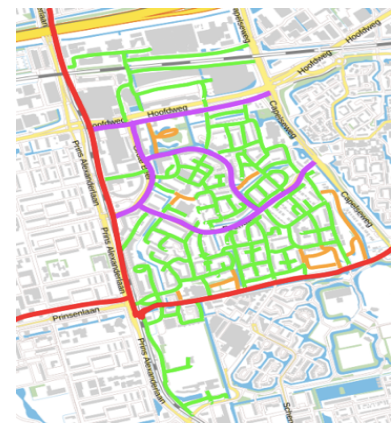


Image 18. Cycle routes Oosterflank - Rotterdam

The local cycling routes (image 18, green lines) are the smaller routes in Oosterflank that connect the homes, schools, and shops to the top local and main routes. These routes mainly function as the utility network, enabling cyclists to reach home, shops, schools, work, and the top local and main cycling routes. They facilitate connectivity for cyclists from A to B and are not typically designed to explore the neighborhood, neither to exercise nor socialize. The remaining paths are pedestrian areas (Image 25., orange lines), cyclists are forbidden on these paths.

Analyzing image 18, there is a strong hierarchy visible in the cycling network in Oosterflank. The two main routes, the few top local routes, and the local cycling routes. With the following 10 design principles of CROW (2021) the Main and Top local routes will be analyzed further.

1. Width of the path

The two main cycle routes follow along the Prins Alexanderlaan, North to South, and the Prinsenaan to the Scandinaviëpad, East to West. All three are two-way cycle paths. Using the measure function of PDOK (PDOK, n.d.) it becomes clear that the width of the path is between 3 and 3,5 meters (see image 19). The width of the Main route Prinsenaan is around 3,5 meters. The width of the Scandinaviëpad is conspicuous: a width between 8 and 8,5 meters, which is significantly larger than the other cycle paths (see image 19). When looking at a satellite view using Google© (see image 20), it becomes clear that the pedestrian area takes about 33% of this width. The width of the cycle path on the Scandinaviëpad therefore is about 2,7 meters. Assuming the main cycle routes of Oosterflank facilitates the average amount of cyclists on a

Dutch main route, an average intensity of 400 cyclists per hour, the recommended width of a two-way cycle path is 5,60 meters (CROW, 2021). Neither one of the paths meets these recommendations.

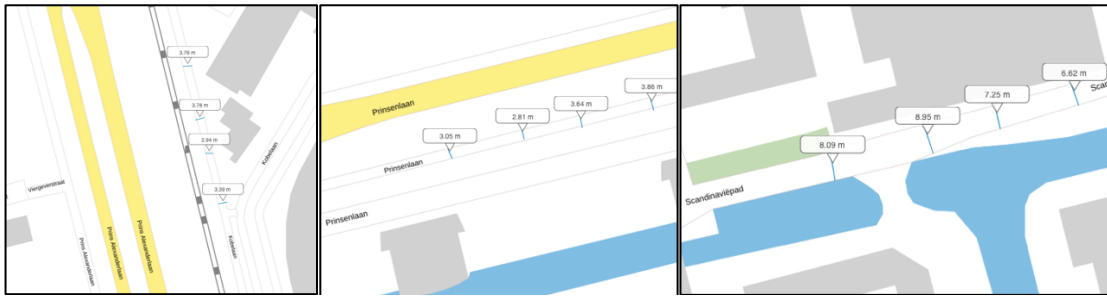


Image 19. Width of Prins Alexanderlaan (Main route), width of Prinsenlaan (Main route), width of Scandinaviëpad (Main route)

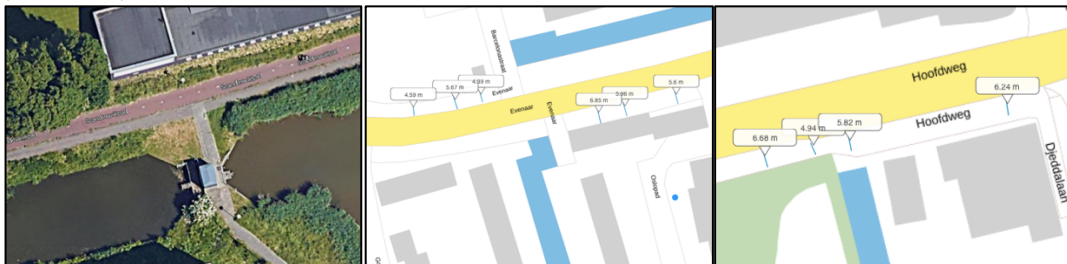


Image 20. Satallite view of the cyclepath Scandinaviëpad (Google©, n.d.-k), Width of Hoofdweg (Top local route), width of Evenaar (Top local route)

The recommended width for the one-way Top local routes with an average intensity of 300 cyclists per hour, is 3,30 meters (CROW, 2021-a). The Top local routes in Oosterflank, cycle path alongside de Evenaar and Hoofdweg, are all one-way cycle paths. Image 20 shows that the average width of the cycle path alongside the Evenaar on both sides is between 5 and 5,5 meters, which exceeds the recommendations of CROW. The cycle path alongside the Hoofdweg has an average width of 5,5 meters, which exceeds the recommendations of CROW.

2. Profile division

CROWs (2021) recommendations for a utilitarian two-way cycle path are white axle and edge marking. The Main cycle routes in Oosterflank have only axle marking. The Top local routes only have axle marking as well, therefore both routes do not meet the recommendations.

3. Edge of the path

To visualize the end of the cycle path and the start of the verge, contrasting pavement is recommended. All the routes on both the Top local and the Main route have contrasting paving: red paving of the cycle path with grey pedestrian or car areas alongside. This creates clear contrasts and visualizes the edges of the cycle paths.

4. Verge of the path

CROW (2021) recommends an obstacle free verge of 1 meter between the cycle path and the surrounding trees, roads, etc. None of the cycle paths meet this recommendation. All paths are within the build environment and have either car parking, pedestrian area with elevated curb, and/or hedges directly adjacent to the path.

5. Pavement of the path

An even and whole pavement of the cycle path is recommended for safety measures, asphalt or concrete is recommended. Both the Main routes and the Top local routes meet these recommendations, as all of them are made of (red) asphalt.

6. Wayfinding

Every crossroad that includes a cycle path (Main route and Top local route) should signal what kind of cycle path it is (not mandatory, mandatory for cyclists, mandatory for cyclists and small motorized vehicles). If the path is part of a regional or national cycle route, there should be a board for his as well. On the Main routes in Oosterflank, which are both part of the regional cycle network both the kind of path and the regional route are signaled. On the Top local route, which is not part of any regional or national network, only the type of cycle path is signaled.

7. Pedestrian area

CROWs recommendations (2021) on pedestrian areas within the urbanized environment is to always facilitate a footpath alongside a cycle path. This should prevent pedestrians and cyclists disturbing each other; if there is no footpath, pedestrians are more likely to use the cycle path as this is probably the most direct way toward facilities. Both Main route and the Top local route have pedestrian routes alongside them.

8. Lighting

Following the recommendations of CROW (2021), there should be lighting in alongside the paths when there is no spatial guiding (housing, trees, etc.). Since most part of the Main and Top local routes is all entirely within the build environment with good spatial guiding, no specific lighting alongside the cycle path is necessary. Except for the Scandinaviëpad, because this path has water on the one side (which can be dangerous for cyclists in the dark) and on the other side bushes. There is lighting alongside the Scandinaviëpad, therefore it is in line with the recommendations.

9. Bends and slopes

Bends

CROW (2021) describes how bends in the cycle path should be avoided as much as possible as it can be dangerous and inconvenient for the cyclists on the Main and Top local routes. The Main route has one point where the route makes two sharp bends (small radius) because it crosses with a main car road. At another point it must bend alongside the water (small radius) (see image 21 & 23). Both those bends are (almost) 90°, which does not follow the CROW (2021) recommendations. The Top local routes have multiple sharp bends (small radius) because the road stops, crosses with another road and cyclists must turn left or right to continue following the Top local route (see image 21 & 23).



Image 21. Examples on map of Oosterflank

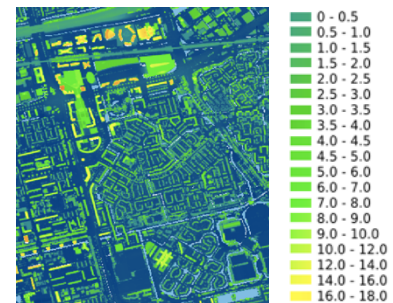


Image 22. Height differences in Oosterflank



Image 23. Example A, B, E. Bends in Main and Top local cycle path.

Slopes

According to CROW (2021) the ideal slope rate is between 7,5% and 2%, depending on different factors. Image 22. shows the height differences in Oosterflank, it shows how there is no sloping, the only height differences on roads are on car roads.

10. Poles and speed decelerators

CROW (2021) recommends the use of poles and speed decelerators to be as little possible as possible as they both have a negative impact on the comfort and safety of cyclists. The Main routes has no speedbumps or poles, which is in line with the recommendations of CROW. However, it does count 6 intersections with traffic lights on the route, this is not ideal for cyclists according to the recommendations. The Top local routes have no poles and speedbumps on them. There are three points on the route where cyclists do not have priority and must wait (i.e., crossing the Evenaar), this is not ideal according to the recommendations.

Density and facilities (AN3, AN4)

Image 24 shows that, measured from the shopping center Alexandrium, the area where most facilities are clustered (red circle), the 15-minute city ideology is applied in Oosterflank. The five principles for general city planning for working with the human dimension by Gehl (2011) will be used to analyze the center of the 15-minute city in Oosterflank (red circle). Alexandrium is an indoor shopping mall, therefore the inside as well as the outside of the shopping center will be analyzed.

Indoors

The fronts of the shops face each other and on average are no longer than the recommended 5 meters (annex 13., image 1). This enhances the experience of visitors as shops, activities and other visitors are within sight and hearing distance. This can invite socializing and staying. However, Alexandrium has three levels (Alexandrium, n.d.), which is not in line with the recommendation of Gehl (2011) to avoid sink or elevate spaces as it may cause dispersal of people. There are many different facilities, from clothing stores and drugstores to bakeries and restaurants, from opticians to hairdressers. The shopping center has a large parking facility below the facilities, indoors are only pedestrian areas.

With its large windows and glass doors and open floor plan in the middle of the mall, Alexandrium is an open and inviting area. Restaurants and cafes have seating options in the open space from where they can see other visitors, shops, and the different floors (annex 13, image 2). Alexandrium is attractive for visitors because it has many kinds of facilities. It has plenty of sitting options and the facilities and people excite the hearing, seeing, and talking experiences of visitors.

Outdoors

The outside of Alexandrium does not fit the human scale: the walls are high and grey, there is a lot of concrete and the plinth is not very inviting nor active (annex 13, image 3). There is enough greenery surrounding Alexandrium, however in combination with the high-rise brick walls the area is not build for the human scale (annex 13, image 4 and 5). There is some form of integration around the area of the shopping center. The plaza at the main entrance integrates different functions, such as shopping (entrances of stores), residing (benches and greenery), dining/lunching (terrace and restaurants), and living (annex 13, image 3 and 4). The traffic is separated: there are car roads towards parking areas, cycle routes that come a bit closer to the entrance of the mall, and pedestrian areas all the way up to the entrance. Public transport is clustered on the North-side of Alexandrium.

There is no smooth transition between the private and public areas. As image 4, 5 and 6 show (annex 13) the high-rise residential areas are harshly separated from the public spaces: the apartment

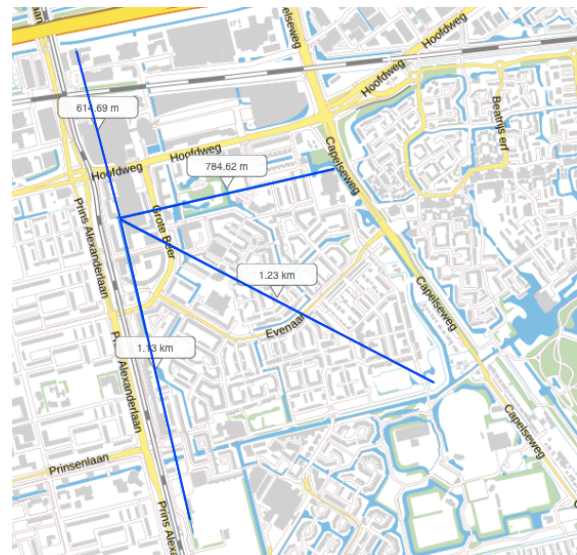


Image 24. Measurement of 15-minute city Oosterflank

buildings have a plinth of about 3 meters high without any windows, only brick walls with a few doors., whilst according to CROW (2021-b) these are the parts of the environment we perceive the most. According to Gehl (2011) this plinth without any so-called action, can be experienced as repelling and does not satisfy the psychological need for contact and stimulation in public spaces. The same can be said about the areas around the entrance of the shopping center, see annex 13. image 7 and 8. The human scale is lost, and the outside area does not stimulate the sensory experience of the people as they cannot see what is going on inside of the shopping center. The plaza (annex 13., image 3) is designed to increase the amount of time people spend here due to the greenery, benches, and stimulation for hearing, seeing, and talking. However, other areas around Alexandrium are designed in a way that, according to Gehl's theory (2011), will reduce the amount of time people spend here (annex 13., image 4 to 8), as spaces are closed in, and are not attractive for sitting, walking, standing, seeing etc. These areas could be improved by restructuring it on the human scale, with interesting views outside as well as opportunities to see what is going on inside the center.

The child friendly neighborhood (AN5, AS3, RN3, RS2)

Holtenbroek will here be analyzed on the possibility to independence for children and the amount of play inducement and opportunities to play in the neighborhood.

Independence for children

The playground at Toulondreef (see image 32) is within hearing and sight of the surrounded residents and within hearing and/or sight of other users of the public area (i.e., neighbors passing by), this makes it socially safe. The play area at Scandinaviëpad (see annex 'analysis observation – Rotterdam') is within hearing of surrounding housing but not within sight, it is within hearing and sight of people passing by. This makes the play area less socially safe than Toulondreef, however it still can be considered as safe. If we look at annex 'observation Rotterdam', we see that the play areas are car-free pedestrian areas situated away from the car traffic. There is clear view on the play areas; they both are open, and the entire area can be overlooked easily. The areas are all on one level and the amount of greenery around the play areas creates an inviting situation. The play area Toulondreef is experience-oriented to some degree: play facilities are colorful and there are trees and grass to make it enjoyable. The playfields in Oosterflank can be seen as socially safe (within seeing and hearing of others) which will allow children to play independently.

Oosterflank does not have an official Kindlint, but there is potential for one. From the North-side to the South-Eastside of Oosterflank are pedestrian areas that connect lot of greenery, playgrounds, and parts of the neighborhood. This could be transformed into a child-friendly route (Kindlint) if the safety of the route would be improved by child safe crossovers with priority, way finding on tiles of boards, and safe routes to school. See annex 14.

Play inducement

The play area "Scandinaviëpad" and the playground on the Toulondreef will be analyzed here using the 10 principles of playground design by Moreno (2023). See annex "analysis observation – Rotterdam" and Image 25.

1. Design for different types of play. There is only one type of play, which is active play on the soccer field and play elements at the Toulondreef. Incorporating more types of play could improve the play area.
2. Create a sense of place. There is no connection between the cultural or communal spirit of the neighborhood and the play area.
3. Trust children's creativity. The play area has no loose elements that can spike the creativity within playing children. By incorporating more loose elements, instead of the current straight forward play elements (rope-bridge, slides, soccer field) play could be induced more and the playground could stimulate creativity.

4. Make room for secrets and surprises. There are no surprises within both play areas, this should be improved.
5. Consider the flow of the space. This design principle is not applied to the current play areas. The play elements on the Toulondreef are segregated from the surrounding area by a fence and are not connected with the rest of the neighborhood or other play areas.
6. Create zones for different energy levels. There are only areas for high level of energy: areas to play, climb, run etc. But there are no quiet areas.
7. Don't get too preoccupied with looks. The play area at Toulondreef is colorful with interesting shapes, however it is surrounded by a fence and leaves no room for chaos during play. The soccer field and basketball field do not have any play inducement around them, only the fields themselves.
8. Design for intersection. The play area is not accessible for all children, there are no levels of difficulties: either the children can use the elements (slide, monkey bars, soccer fields) or they cannot.
9. Work with, not against nature. The playgrounds both are surrounded with greenery. There is a lot of grass and trees. This enhances the experience of the nature and the play area.
10. Don't forget the basics. The trees provide a lot of shade. At Toulondreef there are less trees and therefore less shadow. Toulondreef has two benches, which should be enough for this size playground. More benches would improve the area on Scandinaviëpad. There are multiple trashcans within the area, however there are no facilities for drinking water.



Image 25. Playground Toulondreef, Oosterflank Rotterdam

Greenery and water (AP3, RP2, RP3, RN2, RN5)

Oosterflank is a generally green neighborhood. There are some green fields with trees and bushes, a park area, avenues with trees and grass alongside, and multiple recreational green paths nearby water (see annex 26 'observation Rotterdam'). However, there are no green roofs, green facades, or natural playgrounds. The areas with the least green are the residential (stamp) streets, like Faborgferf and Arendalhof. There are some smaller trees and poorly maintained greenery in these areas, but in general the brick and asphalt dominate the street view. These residential streets do not fit the characteristics of an attractive and inviting green living area by Bureau KM (2016). However, non-residential streets like Evenaar and Scandinaviëpad have a lot of greenery, trees and grass which creates inviting and attractive living environments.

When applying the theory on biosphere reserves by UNESCO MAN (n.d.) on Oosterflank, categories 2 and 3 can be distinguished. There is an urban green corridor biosphere reserve (category 2), a green pedestrian route that meanders through and around Oosterflank. The neighborhood also has a few green fields and parks in different sizes, which classify as urban green area cluster biosphere reserves (category 3) (see annex 15.). When analyzing the water in Oosterflank using the theory of Langie, et al. (2022), only one type of water element is used: the semi-natural pond (annex 15, image 3). Throughout the area, there are multiple ponds and streams that are man-made but have the look and feel of a natural stream with green, sloped shores (see annex 26. 'Observation Rotterdam').

Mobility (AN2, AS2)

Oosterflank does not have a mobility hub, but there is great potential for one. Oosterflank has a train station, two metro stations, and multiple bus stops which means there are people arriving by public transport. One or more mobility hubs where people can transit from public transport to shared mobility to cover their last mile. I.e., shared (electric) bikes, scooters, cars, and cargo bikes could provide visitors of the neighborhood and surrounding areas more easily. A mobility hub within

Oosterflank would be a great opportunity within the near future (5 years) because Rotterdam is a big city and Oosterflank attracts a lot of visitors due to the shopping center. A mobility hub would also help with the pressure of parked cars in the neighborhood.

Shopping center Alexandrium is surrounded by multiple parking lots and indoor parking garages to provide parking for the visitors. Within the residential areas of Oosterflank, parking is dominant within the street view (see annex 26. 'Observation Rotterdam'). Parking alongside the roads (in front of the houses) is allowed on most residential streets, with some extra parking facilities throughout the neighborhood.

Small network (AN1, RP1, RN1)

To analyze the small path network of Oosterflank, the 10 measures for city planning to improve the cycling network by College van Rijksadviseurs (2020-a) is used. See annex 26. 'Observation Rotterdam' for examples.

1. Lower speed limit to 30km/u within the city: all residential streets in Oosterflank have a speed limit of 30 km/h. The Capelseweg, Hoofdweg and Grote Beer have a speed limit of 50 km/h, these streets connect Oosterflank with other parts of Rotterdam and separate car traffic from cyclists and pedestrians (Gemeente Rotterdam, 2018).
2. Prioritize cyclists within the build-up area: on the residential streets in Oosterflank, cars and bikes share the streets. Cyclists could be prioritized more by creating cycle-streets where cars are guest users and must give priority to the cyclists.
3. Create cycle-free zones and streets for pedestrians: pedestrians have their own path alongside the bigger roads with clear division for safety. On smaller roads the sidewalk is less separated from the car and cycle area, however pedestrians still have their own paths.
4. Create sufficient parking facilities at the borders of the city center: parking is allowed alongside most roads; parking therefore has a dominant space in the street view (Gemeente Rotterdam, 2018).
5. Promote use of OV-bike during the 'night' (take a public transport bike home, bring it back the next day when you go to work): The train and metro station 'Rotterdam Alexander' facilitates OV-bikes, therefore the promotion of their use could help reduce car-use in the area (Gemeente Rotterdam, 2018).
6. Facilitate park and bike mobility hubs: no mobility hubs, however there is potential for one.
7. Create a car-bike sharing system (like train-bike systems at stations): There is no car-bike sharing system in Oosterflank, only OV-bikes (Gemeente Rotterdam, 2018).
8. Introduce the bicycle-porch (seasonal parking facility for bikes): There is no bicycle-porch in Oosterflank, but this could be introduced around the shopping center.
9. Facilitate a public platform for shared mobility: There is a public platform for shared mobility (bikes and cars) in Rotterdam, no specific hubs in Oosterflank (see annex 12.).
10. Go for a beautiful *and* efficient cycle network: The cycling network is quite efficient, with a good structure (Main, Top local and Local routes). The quality of the path could be improved at some parts of the route (annex 'Observation Rotterdam').

The three criteria for decision making for walking or not, nearness, comfort, and enrichment, are used to analyze the pedestrian network in Oosterflank (College van Rijksadviseurs, 2020-b). *Nearness*: There is a mixed use of facilities within the neighborhood. Greenery, public transport and facilities are within walking distance, as discussed in 'density and facilities' above. Carparking is allowed through the entire neighborhood, there is no specific clustered parking (Gemeente Rotterdam, 2018). *Comfort*: There are a few pedestrian areas in Oosterflank, which connect the facilities and housing with each other, see 'Greenery and water'. The shopping center has room for improvement to enhance the pedestrian experience, see 'Density and facilities'. *Enrichment*: Oosterflank has natural shores and diversity in

greenery, see 'Greenery and water' and annex 26. 'observation Rotterdam'. However, there is no diversity in water elements, only the semi-natural pond.

Reside in the neighborhood (AS1, RN4, RS1, RS3)

For residing activities in public spaces, safety is one of the most important principles (van Dijk & Marmeleira, 2021). The safety of a street can be optimized using safety measures. Annex 26. 'Observation Rotterdam' shows how speedbumps and guiding paint are used as safety measures on the main road the Evenaar. More subtle guiding paint is used in the residential streets such as Arendalhof. The residential streets are shared between cars and cyclists, these streets are physically made smaller using different materials to divide the street in car and pedestrian areas. The placement of the trees also narrows the street optically, this is positive for the safety for cyclists and pedestrians. Most streets in Oosterflank have a maximum speed limit of 30 km/h (Gemeente Rotterdam, 2018). There are a few cycle routes (Main and Top local routes), as discussed in 'Cycling network' above.

Looking at the 12 quality criteria for comfortable and inviting spaces, according to Gehl (2010), *protection, comfort, and delight* are important criteria. The criteria will be used to analyze the five streets from annex 'Observation Rotterdam'. *Protection*: the traffic in Oosterflank is safe (speed limit 30 km/h, pedestrian and cycle area separated when speed limit is 50 km/h, car free areas for pedestrians/cyclists in Oosterflank), but it could be improved by giving more priority to pedestrians and cyclists (i.e., priority when crossing a street).

Comfort: The quality of the pedestrian areas in Oosterflank generally is badly maintained: broken surface, loose tiles, obstacles on path. There is no support for standing, there are hardly any benches. The view for pedestrians has a clear line and is unhindered, there are a few interesting views (art statues, greenery) but in the residential streets there is a lack of interesting views). There are plenty of opportunities to play and exercise for children, no opportunities for adults. *Delight*: There are great opportunities to enjoy the sun and shade (grass fields with trees), and areas of coolness (water, shores). The neighborhood facilitates a lot of greenery and water. Most buildings are designed on a human scale, only the area around the shopping center Alexandrium there are more high-rise apartment buildings, which do not resonate with the human scale principle of Gehl (2010).

4.2 Results interviews

In this section the results of the interview with the lower-SES population are discussed in relation to their lifestyle as well as the theory of planned behavior.

4.2.1 Lifestyle & mentality

To draw a picture of the lifestyle/mentality of the lower-SES population, we need to look at the similarities within the answers of the respondents on the interviews. This will draw an outline of the general lifestyle of the lower-SES population. Next it is probable that within this general lifestyle, there are subjects where the respondents have different mentalities. Based on the codes the similarities and differences will be discussed and analyzed using the BSR-model and Mentality-model. Quotes are used to substantiate the statements, 'R' means respondent and refers to the interviews in annex 5., 'S' means sentence and refers to the specific sentence where the quote can be found. The interviews were held in Dutch; therefore, the transcripts are in Dutch. The quotes are translated in English.

As the quotes below will show, there are similarities in values on subjects like activities, car usage, and safety. This forms the basis for the manifested values, ideas, and motives, of the lower-SES population. However, the collected field-data also showed differences, or 'nuances', that could indicate different mentalities within the overall lifestyle. These similarities and differences will be discussed below.

Similarities and differences

When looking at the activities, a similarity can be seen in the behavior of choosing certain forms of transportation; none of the respondents are car oriented: *"I don't have a driving-license, so I can't travel by car"* (R1:S10), *"For me it is more practical to travel by bike because it is faster than to go by car"* (R2:S12), *"When you go to the city center of Zwolle, you have to pay parking money. Even if you are just there for a couple of hours, it quickly costs you about €10. I think that is a waste of money, so I prefer to go by bike"* (R3:S21).

When they do use their car, it is because of convenience: *"If I have to get more groceries or at different places, then I'll take the car"* (R2:S28), *"[When do you take the car?] When it rains"* (R3:S16). They prefer active mobility because they know it is better for their health: *"For me it is more practical to travel by bike (R2:S12): And at least I'll have some movement that day"* (R2:S13), *"I prefer to cycle, because it is faster, and it keeps me moving"* (R3:S38).

Some respondents explain how they experience difficulties either walking, *"Well, I experience difficulties walking, because I have had knee surgery. I have a new knee, and it is as if I am staggering a little. I am not very stable when I walk"* (R3:S37), or cycling, *"And cycling is due to health issues a bit of a problem"* (R1:S10) due to health issues. One respondent mentions how they don't like walking. They explain how they only walk because they sometimes must but prefers to stay active by going to the local gym a couple of times a week. *"Because I don't really enjoy walking. And I prefer going to the gym"* (R1:S84).

Whilst another respondent does not experience any troubles walking/cycling, and actively chooses to use active mobility as much as possible to prevent health issues: *"I walk a lot actually"* (R2:S28), *"For me it is more practical to travel by bike (R2:S12): And at least I'll have some movement that day"* (R2:S13). Also, the same respondent explains why she values walking outside with her child, *"I have a 5-year-old son, who has a lot of energy and, especially in the weekends, needs to be active. And I think it is important for him to be outside a lot, so we go for walks"* (R2:S34), *"During summer, we go for walks of at least 30 minutes. With nice weather we'll sometimes be gone for up to 1,5 hours with some stops in between"* (R2:S42). Lastly, one respondent explains how cycling is a social activity for them, *"I cycle for fun as well. With my friends, we go to Kampen, Hattum or Hasselt. Or we cycle around Zwolle"* (R3:S64).

The analysis above shows how all respondents value active mobility, and consciously choose to stay active for health reasons. However, there are nuances in the ability to walk/cycle; some respondents experience health problems whilst others don't. In addition, children also form a reason to stay active for one of the respondents, whilst another respondent doesn't like walking and prefers going to the gym to stay active. Lastly, cycling is a social activity for one respondent.

When talking about their experience of the neighborhood, the respondents mention the maintenance could be better: *"I believe the maintenance could be better"* (R1:S106). *"Yes, more attention should be paid to the maintenance, specifically with regards to the greenery"* (R3:S65). This shows how the respondents value the condition of the neighborhood, the way it looks, and the neatness.

The greenery in the neighborhood is highly valued, they enjoy the feeling of nature around them: *"When I walk there [to the shopping center], I have two possible routes. One has more nature. So that's the one I prefer"* (R1:S55), *"There is a small park, with a lot of trees. In summer this is comfortable as they create a lot of shadow"* (R1:S69), *"If we talk about greenery and it being well maintained. Specifically, behind the schools, in my opinion there are places that still need a lot of attention. Well, you've got greenery but there could be greenery where children could actually play. If trees would grow there, and plants etc."* (R2:S71), *"Zwolle is a great city to see and experience all of that. There is a lot of water and greenery"* [R3:S98].

Nuances in the manifested values for experiencing the neighborhood and what is important, can be seen between the respondents. One of them mentions the garbage alongside the streets a couple of times, *“There is a lot of garbage. The garbage should be collected in a better way”* (R1:S108), *“For people just passing by it is not convenient [underground garbage cans for residents use only]. Then there should be more garbage bins”* (R1:S125). This respondent seems to focus more on the littering in the neighborhood, whilst another respondent mentions a lack of resting places in the neighborhood, *“There are some benches where you can rest, but not that many. There should be more benches”* (R3:S137). Whilst a third respondent purely focusses on the maintenance of the greenery, *“Yes, there should be more attention to the maintenance of the neighborhood, but then specifically for the greenery”* (R2:S65).

The quotes on the respondents’ experience of the neighborhood shows that they all value good maintenance and a lot of greenery and water to enjoy. One of the nuances, however, is how one of the respondents seems to be disturbed by littering often, whilst another respondent would value more resting places in the neighborhood, and the third respondents focusses on the maintenance of the greenery.

Traffic safety is an important value, respondents mention how crossing certain streets can be difficult and are experienced as unsafe, especially for children and elderly in the neighborhood. *“Also, safety. That is also part of it. There is still a lot of attention needed”* (R2:S66), *“For instance, people with a walker. They must make quite a detour to get to a crosswalk to get to the shopping center. That can be difficult for them.”* (R2:S89), *“Yes, there are crosswalks, but you have to pay attention when they are not there. You have to watch out [for car traffic].”* (R3:S94).

Safety around school zones is accentuated by one respondent: *“There are a few schools next to each other, but especially one school, the free-school of Holtenbroek, where children cycle, and small children walk to. And the traffic is crowded there, but there is little... no crosswalks or something. I think for that part of Holtenbroek it is important to give some extra attention”* (R2:S68). Another respondent explains how social safety on streets is a problem, *“Sometimes worrisome things happen. Shooting incidents and drugs”* (R3:S195), *“Youth comes together, and I hear they deal drugs”* (R3:S197). However, the respondent mentions this is only a problem on the streets, she feels safe at home: *“I feel safe at home, I live in an apartment building. We do not have security at the main entrance, but I feel safe. I lock my front door and I sleep well”* (R3:S199).

Mentality model

The analysis above gives insight in the mentalities of the respondents. All have some similarities in their mentality when it comes to active behavior in the living environment. But there also are clear differences in preferences and values. The following mentality model can be established, see image 26. The three mentalities are *Active explorer*, *Uncomfortable activist*, *Cautious traveler*. The three mentalities and the additional lifestyle will be explained further.

Active explorer

The ‘Active explorer’ is typically very mobile. They have no trouble walking/cycling, and even prefer these types of mobility over using their car. The Active explorer is a conscious mover and is aware of the

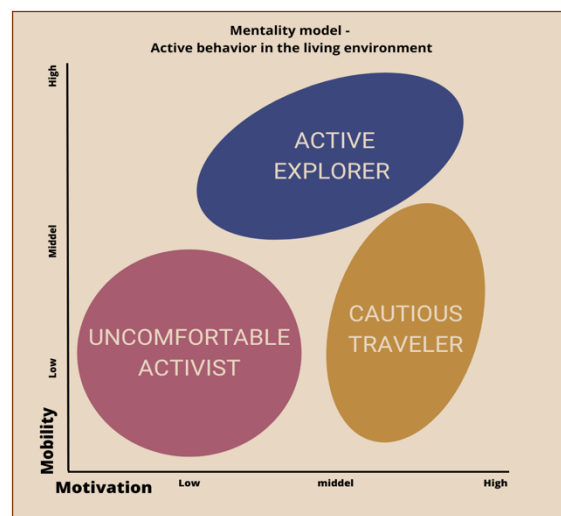


Image 26. Mentality model - Active behavior in the living environment (own image)

health benefits of active mobility. They are motivated to stay active and make conscious decisions about it, for instance they only use their car when walking/cycling is too inconvenient. They like to explore the neighborhood by foot, and often go for longer walks as a leisure activity. They prefer their neighborhood to have a lot of greenery in general, but also emphasize the importance of green, well maintained playgrounds and the presence of sensory stimulating environments. Traffic safety is one of their biggest concerns, especially the safety of the school zones and the area around the shopping center are important to them.

Uncomfortable activist

The 'Uncomfortable activist' is the least mobile resident. They experience problems with their health and have trouble walking and/or cycling, especially longer distances are a problem. They need to take breaks during their trip and therefore they highly value enough resting places and benches in their neighborhood. Possibly, the Uncomfortable activist does not have a car or driving license, which makes them, in combination with poor health conditions, depend on public transport. Also, they are not particularly motivated to stay active. They are aware active behavior is important, but due to their health conditions and their lack of motivation they only move with low intensity and low duration. The Uncomfortable activist is a very concerned resident, and they like to feel part of their neighborhood. They are very willing to help the municipality improve their living environment. They are disturbed by litter and garbage and are concerned with their neighbors.

Cautious traveler

The 'Cautious traveler' has a low to middle mobility; they experience some difficulties either walking or cycling but are highly motivated to stay active. Therefore, they will not let the inconvenience of their health conditions prevent them from active behavior and focus on staying active the way they can. Active mobility is also a social activity for them to do with friends. They enjoy greenery and water, and value resting places along their routes as they need to take some rest. The Cautious traveler is mainly focused on their own circle of friends and family and is less concerned with fellow residents.

4.2.2 Theory of Planned Behavior

During the analysis of the codes in combination with the TPB, it was decided to go over all the quotes once more to assign an extra set of codes based on the TPB: attitude toward the behavior, perceived norm, perceived behavioral control (see annex 17). This extra analysis of the quotes helps to see the relationship between three determinants that drive behavior intentions and the favorable/positive or unfavorable/negative influence they have on the actual behavior. Annex 18 shows an overview of the quotes per determinant with a positive and negative influence on the behavioral intentions and therefore the behavior. To nudge toward the desired active behavior, it is important to reduce the negative influences and enhance the positive influences. The most important/common influences per determinant will be discussed here.

Attitude toward the behavior

The following have a negative influence on the determinant 'attitude towards the behavior' and therefore a negative influence on the desired behavior of the lower-SES population, which is active behavior in the living environment.

When looking at the attitude toward the behavior of being active in the living environment, the negative influences are:

- Not enough resting places (R3:S137). A lack of sufficient number of resting places might prevent people from walking or cycling a further distance as they may need to rest every now and then.
- Health conditions get in the way of cycling and/or walking (R1:S10, R3:37). Health conditions might obstruct residents to walk/cycle. Not enough resting places or good facilities for

alternatives such as clear and whole cycle paths or footpaths (walking as an alternative for cycling and vice versa), prevents people with hindering health conditions to be more active.

- Not enough to experience in the neighborhood (R2:49). When there is not enough sensory stimulation (greenery, water facilities, parks, playgrounds, etc.) the area may be perceived as uninviting, which will prevent people from behaving active.
- Litter and full garbage cans (R1:S127). Littering and full garbage cans have a negative impact on the experienced environment. It makes the greenery and water less enjoyable and less inviting.

The positive influences on the attitude toward the behavior of being more active are:

- Facilities nearby (R1:S36). Facilities at walking or cycling distance has a positive influence on the attitude toward the behavior. When facilities are nearby people find it reasonable to walk/cycle there, taking the car becomes less reasonable for them.
- Nature on routes (R1:S56, R1:S105, R2:S52). Respondents prefer routes with the most nature, it makes more sense to them to take these routes as they are more enjoyable.
- Trees create shade (R1:S71). Shade is desired in summer. When there is more shade, people have a more positive attitude toward the behavior of being active in the living environment during summer as the shadows create coolness.
- Good maintenance of paths (R1:S130). Good maintenance of cycle and footpaths have a positive influence on the attitude, because it makes the paths more enjoyable and accessible, especially for the residents with lesser health conditions.
- Taking the bike is more convenient (R3:S19). If taking the bike is more convenient (faster, cheaper, etc.) people have a positive attitude, and are more likely to cycle.

Perceived behavioral control

The following have a negative influence on the determinant 'perceived behavioral control' and a negative influence on the desired behavior of the lower-SES population, active behavior in the living environment, are:

- Difficulties due to health conditions (R1:S10, R1:S83, R3:S37). Health conditions that create difficulties with walking or cycling influences the perception one has: "walking and/or cycling is difficult". The difficulties with walking or cycling influences their perceived behavioral control, it becomes lower and will prevent the desired active behavior.

Positive influences on the perceived behavioral control toward the behavior of being more active are:

- Car is inconvenient (R2:S12, R3:S19). Taking the car is less convenient than cycling, so say the respondents, due to traffic jams, parking, high gas prices etc., it has a positive influence on their perceived behavioral control toward the desired behavior. Taking the car is seen 'hard', whilst cycling is seen as 'easier'.
- Facilities nearby (R2:S27, R3:S23, R3:S27). If facilities are at walking or cycling distance for residents, it becomes 'easy' for them to walk/cycle to them. This has a positive influence on the perceived behavioral control toward behaving active.

Subjective norms

The negative influence on the determinant 'subjective norms' that have a negative influence on the desired behavior are:

- People who don't follow the rules (R3:S78, R3:S106). People that don't follow traffic rules (not signaling a turn with hand gestures, cycling where one is not supposed to) create unsafe situations. These situations might make others feel unsafe in certain areas or paths. The subjective norm that young people create unsafe situations has a negative influence on the desired behavior.
- People don't reside in the green areas (R1:S145). It is not very common for people to reside in the green areas of the neighborhood. Children might use the playgrounds or play sports on

the grass fields, but adults don't generally use the parks and green areas for residing. The subjective norm that the green areas are not for adults to reside in, has a negative influence on the desired active behavior.

Positive influences on the subjective norms toward the behavior of being more active are:

- People use public greenery (R1:S146). Others use the public greenery to walk their dog, go with their children etc. This creates a favorable social norm that it is desirable and enjoyable to be outside and reside in the public greenery. This has a positive influence on the subjective norms: others believe they will be residing in the public areas; others expect them to use the public greenery. This favorable subjective norm has a positive influence on the desired behavior or people behaving more active in the living environment.
- Active behavior is important (R2:S13). There is a perceived norm that says it is important to stay active and be healthy. The respondents feel as if others expect them to be active, move and live healthy. This perceived social norm has a positive influence on the desired behavior.

4.2.3 Participation

The current level of participation and the desired level of participation are analyzed using 'The ladder of Citizen Participation' by Arnstein (1969), see image 7. During the interviews the respondents were asked about their opinion on what way participation could be created between the municipality and the residents.

The current way of communicating between the municipality and the residents with regards to participation appears on the levels 3 Informing and 4 Consultation of the ladder of participation. Their desired future level of participation is on 5 Placation. The following was said on current and future desired way of communication and citizen participation:

- Level 3 (current involvement) - Informing via text-groups or community center (R1:S160, R1:S172, R2:S115). Residents are informed on certain activities via text-groups or letters displayed in the community center. This is a very passive way of involving citizens by simply letting them know something was decided already.
- Level 4 (current involvement) – Consultation via consultation event (R1:S12). Residents are invited for an event where the municipality presents certain plans and residents can react and give their opinion. However, the respondents mention they never heard of the municipality afterwards. There was no real follow-through, and the residents could only give their opinions at that specific moment.
- Level 5 (desired involvement) – Placation via a walk through the neighborhood (R1:S227, R2:S141) with residents and municipality to talk about certain elements and desires. This lowers the bar for people to participate as it is an informal way of communicating.
- Level 5 (desired involvement) – Placation via spokesmen of the neighborhood (R2:S152). Involved residents of the neighborhood that are respected by their fellow neighbors should function as mediator between municipality and neighbors. This repairs any barriers between the residents and the municipality. These spokesmen can also be involved in the preparations and aftercare of communication and participation events.

One of the respondents points out how there are many different cultural backgrounds within the neighborhood, that don't all respond the same to certain ways of communication. It is important to keep this in mind when trying to create more citizen involvement. *"It should be inviting for everyone, lower the barrier. And take the different cultural background into consideration, the different people, the different layers in society"* (R2:S141). In addition, she says that churches and mosques might be a way toward more participation; if you can communicate with these people through these ways, they might be more inclined to speak up or feel more involved. *"I think there are two or three churches in*

Holtenbroek, and there is a mosque as well. You can reach a lot of people through those places” (R2:S128).

4.3 Results experts interviews

In this chapter the results of the analysis of the focus-group will be given. Following the structure from the presentation used during the focus-group (annex 19), the important insights will be discussed and are substantiated with quotes from the focus-group. Slides 1 to 6 present the background of the research and create some context for the experts. Slides 7 to 9 were used to start the discussion between the experts on three specific topics: car dominance, difficulties with walking/cycling, residing in greenery. The results of the analysis are presented per relevant discussed topic below.

Mentality model

During the focus-group expert 3 commented on the presented mentality model (see annex 20.) and explained she believed an important mentality was missing. Expert 3 explained how in her experience a fourth mentality should be added to the model: the group that is very mobile but is not motivated to walk/cycle. *“Wait a minute, because in this model it seems as if you assume that everyone wants to cycle, unless they experience health issues. Because they all are active”* (FG:S1), *“If I look at people in my neighborhood. A neighborhood that is like Holtenbroek I think. There are plenty of people who simply don’t care. They just take the car”* (FG:S9). Expert 3 explains how she lives in a neighborhood like Holtenbroek, where the lower-SES population is dominant, so she can relate to the mentalities from her own experience with her neighbors.

Expert 1 is doubtful on this statement and argues how he would think higher-educated people would be more likely to not cycle and take the car, instead of lower-educated people. *“But is that the case for lower-income neighborhoods?”* (FG:S26), *“I can image how mostly higher-educated people, in more expensive neighborhoods where people have two cars available and think uhm...”* (FG:S28). However, expert 3 seems to be quite sure of her statement and convinces the other experts that there indeed should be a fourth mentality added for the lower-SES population.

From the interviews held with the lower-SES population, the mobile but unmotivated mentality did not show. The experts try to explain this as follows: *“Chances are you have not spoken to these people because they are not interested [in a conversation] anyway. There is no willingness”* (FG:S37), *“Or they gave politically correct answers”* (FG:S39). Based on the expert’s opinion, a fourth mentality, later called the ‘Passive opportunist’, can be added to the mentality model, see image 27. It should be noted that further research to the fourth mentality is necessary as this group did not show from the interviews, therefore the mentality is added with a dotted line to show the possibility of this fourth group existing but not being confirmed yet from the field research.

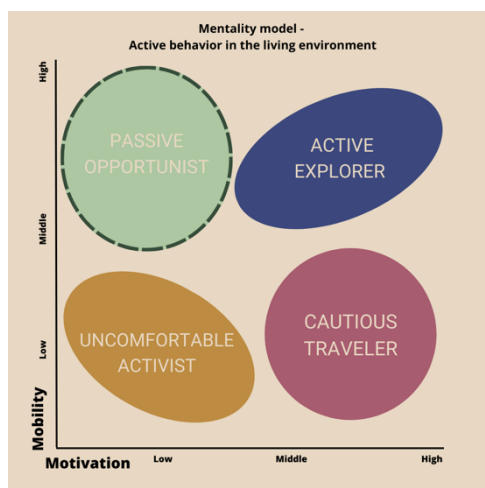


Image 27. Mentality model with fourth mentality: passive opportunist.

Passive opportunist

According to the experts, the ‘Passive opportunist’ is very mobile, they have no health-related issues with walking and/or cycling. However, they are simply not interested in active mobility and will come up with excuses not to walk/cycle. *“I know people who always come up with excuses not to cycle”* (FG:S41), *“Yes, I know those kinds of people as well”* (FG:S43). The ‘opportunist’ takes advantage of the fact that they have a car available, without considering any health or environmental elements in their choice. *“To my surprise, you see people who take the car for the littlest things”* (FG:S32).

Car dominance

From the observation it became clear how the car has a dominant place in the street view. The experts were asked what kind of opportunities they see/think of when it comes to reducing car dominance. Slide 7 of the presentation showed some images of the parking situation in the neighborhoods Holtenbroek and Oosterflank.

One of the first things the experts noted, is how most of the parking spots are empty during the day, which according to them indicates many people travel by car to work. *“Because I see this photo was taken during the day, and you see how many parking lots are empty. So, there must be a lot of people taking the car to work”* (FG:S60). According to the experts, there are opportunities to repurpose some of the parking lots to create spaces for more greenery. *“And here [left picture slide 7 presentation] you have ‘perpendicular parking’ and parking alongside the road. Although it is quite narrow. So yeah, you can just calculate how many houses there are multiplied by 1,25 parking spaces”* (FG:S87), *“But you want to make it visually more attractive. Or at least show how you give priority to the cyclists and pedestrians”* (FG:S102), *“The parking alongside the road is very inefficient. If you were to take those away and widen the footpath you create opportunities to place plants and trees. And then on the other side of the road there is space for efficient perpendicular parking”* (FG:S50).

However, the experts are also very realistic on the fact that reducing the amount of parking spaces is not so simple. *“Yeah, you should make alternative modes of transportation more attractive, and make car-usage less attractive. But yeah, it is quite difficult to make this reality”* (FG:S224).

The experts also come with a solution to minimize car parking in the neighborhood: they propose the parking of shopping mall Alexandrium to facilitate parking for the neighborhood during the evening and night. *“What you could do, is providing parking at a distance. Because shopping mall Alexandrium has a lot of parking spaces. The municipality or exploiter of those parking spaces could arrange a relatively cheap subscription for residents. Then you can take a lot of parking spaces out of the streets and create green streets”* (FG:S92). *“And create a high-quality parking for bikes at Alexandrium so people can take the bike to their cars”* (FG:S160).

This parking at a distance creates opportunities for more greenery and more livable streets whilst simultaneously stimulating active mobility to reach the parked car. However, it was noted how residents with walking and cycling difficulties should still be able to park nearby their homes. *“But a part of the residents cannot walk or cycle, so for this group it is difficult to park their car at a distance. You should keep that in mind. Or parents with young children.”* (FG:S147). Another expert responded how you can work with permit holders for people who need their cars nearby, *“You do not have to take out all parking space. Leave some of them in, and work with permit holders. People who need to use a car because they have no other option can leave their car in the neighborhood. But this way, people who have a choice can be stimulated to park elsewhere”* (FG:S150).

Lastly, it is mentioned how alternative parking within the neighborhood should be minimized. For instance, by making sure parking in the front yards is not an option. *“And especially if you decide to take out the cars. Then this is something to pay attention to. That the possibility to park the car in an alternative way [parking in the front yard] should be minimized”* (FG:S206).

Parking at a distance offers great opportunities for greener and livable streets. However, alternative parking facilities should be thought through and provide high quality parking to lower the barrier and stimulate people to park their car at a distance. Parking at a distance will stimulate active commuting: walking and cycling the distance between the car and home. Important to keep in mind is that some people need their car nearby due to i.e., health related issues or having young children. Residents can be strongly nudged toward parking at a distance, but parking nearby should still be an option via permits.

Livable environment

The experts come up with practical solutions and examples for refurbishing the neighborhood and creating a more livable environment. For instance, giving people a small front yard, but in such a way that people will use it for greenery, not for parking. *“But to make a neighborhood more pleasant, give people small front yards. But try to make sure, I think, that people cannot park in the front yards. But also make them big enough so people leave their curtains open”* (FG:S194), *“A Benefit of giving people a small front yard, is that it is a relatively inexpensive way for the municipality to make the streets greener. Because people will take care of the greenery themselves, which also results in more people in the streets”* (FG:S220).

When designing the spaces to experience, the maintenance is important according to the experts. Public areas should be well lighted, and litter free. *“And make sure there is good lighting, that is also very important”* (FG:S309), *“The municipality should come for maintenance a more often. To take care of litter. Because otherwise this will worsen”* (FG:S311). Maintenance of the perks and fallen leaves in the streets should happen more often, *“The maintenance is very important. The municipality should come to keep the perks nice and clean. And a sweeper to take care of the leaves”* (FG:S339). The experts explain how the effort of the municipality might spill-over in the behavior of the neighbors, how they will contribute to clean the greenery and their own front yards, *“But it is a small effort for people to do maintain the last part themselves”* (FG:S343). Taking care of dog poop in public spaces is also mentioned. *“Something that immediately comes to mind is taking care of dog poop regularly. Because that repels people”* (FG:S379).

The element of surprise within the neighborhood is also valued highly by the experts. Meandering paths, cluttered bends, and situations on pedestrian routes. *“But this is a wide road with a lot of bricks. But it would be more fun, those sand paths that meander. That stimulates people more to go there. It creates a park-like environment”* (FG:S399). However, another expert notes how sand paths might not be ideal for people who have difficulties walking as sand paths develop pits over time and can be muddy. *“But sand paths often get pits, you will get pits from the rain”* (FG:S408), *“It should be nicely paved, otherwise you’ll get dirty shoes. People don’t want that”* (FG:S405). The experts settle on a combination of paved and sand paths, that meander through the environment. *“But you could choose a combination. Definitely put in the paved paths and add some sand paths”* (FG:S412).

Destinations

On the matter of stimulating active behavior for residents who do not like walking and/or cycling, the experts state the importance of destinations within the neighborhood. *“She said [respondents’ mother] just going for a walk, if feels uneasy. Whilst if you walk to a pond to feed the ducks, it is not so weird anymore. Or if you walk to community gardens ... It gives people a reason”* (FG:S293). What kinds of destinations fit an environment can vary based on the culture, history, and demography of the neighborhood. The most important thing is, it should reflect the neighborhood, *“Also looking at what it reflects of the neighborhood”* (FG:S280). In addition, it is important that these elements and destinations are used, *“I think it is important that they are actively used by the people”* (FG:S277).

The experts mention destinations such as playgrounds, parks, and artworks. *“So, I think a playground where children come to play. But for people without children as well, there is something happening there, there is commotion. And then they want to go there or put some artwork there or something that moves and that’s fun to look at”* (FG:S254). But also, community gardens, animals, or graffiti on walls. *“A neighborhood garden, or a park where there is something to see”* (FG:S249). Sometimes it can be as simple as two poles that represent a football goal, *“Or something you often see is two goalposts, so kids can play football. Then there is something to see, put a bench there and then the grass can be used for something”* (FG:S380). These places where there is something to experience, something to see should be within sight because that way it is more likely to attract more people and it prevents loitering youth. *“Yeah, it should be within sight, that is much better”* (FG:S397).

Placing resting facilities at these places where there is something to experience, invites people to come to these and meet each other; people attract other people. It makes it more enjoyable to walk/cycle to these destinations. *“And elderly people go there and sit on those benches. Because especially when the weather is nice, people pass by every time. And the elderly sit there and watch”* (FG:S284).

Greenery

On the topic of greenery, the experts mention the importance of diversity. Placing different types of plants and trees all mixed creates a variety of biodiversity and more interesting and surprising landscape. Important note is that the greenery should fit in the Dutch environment so that it attracts the insects, birds and other animals that live in the Netherlands. Try to make the environment attractive for birds and insects, because this stimulates the biodiversity and gives people something to look at. *“In example the American oak is a beautiful tree, with beautiful colors, a beautiful park tree. However, it only attracts one time of insect or bird, or something. Whilst the European oak attracts more than a hundred insects and animals. The colors might be a bit less beautiful, but it is amazing for the biodiversity”* (FG:S415), *“Of hanging bird boxes, which attracts more birds”* (FG:S423).

Those insects and the diverse greenery attract other animals as well, which is fun for people, specifically children. *“Something with animals because that attracts children. And children attract elderly people because they enjoy watching them play”* (FG:S429), *“Or neighborhood chickens that just wander around”* (FG:S427), *“Yeah, and those animals feed themselves, you don’t have to feed them. And they attract bunnies and squirrels”* (FG:S432). Making the green public area attractive places all through the year is something that needs attention as well. Not just designing for spring and summer, but making it inviting during fall and winter as well. The experts talk about football fields being used all year round, or how hills can offer great sledge ramps during snow times. *“If you have a football field, they are used 12 months a year”* (FG:S460), *“And hills are fun because when there is snow, people can sleigh there”* (FG:S463).

Accessibility

The experts state how accessibility of the public area is important, especially for people who experience problems with walking. Keeping pedestrian areas obstacle free and creating ramps to cross the streets, *“So, it is important to create good ramps on the pedestrian areas for walkers”* (FG:S349). Also, enough resting places alongside the routes makes the public area more accessible for elderly and others with walking troubles, *“A sufficient number of places to rest and greenery”* (FG:S242). In addition, bus stops should be accessible for everyone, by bike as well as by foot. *“And accessible bus stops of course. Especially if people walk toward the bus stops”* (FG:S360).

When the experts are asked about the Kindlint (as discussed in 2.1.4) they are not that enthusiastic on the matter. *“The kindlint intends to connect the library with the school, and the sports facilities. But that is kind of difficult, and that is what I don’t like of the kindlint, it makes it difficult to keep things structured. And I question if children travel from school to the library and then go to the sports locations. Children don’t do that; they will go home in between”* (FG:S479). However, the experts do recommend child friendly and safe streets between certain facilities, so that parents can let their kids travel independently. These streets do not need to be in the kindlint format per se. *“It is fun to make a part of the street movement friendly for children. For instance, hopping, zigzagging, jumping, those kinds of things. Just with paint on the floor, that makes it more movement friendly and interesting for children.”* (FG:S476), *“You should aim to make it a solitaire cycle or pedestrian area, if possible. So that parents can let their children use that route because it is safe”* (FG:S486).

Participation

According to the experts, doing things together with the residents of the neighborhood is very important as it creates the feeling of belonging. *“Well, I think the most important success-factor with*

the involvement of the neighbors. Most of the residents should be involved and participating” (FG:S497).

The recommended level of participation is on level 6 Partnership, which means citizens can negotiate with the municipality on what should and should not happen in their neighborhood. This creates more involvement and enhances the feeling of belonging. According to the experts this can be achieved in a more daily way of participation and involvement in the maintenance of certain elements of the neighborhood. In example, day-to-day participation will make people feel more responsible and connected with the neighborhood and each other. *“You need to make sure there is willingness amongst the residents” (FG:S170).* The experts come up with various ways to make participation fun and accessible for the neighborhood: *“Think of schools, and students as they can also be active in the neighborhood. A personal example, my husband created a dog-field together with the school ... The boys and girls take care of the greenery in the dog-field ... In return the neighborhood organizes a barbecue to say thank you at the end of the school year” (FG:S173-182).*

According to the experts, these kinds of initiatives strengthen the connection between the residents themselves. It also helps spread awareness and creates the feeling of responsibility. *“And it’s not only fun, but it is also great for the future of the neighborhood. Because the teenagers will be more aware why certain choices are made.” (FG:S183).* *“And it is not just the residents, you can also think of schools, companies, self-employed people who want to contribute” (FG:S186).* Letting residents contribute to the maintenance of dog-parks, picking up litter, or taking care of animals such as ducks and chickens, creates involvement and the feeling of belonging. *“Yes, and schools can organize a national clean-up day” (FG:S324), “Or what about chickens in the neighborhood? People really like that” (FG:S427).*

4.4 Summery general results

Here the results of this chapter are shortly summarized, in the next chapter the research questions are answered, and the conclusion is formulated.

The interviews showed there are three mentality groups that can be distinguished, based on level of motivation to be active, and level of mobility. From the focus-group it became clear that a fourth mentality should be added. All four mentalities are generally satisfied with their living environment; however, maintenance and safety are important points for improvement. The current planned living environment in both Holtenbroek and Oosterflank, fit most of the recommendations on creating a livable and inviting living environment, as established in chapter 4.1. Most room for improvement is on traffic safety, more resting places, priority for cyclists and pedestrians and the quality of cycle and pedestrian areas. In addition, reducing the car dominance in the neighborhood, creating inviting public areas with opportunities for social interaction, and creating things/places to experience in the neighborhood form opportunities for stimulating active behavior as it gives people a reason to go outside. In following these opportunities, participation is crucial and the current level of involvement of the residents could be improved. These results will be used to answer the sub questions and conclude on the main research question in the next chapter.

Chapter 5. Conclusion

The main research question of this thesis goes: How can planning for active behavior in the living environment contribute to a more active lifestyle among the Dutch lower-SES population? Based on the theoretical framework established in chapter 2.2 and the results of the research discussed in chapter 4, the sub-questions can be answered. Based on the conclusions of the sub-questions the main research question can be answered in chapter 5.2.

5.1 Sub-conclusions

From the results presented in chapter 4, the lifestyle and mentality of the lower-SES population became clear. Based on the observations the current living environment of the neighborhoods Holtenbroek – Zwolle and Oosterflank – Rotterdam, with respect to stimulating active behavior, becomes clear. The focus-group with the experts and the analysis of the observations show an ideal living environment for stimulating active behavior. Lastly, a combination of experts' opinions and insights from the interviews with the respondents, explain how the lower-SES population can be engaged in the planning of the living environment to stimulate an active lifestyle. These indicators will be used to conclude on each sub-question below.

What kind of lifestyle with respect to active behavior does the lower-SES population take on?

From the interviews, three types of mentalities showed: the active explorer, the uncomfortable activist, and the cautious traveler. The experts pointed out how a fourth mentality should be added: the passive opportunist. With regards to an active lifestyle, the mentalities vary in level of motivation (from very unmotivated to walk/cycle to being highly motivated to walk/cycle), and in level of mobility (from difficulties with walking/cycling to being very able to walk/cycle). Where the *Active explorer* consciously decides to walk/cycling as often as possible, the *Uncomfortable activist* is neither mobile enough to walk/cycle, nor are they motivated to stay active in another way. The *Cautious traveler*, however, is very motivated to stay as active as possible: they walk/cycle even though they might experience some health difficulties. The *Passive opportunist* is very able to walk/cycle, however, they are not motivated for active behavior and prefer the convenience of a car.

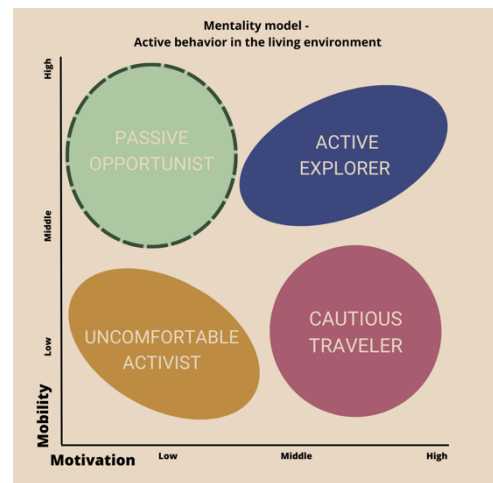


Image 1. Mentality model with fourth mentality: passive opportunist.

The following can be said about their daily active lifestyle. The *Active explorer* prefers to walk/cycle to their destinations and only take the car when there is no other option, i.e., when they must carry groceries. The *Cautious traveler* switches between the car and walking/cycling, depending on the distance and the level of convenience needed. The *Uncomfortable activist* is less mobile; physically and in terms of car-use. Therefore, they switch between walking or cycling short distances, and public transport for further distances. The *Passive opportunist*, even though physically very mobile, prefers to travel by car because of convenience. To say more about this mentality further research is recommended as this mentality did not show from the interviews with the respondents.

The lifestyles can further be differentiated by the level of engagement and concerns for their direct living environment. The *Active explorer* is concerned with traffic safety and safety for children, where the *Uncomfortable activists* are more focused on the overall experience of the neighborhood (i.e., litter, and wellness of other residents). The *Cautious traveler* seems to be the least concerned with their environment and fellow residents. They focus on their personal life and are easily satisfied with

the living environment. This difference can be explained by the fact that the daily life of the *Uncomfortable activist* is mostly concentrated within the neighborhood, where the *Cautious traveler's* life generally reaches beyond those borders, as they cycle/walk longer distances.

In conclusion, there are four main mentalities amongst the lower-SES population in Holtenbroek and Oosterflank. They differ on level of willingness, ability, and motivation to perform more active behavior. To stimulate the groups that could be more active, it is important to keep in mind that they have different reasoning for not being active, mainly health problems or the need for convenience. In addition, the level of involvement and concern with the neighborhoods differs between the mentalities.

How should the living environment be designed, to stimulate the lower-SES population to take on a more active lifestyle?

The observations showed that for the residential streets in Holtenbroek and Oosterflank there is room for improvement on attractiveness and inviting to stimulate active behavior. There are many cars parked alongside the streets and cars are given priority over pedestrians and cyclists. This makes the streets less friendly and inviting to cyclists, but especially to pedestrians. The analysis of the interviews with the TPB showed the positive influence nature on routes has on the attitude of the lower-SES population toward the (desired active) behavior. In addition, when there is not enough to experience or no sensory stimulation on routes, this has a negative influence on the attitude toward the behavior. Therefore, it is important to focus on reducing the number of cars in the streets and creating more sensory stimulation. According to the experts reducing cars within the streets, can be done by stimulating car parking at a distance. Important here is to facilitate in-street parking opportunities for people who experience trouble with walking/cycling. Parking at a distance will allow parking spaces in the streets to be replaced by more greenery, this creates a more livable environment. In addition, the sensory experience of the environment can be enhanced by the element of surprise (i.e., meandering paths, paved and sand paths), and well maintained and clean areas (reduce litter, empty garbage cans more often, reduce dog poop). Lastly, giving people a front yard opens the space between the private and the public areas: people will be more likely to leave their curtains open, and it is an easy way for the municipality to enhance greenery. Important to note, is that the front yards should not be big enough for people to park their cars, according to the experts.

The analysis of the observation showed that the green and blue structure within Oosterflank and Holtenbroek are accessible and within walking distance from every part of the areas. This has an important positive influence on stimulating the desired active behavior amongst the lower SES-population. However, there is room for improvement of the water elements present in the neighborhood. In addition, the respondents of the interviews explained how the greenery is not very well maintained and how people generally do not reside in the green area. This influences the subjective norms of the lower-SES population. The TPB showed difficulties with walking/cycling due to health conditions influence the perceived behavioral control in a negative way. According to the experts, as well as the respondents, more resting places will make active behavior more likely for people, especially for the ones with poorer health conditions. More benches will allow people to rest during their walk or bike ride, which will positively improve the perceived behavioral control. Well maintained paths, parks and greenery have a positive influence on the attitude toward the behavior, litter and full garbage cans have a negative influence.

In addition, the accessibility of facilities and things to see during a walk/bike ride have a positive influence on the perceived behavioral control as well. When facilities are at walking or cycling distance, it becomes easier for them to walk/cycle to these destinations. Also, things to experience, such as artwork, watching other people play sports/children play, animals, etc., will stimulate people to go outside more often as they have a reason to go for a walk or bike ride. However, the elements to experience should fit within the culture and identity of the neighborhoods. According to the experts,

diversity in plants is important as it attracts a diversity in animals and insects, which gives people more to see and experience. Lastly, creating child-friendly areas and streets via play inducement and safe crossovers between important destinations for children, will allow for more lively streets and independence for children.

What does the current (planned) living environment of the lower-SES population look like in relation to stimulating active behavior?

Both Holtenbroek and Oosterflank have a strong hierarchical cycling and pedestrian network. The principle of the 15-minute city is applied in both neighborhoods. In general, the density and quality of the (small) cycle and pedestrian path networks in both neighborhoods create an accessible environment for active behavior. These are all elements that stimulate active behavior in the living environment, and therefore can enhance an active lifestyle.

In Holtenbroek, the residential streets are the areas with the least greenery, these streets do not entirely fit the characteristics of an attractive and inviting green living environment. Car dominance is a problem in these areas. The presence of only one type of water element is less conducive for the experience and attractiveness of the neighborhood. However, the greenery and water elements are within walking distance from every point in the neighborhood. This is great for stimulating active behavior as nature invites people to go outside. Residents sometimes feel unsafe in traffic situations within the neighborhood. Crossing the streets is often experienced as unsafe for pedestrians, specifically for children and elderly, and around school zones. This hinders active behavior for children as parents feel less comfortable to let their children travel independently. In addition, cyclists do not have priority in most situations, which can create unsafe situations. Furthermore, Holtenbroek has multiple playgrounds which could be improved by following the 10 principles of playground design. There is no specific attention for safe and play inducing routes for children in Holtenbroek. Lastly, there is room for improvement of the cycling network on the principles of profile division, edge marking, the verge of the path, lighting, sharpness of the bends, and speed decelerators.

Oosterflank has multiple green areas and a park, with grass fields, trees, bushes, and opportunities to play and reside. There is one type of water element present in Oosterflank: semi-natural ponds. These ponds flow through Oosterflank and create the feeling of a natural stream. These elements create inviting spaces which stimulates active behavior. The quality of the foot and cycle paths is poor in Oosterflank, which hinders active behavior, especially for people that experience trouble with walking/cycling. Furthermore, improvements on the cycle paths can be made on the width of the path, profile division, wayfinding, bends, and speed decelerators. The traffic situations are generally safe; however, priority is mostly given to cars, not pedestrians or cyclists. This is especially interfering with creating safer spaces for children, so that parents will let them travel independently. There is no specific attention for safe and play inducing routes for children, although there are a few streets that have great potential.

How can the lower-SES population be engaged in the planning process for their living environment to stimulate them to take on a more active lifestyle?

The current experienced level of participation and communication between the municipality and residents of Oosterflank and Holtenbroek are on Informing and Consultation of the Ladder of Citizen Participation by Arnstein (1969). This means most participation leaves limited to no space for power for the residents: they are informed of plans or can give their opinion once decisions have already been made by the municipality; all decision-making powers lay with the municipality. The desired level of participation of the residents, is Placation. This means the residents want to be actively involved in the development of plans, they want to be able to give their opinion during the process of plan-development. This could be done by walks through the neighborhood, which is an informal way of connecting between the residents and the municipality. In addition, assigning one or more committed

and involved residents as spokesperson of the neighborhood can help narrow the gap between the municipality and the residents.

To get the level of involvement even one step further to Partnership, the experts recommend involving the residents in decision making on more day-to-day matters. Involving residents in decision making on fun and accessible initiatives such as 'community animals' and involving schools in neighborhood initiatives such as cleaning up litter and maintaining dog-parks, will keep residents involved and make them feel more connected to their living environment and neighbors.

5.2 Conclusion

Based on the results and the conclusions of the sub-questions above, the main research question, *'How can planning for active behavior in the living environment contribute to a more active lifestyle among the Dutch lower-SES population?'*, can now be answered.

Holttenbroek and Oosterflank are generally good neighborhoods with plenty of greenery, good connectivity via foot and cycle paths, have accessible facilities, and multiple playgrounds. The residents are generally quite happy and satisfied with their living environment. There are no major points for improvement within the planning of the build environment with respect to stimulating active behavior. The improvements for the neighborhoods to enhance the livability are purely on improving the 'last 10%'. The maintenance of the greenery, the safety of traffic situations, more priority for pedestrians and cyclists, less car dominance in the street view, and more resting places are the steps to undertake to achieve an ideal living environment. However, these are not the interventions that will stimulate the mentality groups with the least motivation, Uncomfortable Activist and Passive Opportunist, to perform more active behavior.

Even though, according to the analysis, these interventions can make the public area more inviting and will stimulate mainly the Cautious Traveler and Active Explorer to be (even) more active, it will likely not result in complete lifestyle changes for the other mentality groups. The mentalities Uncomfortable Activist and Passive Opportunist need to be stimulated via other ways. To get these residents to take on a more active lifestyle, soft interventions via social initiatives in the living environment could be more effective. Social initiatives that connect the residents to their neighborhood, such as community gardens, things to see and experience, places where people come together, enhance the feeling of belonging. It is important that these soft interventions reflect the history and culture of the neighborhood *and* the residents. These soft interventions in the public spaces can seduce people to come together or go for a walk more often. Not from a point of motivation to be more physically active, but from the desire to be part of the neighborhood and join the social initiatives. Because there is something to see, to experience, and others to meet, a stimulation to go outside and be part of the community will result in more active behavior. If these social initiatives are accessible, nearby and inviting, it could be more likely that residents go for a walk or bike ride to join these initiatives.

For these soft interventions to be successful and stimulate more active behavior, participation is key. Involving residents in the initiation and organization of the social initiatives could establish soft interventions that are fitting to the culture and identity of the neighborhood and its residents, which will make success more likely. Participation through placation and partnership, on the ladder of participation by Arnstein (1969), would be ideal for the lower-SES population. This could be established by involving the residents in the planning process in informal ways that speak to the residents, i.e., neighborhood walks, informal gatherings in public spaces, and involving schools. In addition, a spokesperson that represents the voice of the residents could to close the gap between the residents and municipality.

Improving the living environment by planning for soft interventions, established through citizen participation, can stimulate active behavior amongst the lower-SES population. This could enhance the minutes of low to moderate intensive physical activity in an accessible way and in turn creates a more active lifestyle. A more active lifestyle contributes to health improvement and improves the life expectancy for the lower-SES population, in combination with the citizen involvement and the social initiatives this contributes to the desired state of positive health.

5.3 Discussion

The results of this research point out how the planning of the build environment can only stimulate active behavior up until a certain point for the Passive opportunist and Uncomfortable activist but will not result in fundamental lifestyle changes. Social initiatives, however, will most likely indirectly seduce these mentalities to be more active as they want to join in the communal interactions.

This could mean it is important to create spaces in the public area where the social initiatives can take place and to keep these soft interventions in mind during the planning process of the neighborhood. The planning of an environment is not just about green and livable living environments, it is about facilitating social interactions that fit the cultural and historical character of the neighborhood and its residents. Part of the lower-SES population is not consciously motivated to be more active, whilst generally they live 15 years less in good health and have a lower life expectancy by 6 years (Pharos, 2019), therefore it is important to find ways to indirectly stimulate them to become more physically active. Soft interventions, such as facilitating areas fitting for social initiatives and better maintenance of the public spaces, can indirectly and unconsciously result in a more active lifestyle, and therefore improve the health of the lower-SES population.

The literature review and established theoretical framework show how most recommendations and studies on the livable environment focus on 'hard' interventions such as better cycling networks, more greenery and water, and density. From a health perspective, an active lifestyle can be seen as an essential part of positive health, as it improves both mental and physical health. This study contributed to filling the research gaps between stimulating an active lifestyle amongst the lower-SES population and planning the living environment with respect to positive health. An important insight of the research is how social initiatives in the living environment can bring opportunities for indirectly stimulating active behavior. Whilst at the same time positive health for a big part focusses on social interactions, and social wellbeing. The social initiatives in the neighborhoods can contribute to positive health on both the physical as well as social wellbeing aspects.

Jan Gehl (2011) does touch upon the softer sight of planning the living environment, as he writes how socializing and experiencing are important motives for people to visit or pass-through public areas. He implements this by recommending design on a human scale, fitting with the identity of the neighborhood. This research elaborated on these recommendations by Gehl, as it brought insights on the lifestyle, mentality, and active behavior of the lower-SES population and how they can be stimulated via soft interventions and social initiatives fitting to their needs and desires.

Chapter 6. Recommendations and critical reflection

In this last chapter the recommendations that follow from the research are given. Closing the thesis with a critical reflection on the process and results of the research.

6.1 Recommendations

This interpretive research points into the direction of soft interventions in the living environment for stimulating active behavior amongst the lower-SES population. However, before any concrete steps can be taken, further research is recommended.

6.1.1 Recommendations future research

Firstly, it would be recommended to further research the four mentalities that are concluded upon. The four groups are differentiated based on the levels of motivation and ability to be active, which form the first layer of reasoning for these four mentalities and help understand why they perform certain active behavior. However, to understand the mentalities and different lifestyles even more, the indicators as to why the mentalities behave a certain way should be deepened. Understanding their behavior on a deeper level, can facilitate the municipalities with a stronger basis for the interventions in the living environment to stimulate active behavior.

Secondly, it would be recommended to find out in what cooperative way citizens could best be included in the planning process. This research indicates that citizens like to be involved in the planning of their neighborhood on the level of placation (Arnstein, 1969). Which raises the question on how placation can best be achieved amongst the lower-SES population. The respondents gave examples of what ways they wanted to be involved which resonate with placation, i.e., spokesperson that represents the residents, a walk through the neighborhood with the municipality. However, it would be recommended to find if this is the best way to achieve placation, and to go into further detail on how this participation could be achieved. In addition, it would be recommended to find at what percentage of citizen involvement one can speak of a communal neighborhood, with a good citizen foundation for the decision-making process.

Lastly, it would be recommended to explore how the mentalities the Passive opportunist and Uncomfortable activist can be stimulated to be more active. The research shows how the neighborhoods are planned for active behavior quite well. There is room for improvement of the last 10%, like improving maintenance and resting places. Also, the citizen involvement within the planning process leaves room for establishing a more active lifestyle amongst the lower-SES population. However, this research also implicates that the planning of the living environment will only stimulate active behavior up to a certain point and not for all mentalities. Therefore, to stimulate the mentalities that are not influenced by a behavioral friendly environment, the Passive opportunist and Uncomfortable activist, the responsibility of the spatial planner might end and shift towards the responsibility of the residents or maybe toward the healthcare systems within the municipality. It is recommended to further explore in what way these mentalities could be stimulated beyond the planned environment to live a more active lifestyle.

6.1.2 Recommendations municipality Zwolle and Rotterdam

This research revealed that soft interventions, such as social initiatives, will be most effective in stimulating active behavior. On this basis, the main recommendation is to find what social initiatives will stimulate the residents in Holtenbroek and Oosterflank, specifically the ones with low motivation, to become more physically active within the neighborhood. Future research should evaluate the identity, cultural backgrounds, and needs and values for the neighborhood and its residents. This can help develop social initiatives that are fitting for Holtenbroek and Oosterflank and will make them more likely to stimulate active behavior.

In addition, this research indicates that finding ways to make streets less car dominant can improve the overall attractiveness of the neighborhood and make it more pedestrian and cyclist friendly. Therefore, it would be recommended to find possibilities for i.e., carparking at a distance in Holtenbroek and Oosterflank, and study the willingness of residents to walk or cycle a short distance to their car if in turn it will make their streets more livable. Citizen involvement is key in this process, as this study showed some residents highly depend on their car.

Lastly, the research showed that quick wins for stimulating active behavior amongst the lower-SES population would be to enhance maintenance of the greenery and the quality of the path network. Also, tackling any problems with litter will invite residents to go for walks more often but also leaves room for citizen initiatives. Facilitating more resting places within the neighborhood would be recommended to enable people in poorer health conditions to go for walks more.

6.2 Critical reflection

Looking back on this research, certain decisions that were made might have influenced the research in a negative way. In this paragraph, the limitations of this research are elaborated and indications on how they could have been avoided will be given. First, the interview with the expert of the municipality of Zwolle was not conducted in a sufficient way and was therefore left out of the results. The interview should have brought insights in the different lifestyles/mentalities in the neighborhood, and the way the municipality initiates participation. However, the interview evolved into a conversation where the expert explained the structure and plans for the neighborhood. The researcher lost her role as interviewer, which resulted in interesting but irrelevant information with regards to the research and did not contribute to filling any literature gaps. This misstep showed the importance of good preparation and sticking to a (semi-)structured interview guide, as the vision and goal of the interview can easily be lost. Next time, it is important to respectfully guide the conversation back to the topics/questions from the interview guide to gather the needed insights.

Second, the questionnaire was left out of the results; even though the questions were carefully formulated, the results did not add any value to the establishing of the mentalities and lifestyle. The results of the questionnaire were supposed to give insights in the active behavior and underpin the mentalities and lifestyles that showed from the interviews. However, it was impossible to connect these results with the results of the interviews in a valid way, as this became a guessing game. In addition, the interviews showed the active behavior of the respondents in relation to their mentality and lifestyle, which made the questionnaire obsolete.

Third, the interviews generated valuable insights to the lifestyle and mentality of respondents. However, due to the desired timeline for the thesis, it was decided to no longer interview any residents of Rotterdam. This gap in the research was compensated with the focus-group amongst experts, which resulted in valuable insights as well. However, this research aimed to find the mentality and lifestyle of the lower-SES population in Holtenbroek *and* Oosterflank. Furthermore, the number of interviews was limited, and the insights cannot validly state that all types of mentalities and different lifestyles were included. The focus-group showed an example of this shortcoming, as the experts pointed out they believed a fourth mentality should be included. Therefore, if further research is conducted the different mentalities should be further examined by interviewing a valid number of people to deepen the description of the mentalities.

Lastly, the current and desired level of participation is only researched from the perspective of the residents. It would be valuable to see the opinion and desires of the municipality on the current and future level of participation. This is a gap in the research, nevertheless the insights from the perspective of the residents show a good start for participation in the planning process.

References

- Adler, N.E., Boyce, T., Chesney, M.A., Cohen, S., Folkman, S., Kahn, R.L. & Syme, S.L. (1994). *Socioeconomic status and health: the challenge of the gradient*. *American psychologist*, 49(1), 15.
- Ajzen, I., (1991). *The theory of planned behavior*. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Ajzen, I., & Fishbein, M., (2010). *Predicting and changing behavior*. New York: Taylor & Francis.
- Alexandrium. (n.d.). *Openingstijden en informatie*.
<https://alexandrium-shopping-center.klepierre.nl/openingstijden-informatie/#/>
- Alles over sport. (2019). *Kindvriendelijke speel- en beweegroutes*.
<https://www.allesoversport.nl/thema/beleid/kindvriendelijke-speel-en-beweegroutes/>
- Arnstein, S.R. (1969) *A Ladder of Citizen Participation*. *Journal of the American Institute of Planners*, 35:4, 216-224, DOI: 10.1080/01944366908977225
- Atelier GROENBLAUW. (n.d.-a). *Green and blue the basis for a circular city*.
<https://www.urbangreenbluegrids.com/about/green-and-blue/#heading-4>
- Atelier GROENBLAUW (n.d.-b). *Op naar een klimaatactieve stad*.
<https://www.urbangreenbluegrids.com/uploads/Kas-poster.png>
- Atlas.ti, (n.d.). All-in-one research software. Atlas.ti. <https://www.atlasti.com/>
- Aziz, N.F., & Said, I. (2016). *Outdoor environments as children's play spaces: playground affordances*. *Geographies of Children and Young people*. 9. Springer Reference. DOI 10.1007/978-981-4585-51-4_7
- Beenackers, M.A., Kamphuis, C.B.M., Giskes, K., Brug, J., Kunst, A.E., Burdorf, A., & van Lenthe, F.J. (2012). *Socioeconomic inequalities in occupational, leisure-time, and transport related physical activity among European adults: a systematic review*. *Int J Behav Nutr Phys Act* 2012, 9:116.
- Bhandari, P. (2022). *Operationalization – A guide with examples. Pros and cons*. Scribbr.
<https://www.scribbr.com/dissertation/operationalization/>
- Bouchard, C., Blair, S. N., & Haskell, W. L. (2012). *Physical Activity and Health*. Human Kinetics.
- Bureau Buhrs. (n.d.). *BSR en belevingswereldenmethodiek*. Communicatie & gebiedsmarketing.
<https://www.bureaubuhrs.nl/bsr-methodiek-en-belevingswerelden/>
- Bureau KM, (2016). *Prettige plekken – Handboek mens en openbare ruimte*. Aquire Publishing bv, Zwolle. ISBN: 978-90-825482-0-4.
- Bureau Mijksenaar. (2022). *De identiteit voor hubs*. Mijksenaar.
<https://www.fietsberaad.nl/Kennisbank/De-identiteit-voor-hubs>
- Chamberlain, L. (2022). *The surprising stickiness of the 15-minute city*. World Economic Forum.
<https://www.weforum.org/agenda/2022/03/15-minute-city-stickiness/>
- College van Rijksadviseurs. (2020-a). *Naar een schaa sprong op de fiets*. College van Rijksadviseurs.
<https://www.collegevanrijksadviseurs.nl/adviezen-publicaties/publicatie/2020/04/20/naar- een-schaalsprong-op-de-fiets>
- College van Rijksadviseurs. (2020-b). *Naar een gezonde stad te voet*. College van Rijksadviseurs.
<https://www.collegevanrijksadviseurs.nl/adviezen-publicaties/publicatie/2020/05/28/naar- een- gezonde-stad-te-voet>
- CROW. (2021-a). *Ontwerpaanbevelingen fietspad van de toekomst*.
[https://www.fietsberaad.nl/Platform-Veilig-fietsen/dossier/Aanbevelingen-Fietsvriendelijke- infrastructuur/kennisdetail/Discussienotitie-Ontwerpaanbevelingen-fietspad-\(1\)/24944](https://www.fietsberaad.nl/Platform-Veilig-fietsen/dossier/Aanbevelingen-Fietsvriendelijke- infrastructuur/kennisdetail/Discussienotitie-Ontwerpaanbevelingen-fietspad-(1)/24944)
- CROW. (2021-b). *Uitwerking kwaliteitseisen aantrekkelijkheid van looproutes*.
<https://fietsberaad.nl/Kennisbank/CROW-rapportage-Uitwerking-kwaliteitseis-aantrekke>
- CROW. (2021-d). *Dashbord Deelmobiliteit*. CROW-Fietsberaad. [Zwolle]. [Rotterdam].
https://dashboarddeelmobiliteit.nl/?gm_code=GM0193

- Collard, D., Dellas, V., & van den Dool, R. (2018). *Ontwikkelingen buitenspelen bij kinderen in Nederland*. Mulier Instituut.
<https://www.kennisbanksportenbewegen.nl/?file=8623&m=1519306658&action=file.download>
- Daamen, W., Gavriilidou, A., Tem Temi, M. (2022). *Veilig fietsen naar school*. NM-magazine.
<https://www.nm-magazine.nl/artikelen/veilig-fietsen-naar-school/>
- Dutch Information Centre for sports and movement. (n.d.). *Kenniscentrum Sport en Beweging. Beweegrichtlijnen*.
<https://www.kenniscentrumsportenbewegen.nl/producten/beweegrichtlijnen/>
- European Commission. (n.d.). *Developing a cycle network for your city*.
https://transport.ec.europa.eu/transport-themes/clean-transport-urban-transport/cycling/guidance-cycling-projects-eu/planning-cycling-cities/developing-cycle-network-your-city_en
- European Platform on Sustainable Urban Mobility Plans. (2019). *Parking and sustainable urban mobility planning*. European Commission.
https://www.eltis.org/sites/default/files/parking_and_sustainable_urban_mobility_planning.pdf
- Fletcher, J. (2022). *What is the average walking speed?*. Medical News Today.
<https://www.medicalnewstoday.com/articles/average-walking-speed>
- Flick, U. (2002, 2nd edition). *An Introduction to Qualitative Research*. Thousand Oaks: Sage Publications Inc.
- Galliers, R. D., (1991). *Choosing appropriate information systems research approaches: A revised taxonomy*. Bentley University.
https://www.researchgate.net/publication/236143992_Choosing_Appropriate_Information_Systems_Research_Approaches_A_Revised_Taxonomy
- Gehl, J. (2010). *Cities for people*. (134-147, 232-239). Island Press: London. ISBN: 978-1-59726-573-7.
- Gehl, J. (2011). *Life between buildings*. Island Press: London. ISBN: 978-1-59726-827-1
- Gemeente Rotterdam. (2018). *Bestemmingsplan Het Lage Land – Oosterflank*. Planviewer.
https://www.planviewer.nl/imro/files/NL.IMRO.0599.BP1096LLandOosterf-on01/t_NL.IMRO.0599.BP1096LLandOosterf-on01.html
- Gemeente Zwolle. (2019). *Bestemmingsplan Holtenbroek*. Hoofdstuk 3.4 Verkeer.
<https://www.planviewer.nl/bestemmingsplannen/view/NL.IMRO.0193.BP18007-0002?c=20230129114016>
- Gidlow, C., Johnston, L.H., Crone, D., Ellis, N., & James, D. (2006). *A systematic review of the relationship between socio-economic position and physical activity*. Health Education Journal, 65(4), 338-367
- Grigore, E., Garrick, N., Fuhrer, R., & Axhausen, I.K.W. (2019). *Bikability in Basel*. Transportation Research Record 2019, Vol. 2673(6) 607–617. DOI: 10.1177/0361198119839982
- Goodrick, D. (2014). *Comparative Case Studies*, Methodological Briefs: Impact Evaluation 9, UNICEF Office of Research, Florence.
- Google©. (n.d.-a). *Streetview image Alexandrium*. [image].
<https://www.google.com/maps/@51.9478147,4.5544138,725m/data=!3m1!1e3>
- Google©. (n.d.-b). *Streetview image Alexandrium*. [image].
<https://www.google.com/maps/@51.9478147,4.5544138,725m/data=!3m1!1e3>
- Google©. (n.d.-c). *Streetview image Alexandrium*. [image].
<https://www.google.com/maps/@51.9478147,4.5544138,725m/data=!3m1!1e3>
- Google©. (n.d.-d). *Streetview image Alexandrium*. [image].
<https://www.google.com/maps/place/Alexandrium+Shopping+Center/@51.9469071,4.555973,17z/>
- Google©. (n.d.-e). *Streetview image Alexandrium*. [image].
<https://www.google.com/maps/place/Alexandrium+Shopping+Center/@51.9469071,4.555973,17z/>

- Google©. (n.d.-f). *Streetview image Alexandrium*. [image].
<https://www.google.com/maps/place/Alexandrium+Shopping+Center/@51.9469071,4.555973,17z/>
- Google©. (n.d.-g). *Streetview image Oosterflank*. [image].
<https://www.google.com/maps/place/Oosterflank,+Rotterdam/>
- Google©. (n.d.-h). *Streetview image Oosterflank*. [image].
<https://www.google.com/maps/place/Oosterflank,+Rotterdam/>
- Google©. (n.d.-i). *Streetview image Oosterflank*. [image].
<https://www.google.com/maps/place/Oosterflank,+Rotterdam/>
- Google©. (n.d.-j). *Streetview image Oosterflank*. [image].
<https://www.google.com/maps/place/Oosterflank,+Rotterdam/>
- Google©. (n.d.-k). *Maps image Scandinaviëpad*. [image].
<https://www.google.com/maps/place/Oosterflank,+Rotterdam/>
- Groen, I., & Versluys, K. (2018). *Mensen zijn rare wezens* (1ste editie). Fontys Academy for Creative Industries.
- Harvard T.H. Chan. (n.d.). *Examples of Moderate and Vigorous Physical Activity*. Obesity Prevention Source.
<https://www.hsph.harvard.edu/obesity-prevention-source/moderate-and-vigorous-physical-activity/>
- Holland, R., Hope, A. (2010). *Participatory Planning For A Promised Land: Citizen-Led, Comprehensive Land Use Planning in New York's Adirondack Park*. ProQuest Dissertations Publishing.
<https://www.proquest.com/docview/2027444048>
- Humbert, M.L., Chad, K.E., Sprink, K.S., Muhajarine, N., Anderson, K.D., Bruner, M.W., & Gryba, C.R. (2006). *Factors that influence physical activity participation among high- and low-SES youth*. *Qualitative Health Research*, 16(4), 467-483.
<https://doi-org.ru.idm.oclc.org/10.1177/1049732305286051>
- Informatiepunt Leefomgeving. (n.d.). *Overzicht regels participatie bij de instrumenten van de omgevingswet*. Informatiepunt Leefomgeving.
<https://iplo.nl/participatieomgevingswet/participatie-instrumenten/participatie-instrumenten-omgevingswet/>
- Informatiepunt Leefomgeving. (n.d.-b). *Regels over gezonde fysieke leefomgeving in de Omgevingswet*. Informatiepunt Leefomgeving.
<https://iplo.nl/thema/gezonde-fysieke/regels-gezonde/>
- Institute for Positive Health. (2020-b). *My Positive Health*. [Image]. Institute for Positive Health.
<https://www.iph.nl/kennisbank/wat-is-positieve-gezondheid/>
- Institute for Positive Health. (2020). *What is positive health?* Institute for Positive Health.
<https://www.iph.nl/kennisbank/wat-is-positieve-gezondheid/>
- iSALT Team, (2014). *Theory of Planned Behavior*. iSALT Resources: Theories, Concepts, and Measures. 1.
- KIM, (2017). *Mobiliteitsbeeld 2017*. Ministerie van Infrastructuur en Waterstaat.
<https://www.kimnet.nl/mobiliteitsbeeld/publicaties/rapporten/2017/10/23/mobiliteitsbeeld-2017>
- Langie K, Rybak-Niedziółka K, Hubačíková V. *Principles of Designing Water Elements in Urban Public Spaces*. *Sustainability*. 2022; 14(11):6877. <https://doi.org/10.3390/su14116877>
- Lee I.M., Shiroma E.J., Lobelo F., et al. (2012). *Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy*. *Lancet*. 380(9838):219- 229. doi:10.1016/S0140-6736(12)61031-9
- Leung, C. Y. Y., Brenner, L., & Suskind, D. L. (2019). *Parent-directed intervention in promoting knowledge of pediatric nutrition and healthy lifestyle among low-SES families with toddlers: A randomized controlled trial*. *Child: Care, Health and Development*, 45(4), 518–522.
<https://doi.org/10.1111/cch.12682>
- Lo, R. S. H. (2011). *Walkability Planning in Jakarta*. ProQuest Dissertations Publishing.

- <https://ru.idm.oclc.org/login?url=https://www-proquest-com.ru.idm.oclc.org/dissertations-theses/walkability-planning-jakarta/docview/928954938/se-2>
- McCombes, S. (2022). *Case study: definition, examples and methods*. Scribbr.com.
<https://www.scribbr.com/methodology/case-study/>
- Metternicht, G. (2018). *Land use and spatial planning: Enabling sustainable management of land resources*. Springer. <https://doi.org/10.1007/978-3-319-71861-1>
- Miles, M.B., & Huberman, A.M. (1994, 2nd edition). *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks: Sage Publishing Inc.
- Ministry of Health, Welfare and Sports. (2018). *Nationaal Preventieakkoord*. Rijksoverheid.
<https://www.nationaalpreventieakkoord.nl>
- Mirowsky, J. & Ross, C.E., (2003). *Education, Social Status, and Health*. New York: Aldine de Gruyter.
- Moreno, E. (2023). *10 principles of playground design*. Playground ideas.
<https://playgroundideas.org/10-principles-of-playground-design/>
- Motivaction. (n.d.). *Mentality*. Motivaction.
<https://www.motivaction.nl/en/mentality>
- Motivaction. (n.d.-b). *Base model Mentality* [illustration]. Mentality.
<https://www.motivaction.nl/en/mentality>
- Nagy-Bodnar, (2022). *Alexandrium*. [image]
https://lh3.googleusercontent.com/p/AF1QipMasUr_wVMUWHBq1F-G-wbf2p9yS4RpCghY0rGh=s680-w680-h510
- Nared, J. & Bole, D., (2020), *Participatory Research and Planning in Practice*, The Urban Book Series,
https://doi.org/10.1007/978-3-030-28014-7_1
- Nature Publishing Group. (1963). *Positive Health*. Nature, 200, 408-410.
<https://doi-org/10.1038/200408b0>
- Pharos. (2019, juli). *Sociaaleconomische Gezondheidsverschillen (SEGV)*.
<https://www.pharos.nl/factsheets/sociaaleconomische-gezondheidsverschillen-segv/>
- Pharos. (2022). *Begrijpelijke vragenlijst – de basis voor goede zorg*.
<https://www.pharos.nl/infosheets/begrijpelijke-vragenlijsten-de-basis-voor-goede-zorg/>
- Preamble of the Constitution of the World Health Organization (1946). *Official Records of the World Health Organization*, 2, 100.
- Probleemwijk Holtenbroek. (n.d.). *Wat doet de gemeente aan de problemen in Holtenbroek*.
<https://probleemwijkholtenbroek.weebly.com/wat-doet-de-gemeente-aan-de-problemen-in-holtenbroek.html>
- Rapid Science Publishers. (1996). *Socioeconomic Status* (Nr. 7).
<https://link-springer-com.ru.idm.oclc.org/content/pdf/10.1007%2FBF02352728.pdf>
- Refinity. (2014). *BSR-model* [Illustration]. Consumers' perception of recycled fibers.
<https://www.refinity.eu/blog/consumers-perception-of-recycled-fibres>
- Rijksinstituut voor Volksgezondheid en Milieu. (n.d.). *Participatie: inwoners doen actief mee*. Loketgezond leven. <https://www.loketgezondleven.nl/integraal-werken/succesfactoren/participatie>
- Rijksoverheid. (n.d.-a). *Maartegelen overheid tegen overgewicht*. Rijksoverheid.
<https://www.rijksoverheid.nl/onderwerpen/overgewicht/overgewicht-terugdringen>
- Rijksoverheid. (n.d.-b). *Gezonde leefomgeving*. Gezonde Leefomgeving.
<https://www.gezondeleefomgeving.nl/>
- Rijksoverheid. (n.d.-c). *Gezonde mobiliteit*. Rijksoverheid.
<https://www.gezondeleefomgeving.nl/>
- Rijksoverheid. (n.d.-d). *Maartegelen overheid tegen overgewicht*. Rijksoverheid.
<https://www.rijksoverheid.nl/onderwerpen/overgewicht/overgewicht-terugdringen>
- Rongen, T., Tillema, T., Arts, J., Alonso-González, M. J., & Witte, J.-J. (2022). *An analysis of the*

- mobility hub concept in the Netherlands: historical lessons for its implementation*. Journal of Transport Geography, 104. <https://doi.org/10.1016/j.jtrangeo.2022.103419>
- Saunders, M., Lewis, P. & Thornhill, A. (2015). *Research methods for business Students*. Harlow, England: Pearson.
- Seligman, M. E. P. (2008). *Positive Health*. Applied Psychology: An International Review, 57, 3-18. <https://doi.org/10.1111/j.1464-0597.2008.00351.x>
- Scotland, J. (2012). *Exploring the Philosophical Underpinnings of Research: Relating Ontology and Epistemology to the Methodology and Methods of the Scientific, Interpretive, and Critical Research Paradigms*. English language teaching, 5(9), 9-16
- Silvester, (2018). *Shopping mall Alexandrium*. [image]. <https://lh3.googleusercontent.com/p/AF1QipNywl0muZeZGTyev8egWthEILWW7uRVGbsIhQcK=s680-w680-h510>
- SOAB. (n.d.). *Kindlinten in Amsterdam Westerpark*. SOAB. <http://soab.nl/uploads/Mobiliteit/Top%20projecten/Kindlint%20in%20Amsterdam-Westerpark.pdf>
- Sociology Group, (n.d.). *Difference between life chances and lifestyle*. Sociology Group. <https://www.sociologygroup.com/life-chances-lifestyle-differences/>
- Southworth, M. (2005). *Designing the Walkable City*. Journal of Urban Planning and Development, 131(4), 246-257.
- Streefkerk, R. (2022). *Inductive vs. deductive research approach (with examples)*. Scribbr.com. <https://www.scribbr.com/methodology/inductive-deductive-reasoning/>
- Sutmuller, J. & Van Belkom, R. (2014). *Serious concepting: value through values*. Tilburg, Nederland. Fontys Academy for Creative Industries.
- Timney Bailey, M. (1992). *Do Physicists Use Case Studies? Thoughts on Public Administration Research*. Public Administration Review, 52(1), 47–54.
- Tiwari, P., Nair, R., Ankinapalli, P., Rao, J., Hingorani, P., Gulati, M. (2015). *Living Environment*. In: India's Reluctant Urbanization. Palgrave Macmillan, London. https://doi.org/10.1057/9781137339751_5
- Tremblay MS, Aubert S, Barnes JD, et al. (2017). *Sedentary Behavior Research Network (SBRN) – Terminology Consensus Project process and outcome*. Int J Behav Nutr Phys Act. 14(1):1-17. doi:10.1186/s12966-017-0525-8
- UN Habitat. (2014). *Guidelines for public participation in spatial planning*. Municipal spatial planning support programme in Koskovo. <https://Unhabitat-koskovo.org>
- UNESCO MAB (n.d.) *Programme | United Nations Educational, Scientific and Cultural Organization*. <http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/>
- Van Dijk, G. & Marmeleira, J. (2021). *Streets as social places*. ResearchGate. https://www.researchgate.net/publication/351092490_Streets_as_Social_Places
- Van Thiel, S. (2014). *Research Methods in public administration and public management*. Taylor & Francis Books. ISBN: 978-0-415-65581-1
- Veilig Verkeer Nederland. (n.d.). *Ouders, kinderen en verkeer*. <https://vvn.nl/ouders-kinderen-en-verkeer>
- Wang, H. (2001). *01-08-01: An active lifestyle postpones dementia onset by more than one year in very old adults*. Alzheimer's association. <https://doi.org/10.1016/j.jalz.2012.05.245>
- Welser, H. T., Hogan, B., & Titsworth, S. (2011). *Socioeconomic Status Updates*. Information, Communication & Society, 14(4), 529–549. <https://doi.org/10.1080/1369118X.2011.562221>
- Williams, D. R. and Collins, C. 1995. *US socioeconomic and racial differences in health: patterns and explanations*. Annual Review of Sociology, 21: 349–386.
- World Health Organization. (2012). *Health Indicators of Sustainable Cities in the Context of the Rio+20 UN Conference on Sustainable Development*; WHO: Geneva, Switzerland, 2012.
- Zainal, Z. (2007). *Case study as a research method*. Universiti Teknologi Malaysia. Jurnal Kemnesiaan

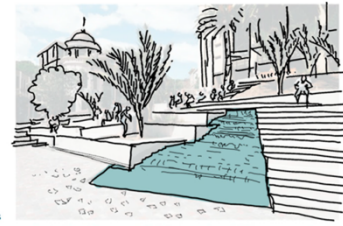
Annex

Annex 1. Exemplification of the 10 types of water elements in urban areas (Langie et al., 2022)



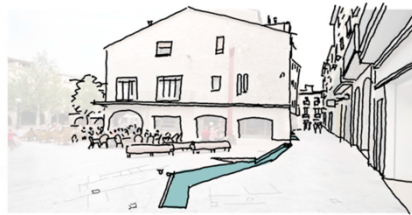
Superkilen
Copenhagen,
Denmark
2007–2012
By: TOPOTEK 1,
BIG Bjarke Ingels
Group, Superflex

Basin fountain					
Exchange Value	Use Value	Image Value	Social Value	Environmental Value	Cultural Value
(+)	++	(+)	+	0	(+)



Freyberg Place
Auckland,
New Zealand
2014-17
By: John Reynolds

Cascade					
Exchange Value	Use Value	Image Value	Social Value	Environmental Value	Cultural Value
(+)	++	(+)	+	+	(+)



Plaza Mayor
Banyoles, Spain
1998-2008
By: Josep Mias
Gifre

Urban trickle					
Exchange Value	Use Value	Image Value	Social Value	Environmental Value	Cultural Value
(+)	++	(+)	+	+	(+)



Foot of Longdale
San Francisco, CA, USA
2014-18
Patkau Architects
/ V.Helton & Assoc.

Pavement fountain					
Exchange Value	Use Value	Image Value	Social Value	Environmental Value	Cultural Value
(+)	++	(+)	+	(-)	(+)



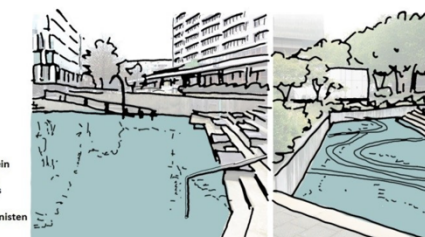
Temporary Pool at
Verona Street,
Bucharest,
Romania
2012
By: studioBASAR

Swimming pool					
Exchange Value	Use Value	Image Value	Social Value	Environmental Value	Cultural Value
(+)	++	(+)	+	+	(+)



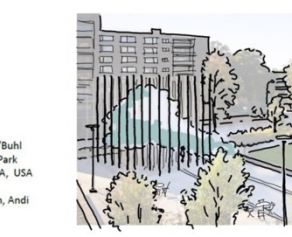
Olympic Handover
Thames River
London, UK
2012
By: NN

2D, 3D Screen					
Exchange Value	Use Value	Image Value	Social Value	Environmental Value	Cultural Value
(+)	++	(++)	+	+	(+)



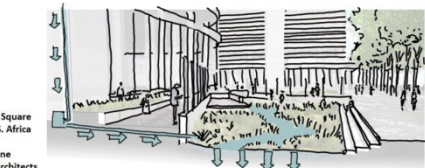
Bentheplein
Rotterdam,
Netherlands
2011-13
By: De Urbanisten

Water square					
Exchange Value	Use Value	Image Value	Social Value	Environmental Value	Cultural Value
(+)	+	(+)	(+)	+	(+)



Cloud Arbor/Buhl
Community Park
Pittsburgh, PA, USA
–2012
By: Ned Kahn, Andi
Cochran

Mist fountain					
Exchange Value	Use Value	Image Value	Social Value	Environmental Value	Cultural Value
(+)	++	(+)	+	(-)	(+)



The Towers
at Merriman Square
Cape Town, S. Africa
2013-16
By: Square One
Landscape Architects

Semi-natural pond					
Exchange Value	Use Value	Image Value	Social Value	Environmental Value	Cultural Value
(+)	+	(+)	+	++	(+)



Waller Park
San Francisco,
USA
2012-15
By: MSLA

Percolation trench					
Exchange Value	Use Value	Image Value	Social Value	Environmental Value	Cultural Value
(+)	+	(+)	+	+/(++)	(+)

Annex 2. Operationalizations

Operationalization ‘Positive Health’

Operationalisation of ‘Positive Health’ based on the model “My Positive Health” by Institution for Positive Health (2020-b).

Objective	Definition	Dimension	Sub-dimension	Indicators + items
Positive	The resilience of people to adjust to life and all it entails, emphasize on what makes live meaningful for someone (Institution for Positive Health, 2020).	Resilience	Dealing with change, knowing your boundaries,	Living situation (daily-structure, activities)
		Prevention	Taking care of yourself, being active, balance in life	Lifestyle
		Meaningful life	Liveliness, thankfulness, acceptance, being happy, doing meaningful things	Someone’s energy, mentality/way of thinking
Health	“Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” (Preamble of the Constitution of the World Health Organization, 1946).	Physical wellbeing	Being fit, feeling healthy, eating pattern, physical activity	Lifestyle
		Mental wellbeing	Communicating, feeling in control, self-acceptance, being happy	Someone’s energy, mentality/way of thinking
		Social wellbeing	Social contacts, being part of something, being together, interest in society	Someone’s network

Operationalization ‘Lifestyle’

Operationalization of ‘lifestyle’ based on the literature presented in chapter 2.1.2.

Objective	Definition	Dimension	Sub-dimension	Indicators + items
Lifestyle	“Creating a clear and accurate view of the target group and the corresponding manifested values and needs as possible” (Sutmuller & Van Belkom, 2014).	Mentality	Reason for behaviour, social environment, social dimension,	Travel behaviour, active behaviour, behaviour in neighbourhood, type of house, household, daily routines
		Values & needs	With respect to work, ambitions, politics, leisure, living standards	Work, leisure activities, living environment, facilities, travel standards, status-sensitivity

Operationalization ‘Active behavior’

Operationalization of ‘Active behavior’ based on the literature presented in chapter 2.1.3.

Objective	Definition	Dimension	Sub-dimension	Indicators + items
Active Behaviour	Can be understood as physical activity; physical activity can help maintain a healthy mind and body and contributes to preventing illness. Can be explained by the Theory of Planned Behavior	Physical activity	Sports, cycling, walking, active mobility	Weekly routine, daily routine, ways of travel, location, destinations, leisure activity
			Theory of planned behavior	The attitude toward behavior
		Subjective norms		Believes, others, social norms
		Perceived behavioral control		Perception, performance, resources, confidence

Operationalization ‘Living environment’

Operationalization of ‘Living environment’ based on the literature presented in chapter 2.1.4.

Objective	Definition	Dimension	Sub-dimension	Indicators + items
Living environment	The living environment is the natural and build environment which is offered to the inhabitants of a certain neighbourhood	Natural environment	Nature	Trees, greenery, parks
		Build environment	Planned environment, streets, housing, neighbourhood,	Cycle paths, pedestrian area, accessibility, public transport connections, density

Operationalization ‘Planning the living environment’

Operationalization of ‘Planning the living environment’ based on the literature presented in chapter 2.1.5.

Objective	Definition	Dimension	Sub-dimension	Indicators + items
------------------	-------------------	------------------	----------------------	---------------------------

Planning [the urban living environment]	The expected spatial developments and how they will be implemented (Government of the Netherlands, n.d.)	Spatial Planning Act (WRO)	Spatial visions, land-use plans, encouragements/nudging	Walkability, bikeability,
		Participatory planning	Collaborative, People-centred, bottom-up	Involvement, willingness, Ladder of citizen participation

Annex 3. Overview of all the codes - interviews (own work via Atlas.ti)

The screenshot shows the Atlas.ti software interface with the following content:

Thesis - interviews

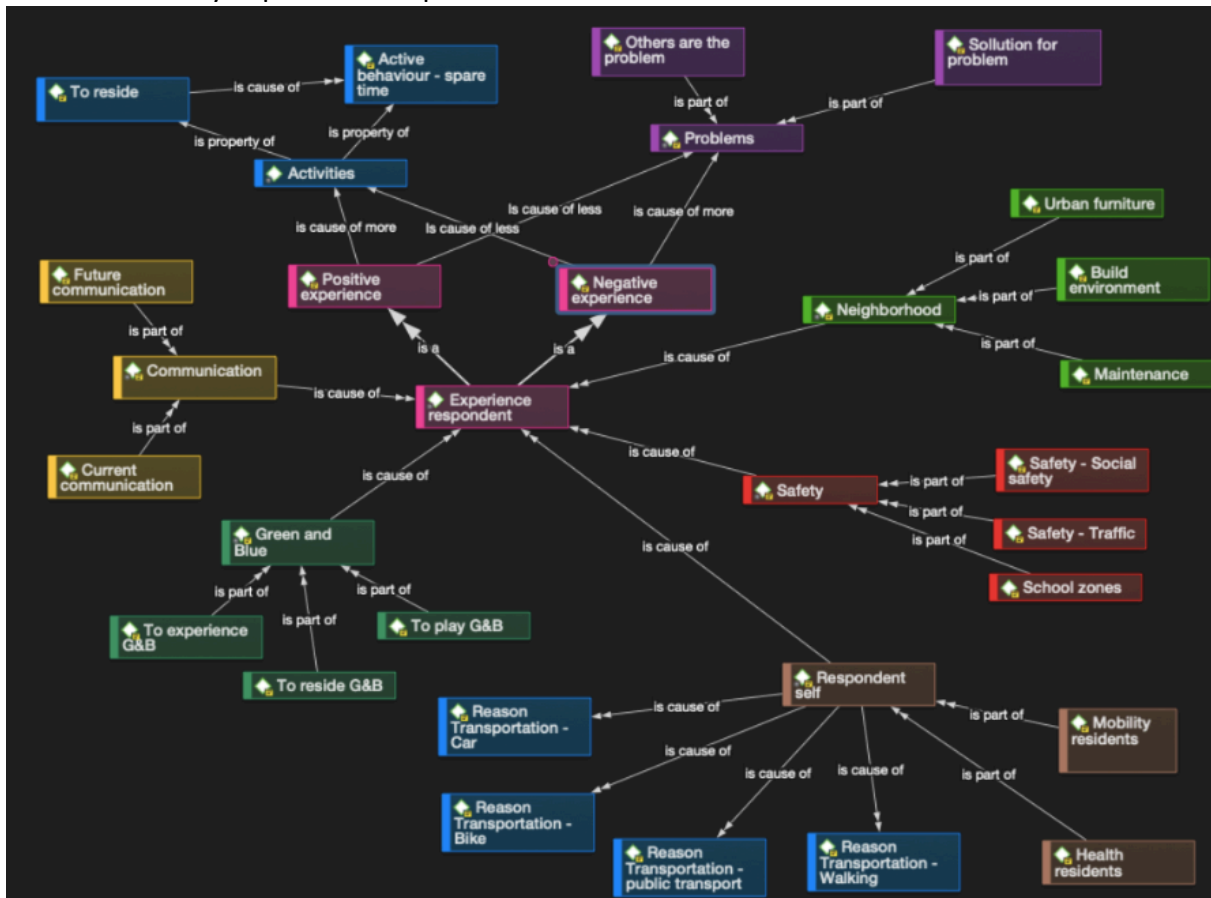
Documents Quotations Codes Memos Networks Insert Quotation Fe

Transcript Respondent 1_.pdf Explanation codes

Helvetica 12 B I U

- 1 **Active behaviour spare time** → The activities (sports, movements, active behaviour) respondents undertake in their spare time. Meaning they are not traveling to work, school, shops etc. They do these for fun.
- 2
- 3 **Reason Transportation (bike, car, public transport, walking)** → Says something about why people choose certain nodes of transportation.
- 4
- 5 **To reside** → Activities that can be categorized as residing, that take place in the public spaces of the neighborhood
- 6
- 7 **Build environment** → When people explain something about the build environment. Gives insights on their perspectives on the housing, buildings, facilities etc.
- 8
- 9 **Maintenance neighborhood** → The way the elements in the neighborhood are maintained. Intonation of the quote says something about the way the neighborhood is viewed (maintained or not)
- 10
- 11 **Urban furniture** → The urban furniture (street furniture such as benches, wastebaskets, lanterns etc.)
- 12
- 13 **Future communication** → Quotes where respondents explain how they would like the Municipality to communicate with them in the future. How participation can be accomplished.
- 14
- 15 **Current communication** → The way the municipality currently communicates with the residents.
- 16
- 17 **To play G&B** → Quote on how children can play within greenery and nearby water in the neighborhood.
- 18
- 19 **To reside G&B** → When people reside in the greenery alongside the water.
- 20
- 21 **To experience G&B** → The way people experience the greenery and water in the neighborhood.
- 22
- 23 **Health residents** → Says something about the health conditions of the respondents.
- 24
- 25 **Mobility residents** → Says something about the way the residents are able to travel via different nodes of mobility
- 26
- 27 **Work description** → What respondents do for work, description of their work.
- 28
- 29 **Negative experience** → The way the respondents experience the neighborhood is negative. Things they don't like in the neighborhood. Negative elements and qualities
- 30
- 31 **Positive experience** → The way the respondents experience the neighborhood is positive. Things they like about the environment.
- 32
- 33 **Safety social safety** → situations where people do not feel socially safe (crime rates, intimidation etc.)
- 34
- 35 **Safety traffic** → traffic situations that are experienced as unsafe
- 36
- 37 **School zones** → situations where school zones are unsafe, children cannot travel to school safely.
- 38
- 39 **Sollution for problem** → quotes where respondents explain how they believe a certain problem could be solved
- 40
- 41 **Others are the problem** → When respondents experience something negative and in their opinion other residents are the cause, they are the problem.

Annex 4. Network 'Theory experience respondents' (own work via Atlas.ti)
 Network 'Theory experience respondents' – Version 1.



Explanation network

The network 'Theory experience respondents' gives an overview of how the different elements the respondents mentioned during the interview (quotes + codes) influence their experience. Their experience being either positive or negative will influence the number of activities in the public spaces and the number of problems with the public spaces.

Theory

How the respondents experience the neighborhood (urban furniture, maintenance, build environment), the green and blue (to play, to experience, to reside) and the safety (traffic, social safety, school zones) influences whether they have a positive or negative experience of the neighborhood. In addition, the health and mobility of the respondent self, influence the way they experience the neighborhood in a positive or negative way. The health and mobility of the respondent influence if and why they would choose to travel by car, public transport, bike or by foot.

Lastly, the way of communicating between the municipality and the residents of Holtenbroek, on how the neighborhood could be improved is crucial in the improvement of the neighborhood: communication in a way the residents experience as positive will most likely give a better view on what the respondents think of Holtenbroek (what situations can be improved, what would they like, etc.). Good communication will result in better participation which will enhance citizen involvement (Rijksinstituut voor Volksgezondheid en Milieu, n.d.).

Annex 5. Interviews with respondents

RESPONDENT 1.

Interview

Date: 25-09-2022
Location: Interview via telephone
Respondent: 37 years, Female
Interviewer: Amber den Otter, Student Master Spatial Planning

Legenda

Interviewer: I
Respondent: R

Pause: (...)
Thinking: [...]
Unclear: {...}
Way of saying: *way*

-
- 1 I: [00:00:00] Even kijken. We beginnen even met een paar korte vragen, die Ook een beetje overeenkomen met
2 de enquête die ik met je heb afgenomen. De enquête was anoniem, dus ik heb niet meer precies terug kunnen
3 halen wat je antwoorden waren dus vandaar vandaag weer een herhaling. Om even te beginnen, in een
4 gemiddelde, normale week, hoe reis je dan naar bijvoorbeeld werk? Geloof dat je van baan was gewisseld, dus
5 ik hoop dat de sollicitatie goed is gelopen.
- 6 R: Nou helaas niet.
- 7 I: Oh dat is vervelend...
- 8 R: Nee, maar ik zou met de bus zijn gegaan. Dus ov ja.
- 9 I: Oké, even kijken dan schrijf ik dat op. En waarom kies je voor het OV?
- 10 R: Omdat ik niets anders heb. Ik heb geen rijbewijs, dus ik kan niet met de auto gaan. En fietsen is wegens
11 gezondheidsredenen een beetje een probleem. Ja, Het is een noodzakelijk kwaad zeg maar. Meestal is het
12 prima. Het kan ook heel [...] Het kan ook heel oncomfortabel zijn.
- 13 I: Ja, want ik kan me voorstellen dat je bijvoorbeeld in de spits reist en dat het dan druk is in de bus.
- 14 R: Ja, als ik naar werk zou zijn zou gegaan, dan was dat in de spits zijn inderdaad.
- 15 En dan is het dus inderdaad heel druk. En met name heel veel studenten. En niks ten nadele van studenten.
- 16 Maar die nemen wel heel veel plek in.
- 17 I: Ja. Ja, dat geloof ik wel. En uhm, nou ja, even hypothetisch dan. Hoe lang zou je dan hebben moeten reizen
18 met het OV?
- 19 R: Nou met die ene baan die ik het liefste zou willen hebben, zeg maar, zou dat ongeveer tien minuten zijn
20 ofzo, naar het station.
- 21 I: Ah oké, dat is eigenlijk heel goed te doen, 10 minuten.
- 22 R: Dat [00:02:00] is heel goed te doen,
- 23 I: En u stapt dan op op beide dichtstbijzijnde bushalte, kan ik me voorstellen?
- 24 R: Ja.
- 25 I: En hoe lang zou u daarnaartoe moeten reizen naar de bushalte?
- 26 R: Nou lopen is dat dan, een paar minuten? Minder dan vijf minuten?
- 27 I: Oké, vijf minuten lopen. En uhm, [...] nou u reist als u dus naar uw werk zou reizen, met de bus. Maar reis je
28 ook wel eens op een andere manier naar andere locaties. Dus bijvoorbeeld, je gaf net al aan dat de auto en
29 fietsen eigenlijk afvallen. Dus dan in dit geval lopend.
- 30 R: Ja lopend zeker wel. Als het kan dan ga ik lopend.
- 31 I: Ja, en waar wandelt u dan naartoe? Onder andere? Dus bijvoorbeeld de supermarkten of cafés?
- 32 R: Bijvoorbeeld naar waar we elkaar toen ontmoet hebben inderdaad laatst bij de supermarkt. Of naar het, ja
33 hoe noem je dat, winkelplein zal ik maar zeggen.
- 34 I: Ja, ja.
- 35 R: Daar bijvoorbeeld. Maar ook andere locaties hoor, maar wel allemaal, meestal wel allemaal binnen de wijk.

36 I: Dus alle voorzieningen zijn op loopafstand voor u.

37 R: Ja eigenlijk wel. Er zijn winkels, er is een dokter, er is een politiebureau. Er is een uh, dat soort voorzieningen
38 zijn er allemaal.

39 I: Ja, dat is wel ideaal.

40 R: Dat is fijn, ja.

41 I: En als we dan kijken naar bijvoorbeeld die wandelingen naar de supermarkt. Of het winkelplein. Dus door
42 de stukjes binnen binnen de wijk. Wat voor momenten in de week en op de dag doet u dat?

43 R: Ja. Bijna elke dag.

44 I: Dus u heeft eigenlijk al best wel wat beweging van het wandelen naar de winkels enzo.

45 R: Ja, zo kun je het ook zien. Het is maar een paar minuten, voor mij, op mijn tempo. Zo een minuut of tien.

46 I: Nou dat is goed te doen, tien minuten wandelen ongeveer.

47 R: Ja zoiets.

48 I: Uhm, even kijken. En uhm nou ja, u reist zelf niet met de auto. Maar als je dan bijvoorbeeld bij het
49 winkelcentrum aankomt te voet. Wat vindt u dan van het aantal parkeermogelijkheden voor auto's?

50 R: Nou die zijn er wel, uh er is wel een vrij grote parkeerplaats. Dus die zijn er wel, voldoende parkeerplaatsen.
51 Dus die zijn er voldoende zeg maar.

52 I: Als we [00:05:00] naar de wandeling kijken. Dus u wandelt naar het winkelcentrum. En wat vindt u dan van
53 de route die u wandelt? Vindt u dat een prettige route of of zijn er dingen die u opvallen of die u juist heel
54 vervelend vindt of heel fijn?

55 R: Uh als ik te voet ga, dan moet ik kiezen uit twee mogelijke routes. Uh de ene route is wat meer natuurlijk.
56 Dus dat vind ik eigenlijk de fijnste route. En een andere route is, he [...] Ja, dat ligt er dan aan waar ik dan
57 precies naartoe moet, natuurlijk. Welke route ik neem. De andere route is wat, dat is, dat zijn gewoon dat is
58 langs het een bejaardenhuis, zeg maar. Ik weet niet dat hele grote gebouwen maar...

59 I: Oké.

60 R: Dus, dat is wat minder natuur.

61 I: Ja. En waarom zou je de ene keer voor de ene route en de andere keer voor de andere route [00:06:00]
62 kiezen?

63 R: Het ligt een beetje aan waar ik zin in heb. Laat ik het zo zeggen. En, uh als ik de route neem via het
64 bejaardenhuis, dan is dat dan kom ik dicht bij de bushalte uit.

65 I: Dus dat is uh, eigenlijk de snelste route naar de bushalte?

66 R: Dat is de snelste route naar de bushalte, ja.

67 I: En bij de eerste route, de fijnste route, gaf u, gaf u aan dat het de fijnste route is omdat er uh, veel natuur is.
68 En wat voor natuur heeft u het dan over?

69 R: Uhm er is een soort parkje, en uh ja veel bomen.

70 I: Ja, veel bomen.

71 R: In de zomer is dat prettig want dan heb je ook veel schaduw ook.

72 I: Dat is afgelopen zomer natuurlijk heel fijn geweest.

73 R: Ja, dat was wel fijn ja.

74 I: En [00:07:00] uhm, die natuur dus, die parkjes en de bomen. Is er ook nog ruimte voor verbetering of iets dat
75 je eventueel mist? Of is het eigenlijk al uh, voldoet het al aan je wensen?

76 R: Nou ik vind het, ja nee, ik zou niet... nee ik mis eigenlijk niet echt wat.

77 I: Oké, nou dat is heel goed natuurlijk. Dat is super. Ik typ het even mee. En ja, je vertelt net al dat je dat je dus
78 wandelt, uh, naar de supermarkten. En maar wandel je bijvoorbeeld ook wel eens, uh, voor je plezier? En dat je
79 niet per se een specifieke bestemming hebt.

80 R: Nou eigenlijk niet, nee. Ik ben eigenlijk [...] nee. Ik wandel altijd eigenlijk wel ergens [00:08:00] naartoe.

81 I: En uh is er een reden voor dat je niet wandelt in je vrije tijd? Heb je daar geen behoefte aan of beweeg je al
82 voldoende?

83 R: Uh ja uh [...] ik heb niet altijd uh [...] Ik heb gezondheidsklachten en ik heb niet altijd een goede dag zal ik
84 maar zeggen. En ik doe dan liever, als ik wil bewegen, doe ik liever wat anders. Want ik vind wandelen niet zo
85 erg leuk. *lacht*

86 I: Oké dat is uh, dat kan ook natuurlijk. Ik typ het heel even mee. En uhm je doet liever iets anders zeg je dan,
87 om te bewegen. Uhm, wat dan bijvoorbeeld?

88 R: Uhm er is vlak bij mij in de buurt een sportschool. Onder het bejaardenhuis daar, op de begaande grond.
89 Daar ga ik wel naar toe. En uh, naja dat eigenlijk wel. En ik ga dan liever naar de sportschool. [00:09:00] Ik denk
90 toch. Het is niet alleen een sport gewoon. Daar heb je toch meer afwisseling.

91 I: Meer afwisseling. En hoe vaak in de week. Gaat u naar de sportschool?

92 R: Ik probeer twee keer in de week minimaal te gaan

93 I: En hoelang gaat u dan?
94 R: Nou zeg uhm, drie kwartier, een uur...
95 I: En hoe intensief sport u dan? Kunt u daar iets van zeggen?
96 R: Niet zo intensief. Ik sport heel rustig. Maar vanwege diezelfde gezondheidsklachten. Ja is het niet heel
97 verstandig om heel [00:10:00] intensief te sporten. Maar ik moet wel in beweging blijven dus daarom ga ik er
98 wel naartoe. Ja.
99 I: Nou, dat is ook mooi dat u zich daar zo bewust van bent.
100 R: Ja, dat moet ook wel want anders dan wordt dat wel artsen en behandelaren en dergelijken uh... die maken
101 je daar wel bewust van hoor.
102 I: Even kijken. En dan als u wandelt door Holtenbroek. We hadden net al die specifieke routes, maar we nemen
103 het nu even wat breder op de hele wijk. Wat vindt u dan van het groen en de bomen, het gras, de planten en
104 ook van het onderhoud van het groen?
105 R: Uh, er zijn voldoende bomen en gras en planten en dergelijken. Er is voldoende groen in de wijk, uhm (...).
106 Ik vind zelf dat het onderhoud wel wat [00:11:00] beter kan.
107 I: En wat bedoelt u dan? Wat zou er dan specifiek beter kunnen aan het onderhoud?
108 R: Bijvoorbeeld uh [...] Er is bijvoorbeeld veel afval. Dus dat het afval beter opgeruimd wordt. Ja ik weet niet
109 hoe praktisch dat daarop te lossen is. En dat het afvalt dus beter opgeruimd. Zou worden. Ja. En ja, veel uh (...)
110 ja, dat eigenlijk dus met name het afval dat is wat mij wel opvalt.
111 I: En dat afval, is dat dan zwerfafval dat iemand langs de prullenbak heeft gegooid? Of gewoon niet eens in de
112 buurt van een prullenbak?
113 R: Ja dat idee, ja. Nee, ik denk, er zijn ook heel veel scholen. Dat ik denk dat het heel veel jeugd is. Ja.
114 [00:12:00]
115 I: En maar, bijvoorbeeld ook als je het hebt over afval. Zijn dat dan ook ondergrondse containers, die
116 gebruiken ze geloof ik ook in Holtenbroek hé?
117 R: Ja. Klopt.
118 I: Dat die uh te weinig geleege worden, of dat niet?
119 R: Nou, dat valt wel mee eigenlijk. Ondergrondse container zijn niet voor als je er even langs komt lopen en dat
120 je dan wat weg moet gooien. Daar moet je dan met een pasje erbij kunnen.
121 I: Precies.
122 R: Ik heb hier zelf ook bij mijn huis zo'n uh ondergrondse.
123 I: Ja, dat is wel ideaal natuurlijk.
124 R: Op zich is het heel fijn want uh, je kan erop zich elke dag wel je vuilniszak weggooien. Maar uhm, ja wat ik
125 zeg, voor voorbijgangers is dat niet uh dan niet handig. Dan moeten er eigenlijk toch ook nog prullenbakken
126 zijn.
127 I: Oké, dus misschien dat er dan ook inderdaad te weinig prullenbakken in de omgeving staan? [00:13:00]
128 R: Wel ja, dat zou kunnen, ja. In ieder geval bij mij in de straat staat een ondergrondse container maar er staan
129 ook twee prullenbakken.
130 I: En we hadden het net even over het onderhoud en uh van het groen vond u dat voldoende. Maar hoe zit dat
131 bijvoorbeeld met de staat van onderhoud van bijvoorbeeld de voetpaden?
132 R: Oh prima, ja hoor. Daar is mij nooit uh, daar is mij nooit iets van opgevallen.
133 I: En uhm, u fiets niet. Maar misschien is u iets opgevallen aan de fietspaden. Zijn die ook goed onderhouden?
134 R: Ja, volgens mij gaat dat wel goed?
135 I: Nou, dat is heel fijn, dat gaat dan prima. En Holtenbroek heeft natuurlijk ook een uh [...] Ligt aan het Zwarte
136 [00:14:00] water. En heeft ook tegenover het winkelcentrum bij het Groene assenkruis zoals dat geloof ik heet,
137 een stukje water liggen. En, uhm hoe ervaart u dat water? Vindt u dat fijn? Maakte u daar gebruik van?
138 Wandelt u daarlangs bijvoorbeeld?
139 R: Ik ga... ik ga echt nooit naar het zwarte water. En dat anderen dat [...] Je bedoelt daar die vijver?
140 I: Ja, ja, precies,
141 R: Ja, dat vind ik heel mooi. Helemaal als je als je als het goed weer is, dan kun je daar ook zitten.
142 I: Gebeurt dat ook, dat mensen inderdaad aan het water gaan zitten?
143 R: Ja, dat gebeurt wel, ja. Op de bankjes, maar die zijn er maar een paar.
144 I: En wat doen ze dan? Als ze daar heen gaan?
145 R: Nou, ze gaan niet picknicken, daar is ook niet echt de ruimte voor. Ja, misschien een beetje. Nee, daar is het
146 niet echt geschikt voor. Ja. Sommige mensen lopen er langs met de kinderwagen en een ander wandelt er met
147 de hond. Ja dat soort dingen. Maar picknicken heb ik nog nooit gezien.
148 I: Nee. [00:15:00] Dus mensen passeren het water. Maar ze gaan niet per se in het gras zitten of zo?

149 Ja, de mensen gaan dan op de, er staan bankjes bij. Dus dan ja gaan ze op zo'n bankje zitten. En dan laten ze de
150 hond rondlopen. Ja. Of ze staan daar met de kinderwagen?

151 **I:** Ja, uhm en als u verder denkt aan de wijk Holtenbroek. Schiet u dan ook dingen te binnen die de die de wijk
152 aantrekkelijker zouden kunnen maken? Of die ervoor zouden kunnen zorgen dat mensen wat vaker een
153 wandelingetje zouden maken bijvoorbeeld?

154 **R:** Nou, op zich vind ik eigenlijk dat er al heel veel gedaan wordt. Maar ik weet niet uh want jij zegt van het
155 opknappen van Holtenbroek uh op zich gebeurt er al best wel veel. Bijvoorbeeld gisteren was het
156 Holtenbroekfestival. [00:16:00] Dat is een heel groot festival hier in de buurt. En dan denk ik ja dat is toch wel
157 heel leuk. Voor de... uh dat de mensen elkaar ontmoeten en dergelijke. En in mei was er een project ook vlak
158 bij het winkelcentrum. En dat was ook goed, dat hielp daar ook bij bijvoorbeeld. Dus ja, ik (...) dat soort dingen
159 helpen dan al heel erg. Helpt wel heel erg dat er iets gebeurde in Holtenbroek waar andere mensen naartoe
160 kunnen gaan. Maar het is meer werk voor het wijkcentrum om dat soort dingen dan ook bekend te maken bij
161 de mensen.

162 **I:** Want als ik dat zo hoor, zeg jij dat een soort evenementen en plekken waar mensen elkaar kunnen
163 ontmoeten, bijdragen aan een prettige sfeer in de wijk?

164 **R:** Ja, precies.

165 **I:** En u zegt net dat het de [00:17:00] wijkcentrum daar dat goed bekend moet maken. Heeft u het idee dat niet
166 iedereen op de hoogte is van dit soort?

167 **R:** Ja, dat idee heb ik. Sterker nog ik was er zelf niet echt heel goed van op de hoogte. Ik heb daar... ik ken
168 toevallig iemand die dat weet. Iemand die daar werk voor gedaan heeft ook, voor een festival dan. Dus die
169 heeft dat laten weten. Maar in principe als dat niet was gebeurd had ik dat nooit, had ik het niet op een andere
170 manier geweten.

171 **I:** Nee, oké, dus via via begreep u dat het uh (...)

172 **R:** Ja toevallig via via, of via een groepsapp ook nog werd dat doorgegeven. Maar ja wat ik zeg, anders dan had
173 ik het ook echt niet geweten.

174 **I:** Ja dat is toch zonde inderdaad als mensen op die manier uh niet kunnen aansluiten omdat ze niet op de
175 hoogte gesteld worden.

176 **R:** Ja precies! Dus ik denk dat dat wel heel erg bijdraagt aan de, aan de sfeer in de wijk. Ja Holtenbroek staat
177 niet zo heel goed bekend dus ja, het is wel belangrijk denk ik. Ik woon er trouwens al twintig jaar na volle
178 tevredenheid hoor.

179 **I:** Dat is al een hele tijd inderdaad, Als het niet zou zijn bevallen was u misschien al lang vertrokken. Dus dat
180 zegt [00:18:00] zeker iets.

181 **R:** Ja daarom, daarom. Dus nee dat gaat wat mij betreft heel goed.

182 **I:** Nou dan komen we eigenlijk alweer bij de laatste vraag, dus we gaan behoorlijk vlot.

183 **R:** Ja dat gaat snel, dat gaat goed.

184 **I:** Nou zoals ik daarnet dus al zei uhm, is de gemeente Holtenbroek, uh is de gemeente Zwolle aan het
185 nadenken over het opknappen van Holtenbroek en er zijn nog geen serieuze plannen maar uhm, Ze zijn
186 gewoon, ze willen gewoon eens peilen bij bewoners of er eventueel uhm, ja uh, behoefte is aan bepaalde
187 andere opknapp dingen in de buurt. En stel dat de gemeente met bewoners wil mee... Wil vragen of bewoners
188 willen meedenken over het opknappen van de buurt, hoe denk je dat de gemeente dat het beste aan kan
189 pakken? Op welke manier zijn [00:19:00] bewoners bereid om mee te denken aan deze plannen?

190 **R:** Uh [...] sjah, uhm, Ik zit even na te denken over de manieren waarop het zou kunnen. Ik denk toch dat
191 gewoon uhm... Want ja via email is gewoon [...] is dat niet handig want ja je hebt gewoon niet alle
192 emailadressen. Uhm (...) Ik denk toch dat het via iets in de bus zou moeten, via papieren post zeg maar.

193 **I:** Ja, dus dat mensen worden uitgenodigd via uhm (...)

194 **R:** En via het wijkcentrum zou het ook kunnen. Sterker nog ik ben in het wijkcentrum al eens uitgenodigd voor
195 iets, alleen ik heb er nooit meer wat van terug gehoord. Ik zou meewerken aan het [...] Mijn straat zou een
196 speelstraat worden, En uhm daar kan je dan als bewoner over meepraten. Alleen ja ze hebben een heel
197 evenement georganiseerd [00:20:00] om mensen te werven. Maar vervolgens geef ik me op en hebben ze
198 nooit meer wat terug uh, nooit meer wat laten weten. Dus dat Als je dan mensen vraagt en die geven zich op,
199 jij niet hoor de gemeente, uhm laat dan ook wat terug horen. Want anders denken mensen nou bekijk het
200 maar het gaat blijkbaar niet door weet je.

201 **I:** Want hoelang was dat geleden ongeveer denkt u?

202 **R:** Uhm een paar maanden, dit jaar nog.

203 **I:** Oh ja, dat is inderdaad wel uhm. Lang dan zou u inderdaad al wel wat gehoord moeten hebben.

204 **R:** Ja lijkt me wel, maar uhm ik heb nog niets gehoord.

205 **I:** Nou misschien dat het nog komt maar uhm inderdaad fijn om eerder iets te horen. En als we het dan hebben
206 (...) U noemt uitnodigen via een briefje in de brievenbus en via het wijkcentrum, en mensen geven zich op
207 houdt ze dan ook op de hoogte van hoe het verder loopt. Uhm, maar stel dat mensen dan dus [00:21:00]
208 worden uitgenodigd voor zo'n middag of avond om echt samen om de tafel te gaan zitten, en te gaan praten
209 over de mogelijkheden. Hoe zou zo iets er dan uit moeten zien volgens u?
210 **R:** Uhm dat weet ik niet
211 **I:** nee...
212 **R:** Nee dat weet ik niet, ze hebben dat toen gedaan, de laatste keer dat ik bij zo iets was, hebben ze gedaan via,
213 naar allerlei mensen die uhm informatie gaven en waar je dan op mocht reageren, zeg maar. Maar ja wat ik dus
214 net zeg, dan geef je je op en dan laten ze niets terug horen. Dus ja dat vind ik een beetje een lastige.
215 **I:** Oké, misschien kan ik even een aantal situaties schetsen en dan kan u misschien uw mening geven daar over.
216 Dus bijvoorbeeld uhm, dat ze met de buurt verzamelen, iedereen die aan wil sluiten op een plek bijvoorbeeld
217 bij het winkelcentrum en dan samen een wandeling maken door de buurt om te bespreken hoe de buurt er uit
218 ziet wat eventueel anders zou kunnen, beter zou kunnen. Zo dat je echt [00:22:00] met z'n allen ter plekke kunt
219 bespreken hoe dingen ervoor staan en hoe het eventueel beter zou kunnen. Zou dat een optie zijn?
220 **R:** Ja dat zou kunnen, dat vind ik een goede optie. Want dan zie je ook voor je waar het over gaat zeg maar.
221 **I:** Ja precies, dan weet je ook zeker dat he het over dezelfde situatie hebt.
222 **R:** Ja, dat lijkt me heel fijn.
223 **I:** Of bijvoorbeeld, een informatieavond uhm, waar ook ruimte is voor discussie en inspraak inderdaad,
224 bijvoorbeeld in het wijkcentrum. Zou dat ook een optie zijn?
225 **R:** Ja, dat is zoals ik net zei. Dat wekt wel goed denk ik.
226 **I:** En welke van deze opties lijkt u dan prettiger en toegankelijker?
227 **R:** Nou de wandeling lijkt me wel een fijne manier om het met elkaar te hebben over de wijk. Dus ik denk dat
228 dat goed zou werken. Want je hebt natuurlijk in de wijk [00:23:00] ook wel dat er veel allochtonen, allochtonen
229 Nederlanders wonen en dan heb je ook dat mensen misschien niet zo goed durven te zeggen wat ze vinden op
230 zo'n avond dat men samen komt.
231 **I:** Ja
232 **R:** Vanwege hun Nederlands.
233 **I:** Ja precies, en dat is toch zonde terwijl als je ze één op één kunt spreken tijdens zo'n wandeling dan komt er
234 misschien meer naar voren.
235 **R:** Ja dan zou je misschien uh zo'n wandeling moeten doen en dan meerdere mensen van de gemeente of van
236 het wijkcentrum wat dan ook. Dat je gewoon inderdaad met iemand één op één kunt spreken. Dat er niet een
237 persoon is die leidt en iedereen maar achteraanloopt, maar dat je ook daadwerkelijk tijdens het wandelen met
238 mensen kan praten. Dat mensen ook beter durven denk ik [00:24:00] dan.
239 **I:** Ja, dat kan ik me voorstellen.
240 **R:** Ja, ik ook.
241 **I:** En uhm, ik weet niet of je hier iets over zou willen of kunnen zeggen, maar uhm bijvoorbeeld laatst dat de
242 gemeente had gevraagd of u wilde mee denken over de speelstraat. U heeft toen gezegd dat u graag mee wilde
243 denken. Heeft u er kijk op of andere buurtbewoners daar ook voor openstaan?
244 **R:** Ja ik heb uh, je moest je opgeven op een lijst en uhm daar stonden ook anderen op inderdaad. Dus de buurt
245 bewoners die willen wel op zich.
246 **I:** Oké, dat is heel positief. Uhm, we hebben al mijn vragen besproken. Bedankt voor je prettige uitleg. Wilde je
247 zelf nog iets toevoegen, of had je misschien nog een vraag?
248 **R:** Nee, eigenlijk niet, [00:25:00] nee hoor.
249 **I:** Nou dan wil ik je heel erg bedanken voor je bijdragen en je tijd. Dan stop ik nu de opname.

RESPONDENT 2.

Interview

Date: 25-09-2022
Location: Interview via telephone
Respondent: 34 years, Female
Interviewer: Amber den Otter, Student Master Spatial Planning

Legenda

Interviewer: I
Respondent: R

Pause: (...)
Thinking: [...]
Unclear: {...}
Way of saying: *way*

-
- 1 I: [00:00:00] Dan ga ik gewoon beginnen. Uhm ik heb daarbij eerst een aantal vragen die overeenkomen met die vragen die
2 we hebben besproken tijdens de enquête twee weken geleden. En dat is even om weer een beetje op te pakken hoe het
3 ook alweer zat. En dan gaan we vanuit daar gewoon verder. En dus in eerste instantie was ik benieuwd hoe je naar je werk
4 reist.
- 5 R: Ja, ik werk dan vijf dagen in de week en vier dagen daarvan uh, met de fiets en een dag wel met de auto.
- 6 I: En waarom vier dagen met de fiets en een dag specifiek met de auto?
- 7 R: Omdat ik op donderdag ook een nachtje die op dezelfde school zit als mijn zoontje, dus dan moet ik hen allebei naar
8 school brengen en dat is een beetje lastig met hen beiden op [00:01:00] de fiets, ze zijn allebei 5. Dus het is voor mij
9 praktischer als ik hen samen met de auto naar school breng en dan doorrijdt naar werk.
- 10 I: Ja dat snap ik... En uhm, de dagen dat je op de fiets gaat, waarom kies je dan juist bewust voor de fiets?
- 11 R: Uhm ja om meerdere redenen. Ik werk, nou ja zegt jou misschien niet zoveel, maar bij het ziekenhuis van Zwolle. En het
12 is voor mij praktischer om met de fiets te gaan want het is zelfs sneller ook dan met de auto. Daarnaast ook in de tijd van nu
13 de benzine kosten, besparing en ja voor de visite. Ik heb zit werk zoals ze dat noemen. Dus dan heb ik in ieder geval ook wat
14 beweging voor de dag.
- 15 I: Ja, oké dus je maakt ook wel echt bewust de keuze, een hele boel redenen, maar een van de redenen die je dus echt
16 noemt is ook om de beweging er meteen bij te hebben.
- 17 R: Ja inderdaad, ja. [00:02:00]
- 18 I: En hoe lang moet je reizen naar je werk?
- 19 R: Ja, het is wel uh 15 à 20 minuten fietsen.
- 20 I: Ja, dat is goed te doen. Maar het is ook niet niks.
- 21 R: Nee, precies, het is niet even om de hoek. Maar het is prima te fietsen.
- 22 I: En als je met de auto reist, hoe lang ben je dan onderweg?
- 23 R: Ja dat is natuurlijk afhankelijk van hoe druk het op de weg is, maar dat is uiteindelijk ook ja 10 tot 15 minuten.
- 24 I: Oké, dat scheelt dan dus niet zo heel veel meer. En uhm, als je ook kijkt naar andere bestemmingen, zoals bijvoorbeeld de
25 supermarkt maar ook scholen of juist recreatieve bestemmingen. Hoe reis je dan? Ga je dan ook bijvoorbeeld lopend of
26 met het openbaar vervoer.
- 27 R: Uhm, openbaar vervoer moet ik zeggen dat ik daar al heel lang geen gebruik van heb gemaakt. Uhm maar wel lopen, dat
28 doe ik wel veel heel veel lopen zelfs. En fietsen, en ja als ik echt grote boodschappen nodig heb of als ik op verschillende
29 plekken boodschappen moet doen dan uh neem ik wel de auto.
- 30 I: Ja dus dan kies je voor de auto omdat het ook gemakkelijk is met het sjouwen.
- 31 R: Ja precies, met het sjouwen.
- 32 I: Uhm en als je dus bijvoorbeeld gaat lopen, hoe lang wandel je dan, en waarom kies je er dan voor om te wandelen?
33 [00:03:00]
- 34 R: Nou uhm ik heb dus een zoontje van 5 jaar, en vooral weekenden, hij moet zijn energie kwijt en ik vind het gewoon ok
35 belangrijk dat hij veel buiten is dus dan is het wandelen. Ja ik woon dicht bij het winkelcentrum dus dan gaan we vaak
36 richting de kinderboerderij daarzo bij het water dus dat zijn vaak ook wat langere afstanden. Ja zodat hij beleving krijg en
37 natuur en ook weer een combinatie denk ik, nu ik dit zo aan jou vertel, denk ik dat zijn wel bewuste keuzes. Zodat hij lekker
38 buiten is lekker in de modder, lekker spelen. We stoppen ook vaak voor blaadjes ofzo net at we allemaal tegenkomen.
- 39 I: Ja dus je wilt hem ook bepaalde waarden meegeven?

40 **R:** Ja en ik vind het zelf ook lekker.

41 **I:** En je zei al, dan maak je wel wat langere wandelingen. Hoe lang ben je dan zoal onderweg?

42 **R:** Nou in de zomer de wandelingen die we nu dan maken, zijn de wandelingen wel minimaal een half uur, dat kan soms ook

43 wel met het mooi weer, dan zijn we soms wel anderhalf uur aan het lopen met tussen door even stoppen en even zitten,

44 dan waren we zo wel anderhalf uur van huis.

45 **I:** Nou dus ook als het mooi weer is dan is dat extra fijn. En als je dan dus zo'n wandeling maakt door de wijk. Wat zijn er

46 dan dingen aan het groen die je opvallen? Zij neer bijvoorbeeld dingen die er ontbreken, die je graag zou zien in de wijk of

47 ben je eigenlijk heel tevreden.

48 **R:** Uhm, het is heel wisselend in welk gedeelte van Holtenbroek je loopt. Je hebt delen waar het heel groen is en waar je

49 mooi kan lopen. Maar je hebt ook delen waar het niet zo groen is en waar je [...] daar [00:04:00] valt er weinig te beleven

50 vanuit het oogpunt van een kind bijvoorbeeld of zelfs vanuit volwassenen.

51 **I:** En als je kijkt naar het goede deel, wat vind je daar dan zo fijn?

52 **R:** Nou ja je hebt dus een deel dicht bij het winkelcentrum, met name een pad dat super groen is, van beiden kanten

53 bomen. Dat is eigenlijk van mij en mijn zontje favoriete deel om te lopen. Groot deel, beiden kanten bomen, dat loopt

54 heel lekker. En dan bij de kinderboerderij, daar is het ook mooi groen. Maar je hebt ook dus een deel van Holtenbroek,

55 Oude Holtenbroek. Ja dat zijn alleen van die flats, en een paar appartementen, een kleine speeltuin voor de kinderen en

56 that's it. Met weinig groen. (...)

57 **I:** (...) En zie je daar wel ruimte voor dat groen? Of is [00:05:00] het er ook niet, is er geen openbare ruimte waar dat

58 gecreëerd kan worden?

59 **R:** Jawel, ja zeker wel.

60 **I:** Dus er is ruimte maar er wordt niets mee gedaan?

61 **R:** Ja precies, er wordt niets mee gedaan.

62 **I:** Waar ik dan verder nieuwsgierig naar ben is uhm, de staat van het onderhoud van bijvoorbeeld de voet en fietspaden. Of

63 die bijvoorbeeld, uh of de tegels bijvoorbeeld goed liggen. Of de fietspaden goed geasfalteerd zijn, dat soort dingen?

64 **R:** Uhm [...] Op zich wel, dat is op zich prima. Maar dat is [00:06:00] ook weer afhankelijk van het deel. Want als je kijkt waar

65 bijvoorbeeld mijn zontje op school zit. Dat is ook weer zicht bij het winkelcentrum. Ja daar zou er wel wat meer aandacht

66 aan besteed mogen worden, maar dan is het ook weer in het kader van groen ook. [00:07:00] Maar ook een stukje

67 veiligheid. Met uh, ja dat zit er ook in. Daar is wel nog vrij veel aandacht nodig. Dat ligt ook een deel bij de gemeente, maar

68 dat is al jaren zo, maar dat is nog steeds niet opgepakt. Er zijn daar een aantal scholen naast elkaar, maar vooral dan een

69 school dat is dan de vrije school van Holtenbroek waar kinderen dus fietsen, waar kleine kinderen lopend zijn. En je hebt

70 dat best wel drukte met verkeer, maar weinig echt uh, [00:08:00] geen zebrapad of wat dan ook. Dat stukje van

71 Holtenbroek vind ik echt wel belangrijke aandacht nodig hebben [...] En ook uh, als we het hebben over groen en echt dat

72 het goed aangepakt is. Ook achter die scholen, dat zijn naar mijn mening ook plekken die echt aandacht mogen hebben.

73 Kijk je hebt groen, maar je hebt ook groen waar ook daadwerkelijk gespeeld kan worden, en dat er bomen groeien en

74 planten en noem maar op [00:09:00].

75 **I:** Want uh, ja dat noemen ze ook wel verblijfsgroen, denk ik waar je op doelt. Dus niet groen alleen waarbij het leuk is om

76 doorheen te wandelen, maar ook groen waar je echt even kunt verblijven, dat uitnodigt om te spelen of even te zitten. Dat

77 soort groen bedoel je dan denk ik?

78 **R:** Ja. Ja precies.

79 **I:** Uhm, en je noemde net ook even veiligheid. En toen vertelde je over de straat rondom de school die eigenlijk heel erg

80 druk is met weinig zebrapaden. [00:10:00]

81 **R:** Ja

82 **I:** Dus als ik dat goed begrijp zijn dus vooral met name ook de oversteekpunten een risicovol stukje? Of zijn er ook andere

83 onveilige situaties.

84 **R:** Ja, nee. Vooral rondom de scholen, maar ook het winkelcentrum. Want je hebt toch wel bij het winkelcentrum heb je

85 twee zebrapaden, eentje aan de voorkant en dan een aan de achterkant. Maar je hebt ook delen bijvoorbeeld bij die

86 snackbar, aan de andere kant. Die oversteek wordt heel vaak gemaakt, dat stuk wordt heel veel gebruikt. Maar er is altijd

87 wel een soort van onveilig. Je hebt oudere mensen, [00:11:00] zeg maar naast het winkelcentrum heb je een woonzorg

88 centrum. Dus best wel veel oudere mensen die daar oversteken. En dan vind ik ook wel dat daar meer aandacht aan

89 besteed mag worden. Dus ook bijvoorbeeld mensen die met de rollator zijn (...) Die moeten echt wel een omweg maken om

90 bij een zebrapad over te steken om bij het winkelcentrum te komen. Dat kan best wel lastig voor hen zijn.

91 **I:** Als ik dit zo hoor, zeg je eigenlijk dat de voetganger niet voldoende is meegenomen in een veilige inrichting van de weg.

92 Hoe is dat in Holtenbroek voor de auto?

93 **R:** Ja het is [...] Kijk, ja, Holtenbroek is vooral bij het winkelcentrum wel veel auto's ja.

94 **I:** En als je dan bijvoorbeeld kijkt naar het winkelcentrum Holtenbroek [00:12:00]. Dan zijn er aan twee kanten van het

95 winkelcentrum een parkeerplaats. Dat is natuurlijk heel erg fijn voor de mensen die met de auto komen. Maar hoe ervaar je

96 dat wanneer je als voetganger of als fietser naar het winkelcentrum komt?

97 **R:** Ja dat is opzicht prima, die parkeerplaatsen zijn aan de achterkant van het winkelcentrum, daar krijg je niet zo veel van

98 mee. En in het winkelcentrum zijn er ook voldoende plekken om je fiets neer te zetten. Om je fiets te stallen, dus dat is op

99 zich prima (...)

100 **I:** (...) Uhm, Nou we gaan vlot door de vragen heen [00:13:00], fijn dat je zo uitgebreid verteld. Mocht je zo nog iets te

101 binnen schieten dan mag je uiteraard nog verder vertellen. Dan komen we nu bij de laatste vraag. Stel dat de gemeente wat

102 serieuzer gaat nadenken over het opknappen van de wijk Holtenbroek, vooral ook op de punten die we net hebben

103 besproken. Dan zouden ze daarin ook vooral de mening van bewoners daarin mee willen nemen. Om de wensen goed in
104 zichtelijk te krijgen. Hoe denk jij dat de gemeente de bewoners het beste kan betrekken bij zo'n project? Bij het nadenken
105 over mogelijke verbeterpunten?

106 **R:** Ja, dat is een [00:14:00] goede vraag [...] Uhm [...] Nou ik denk wat jullie deden, echt actief mensen benaderen. De actie
107 in de spotlight zetten, dus dat er echt aanwezigen zijn en dat er toenadering is. I.p.v. via de mail of brief ofzo, dat vind ik
108 een hele mooie manier. Maar goed je moet het net treffen op zo'n dag dat je ook echt mensen en bewoners ontmoet.
109 Maar verder denk ik ook doormiddel van scholen. Holtenbroek is best wel een gezinswijk geworden, en ik denk dat je
110 doormiddel van scholen ook nog gewoon bewoners dus ouders kunt betrekken in van je hoe zie je de wijk en in het kader
111 van groen. Ik weet dat bijvoorbeeld een van onze burens, die is heel erg bezig geweest om voor de woningen een deel groen
112 te krijgen. Dat was een project, ik kom even niet op de naam, om echt [00:15:00] het voorste gedeelte van uh van de
113 woningen groen te krijgen, maar ook uhm, op het dak van onze schuren groen te krijgen. Weet je zo, dus uh de buurt echt
114 eigenlijk dat is ook een mooie manier, heel laagdrempelig. Via de buurtvereniging mensen te benaderen. Ik denk dat dat
115 wel de kortste klapper is. Tegenwoordig heeft iedereen een mobiel. Heel veel bewoners zitten in zo'n buurt app. Dat is
116 bijvoorbeeld een manier, de school is een manier, wijkcentrum is een manier. En dan als je het echt hebt over verschillende
117 doelgroepen, de ouderen via de woonzorgcentra die zijn wat minder digitaal, maar die zijn door actief aanwezig zijn heel
118 goed te benaderen. Ik denk op zo'n manier. Dan [00:16:00] pak je het op alle manieren denk ik op.

119 **I:** Ja ik denk dat je zo ook een hele grote groep aan kunt spreken.

120 **R:** Ja, want dat moeten we niet vergeten inderdaad. Holtenbroek is best wel een multiculturele wijk, en je hebt dus alle
121 soorten culturen, maar ook alle soorten lagen van de bevolking. En ik denk dat dat ook een beetje in acht genomen mag
122 worden vanuit de gemeente. Wat voor ene werkt als benaderbaar, werkt voor de nader niet. Maar kijk het feit dat je de
123 stem van heel veel bewoners in Holtenbroek [00:17:00] niet hoort, door welke reden of achtergrond dan ook, betekend
124 niet dat de behoefte er niet is.

125 **I:** Nee (...) Dus van iedere groep binnen zeg maar, om in die multiculturele wijk iedereen aan het woord te krijgen, dus
126 bijvoorbeeld via de scholen, het wijkcentrum, het zorgcentrum [...] Op die manier denk je wel dat je de grootste groep te
127 pakken zult krijgen?

128 **R:** Ik denk het wel. En wat [00:18:00] me ook nu te binnen schiet, misschien gaat dat heel ver hoor [...] Maar uh, je hebt
129 volgens mij een of twee kerken in Holtenbroek, en je hebt ook nog een moskee. Dus ja daar zou je ook nog heel veel
130 mensen mee kunnen benaderen. En ik wil echt niet zeggen dat er een hoop uitzonderingen moeten worden gemaakt om
131 alle culturen te benaderen. Maar ik denk wel daar pak je wel een belangrijk deel van de bewoners van Holtenbroek. Dat dat
132 ook een bepaalde stimulans is natuurlijk, juist he meer groen en in het kader van meer beweging, noem maar op.

133 **I:** Ja, ja (...) Dat zijn inderdaad nog goede ingangen ja. En uhm [...] stel [00:19:00] die groep mensen heeft gereageerd dat ze
134 ook daadwerkelijk mee willen denken. Heb je dan ook nog ideeën over hoe zo'n dag of middag, sessie er nog uit zou
135 kunnen zien.

136 **R:** Uhm [...] Ja dat is een hele goede [...] Ja weet je in de tijd van nu, iedereen heeft het druk, en iedereen heeft weinig tijd
137 Maar ik denk, kijk uit [...] Mensen willen graag gezien en gehoord worden, maar ook beloond worden voor het feit dat ze
138 dan met input komen. En ja die beloning, ik durf nu niet zo goed te zeggen waar dat in moeten zitten hoor (...) Maar ik denk
139 in de vorm toch van een beloning, dat dat vaak heel [00:20:00] vaak mensen trekt. Op de dag ook dat jij in Holtenbroek
140 stond, die beste man die daar stond met de fiets en die smoothie, dat hoeft echt niet groot te zijn, dat kan in die kleine
141 aspecten zitten. Dat werkt wel vaak, weetje dat lokt mensen. Dat het ook laagdrempelig is, ook voor iedereen toegankelijk.
142 Rekening houden met de verschillende mensen, de cultrenen, de verschillende lagen, en de verschillende achtergronden.
143 Dat het heel laagdrempelig is om bij zo'n bijeenkomst te komen. Dan denk ik, nou ja weet je. Dat wijkcentrum van
144 Holtenbroek is denk ik een hele mooie plek om zo'n activiteit uh, dat dat plaats neemt daar.

145 **I:** Het was voor [00:21:00] mij ook de eerste keer om bij zo'n event te zijn, zoals we dat twee weken geleden ook in
146 Holtenbroek hebben gedaan. En het viel me inderdaad op hoe interessant mensen het dan al vinden, dat je daar staat met
147 zo'n fiets en we hadden op een gegeven moment lekkere hapjes, en dan komen mensen een beetje los en dan komt er
148 stiekem al beste veel naar boven. Dus ik denk inderdaad dat je daar een goed punt noemt. En dat is dan beloning slash iets
149 dat gewoon heel aantrekkelijk is om bij aan te sluiten.

150 **R:** Ja en weet je wat het denk ik ook is uhm, gemeente dat zijn, [00:22:00] ik weet niet of er echt bewoners zijn vanuit
151 Holtenbroek die weet je die ook kunnen aantonen dat [...] Die echt bewoner zijn vanuit Holtenbroek die bijvoorbeeld actief
152 met de gemeente betrokken kunnen worden en dan he, ook namens de wijk een soort van stem hebben voor de rest van
153 de wijk. Dat je die ook actief erbij kunt betrekken. Dat trekt wel natuurlijk. Op die dag, als ik heel eerlijk ben, wat mij heel
154 erg aantrok. Dat was natuurlijk die beste man met die smoothie-fiets, maar er was ook een kraampje met van die
155 kikkererwten eten. Dan denk ik oh ja, dat is bekend voor heel veel mensen he. Dan heb je meteen een soort van
156 herkenningspunt voor veel mensen en dat maakt het makkelijker om even een praatje aan te gaan en te bespreken, van he
157 wat gebeurt hier. En ik denk dat dat echt een hele mooie is ook. En niet dat het van die onbekende de mensen, je moet
158 echt in de wijk wonen of verder [00:23:00] meer weten van de wijk. Dus dat je een aantal mensen hebt die daar open voor
159 staan en dat je hen ook betreft in de voorbereiding van zo'n gesprek van uh hoe gaan we dat doen, en dan tijdens en ook
160 erna. Van hoe gaan we dat allemaal en iedereen nu samenbrengen. In plaats van dat het heel erg van wij de gemeente en
161 jullie de bewoners van Holtenbroek.

162 **I:** Ja precies, er zijn vaak wel wat mensen in een wijk die graag mee willen denken en willen doen. En je zegt als je die al
163 voorafgaand aan zo'n bijeenkomst, dan zorgt dat al voor een extra schakel tussen de wijk en de gemeente.

164 **R:** Ja, maar dus echt voor, tijdens. Dus ook tijdens zo'n bijeenkomst, en daarna.

165 I: Nou dat lijkt me een interessante. Dat is eigenlijk zo'n [00:24:00] beetje alles dat ik met je wilde bespreken. Had je zelf
166 eventueel nog andere dingen die je kwijt wilde of vragen aan mij misschien?
167 R: Uhm [...] Nee, ik vind het superleuk dat je [...] ja heel leuk, interessant en ik denk heel waardevol. En ik hoop uh dat er
168 iets moois uit gaat komen. Ik denk sinds ik zelf moeder ben, ben ik me bewuster van zulke dingen geworden. Van wat gun ik
169 mijn kinderen en andere kinderen in de wijk. En Holtenbroek is een hele mooie fijne wijk en ik zie heel veel mogelijkheden
170 in uh [...] en mooi dat dat gezien wordt en dat daar iets mee gedaan wordt. Alleen ik denk die vormgeving ik denk dat daar
171 nog wel echt [00:25:00] nagedacht moet worden over wat daar mee gedaan kan worden.
172 I: Nou bedankt voor je tijd op deze zondag avond
173 R: Ja graag gedaan.
174 I: Nou en als je het leuk vindt, kan ik je over een aantal maanden als ik mijn onderzoek afrond je de uitslag toesturen.
175 R: Ja heel graag, super!

RESPONDENT 3.

Interview

Date: 31-10-2022
Location: Holtenbroek, Zwolle
Respondent: 84 years, Female
Interviewer: Amber den Otter, Student Master Spatial Planning

Legenda

Interviewer: I
Respondent: R

Pause: (...)
Thinking: [...]
Unclear: {...}
Way of saying: *way*

1 I: [00:00:00] Ik zou graag beginnen met even een aantal persoonlijke vragen en daarna gaan we meer de inhoud van de
2 woonomgeving. Ik wilde je leeftijd vragen, maar daar hebben we het net al over gehad, 84 jaar. Dan ga ik ervanuit dat u
3 met pensioen bent.
4 R: Ja, dat klopt.
5 I: Heeft u een opleiding gevolgd?
6 R: Ja, mavo en academie van beeldende kunsten.
7 I: Is dat hier in Zwolle?
8 R: Nee, in Rotterdam. Ik kom uit Gouda, daar ben ik geboren en toen ben ik in Rotterdam gaan studeren.
9 I: Oké, dat waren de persoonlijke vragen. Ik typ ondertussen soms even mee, en mijn vragen staan hier op mijn laptop, daar
10 kijk ik af en toe even naar. Dan gaan we nu verder met de inhoudelijke vragen van het onderzoek. Ik doe onderzoek naar
11 het bewegen in de openbare ruimte, [00:01:00] en een van de vragen tijdens de enquête die u heeft ingevuld toen we
12 elkaar hebben gezien hier in Zwolle, was ook hoe u naar bestemmingen in uw woonomgeving {Zwolle} zoals voorzieningen,
13 vrienden, familie etc. reist?
14 R: Ik ga met de fiets. Lopen of fietsen, met de auto.
15 I: Wanneer kies je voor de auto?
16 R: Als het regent *lacht*.
17 [...]
18 I: Wanneer kiest u voor lopen of de fiets?
19 R: Als het mooi weer is ga ik liever lopen of fietsen. Fietsen meestal.
20 I: En waarom kiest u dan voor de fiets? Of lopen?
21 R: Nou ja, kijk als je in Zwolle met de auto naar de stad gaat, moet je altijd parkeergeld betalen. Als je dan een paar uurtjes
22 weg bent is het zo 10 euro, dat vind ik zonde. Daarom ga ik op de fiets. Ik ga niet naar de stad lopen, dat is te ver. Maar
23 bijvoorbeeld naar het winkelcentrum hier kan ik wel lopen. Maar nu ben ik ook op de fiets.
24 I: U woont hier in Holtenbroek?
25 R: Ja, ik woon in Holtenbroek.
26 I: En als u naar het centrum fietst, hoe lang bent u dan onderweg? [00:02:00]
27 R: Een kwartier ongeveer.
28 I: Dat is goed te doen dus.
29 R: Ja, dat is heel goed te doen. Met de fiets dan. Met de auto ook wel een kwartier hoor, want je moet dan parkeren en een
30 plekje zoeken. Dus qua tijd scheelt het niet veel.
31 I: Oké, dus u kiest in principe ook voor de fiets omdat u het gemakkelijk vindt? Makkelijker dan met de auto, als u
32 bijvoorbeeld naar het centrum van Zwolle gaat?
33 R: Ja, maar ik vind het ook fijn.
34 I: Ook fijn.
35 R: Ja, ik fiets liever dan dat ik loop.
36 I: En waarom fietst u liever?
37 R: Nou ik loop niet zo makkelijk meer, omdat ik een knieoperatie heb gehad. Ik heb een nieuwe knie, en het is net of ik een
38 beetje zwabber. Ik ben niet zo stabiel met lopen. Weetje een lekkere pas erin, vroeger liep ik altijd naar school. Maar nu ga
39 ik liever fietsen. En het is sneller, [00:03:00] en ik houd de beweging erin.

40 I: Dat begrijp ik wel, vanuit uw gezondheid en het is sneller. Fietsen is wat dat betreft natuurlijk ook een soepelere
41 beweging voor de knieën dan lopen, met lopen vang je telkens klappen op je knieën.
42 R: Ja klopt. En ik heb ook een elektrische fiets he.
43 I: Ah dat is helemaal fijn.
44 R: Dus uh, je hebt allemaal bruggen hier als je naar de stad fietst. Dus ik heb toen ik hier kwam wonen meteen een
45 elektrische fiets gekocht.
46 I: Dat is prettiger dan natuurlijk. (...) En maakt u wel eens gebruik van het openbaar vervoer?
47 R: Ja. Wel eens, als ik naar het station moet en ik moet naar Amsterdam, want daar woont [00:04:00] mijn dochter. Dan
48 neem ik wel eens de bus naar het station en met de trein naar Amsterdam.
49 I: Waarom kiest u dan voor de bus?
50 R: Nou, als ik niet blijf slapen dan kan ik mijn fiets parkeren bij de bushalte en dan kom ik 's avonds terug met de bus. Of ik
51 zet mijn auto bij de bushalte, en dan stap ik zo op de bus. De bus komt niet voor mijn huis, want ik woon aan het einde van
52 deze weg en daar komt geen bus. Dan moet ik toch weer een kwartiertje lopen naar de bushalte. Dus dat doe ik dan met de
53 fiets of met de auto. Maar als ik blijf slapen, dan uh, dan brengt een vriendin me soms naar het station, want dan laat ik de
54 auto niet zo lang buiten staan. Dus ja aanpassen he.
55 I: Ja, precies. Fijn dat u zo duidelijk vertelt waarom u soms voor de auto of juist de bus kiest [00:05:00]. Als u dan
56 bijvoorbeeld met de auto naar de bushalte gaat, is er dan voldoende parkeerplaats rondom?
57 R: Ja, er is voldoende parkeerruimte vind ik. Jij bent hier niet zo bekend he?
58 I: Nee, dat klopt. Ik heb wel ooit een half jaartje gestudeerd in Zwolle, toen heb ik hier ook gewoond.
59 R: Ja, ja. Maar toen kwam je natuurlijk niet buiten het centrum?
60 I: Nee, precies toen kwam ik alleen in het centrum en naar de campus.
61 R: Nee, maar hier achter heb je een hele grote parkeerplaats. Daar is altijd ruimte.
62 I: Oké, dus inderdaad voldoende parkeergelegenheden. (...) Ik wilde ook nog wat vragen over recreatief fietsen. Fietst u
63 altijd naar een bestemming, of fietst u ook [00:06:00] wel eens voor uw plezier?
64 R: Ik fiets ook voor mijn plezier. Met vriendinnen, dan ga ik naar Kampen of naar Hattem of naar Hasselt. Of we rijden een
65 rondje Zwolle, niet altijd om boodschappen te doen. Maar ook voor entertainment.
66 I: Ja precies, vermaak.
67 R: Ja vermaak, lekker bezig zijn samen.
68 I: Hattem ben ik net gepasseerd op de snelweg, dat is nog best een stukje fietsen denk ik toch?
69 R: Hattem is ongeveer [...] 45 minuten. Je gaat de IJsselbrug over. Dat is vanaf hier goed te doen. En we fietsen ook iedere
70 keer andere routes. Mijn vriendinnen weten dat nog beter dan ik. [00:07:00] Dus ik rijd gewoon achter hen aan.
71 I: [Lacht] Je komt er wel, daar vertrouwd je wel op.
72 R: Ja, precies (...).
73 I: En als we kijken naar de fiets in de wijk Holtenbroek of in Zwolle. Zijn er dan dingen die beter of anders zouden kunnen
74 volgens u?
75 R: Nou voor fietsen, [...]. Ja weet je, als je de krant leest dan zijn de fietspaden goed, maar druk. En al die scooters en al die
76 elektrische scooters die je niet aan hoort komen. Dat is dan soms wel eens even schrikken. Maar ja je raakt er ook wel aan
77 gewend, vind ik hoor. En jongelui die fietsen soms met z'n drieën naast elkaar, en dan moet je bellen. Dan gaan ze wel opzij.
78 Maar ja, dat zijn kleinigheden voor mij, in mijn ogen. Ik kan er wel mee dealen en mee omgaan. Maar ja, ook handen
79 uitsteken van jongelui doen ze niet, want ja ze hebben een telefoontje in de hand, en dan moeten ze die bocht om.
80 [00:08:00] Dan kunnen ze het stuur niet loslaten, ze kunnen niet hun hand uit steken. *Lacht*
81 I: *Lacht* Ja, wat erg eigenlijk he.
82 R: Ja, dus dat soort dingen. Maar ja dat heeft eigenlijk uh, niet zo zeer betrekking op jouw vraag. Want wat was je vraag ook
83 alweer?
84 I: Ja, het zijn zeker wel handige inzichten hoor. Mijn vraag was, als je kijkt naar het fietsnetwerk of fietsroutes in Zwolle en
85 Holtenbroek of je dan verbeterpunten ziet? U noemt net dus het gedrag van andere weggebruikers.
86 R: Nee, dat is prima. Je kunt nummertjes volgen, op de borden. Fietsroutes die aangegeven staan met nummers. Mijn
87 vriendin heeft dan van de ANWB zo'n mapje en dan ziet ze al die nummers en dat gaat goed. We gaan ook wel eens naar uh
88 [...]. Het Zwarte Water, hoe heet dat daar? We gaan wel eens naar een ander plaatsje daar, en dan moet je ook al die
89 fietsroutes volgen, met al die nummertjes. [...]. Uhm, hoe heet het nou ook alweer. Nou ja, maakt niet uit, daar kom ik zo
90 wel weer op. [00:09:00]
91 I: Maar dan fiets u dus op de knooppunten?
92 R: Knooppunten inderdaad, dat is het.
93 I: Uhm, en hoe vindt u bijvoorbeeld het oversteken? Ziet u daar nog ruimte voor verbetering?
94 R: Nee, dat is allemaal goed. Ja, je hebt zebrapaden en je moet goed opletten als ze er niet zijn. Dat je dan goed uitkijkt. En
95 je hebt stoplichten. Dus nee, ik vind Zwolle een fijne stad om te wonen en om dingen te doen. Dat vind ik allemaal wel goed
96 geregeld.
97 I: Nou dat klinkt allemaal heel positief. En wat vindt u dan bijvoorbeeld van het groen?
98 R: Ja, dat is ook fantastisch. Groen en water. Zwolle is echt een hele fijne stad om dat allemaal uh te zien en te beleven. Er
99 is veel water, en er is veel groen. [00:10:00]
100 I: En ook als u bijvoorbeeld kijkt naar hier uw directe woonomgeving? Is dat ook goed, of is daar nog ruimte voor
101 verbetering?

102 R: Nou, ik denk niet dat er meer nodig is. Er zijn bomen, en er is gras en er zijn potten met planten. Daar hebben ze net
103 weer nieuwe viooltjes in gezet. Dus ik vind het allemaal heel verzorgd. Alleen de jongelui moeten weer eens leren geen
104 troep achter te laten. Kom ik daar weer op he *lacht*.

105 I: *Lacht* Ja, maar dat mag u best zeggen. U stoort zich dus aan gedrag van medebewoners? Jongeren vooral?

106 R: Nou jongelui, die hebben overal lak aan. Je mag hier niet fietsen, [00:11:00] wat doen ze, ze fietsen natuurlijk. Als ze hier
107 iets gaan veranderen, als ze dat op de een of andere manier hier dicht gaan maken. Net als in Emmen, daar heb je ook een
108 dicht winkelcentrum met draaideuren, dan wordt er niet gefietst.

109 I: Nee, dan kom je er niet in.

110 R: Maar de tegels lijken, het is ook natuurlijk de image he. Alsof je op straat bent. Want als ze hier mooie marmeren tegels
111 neer leggen, en een deur, gedeeltelijk bijvoorbeeld, dan komen er geen fietsers. Maar die jongelui die fietsen er gewoon
112 door heen.

113 I: Ja, precies. Dus iets vaneen afscheiding waardoor het al oogt als een ander soort gebied, dat zou al helpen?

114 R: Ja, dat denk ik wel.

115 I: (...) Dat is wel een goede opmerking, want het is in principe voetgangersgebied, maar als je van de ene naar de andere
116 kant moet en je bent op de fiets is het natuurlijk heel erg verleidelijk om er doorheen te fietsen. Ja, dat kan ik me
117 voorstellen, maar als voetganger ondervind je daar natuurlijk wel hinder aan. [00:12:00]

118 R: Ja, dat doen ze hoor. En ik vind dat je je aan de regels moet houden. Of je nou hinder hebt of niet. Kijk oudere mensen
119 die gaan hier niet op de fiets. Die weten wel wat ze moeten doen.

120 I: Ja, die stappen af.

121 R: Maar het zijn jongelui. Of ook wel eens een scooter, die rijdt er dan doorheen. Want ze willen gewoon niet afstappen.
122 Makkelijk.

123 I: Ja, even snel. Met haast.

124 R: Ja, dus ja...

125 I: Maar u, vind dus eigenlijk dat de openbare ruimte goed is ingericht. Maar u ziet vooral ruimte voor verbetering in het
126 gedrag van anderen?

127 R: Ja, ja. [00:13:00]

128 I: We hadden het net al even over het groen, en u noemde ook al dat er veel water is in de omgeving. Op welke manier
129 gebruiken mensen dit water en groen? Wandelen ze er alleen door heen, of langs het water, of gaan ze er bijvoorbeeld ook
130 naartoe of er zitten en in die zin 'verblijven' bijvoorbeeld? Met kinderen, even bewegen of sporten.

131 R: Nou ik woon aan een plas, aan het eind van de weg [00:14:00] heb je een heel groot meer. Daar heb je ook een strand,
132 een plashuis en een restaurantje. Daar kun je lekker buiten zitten dus ja, er wordt heel veel gewandeld en daar naartoe
133 gegaan. Ook voor recreatie wel. Bijvoorbeeld om even lekker van het uitzicht te genieten en er te zitten. En dat heb je op
134 verschillende plekken in Zwolle. Niet alleen hier maar je hebt ook de Wijthmenerplas. Je hebt de golfbaan. Overal zijn wel
135 uh... Nou ik zou wel eens wat meer bankjes willen zien. Dat je soms ook even kunt zitten onderweg. [00:15:00]

136 I: Ah, meer bankjes dat heb ik al eerder gehoord. U zou wel wat meer rust punten onderweg

137 R: Juist, ja, ja. (...) Ja, en uh langs de IJssel en langs het Zwarte Water kun je natuurlijk prachtig fietsen en daar kun je ook af
138 en toe zitten op een bankje maar niet zo veel. Dat zou wel wat meer mogen.

139 I: Dus wat meer bankjes. (...)

140 R: Verder qua recreatie denk ik dat Zwolle best wel aan onze eisen voldoet. Maar dan ga ik [00:16:00] dus wel al snel mijn
141 eigen buurt uit. In de binnenstad zijn er ook restaurantjes langs het water. Je hebt uh, de Villa het geloof ik. En dan heb je
142 dat beetje strandachtige café waar mensen allemaal kunnen zitten. Aan het begin van de markt. (...). Ben je daar wel eens
143 geweest, op de markt?

144 I: Ja, toen ik hier woonde kwam ik regelmatig in de binnenstad. Voor de winkels en de horeca. Maar heel veel verder dan de
145 binnenstad en Windesheim kwam ik toen niet. *Lacht*

146 R: *Lacht* Ja, dat begrijp ik wel. Hoe lang is dat geleden?

147 I: Dat was in 2015, dus alweer 7 jaar geleden. De tijd gaat snel! (...). Verder wilde ik het nog over de wijk Holtenbroek zelf
148 hebben. De gemeente vindt dat Holtenbroek toe is aan een opknopbeurt. De gemeente denkt erover na om de wijk op te
149 frissen, onder andere ook specifiek de woonstraten, de straten waar de woningen aan staan.

150 R: De straat of de huizen? *Lacht*. Dat is een verschil.

151 I: *Lacht*. Nou de straten in eerste instantie. Maar ik proef hier al een ander verbeter punt. Maar in principe de straten en
152 het aanzicht van de straat. Dus als het koophuizen zijn, daar kan de gemeente niet heel veel aan doen. Maar huurwoningen
153 en de flatgebouwen, appartementencomplexen bijvoorbeeld wel. Ziet u verbeter punten voor de wijk Holtenbroek als we
154 het hebben over het straatbeeld? En uiteraard kunt u ook de woningen noemen, ik ben vooral benieuwd naar uw mening.

155 R: Ik kan maar een antwoord geven; de sfeer in Holtenbroek. Bijvoorbeeld in Stadshagen, een nieuwbouw buurt hier een
156 stukje verder, heeft een hele andere sfeer, een prettigere sfeer vind ik. In Holtenbroek wonen hele andere mensen. Dat is
157 alles wat ik ervan kan zeggen. [...]. En wat er verbeterd moet worden, nou ja ik ga naar het winkelcentrum Holtenbroek om
158 er een paar boodschappen te doen bij de Lidl of naar de Turkse supermarkt want die heeft heel lekker fruit. Dus dat is
159 specifiek voor mij. Maar ik ga liever op de fiets naar Stadshagen, dat vind ik een prettigere wijk.

160 I: En als je dan kijkt naar Stadshagen, wat maakt dat u die wijk dan prettiger vindt dan de in Holtenbroek? Wat trekt u
161 daarin aan?

162 R: Uhm [...]. Nou mijn man en ik kwamen uit Dalen, en we hadden hier 22 jaar geleden vrienden wonen. Die hadden een
163 housewarming. Wij waren uitgenodigd, toen kwamen we voor het eerst in Stadshagen. En toen dachten we: "goh, dat is
164 wel handig er is een gezondheidscentrum, er zijn bejaardenwoningen, een winkelcentrum, ziekenhuis, zwembad, een

165 station. Alles bij elkaar. En toen mijn man ziek werd en ik moest verhuizen, toen kwam ik in contact weer met die vrienden
166 en die zeiden er komt hier vlakbij {Holtenbroek} een appartement vrij is dat niets voor jou? Toen ben ik gaan kijken, en na
167 drie maanden wachten kon ik erin. Het fijne was dat mijn man in Stadshagen meteen naar een verpleeghuis kon. Hij moest
168 naar een verpleeghuis. Dus vanuit Holtenbroek kon ik makkelijk bij hem langs in Stadshagen in het verpleeghuis. Dus
169 vandaar, door toeval eigenlijk dat we hier zijn komen wonen. En ik woon hier nu 12 jaar.

170 **I:** Dat is al een lange tijd. En als ik het goed begrijp, vindt u het dus vooral fijn aan Stadshagen dat alle voorzieningen
171 aanwezig zijn, en dicht bij elkaar zitten?

172 **R:** Ja, klopt. En het water in de buurt. Ik kom uit Gouda, daar was altijd water [lacht]. Dus dat vind ik ook heel belangrijk. Dat
173 heeft Holtenbroek natuurlijk ook. Dat is wel een verschil met Holtenbroek, dat is qua voorzieningen een kleiner aanbod.

174 **I:** Dus u noemt met name de bereikbaarheid en aanwezigheid van voorzieningen.

175 **R:** Ja, dat is denk ik toch wel het belangrijkste. Zeker op mijn leeftijd. *Lacht*.

176 **I:** *Lacht* Nou, dan heb ik nu nog een laatste vraag. Als de gemeente meer contact wil hebben met de bewoners van
177 Holtenbroek, als het bijvoorbeeld gaat over het opknappen van de buurt. Daarin is participatie van belang. Hoe denkt u dat
178 de gemeente bewoners het beste kan betrekken? Zodat bewoners mee kunnen denken over hoe de buurt het beste kan
179 worden opgeknapt.

180 **R:** Nou ik heb al een paar keer een formulier in gevuld over dit soort vragen. Wat je van de wijk vindt, is het veilig, voel je je
181 veilig? Is er sprake van overlast, van geluidsoverlast. Dat soort vragen krijg je allemaal in die lijst he. Dus ja, dat vul ik dan in.
182 (...).

183 **I:** (...). En hoort u daar ooit iets over terug? Of is dat alleen een kwestie van invullen?

184 **R:** Nee, daar hoor je niets over terug. Dat is van de gemeente. Het is ook alweer een paar jaar geleden dat ik dat gedaan
185 heb.

186 **I:** Oh, is dat het uhm... [...]. Het buurt-voor-buurt onderzoek? Daar heb ik laatst iets over gelezen.

187 **R:** Ja, dat is het inderdaad. En dat zijn allerlei vragen. Of je je goed voelt, en veilig voelt in je wijk.

188 **I:** En daar doet u ook altijd aan mee als u de kans krijgt?

189 **R:** Ja, ja. (...).

190 **I:** En als we het hebben over specifiek meedenken over een oplossing voor een situatie in uw buurt. Dus stel nou, de
191 gemeente vindt dat er te veel en te vaak wordt gefietst in voetgangersgebieden rondom het winkelcentrum Holtenbroek.
192 En de gemeente wil in gesprek met bewoners om te kijken hoe ze dit probleem kunnen aanpakken. Hoe kan de gemeente
193 de bewoners dan het beste betrekken denkt u?

194 **R:** Ja, ook weer met een enquête denk ik. Een anonieme enquête. Je weet nooit wat er in je buurt gebeurt. Er gebeuren hier
195 ook wel eens hele vervelende dingen. Schietpartijen en drugs en uh...

196 **I:** Echt waar?

197 **R:** Ja, ja echt waar. Dat verwacht je helemaal niet. Jongeren verzamelen zich, en ik hoor dat er dan drugs gedeald wordt.

198 **I:** En heeft dat invloed op hoe u zich voelt in de buurt?

199 **R:** Nee, dat niet. Ik heb mijn eigen stekkie [lacht]. Ik voel me veilig thuis, ik zit in een appartement uh, we hebben niet eens
200 beveiliging hoor aan de buiten deur. Maar ik voel me veilig. Ik doe mijn eigen voordeur op slot, en ik ga lekker slapen hoor.
201 Ik voel me veiliger hier, dan in een huis.

202 **I:** Dat is fijn, ja dat begrijp ik een appartement is wat dat betreft heel overzichtelijk.

203 **R:** Ja, precies. Dus wat dat betreft ben ik helemaal happy.

204 **I:** (...). Nou dat waren mijn vragen. Fijn dat u zo uitgebreid antwoord wilde geven. Heeft u misschien nog vragen voor mij?
205 Of wilt u verder nog iets vertellen?

206 **R:** Nee... Ik denk dat het in Nederland allemaal heel erg goed verzorgd is, met het oog op senioren. Want dat ben ik
207 natuurlijk. En dat je overal hulp kunt krijgen. Dat heb ik nog niet gevraagd of gehad. En ik ben lid van Ikada, maar dat heet
208 nu anders. Ik ben de naam even kwijt. Maar ik kan overal om hulp vragen. Ik heb WMO-vervoer, ik heb Valys taxivervoer.
209 Die brengen mij bijvoorbeeld naar Schiphol als ik binnenkort op vakantie ga naar Curaçao. Van A naar B.

210 **I:** Dat is goed geregeld, wat fijn.

211 **R:** Ja, en die komen me ook weer ophalen als ik terugkom. Dat is allemaal fantastisch tegenwoordig, dat hadden ze vroeger
212 niet. Mijn ouders konden dat allemaal niet. Mijn vader kreeg dan wel een vorm van thuiszorg weet ik nog wel. Maar uh, ja
213 dat is allemaal zo geweldig hier in Nederland. Dat heb je in andere landen niet.

214 **I:** Ja, u kent natuurlijk de verhalen van uw vriendin die in Rhodos heeft gewoond zoals u daar straks vertelden. Daar ging dat
215 wellicht heel anders?

216 **R:** Ja, ik heb negen jaar in Amerika gewoond en vijf jaar op Curaçao. Dus ik ben eigenlijk wel wereldwijd. Ik zie nergens meer
217 tegenop, ik doe wat ik doe en ik regel het wel.

218 **I:** Ik merk ook dat u heel positief in het leven, dat vind ik erg mooi om te zien.

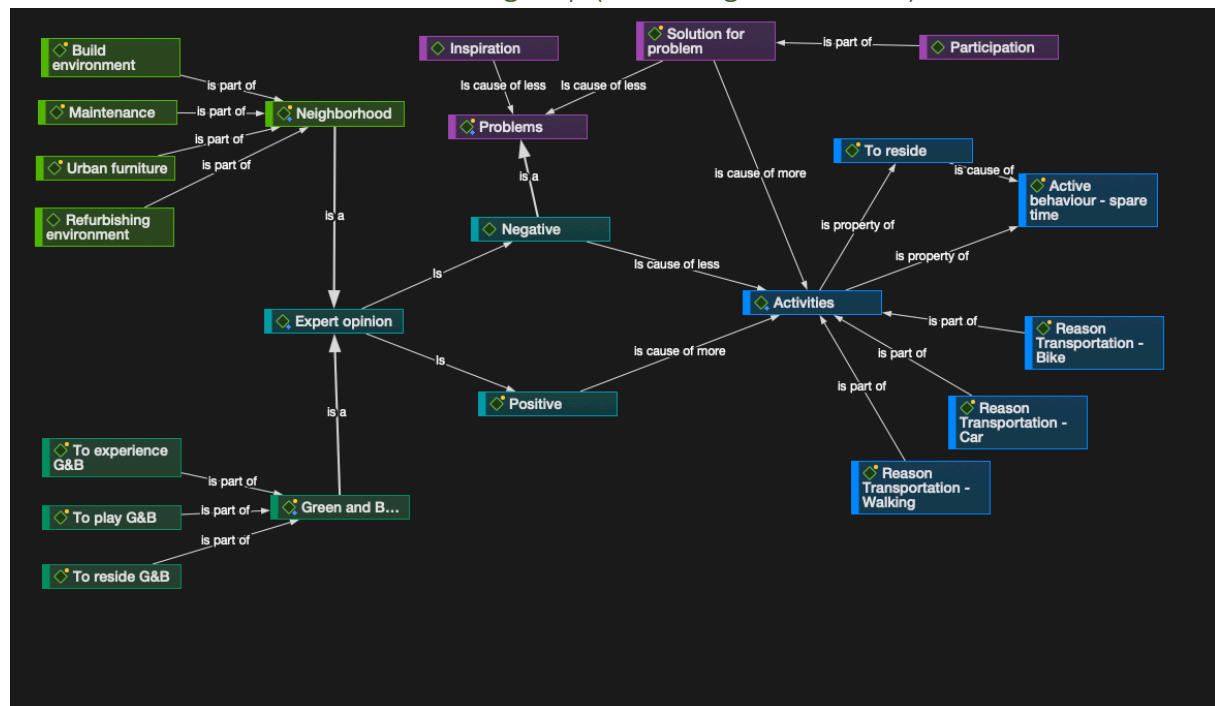
219 **R:** Ja? Dank je *lacht*.

220 **I:** Nou dan wil ik u heel graag bedanken voor uw tijd en uw antwoorden. Ik stop nu de opname.

Annex 6. Used codes – focus-group (own image via Atlas.ti)

1	Explanation codes - focus group
2	Build environment → When people explain something about the build environment. Gives insights on their perspectives on the housing, buildings, facilities etc.
3	Maintenance neighborhood → The way the elements in the neighborhood are maintained. Intonation of the quote says something about the way the neighborhood is viewed (maintained or not)
4	Urban furniture → The urban furniture (street furniture such as benches, wastebaskets, lanterns etc.)
5	Refurbishing environment → The way the living environment could be refurbished to be a better environment.
6	To play G&B → Quote on how children can play within greenery and nearby water in the neighborhood.
7	To reside G&B → When people reside in the greenery alongside the water.
8	To experience G&B → The way people experience the greenery and water in the neighborhood.
9	Active behavior/spare time → The activities (sports, movements, active behaviour) respondents undertake in their spare time. Meaning they are not traveling to work, school, shops etc. They do these for fun.
10	Reason Transportation (bike, car, walking) → Says something about why people choose certain modes of transportation.
11	To reside → Activities that can be categorized as residing, that take place in the public spaces of the neighborhood
12	Solution for problem → Quotes where respondents explain how they believe a certain problem could be solved
13	Inspiration → Inspiring examples or solutions for designing the living environment.
14	Participation → Experts opinion on and experience with participation; involving residents in planning of the living environment
15	Expert opinion - positive → situations, examples, solutions etc. that the expert believe will have a positive influence on the living environment
16	Expert opinion - negative → situations, examples, solutions etc. that the expert believe will have a negative influence on the living environment

Annex 7. Network of codes – focus-group (own image via Atlas.ti)



Annex 8. Density and facilities Holtenbroek

Image 1. To assemble or disperse – Holtenbroek: fronts are longer than 5 meters, all on same floor level.



Image 2. To assemble or disperse – Holtenbroek: fronts are longer than 5 meters, all on same floor level.

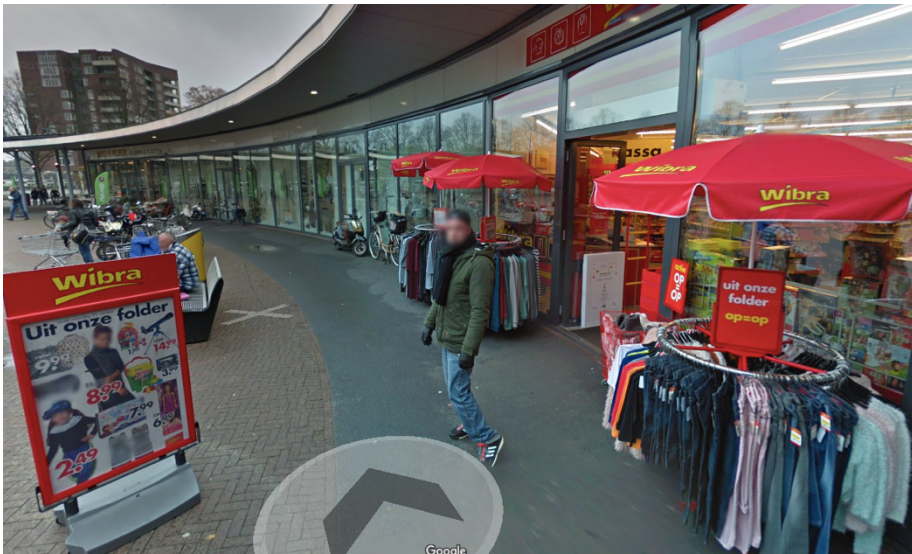


Image 3. To integrate or segregate – Holtenbroek: integration of cyclists and pedestrians, integration of facilities to some degree. To invite or repel – Holtenbroek: places with different motives for visiting.

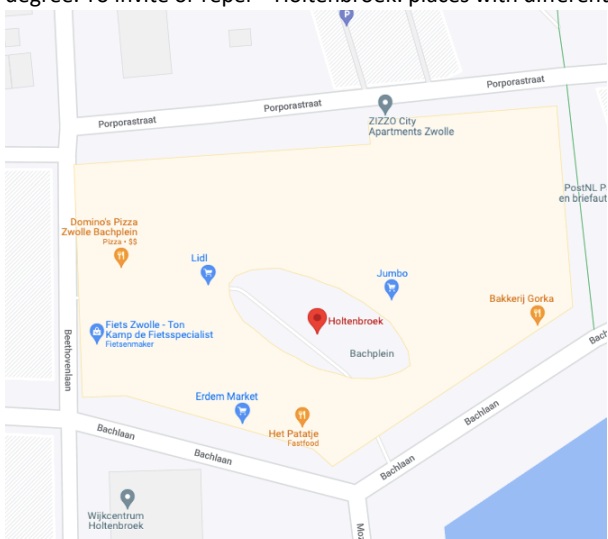


Image 4. To open up or close in – Holtenbroek: the center has an open characteristic.



Image 5. To open up or close in – Holtenbroek: the center has an open characteristic.

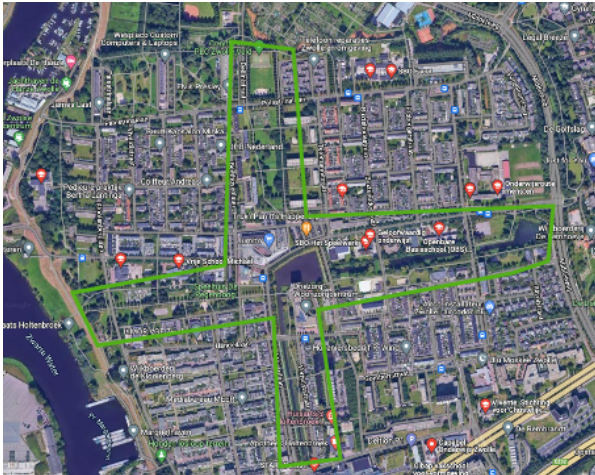


Image 6. To increase or reduce – Holtenbroek: Benches and greenery



Annex 9. Independence for children Holtenbroek

Green Axle – Holtenbroek: connects many schools, playgrounds, sport facilities and the different parts of the neighborhood.



Annex 10. Greenery and water Holtenbroek

Image 1. (left) Biosphere reserves – Holtenbroek: Category 2 biosphere reserves and category 3 biosphere reserves.

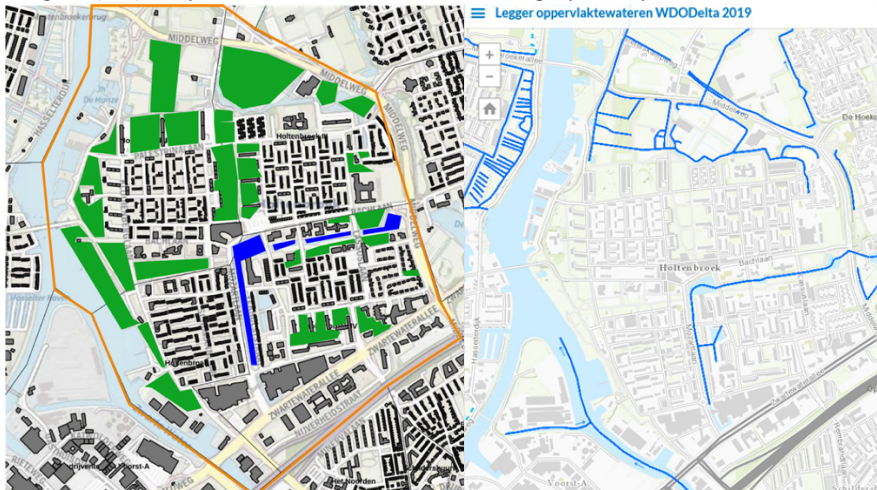
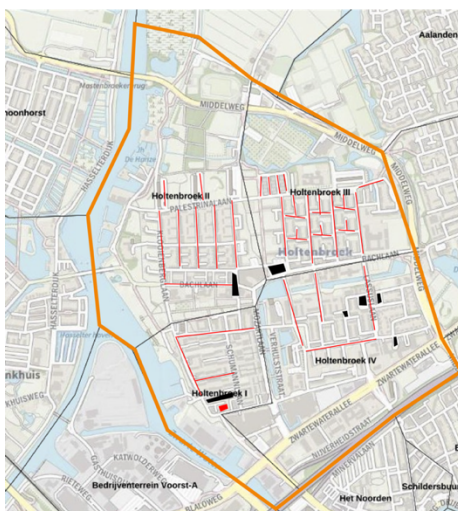


Image 2. (Right) Water elements – Holtenbroek: Semi-natural pond (Gemeente Zwolle, 2019).

Annex 11. Mobility - Holtenbroek

Black = parking lot, red = parking alongside road



Annex 12. Shared mobility in Zwolle & Rotterdam

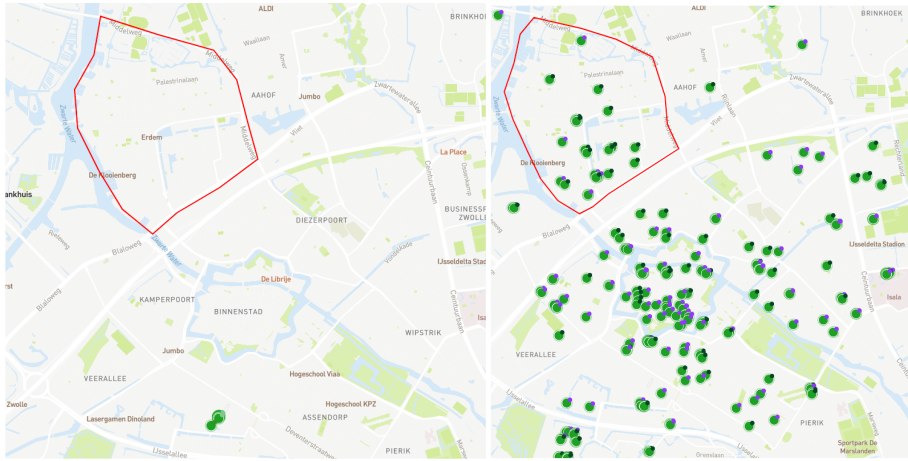


Image 1. Bike sharing in Zwolle (CROW, n.d.-d)

Image 2. Scooter sharing in Zwolle (CROW, n.d.-d)

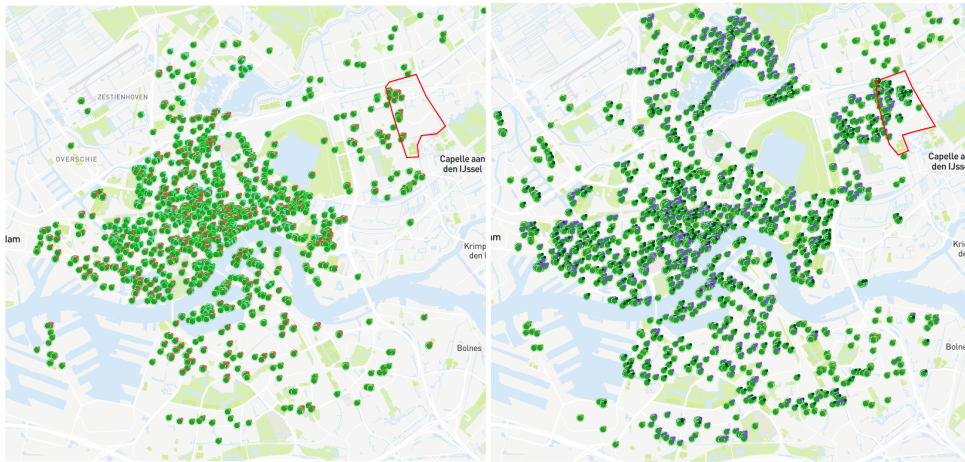


Image 3. Bike sharing in Rotterdam (CROW, n.d.-d)

Image 4. Scooter sharing in Rotterdam (CROW, n.d.-d)

Annex 13. Density and facilities Oosterflank

Image 1. Alexandrium – fronts no longer than 5 meters (Silvester, 2018).



Image 2. Alexandrium – open floor plan in the middle (Nagy-Bodnar, 2022)



Image 3. Human scale – outdoor Alexandrium (Google©, n.d.-a)



Image 4. Human scale – outdoor Alexandrium (Google©, n.d.-b)



Image 5. Human scale – outdoor Alexandrium (Google©, n.d.-c)



Image 6. Traffic segregation – left to right: cycle path, car road with parking alongside, pedestrian area (plaza in front of entrance) (Google©, n.d.-d).



Image 7. To open up or close in – wide open space, no connection with indoor experiences of shopping center (Google©, n.d.-e).



Image 8. To open up or close in – wide open space, no connection with indoor experiences of shopping center, wide streets, car dominant, car parking (Google©, n.d.-f).



Annex 14. Independence for children - Kindlint

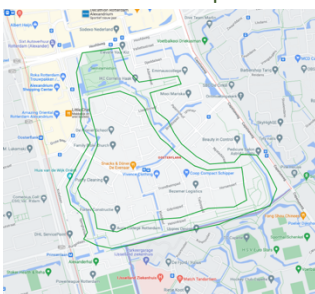


Image 1. Kindlint – the routes between the two green lines have potential to function as a kindlint (see images 2 to 4) (Google©, n.d.-g).



Image 2. Potential Kindlint – pedestrian area that connects to green routes, and playgrounds (see image 3 and 4) (Google©, n.d.-h).



Image 3. Potential Kindlint – Pedestrian route alongside cycle route through greenery which connects to parts of Oosterflank and facilities (Google©, n.d.-i).



Image 4. Potential kindlint – Playground on the route of potential kindlint, connects to green pedestrian route. (Google©, n.d.-j).

Annex 15. Biosphere reserves + types of water elements - Oosterflank



Image 1. Biosphere reserves Oosterflank – Category 3

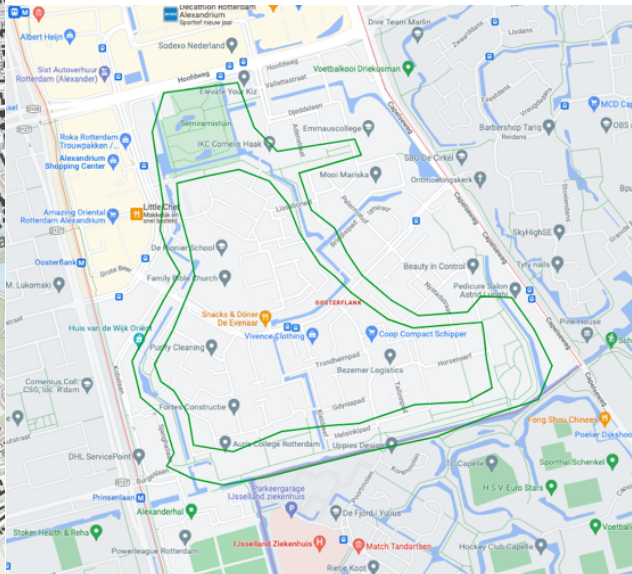


Image 2. Biosphere reserves Oosterflank – Category 2



Image 3. Water elements – semi-natural ponds

Annex 16. Questionnaire and results

First the questions of the questionnaire are stated.

Questionnaire Rotterdam - Active lifestyle

My name is Amber den Otter and I am researching moving and sports in this neighborhood. I would like to ask you 10 questions about sports and moving, which will take about 10 minutes. If you have any questions, you can always ask me, and please let me know if anything is unclear to you. Do you have any questions right now before we start?

amber_otter@hotmail.com [Ander account](#) 🔗

🔒 Niet gedeeld

Volgende
Formulier wissen

Questionnaire Rotterdam - Active lifestyle

amber_otter@hotmail.com [Ander account](#) 🔗

🔒 Niet gedeeld

The first 5 questions are about traveling to work and/or school.

I will ask you five questions about moving in a normal week for you. First I will ask about your work, next about your free time.

How do you travel to work/school? (days, duration per day, intensity) Or how to public transport?

	slow	average	fast	1 day	2 days	3 days	4 days	5 days	0-15 minutes per day
Walk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cycle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public transport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What kind of work do you do?

Jouw antwoord _____

Do you move at your work?

Light to average intensity (sitting/standing work, walking every now and then, bureau work, walking with light balast)

Heavy intensity work (walking work, or work with regularly heavy lifting)

Not applicable (no work)

Now I would like to ask you something about moving in your spare time, in a normal week. Movement would i.e. mean walking, cycling, gardening. But not sports.

How much do you ... per week? (on average)

	slow	average	fast	1 day	2 days	3 days	4 days	5 days	0-15 minutes per day
Walk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cycle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gardening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DIY/ Jobs around the house	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

We are half way there. I would like to ask you about sports now.

Is everything clear up until now? Do you have any questions?

Do you do sports? If yes, which one?

Jouw antwoord _____

How often a week do you do >sport<? (how long, intensity?)

	1	2	3	4	5	6	7	light	average	heavy
Sport 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sport 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sport 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sport 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Next I would like to ask you the reason you would choose the car, of bike or why you choose to walk.

Next, I have a few short questions for you.

Why do you travel by car?

Jouw antwoord _____

Why do you travel by bike?

Jouw antwoord _____

Why do you walk?

Jouw antwoord _____

Lastly, I would like to ask you some personal questions, if that is okay?

What is your gender?

Man

Woman

Other

I don't like to say

What is your birth year?

Jouw antwoord _____

With whom do you live?

Alone

Two-person household, no (at home) children

Two-person household, with (at home) children

One-parent household, no (at home) children

One-parent household, with (at home) children

Studenthousing

Housing with facilities for elderly

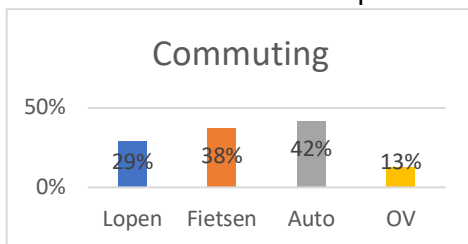
Other, namely _____

What education did you follow? (graduated)

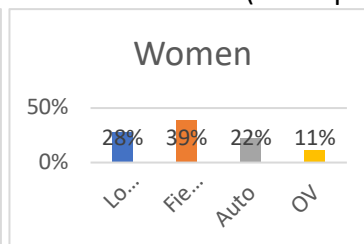
- Basisschool
- Lager/voorbereidend beroepsonderwijs (lbo/vmbo)
- Middelbare algemeen voortgezet onderwijs (mavo)
- Middelbaar beroepsonderwijs (mbo)
- Hoger algemeen voortgezet onderwijs (havo)
- Voorbereidend wetenschappelijk onderwijs (vwo)
- Hoger beroepsonderwijs (hbo)
- Wetenschappelijk onderwijs (wo)
- Geen antwoord

Vorige **Verzenden** Formulier wissen

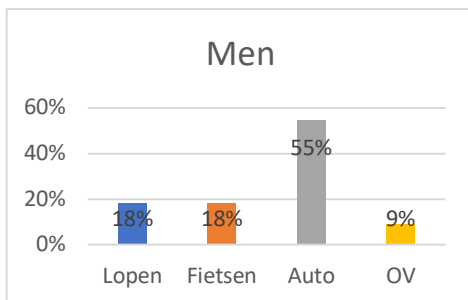
Here the outcomes of the questionnaire are visualized (24 respondents).



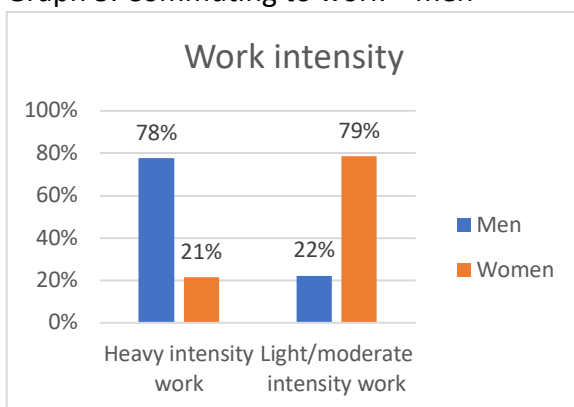
Graph 1. Commuting to work



Graph 2. Commuting to work – Women



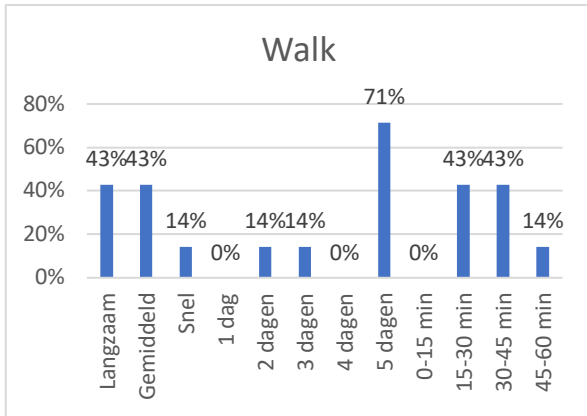
Graph 3. Commuting to work – men



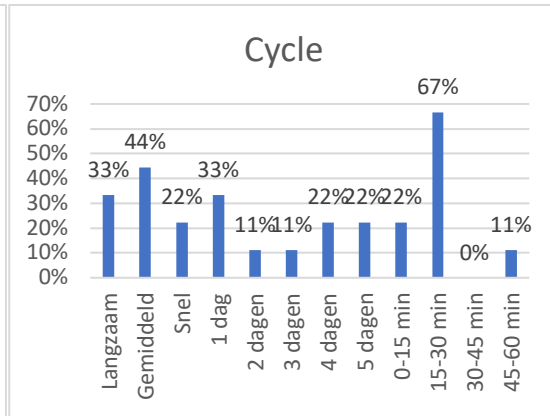
Graph 4. Physical movement – work



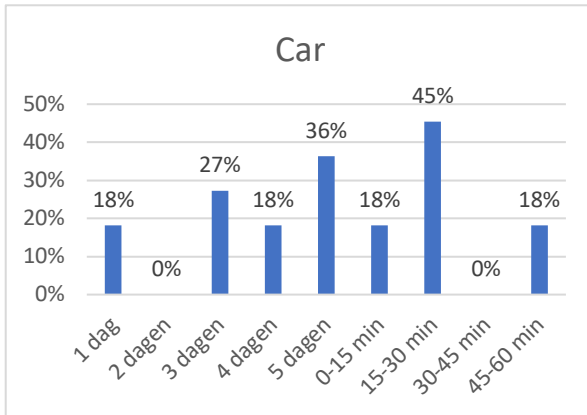
Graph 5. Work intensity



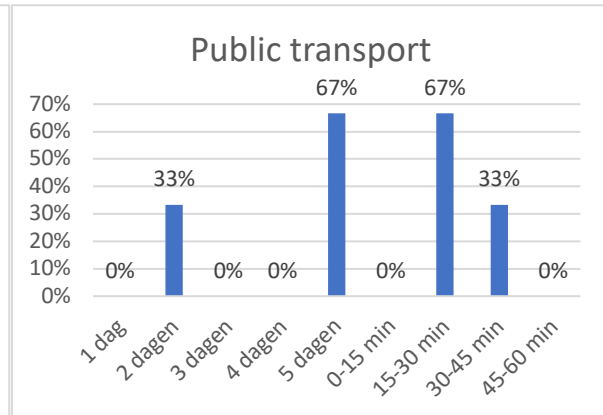
Graph 6. Commuting - walk



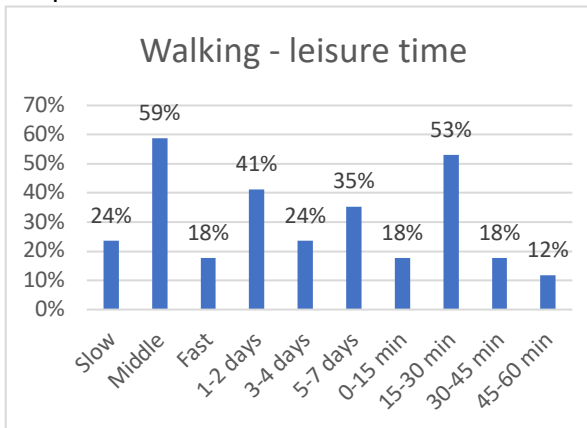
Graph 7. Commuting - cycle



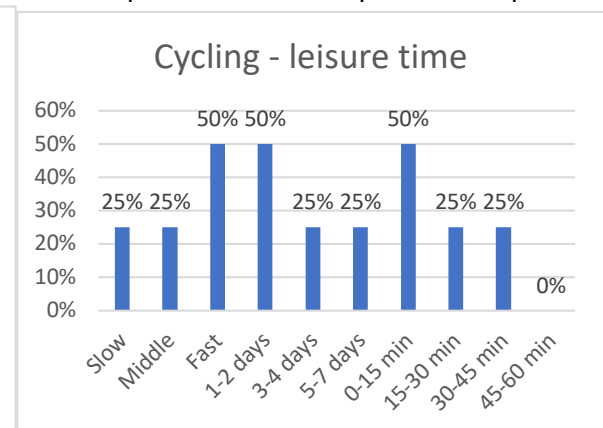
Graph 8. Commute - car



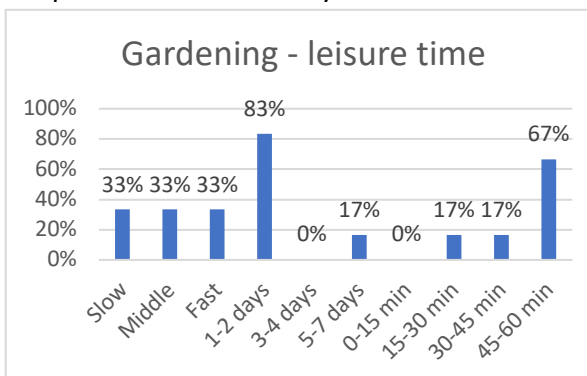
Graph 9. Commute - public transport



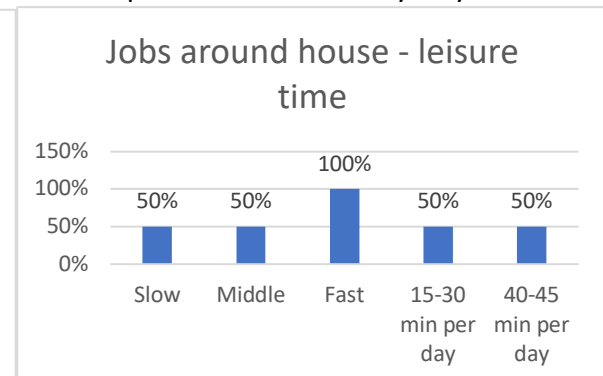
Graph 10. Leisure activity - walk



Graph 11. Leisure activity - cycle



Graph 12. Leisure activity - Gardening



Graph 13. Leisure activity - jobs around the house

Annex 17. Codes later added – Theory of planned behavior (own work via Atlas.ti)

Code group: Theory of planned behavior (Ajzen, 1991)

Attitude towards behavior → The degree to which the feelings of a person towards the behavior are positive or negative

Perceived norm → The belief that significant others believe the person will perform certain behavior or not

Perceived behavioral control → the persons perception on the performance of the behavior to be easy or difficult, certain resources and confidence might increase the perception

Annex 18. Three determinants and their positive and negative influences

Attitude towards behavior - Positive and negative influence on behavioral intention

Attitude towards behavior

Negative

You can sit there on a bench every now and then, but not that often. That could be a bit more.

And cycling is a problem due to health reasons.

And I prefer to go to the gym.

But there are parts where it is not that green, where you [...] There is not much to experience from the point of view of a child, or even from an adult.

Maybe that there indeed are not enough garbage cans in the area?

R: Yeah, that could be yes.

Because on Thursday I have a little niece that goes to the same school as my son, so I must take them both and that is a bit difficult to take them both on the bike as they are 5 years old. So, for me it is more practical to take them to school by car than drive to my work.

Old Holtenbroek. Yes, that are only flats, and a few apartments, and a small playground for children. That's it. (...)

R: When it rains *laughs*

Positive

Well, the walk seems like a nice way to talk about the neighborhood together.

With the car it's also about 15 minutes, because then you need to find a parking spot. So timewise it not a big difference.

So then at least I'll have my movement for the day.

And for me it is more practical to take the bike because that is even faster than by car.

A path that is really green, trees on both sides. That's our favorite part to go for a walk.

I: So, facilities are at walking distance for you? R: Yes, actually. There are shops, such facilities are all there.

I try to go at least two times a week.

But what is it like with for instance the maintenance of the pedestrian paths? R: Oh, it's fine, I never noticed anything about that.

But now I prefer to go by bike. It's faster, and I enjoy the movement. R: I go by bike. Walking or cycling, or the car. I: When do you take the car? R: When it rains *laughs*

People like to be seen and heard, but also to be rewarded for the fact that they came up with input. And yeah those rewards, I don't know what that should be (...) But I think some reward, that should attract and invite people.

Well the walks that we take during summer, are at least half an hour, but especially with good weather it can be an hour and a half, with stopping and sitting during the walk.

Well uhm, so I have a 5-years old, and especially in the weekends he needs to use his energy, and I think it is important for him to be outside a lot, so then we go for walks.

R: If the weather is nice, I prefer to walk or cycle. Cycle most of the time.

R: It depends on what I'm in the mood for. And uh if I take the route with the elderly home on it, I end up closer to the bus stop.

R: During summer it is especially nice because there is a lot of shadow.

R: Yes, I really like that. Especially if the weather is good, then you can sit there as well.

R: Yes, I prefer to cycle instead of walking.

R: Uhm If I walk, I have two routes to choose from. One route has got more nature, so that's the one I prefer.

Perceived behavioral control - Positive and negative influence on behavioral intention

Perceived behavioral control

Negative

I don't walk to the city center, that is too far.

I don't have a drivers license

I have health problems

I have health problems and I don't always have a good day. And then I prefer to do something else if I want to stay active. Because I don't like walking.

Not so intensive. I do sports slowly. But because of those same health problems. Yeah, it is better to not sport too intensive. But I need to stay active so that is why I go there.

Because I do not have anything else. I do not have a driver's license, so I can't take the car. And cycling is a problem due to my health. Most of the time walking is okay, but it can also be very uncomfortable.

Well, I cannot walk so easily anymore, because I have had surgery to my knee. I have a new knee, and it is as if I am swerving. I am not that stable whilst walking.

Positive

Besides the prices for gas these days, to save money and for the movement. I have desk-work.

The neighborhood center of Holtenbroek I believe is a good place to host such activities.

To the shopping center here I can walk.

I have to cycle for 15 minutes. So that's very doable.

Well yeah, if you go to Zwolle center by car, you have to pay money for parking. If you just go for a few hours, you'll easily pay 10 euro's, I think that is a waste. So that's why I go by bike.

Uh, there are enough trees and grass and plants and such things. There is enough greenery in the neighborhood.

Uhm but walking, I do walk a lot.

Subjective Norms - Positive and negative influence on behavioral intention

Subjective Norms

Negative

For instance there is a lot of garbage. So that should be better taken care of.

But yeah, signing the direction you're going to go. Young people don't do that, because they have their phone in one hand, and the other hand holds the steering wheel. So, they can't use a hand to signal when they take a turn.

Well young people. They don't think of others. You're not allowed to cycle here, but they just do it anyways.

Well, you have a neighborhood with many immigrants, and then you notice that people are a bit afraid to speak their mind on such a night where people come together.

Positive

Yeah, some people walk there with a stroller and others walk with their dogs. Those types of things.

Residents of Holtenbroek who are actively involved with the municipality can have a voice in name of the rest of the residents in the neighborhood.

So then at least I'll have my movement for the day.

Annex 19. Presentation focus-group

Here the presentation used during the focus-groups is presented. The presentation started with a few slides on the background and results of the research. Followed by slides with the discussion topics.

<p style="text-align: right;">1.</p> <h1 style="text-align: center;">Bewegen in de leefomgeving</h1> <p style="text-align: center;">Lage SES-populatie</p> <p style="text-align: center;">Focusgroep 23-02-2023 CROW</p> <p style="text-align: center;">Amber den Otter – Student Radboud Universiteit</p>	<p style="text-align: right;">2.</p> <h1 style="text-align: center;">Focusgroep</h1> <p style="text-align: center;">Doel: inzicht van experts</p> <p style="text-align: center;">Audio-opname Anonieme verwerking Afspraken</p>
<p>3.</p> <h3>Mentaliteit lage SES-populatie</h3> <p>Active explorer "Ik vind het belangrijk om actief te zijn, daarom fiets ik altijd naar mijn werk" "Mijn zoonje is 5, ik ga graag met hem wandelen in de groene stukken van onze wijk"</p> <p>Uncomfortable activist "Door gezondheidsklachten kan ik niet fietsen. Ook met lopen heb ik moeite, ik moet regelmatig rusten"</p> <p>Cautious traveler "Ik ga graag fietsen met mijn vriendinnen, dus ik fiets niet alleen als ik naar de supermarkt ga ofzo" "Ik vind het water en de natuur in onze wijk erg fijn. Er zijn ook bankjes waar je kunt rusten, maar die zouden er wel meer mogen zijn"</p> 	<p>4.</p> <h3>Ervaren belemmeringen doelgroep</h3> <ul style="list-style-type: none"> Gezondheidsproblemen - moeite met lopen en/of fietsen Een groene wijk is belangrijk - onderhoud moet beter Er is geen echt verblijfsgroen (groot grasveld) Straatmeubilair - niet genoeg bankjes en prullenbakken Schoonzone - slecht onderhouden groen, onveilige overstek Verkeersveiligheid slecht - oversteken is gevaarlijk Veel gebouwen en weinig groen (sommige delen van de wijk) 
<p>5.</p> <h3>Observatie Holtenbroek – Zwolle</h3> <p>Respondenten</p> <ul style="list-style-type: none"> Veel zwerfafval Groen slecht onderhouden Onveilige verkeerssituaties (oversteken, schoolzone) <p>Observatie</p> <ul style="list-style-type: none"> Auto en fietsverkeer gemengd in veel straten Auto dominant in het straatbeeld Goede hiërarchie in de fiets en wandel netwerken Ontwerpaanbevelingen fietspad vd toekomst CROW Breedte, scherpheden bochten, verlichting 	<p>6.</p> <h3>Observatie Oosterflank - Rotterdam</h3> <p>Respondenten</p> <ul style="list-style-type: none"> Groen slecht onderhouden Veel auto's, vooral geparkeerde auto's Slecht onderhouden voetpaden <p>Observatie</p> <ul style="list-style-type: none"> Auto en fietsverkeer gemengd in veel straten Auto dominant in het straatbeeld Goede hiërarchie in de fiets en wandel netwerken Veel groen, onderhoud verslechterd 
<p>7.</p> <h1 style="text-align: center;">Dominantie auto</h1> <p>Auto relatief dominant in straatbeeld Respondent hecht veel waarde aan groen 68% fietst of loopt naar het werk (30 minuten)</p> <p>Mening? Mogelijkheden?</p> 	<p>8.</p> <h1 style="text-align: center;">Moeilijk lopen/fietsen</h1> <p>Uncomfortable activist "Door gezondheidsklachten kan ik niet fietsen. Ook met lopen heb ik moeite, ik moet regelmatig rusten"</p> <p>Cautious traveler "Ik vind het water en de natuur in onze wijk erg fijn. Er zijn ook bankjes waar je kunt rusten, maar die zouden er wel meer mogen zijn"</p> <p>Laag en hoog gemotiveerd Genieten van natuur</p> <p>Mening? Mogelijkheden?</p>

Verblijfsgroen

9.



Observatie

- Veel groen; struiken, heggen, gras, bomen
- Er wordt niet 'verbleven' in het groen
- Meeste mensen geen of kleine tuin

Respondenten

- Men wandelt door het groen, de parken
- Kinderen spelen er
- Zelden 'verbijft' iemand in het groen

Nabranders?

10.



11.

Bedankt!

Lage SES-populatie

Focusgroep 23-02-2023 CROW

Amber den Otter – Student Radboud Universiteit

FOCUS-GROUP

Date: 23-02-2023
Location: Ede, CROW-office
Expert 1. CROW-expert cycling, male
Expert 2. CROW-expert cycling and walking, male
Expert 3. CROW-expert cycling and walking, female
Interviewer: Amber den Otter, Student Master Spatial Planning

Legenda

Interviewer: I
Expert: R1
Expert: R2
Expert: R3

Pause: (...)
Thinking: [...]
Unclear: {...}
Way of saying: *way*

The first 20 minutes of the focus-group were used to explain the insights of the research on the target group and the neighborhoods Holtenbroek and Oosterflank (see slides 1 to 6 of the PowerPoint presentation in annex 19). The first 20 minutes are not transcribed as the respondents (which provide the relevant information in the session) are simply listening. Only one important point was made on the mentality model of the lower -SES population (slide 3), therefore this part is transcribed below.

Slide 3 of presentation

- 1 **R3:** [0:06:00] Wacht even hoor, want in dit model ga je er bijna vanuit dat iedereen graag
2 fietst en wandelt, behalve als ze gezondheidsklachten hebben ofzo. Want ze zijn allemaal
3 actief. Heb je daar speciaal naar gezocht?
- 4 **I:** Actief in het fietsen en lopen bijvoorbeeld?
- 5 **R3:** Ja, daar heb je specifiek naar gezocht?
- 6 **I:** Nou nee, want de groep onderin die vindt het dus bijvoorbeeld ook helemaal niet leuk.
7 Daarom staat de motivatie ook laag, die gaat liever ook niet lopen of fietsen. Die kan het ook
8 niet maar die groep vindt het ook niet leuk.
- 9 **R3:** [denkt]. Als ik zo in mijn eigen woonomgeving kijk, wat een heel gemengde
10 woonomgeving is. Een wijk die denk ik overeenkomt met Holtenbroek. Zijn er best heel veel
11 mensen die het gewoon ook helemaal niet interesseert. We pakken gewoon de auto
- 12 **I:** Ja, precies. [0:07:00].
- 13 **R3:** E2n waar valt die dan in?
- 14 **I:** Nou die, die komt dus uit mijn interviews niet naar voren. Uit de enquêtes zag ik wel dat er
15 ook mensen waren die gewoon met de auto naar hun werk gaan, maar die zaten toevallig
16 net niet tussen bij mijn interviews.
- 17 **R3:** Oh. Zo (...)
- 18 **I:** Maar die zouden eigenlijk ook een beetje meer linksboven in de assenkruis vallen, dan zou
19 er eigenlijk nog een vierde cirkel bij moeten. Misschien is dat nog wel een goede toevoeging
20 inderdaad.
- 21 **R3:** Ja want die heb je heel veel. In onze vakwereld, dan zien we die vaak over het hoofd
22 omdat onze beleving is dat iedereen best wel graag wil fietsen en wandelen, en dat ook veel
23 doet. Maar gelukkig staan we ook met een half been [0:08:00] nog ergens in een andere
24 maatschappij waar je tot mijn verbazing mensen tegen komt die voor het minste geringste
25 de auto pakt.
- 26 **R1:** Maar is dat dan ook in sociaaleconomisch lage wijken zo?
- 27 **R3:** Ja (...)
- 28 **R1:** Ik kan me dat zo voorstellen dat je dat juist in hoogopgeleide, dure wijken, waar
29 iedereen twee auto's heeft en denkt uh (...)
- 30 **R3:** Ja, maar die hebben allemaal goede fietsen, of een elektrische of weet ik veel wat. Die
31 gaan wel fietsen. Maar juist uhm die mensen [...] bij ons achter, die parkeerplaats daar staan
32 allemaal oude auto's en daar pakt iedereen de auto. Met de auto naar het voetbalveld gaan
33 bijvoorbeeld.
- 34 **R1:** Oh oké,
- 35 **R3:** Kijk maar eens bij de supermarkt wat daar allemaal aan auto's staan en dan kom je je
36 burens tegen zo van ja (...)
- 37 **R2:** Grote kans dat je die mensen niet hebt gesproken omdat het hen toch niet interesseert.
38 En die bereidheid er niet is. [0:09:00].
- 39 **R3:** Of politiek correcte antwoorden geven. Ja, ik wil wel fietsen maar als het dan regelt dat
40 worden mijn haren nat of uh, ja ik weet niet hoe laat ik naar huis ga fietsen en ik durf niet in
41 het donker te fietsen. Ik ken mensen die hebben altijd wel een smoesje om niet te gaan
42 fietsen.
- 43 **R1:** Ja, ja ik ken ze ook wel inderdaad.
- 44 **I:** Maar dat is wel een hele goede inderdaad. Dat kwam uit mijn enquêtes wel naar voren.
45 Dus dat is een goede toevoeging, dus mensen die wel mobiel zijn maar hele lage motivatie
46 hebben om te fietsen of te lopen.

47 **R3:** Ja precies, dat is echt een grote groep.

48 **I:** Daar ga ik nog even goed naar kijken. Het kan op zijn minst een side-note zijn van ik heb
49 deze groep niet gesproken, [0:10:00] het is belangrijk ze nog even op te zoeken.

The transcription of the focus-group will continue from slide 7. This is where the focus-group truly starts, as the experts opinion on the topics is asked and the discussion between them starts.

SLIDE 7 of presentation

50 **I:** Dan kom ik bij het eerste discussiepunt, om het zo te noemen. De dominantie van de auto
51 ik dus redelijk aanwezig in het straatbeeld. [0:22:00]. En dat hebben we natuurlijk niet 1, 2, 3
52 opgelost. Maar ik ben dus vooral heel erg benieuwd naar jullie inzichten, vooral ook omdat
53 de respondenten uit de enquête dus wel aangeven. He ze zeggen, dat is natuurlijk altijd het
54 ding. Dat bijna 70% fietst of loopt naar het werk, dat is dan gemiddeld 30 minuten. Wat dan
55 ook betekend dat als je loopt, dat je toch wel zeker een kwartier in de wijk aan het wandelen
56 bent gemiddeld. Dus ik ben benieuwd naar jullie mening, ervaring. Welke mogelijkheden
57 zien jullie in zijn algemeen. Maar misschien ook over de wijken die we net hebben
58 besproken, om het straatbeeld aan te passen in zo'n wijk. [0:23:00].

59 [...]

60 **R1:** Nou ja, ik zit even te kijken want deze foto is volgens mij overdag gemaakt en dan ize je
61 dat er best wel veel parkeerplekken leeg zijn. [0:24:00] Dus dan zijner ook best wel veel
62 mensen met de auto weg denk ik wel.

63 **R3:** Weet je die 68% dat is dat ze op een dag wel eens met de fiets of te voet en misschien
64 wel te voet naar de metro gaan ofzo. Maar uhm, dat ze de keuze hebben. Want
65 waarschijnlijk hebben ze in deze wijk bijna allemaal de keuze om te gaan fietsen en te lopen.
66 En dan ook heel vaak wel de auto pakken. Of dat ze twee verdieners zijn, dat de een de auto
67 mee heeft. En dat de ander dus op een andere manier naar het werk moet. [0:25:00]

68 **R1:** Ja, de ene werkt in Zwolle en de ander in Ede.

69 **R3:** Ja, dus dat soort dingen, die 68% denk ik dat je genuanceerd moet benaderen. Want ook
70 bij interviews en enquêtes krijg je toch vaak uh van die politiek correcte antwoorden. Van
71 uh, ja ik pak wel eens een keer de fiets. [0:26:00]

72 **I:** Nou, ik had dus ook gevraagd naar het aantal dagen, want dat wilde ik wel voor zijn. En
73 daar kwam gemiddeld dus ook uit op 4 dagen. De meeste mensen gaven aan 4 dagen te
74 fietsen of te lopen.

75 **R1:** Oh oké, zo veel.

76 **I:** Uhm, maar dan denk ik lopen doe je ook naar de bushalte gaat. Maar mensen gaven weer
77 niet zo veel aan met het ov naar het werk te gaan. Dus ze liepen dan toch wel voor een groot
78 del naar het werk. Maar dan werken ze ja, in de buurt. [0:27:00]

79 **R3:** En even, helemaal aan het begin uhm, bij je aftrap. Had je het vooral ook over om ervoor
80 te zorgen dus, herinrichting om vooral ook fietsen en lopen meer te stimuleren, toch? Dat is
81 waar je naar opzoek bent?

82 **I:** Ja, ja. Bijvoorbeeld dat ze in die nieuwbouwwijken zeggen van 1,2 parkeerplek per woning.
83 Dat is hier duidelijk meer, want je ziet hier die auto's langs de weg, maar een klein stukje op
84 de hoek van de weg, is weer bijna een hele parkeerstrook. [0:28:00]

85 **R3:** Ja, net als hier links op de linker foto.

86 **I:** Ja, ja zoiets.

87 **R3:** En hier heb je een haaks parkeerstrook en nog een langs parkeerstrook. Hoewel dat wel
88 een beetje krap is. Volgens mij is dit middelhoog bouw en stapelbouw, dus niet per se

89 grondgebonden woningen. Dus uh, ja en dan gaan ze gewoon plussen en minnen van
90 hoeveel huizen zijn het maal 1,25 en zoveel parkeerplaatsen komen er.

91 **I:** Ja, precies.

92 **R3:** Wat je zou kunnen doen, is parkeren op afstand maken. Want bij uhm, Alexandrium heb
93 je heel veel parkeergarages.

94 **I:** Ja klopt. [0:29:00]

95 **R3:** De gemeente of de exploitant van die parkeergarages, dat ze regelen dat bewoners een
96 goedkoop abonnement kunnen krijgen en dat je hier heel veel parkeerruimte eruit haalt en
97 groene straten gaat inrichten.

98 **R1:** Zeker hier inderdaad. Want dat is echt een grote [...] Hier kan je mooi groen maken.

99 **R2:** Nou ik vind die parkeerstrook dan nog mee vakken, ik vind juist rechts vind ik zonde.
100 Want ik vind daar juist het trottoir, dat is vrij smalletjes dus nodigt ook weer niet uit om daar
101 te gaan open. En dan op de rechter foto ook, [0:30:00] dat is natuurlijk ook groenbeheer.
102 Maar ook, je wilt het juist aantrekkelijk maken. Of in ieder geval uitstralen dat je meer de
103 fiets en de voetganger [...] ja laat domineren. Laat ik het zo zeggen. Uhm, ik weet niet hoe de
104 hele structuur van de wijk in elkaar zit. Maar uhm, als je het zo nog kunt ontwerpen dat je
105 met de fiets bijvoorbeeld altijd sneller de wijk uit bent dan met de auto. [...] Dan is dat ook
106 prettiger. Alleen er zit natuurlijk een bestaande structuur.

107 **R3:** Ken je de Groningse wijk Selwerd? Waar ze bezig geweest zijn om ook zo'n
108 achterstandswijk te vergroenen?

109 **I:** Nee ken ik niet. [0:31:00].

110 **R3:** Ik heb uh in Leeuwarden gezien dat, dat heet 'het wandelende bos'. Daar hadden ze
111 allemaal van die kratten met bomen, en die [denkt] die twee weken ergens stonden. Dan
112 hadden ze de weg of een plein heringericht. En na twee weken pakten ze met
113 pompwagentjes die [...]

114 **R2:** Die bakken weer op

115 **R3:** Die bakken weer op en zetten ze ze weer ergens anders weer neer en hadden ze daar
116 een bos. Gewoon om iedereen te laten wennen, en om aan iedereen te laten zien. En het
117 was een kunstproject. Er was een [0:32:00] kunstenaar mee bezig, en die had allemaal
118 subsidie gekregen om dat te doen. En allemaal vrijwilligers. Dus ik heb ook geholpen met het
119 verplaatsen van die dingen.

120 **R2:** Wat leuk!

121 **R3:** Ja, en op het moment dat mensen zeggen, nou dat bevalt me best. Hak maar een gat in
122 de grond en zet er maar bomen neer. En ook met die bakken kun je er best iets leuks mee
123 maken.

124 **R1:** Of met graffiti, daar kan je ook heel veel dingen mee doen. Om lopen aantrekkelijk te
125 maken.

126 **R3:** Ja, [0:33:00] wat ze in Ede hebben is een kunstenaar die kun je inhuren en die maakt
127 een, schildert een ekster op je gevel ergens. En dan heb je een hele wandelroute, dan ga je
128 met kinderen eksters zoeken in je wijk.

129 **I:** Ja, wat leuk. Want dat kwam je ook naar voren dat sommige delen van de buurt niet
130 genoeg prikkelde, dus dan is dat misschien wel heel leuk.

131 **R3:** En je kan dus ook met de buurt zelf de graffiti doen.

132 **R2:** Ja en je zit natuurlijk met een jaren 60, jaren 70 wijken, zijn het denk ik. En toen hebben
133 ze dat neergegoid in die tijd. Toen de auto nog heel dominant was, en dat wordt minder.
134 En je ziet gewoon dat dat het, alles verkleurd. Ik denk dat je in die tijd die plaatjes die je net
135 liet zien, vooral als je met klinkerbestrating hebt, [0:34:00] dat het er net zo leuk uit zag als

136 in sommige andere straten nu die heel groen zijn. Omdat de kleuren toen nog fris waren.
137 Maar ja, het is vrij kostbaar als je dan een hele straat opnieuw moet gaan klinkers, dat het er
138 weer mooi uit ziet.

139 I: Nou er zijn dus gelukkig echt wel mogelijkheden. Want bijvoorbeeld in Holtenboek moeten
140 ze over 2 jaar de riolering helemaal moeten vervangen. Daarom zijn ze nu ook aan het
141 wachten met alles. Zodat ze dan niet alles twee keer hoeven open te halen. [0:35:00]

142 R1: Ja vaak zie je inderdaad dat ze het combineren met als ze groot onderhoud doen. Dat is
143 dan de aanleiding om dan de straat helemaal op de schop te nemen. En helemaal mooi nu, is
144 dat je samen met de bewoners nu ook kunt kijken waar een beetje de behoefte zit. Daar kun
145 je nu mee beginnen en dan kun je gelijk uh [...]

146 R2: Ja, ik denk dat het belangrijk is niet al het blik op straat. [0:36:00]

147 R1: Wat ik me nog wel zat te bedenken. Want R3 zegt net parkeren op afstand, maar een
148 deel van de bewoners kan niet lopen en fietsen, voor die groep is het ook lastig om een auto
149 op afstand te hebben. Dus daar moet je wel rekening mee houden. Of met jonge kinderen.

150 R3: Je hoeft ook niet alles eruit te halen. Wat R2 net ook zegt, die langsparkeerstrook is heel
151 inefficiënt. Als je die nou weg haalt en een breder trottoir maakt met ook mogelijkheden om
152 daar planten bakken, bomen wat dan ook neer te zetten. En dan aan de andere kant heel
153 efficiënt haaks parkeervakken. Want dan kan je op een hele korte afstand heel veel. Want de
154 breedte heb je wel. Laat je die staan, en dan ga je met vergunninghouders parkeren werken.
155 Degene die een auto moet gebruiken omdat ze niet anders kunnen, die kan in de wijk staan.
156 En mensen die keuze hebben, laat die dan voor een klein bedrag ergens anders staan.
157 Omdat 's-nachts parkeergarages van [0:37:00] Alexandrium waarschijnlijk helemaal leeg
158 staan. Dat is hartstikke inefficiënt.

159 R2: Ja, dat is wel een bewuste keuze dan.

160 R1: En zorg dat er bij Alexandrium een goede fietsenstalling is zodat je met de fiets naar de
161 auto kunt.

162 R3: Dat gebeurt ook wel inderdaad. Dat mensen dan een stukje fietsen naar de auto.

163 [...]

164 R3: Dus de autodominantie (...) Ik zou zeggen fietsstraten. Dus dat de bewoners er ook van
165 doordrongen raken dat auto's te gast zijn, daar kan je ook al heel veel mee doen. Ik zou ook
166 gewoon lekker versmallen.

167 R1: Ja, daar zat ik ook aan te denken daar rechts. Want dit nodigt ontzettend uit om de auto
168 daar neer te zetten. Dan kan nog makkelijk de vuilniswagen erlangs. (...) [0:37:00]

169 R2: En verder, het belangrijkste is dat het met de wijk samengedaan wordt. Op de een of
170 andere manier. Kijk je moet de bereidwilligheid hebben van de bewoners, dat zij dus bereid
171 zijn om verder te lopen. Als ze de auto niet meer voor de deur kunnen zetten. Dat kan nu
172 wel, je hebt hem altijd bij de hand, altijd dichtbij. [...] Ik zet even te kijken naar de plaatjes.

173 R3: Maar denk ook aan de scholen, scholen en klassen kunnen ook heel actief worden in een
174 wijk. Even een voorbeeld uit mijn eigen portefeuille. Mijn man heeft samen met de school
175 bij ons in de straat een hondenloopveldje gemaakt. En dat is een middelbare school, voor
176 het laagste niveau, technisch en beroepsonderwijs. Maar die jongens en meisjes verzorgen
177 het groen in dat hondenloopveldje. Die maaien en sproeien het gras, snoeien de struikjes
178 die er omheen staan. [0:38:00] Ze zorgen dat het hek heel blijft. Nou mijn man vervangt dan
179 de zakjes voor de hondendrollen bij de vuilniszakken. Maar dat doet hij dus samen met de
180 school. En vervolgens is het de buurt die organiseert dan aan het eind van het schooljaar een
181 soort van barbecue voor de school. Dan maken ze Syrische hapjes enzo, en dan eten die
182 jongeren daar mee. Die hebben dan een feestje, met de buurt. Gewoon heel leuk.

183 **R1:** En los van leuk s het natuurlijk ook goed voor de toekomst van de wijk. Dat ze zich
184 bewust zijn van waarom bepaalde keuzes zijn gemaakt en waarom je [...] Dat stukje
185 bewustwording is heel belangrijk denk ik.

186 **R3:** Dus ja dat soort dingen. [0:39:00] Het hoeft niet alleen de bewoners te zijn, we denken
187 altijd dat er alleen gewoon wordt in een wijk. Maar je hebt ook scholen, bedrijven, zzp'ers
188 die best hun steentje bij willen dragen. En je hebt in die buurten ook snackbars, shoarma
189 tenten. [0:40:00]

190 **R2:** De Chinees.

191 **R1:** Wat mij nog (...) Mijn punt van daar straks. Hierzo zijn dus wel mensen actief met allerlei.
192 Ja, geveltuintjes zeg maar.

193 **R3:** Ja, dat is mooi dat ze dat doen.

194 **R2:** Maar om een wijk prettiger te maken, geef mensen voortuintjes terug als die weg zijn.
195 Probeer daar ervoor te zorgen, denk ik, dat er niet in voortuinen geparkeerd wordt of kan
196 worden. En dat je als je ze strak aan de straat hebt, dat iedereen de gordijnen dicht deed.
197 Vertelde jij dat niet (R3)? [0:40:00]

198 **R3:** Nee, ik niet.

199 **R2:** Dat je zo'n maat hebt van 2 meter ofzo qua diepte van je tuin. Dat mensen dan nog de
200 gordijnen openlaten enzo. En zodra het dan nog ruimer is dus 4 meter, dat heb ik
201 bijvoorbeeld. Dat mensen dan [...] toch wel meer een tuin gaan maken. Maar dat ook gaan
202 gebruiken als parkeerplaats. Dus dat je daar ook nog wat mee kunt. Want dat zie je daar
203 rechts, dat lijkt een beetje eenzelfde soort huis als ik heb. Als je zou willen zou je er een auto
204 in de voortuin kunnen zetten. [0:41:00]

205 **R3:** Ja, dat gebeurt heel veel.

206 **R2:** En vooral als je de auto eruit gaat vegen. Dan is dat wel een aandachtspunt denk ik waar
207 je op moet letten. Dat die mogelijkheid in ieder geval geminimaliseerd wordt. Dat ze op
208 alternatieve manieren toch de auto voor de deur gaan krijgen. Want dan gaat het averechts
209 werken.

210 **R1:** We hebben ooit een keer een publicatie voor parkeren in woonwijken uitgebracht.
211 Misschien heb je daar nog iets aan.
212 [...]

213 **I:** Interessant dat je dat zegt want ik heb in een boek van Jan Gehl gelezen. Hij heeft het over
214 een overgangszone van semi privé stukken. [0:42:00] Dat dat interessant is. Dan heb je het
215 bijvoorbeeld over zo'n voortuin. Dat je ook ziet dat het mensen lokt om wat meer naar
216 buiten te komen, want dan zijn ze niet meteen als ze de deur uit stappen inderdaad in het
217 straat leven, maar is er een overgangstukje. Ook met het uit het raam kijken voelt dat heel
218 anders dan dat je woonkamer raam aan het voetpad zit bijvoorbeeld. Precies wat jij net
219 omschrijft eigenlijk.

220 **R1:** Het voordeel van als je een klein stukje tuin geeft, dat je het zowel vergoend maar dat
221 het de gemeente niets kost. Omdat mensen het zelf gaan onderhouden. En daarmee zijn ze
222 ook vaker op straat.

223 **R3:** Maar we hadden het nog even over de auto.

224 **R2:** Ja voor het alternatieve vervoerswijze moet je het aantrekkelijker maken, en voor de
225 auto moet je het minder aantrekkelijk maken. Maar goed [...] Dat is nog best lastig om zoiets
226 te realiseren. [0:43:00]

Short break. Focusgroup continues from minute 48 and slide 8 of the presentation.

SLIDE 8 of presentation

227 I: Dan wilde ik naar het volgende discussiepunt. [0:48:00] We hadden het er net ook al even
228 over, we hebben natuurlijk een doelgroep die moeilijk kan lopen en fietsen. Daar zit ook een
229 doelgroep bij die zou het wel kunnen, maar de vindt het vooral ook niet zo leuk, dus die lage
230 motivatie. Dus die doelgroep die het niet leuk vindt gaat dan bijvoorbeeld wel naar de
231 sportschool, maar doet dat op het gemakje. En juist voor deze mensen is het dus belangrijk
232 om die laagdrempeligheid in actieve mobiliteit in de woonomgeving te creëren. [...] Dus
233 beiden hebben ook regelmatig rust nodig tijdens hun trip. Dat kwam dus naar voren, er zijn
234 te weinig bankjes om af en toe even te zitten, te genieten, samen te komen. Mijn vraag is
235 daarom aan jullie: Hoe denken jullie dat je zo'n groep toch het beste in de beweging krijgt?
236 Ze hoeven heus niet iedere dag een uur te gaan lopen, maar dat ze wat bewuster kiezen
237 voor lopen of fietsen i.p.v. de auto of het openbaar vervoer, juist ook voor de kleine
238 afstanden binnen de wijk.

239 **R1:** Mijn eerste [0:49:00] reactie was eigenlijk, toen ik de bovenste regel las, mijn eerste
240 reactie was meer groen en inderdaad meer bankjes. Dus inderdaad voldoende rustpunten
241 en dat het groen is.

242 **R2:** En dat je natuurlijk goede fietsvoorzieningen en winkelvoorzieningen hebt. Een
243 buurttuin ofzo.
244 [...]

245 I: Bankjes inderdaad. Maar je ziet soms van die bankjes waar je eigenlijk niet heel prettig
246 kunt zitten. Je kunt er rusten, [0:50:00] maar het is geen bestemming voor mensen. Hebben
247 jullie daar nog ervaring mee, hoe je bijvoorbeeld een bestemming maakt van zo'n omgeving.
248 Jij noemt net een buurttuin (...)

249 **R2:** Ja, een buurttuin of iets van een park waar wat te beleven valt. Ik zie bij ons in de wijk
250 altijd ligt langs het kanaal, en daar staan ook allemaal van die vieze bankjes, die helemaal
251 groen worden, dus daar ga je ook niet op zitten. Dus je moet ook kwalitatief goede bankjes
252 neer zetten. Want toch gaan mensen daar graag zitten, er komt veel scheepverkeer voorbij
253 op het kanaal. De roeivereniging zit daar. Dus er is wel wat te doen en te zien, dus mensen
254 gaan daar graag zitten. Dus ik denk dat als je een speeltuintje waar kinderen komen spelen.
255 Ook voor mensen die geen kinderen hebben, er gebeurt wat, [0:51:00] er is reuring. En dan
256 willen ze er wel naar toe, of je zet er een of ander kunstwerk neer wat beweegt en wat de
257 aandacht trekt en leuk is om naar te kijken. Of mensen daar echt naartoe gaan, maar dan
258 hebben ze wel een bestemming om even ergens naar toe te lopen. En is het niet van, nou ik
259 loop een rondje en op mijn route heb ik wat bankjes dus ik ga even zitten en er is verder
260 niets aantrekkelijks in die omgeving. Dan alleen een groen grasveld.

261 **R1:** Ja, en ik zit te denken [...] bij mijn ouders in de buurt, dat is inderdaad ook langs een
262 kanaal. Dat was ooit doorgaande weg, daar hebben ze op een gegeven moment busbaan van
263 gemaakt, waardoor een deel van de weg dicht ging. En vervolgens hebben ze daar, toen ging
264 die busbaan daaruit, toen zag je gewoon het asfalt alg er nog in, maar dat steeds meer
265 mensen daar gingen fietsen, lopen of hun hond uit te laten. [0:52:00] Dus daar hebben ze nu
266 een hele parkachtige omgeving van gemaakt. Asfalt eruit, en dan is het zo'n [...] een beetje
267 een schelpenpaadje, met heel veel bankjes en dan hier en daar een speeltuintje. En ook zo'n
268 circuitje waar je kunt bootcamps enzo. (...)

269 **R2:** Ik vraag me af of dat fitnessapparatuur die je in de openbare ruimte ziet, of dat echt
270 werk. Ik zie ze meer leeg staan dan dat ze gebruikt worden.

271 **R3:** Nou, ik rijd er altijd langs eentje als ik naar huis fiets. Daar staan van die rek en strek
272 rekken, elke avond zijn daar mensen, in allerlei soorten en maten. Kleine kindjes met iemand
273 ernaast, of van die patsertjes die willen laten zien hoe laat ze zich aan dat hoge ding kunnen
274 optrekken. Maar ook stelletjes die elkaar stimuleren. Dus ja ik zie dat regelmatig. En er staat
275 ook een bordje dat er elke maandag avond of dinsdag avond ook georganiseerd [0:53:00]
276 sporten is.

277 **R2:** Ja dat is denk ik ook belangrijk, dat daar actief gebruik van wordt gemaakt.

278 **R3:** Ja en ook niet iedere wijk hoeft zo'n ding te hebben. Als het een wijk is waar geen jeugd
279 woont bijvoorbeeld, een bejaarde wijk.

280 **R2:** Ja inderdaad, dus ook een beetje gekeken naar de afspiegeling van die wijk. Er moet in
281 ieder geval wat te beleven zijn. Het rondje dat ik vaak loop, daar heb je ook een stuk. Een
282 kilometertje of twee, drie. Daar hebben ze ook allemaal van die apparatuur, apparaten staan
283 maar dan wat meer verspreid, dat het echt een rondje is waar mensen lopen. Daar hebben
284 ze dan ook wat bankjes neer gezet. Dan is dat de activiteit, en gaan ouderen mensen daar
285 dan ook zitten. [0:54:00] Want er komt toch wel, vooral als het mooi weer is, telkens iemand
286 voorbij gerend. Daar zitten ze dan naar te kijken. En het kanaal wordt daar gewoon goed
287 benut.

288 **R3:** Maar alleen al als je, [...] dat is tegenwoordig zijn ze daarop tegen vanwege de watten.
289 Maar als je vijvers hebt waar gewoon eentjes zijn, dan gaan mensen al naar buiten om de
290 eentjes te gaan voeren. Allemaal oud brood of korstjes, die je toch niet zo lekker vindt,
291 geven ze dan aan de eentjes. Ja, dan heb je een reden om even naar buiten te gaan. Mensen
292 gaan niet zomaar naar buiten. Dat vertelde mijn moeder ook, toen ze weduwe geworden
293 was en haar hond was overleden, toen zei ze van ik kom nu bijna niet meer buiten, want ik
294 heb geen reden. Vroeger ging ze dan met mijn vader blokjes om wandelen, en later met de
295 hond. Ze zei alleen een blokje om, dat voelt zo raar alleen. Terwijl als je naar de vijver loopt
296 om eentjes te voeren, dan voelt dat helemaal niet zo gek meer. [0:55:00] Of als je naar zo'n
297 volkstuintje loopt omdat daar je worteltjes groeien ofzo, omdat je daar wat wilt wieden. Of
298 een pluktuintje ofzo, groenten kunt plukken. Dat geeft mensen een reden.

299 **I:** Ja. (...) Dus dat mensen een reden hebben om ergens heen te gaan wandelen, en dat ze
300 ook omringd zijn door andere mensen.

301 **R3:** Ja en als er dan dus mensen zijn, en je hebt daar een bankje, dan versterkt dat elkaar.
302 Dingen bij elkaar zoeken dat elkaar kan versterken. Zoals dat kanaal, waar al iets te zien is,
303 en dan een voetpad erbij, een bankje en fitness dingetjes. Nou dan heb je heel veel
304 combinatie van dingen. Dan voelt niemand zich eenzaam zo van ik zit hier in mijn eentje te
305 koekeloeren. Je hebt het gevoel dat je onderdeel bent van een groep.

306 **R2:** En vooral [0:56:00] voor mensen die moeilijk kunnen lopen of fietsen, het moet allemaal
307 betrekkelijk korte afstanden, moet zo iets te bereiken zijn. Of in ieder geval een klein
308 gedeelte (...) van het hele systeem.

309 **R1:** En zorg dan ook voor goede verlichting, dat is ook belangrijk.

310 **I:** Goede verlichting. (...)

311 **R1:** En inderdaad, dan ook nog, goed onderhoud. Dat de gemeente net iets vaker komt om
312 het te onderhouden. Zwerfafval weghalen. Want anders versterkt dat elkaar ook weer, krijg
313 je ook weer een negatieve dingen.

314 **R3:** Maar ook daar kan je dingetjes voor doen, wat je nu met buurtvaders hebt ofzo. Dan zou
315 je ook buurt opa's en oma's kunnen doen, weet ik veel. Ja, mijn man is verschrikkelijk actief
316 bij ons in de wijk, het is een achterstandswijk. Hij is een hele tijd buurtjutter geweest, dat hij

317 op woensdag middag met kinderen zwerfafval ging juttten, en dat ze een euro per kilo
318 kregen. [0:57:00]
319 **I:** Wat leuk!
320 **R3:** Dan deelde hij dat uit zijn eigen zak uit, hij vond het gewoon leuk om dat met de
321 kinderen te doen. In de hoop dat als ze dan groter zijn, dat ze zich bewust zijn dat ze hun
322 eigen achtertuin vervuilen.
323 **R1:** Wat leuk en wat actief zeg!
324 **R2:** Ja, en scholen organiseren dat ook vaak, de nationale opruim-dag ofzo.
325 **R1:** Ja, scholen, kerken, sportverenigingen.
326 **R3:** Oh ja, kerken natuurlijk ook.
327 **R2:** Ik vertik het altijd om daaraan mee te doen. [0:58:00]
328 **I:** Maar jij gooit ook niets op straat natuurlijk *lacht*
329 **R2:** Nee, ik gooi niets op straat. *lacht* ik ga niet de rotzooi van een ander op ruimen
330 *lacht*. Nee, maar ik houd het altijd bij tot dat ik een prullenbak tegen komen en dan gooi ik
331 het weg. Of ik bewaar het tot thuis, lijkt me heel normaal.
332 **R1:** Ja, dat zou je wel denken.
333 **R2:** Maar als gemeente, die prullenbakken moeten ook echt wel snel geleegd worden. En
334 wat ik ook nog wel vaak zie gebeuren dat gewoon hele afvalzakken van huis worden
335 meegenomen, en die proppen ze er dan ook in. Dus dat is weer een nadeel van heel veel
336 prullenbakken misschien, dat dat gaat gebeuren. Maar goed.
337 **R3:** Ja dat kost wel wat, maar dat levert wel veel op. [0:59:00]
338 **R2:** Ja, dus het onderhoud blijft gewoon heel belangrijk. Als je kijkt bij mij in de wijk, ik denk
339 wel dat ze wel minimaal twee keer in de maand langs komen om de groenperkjes weer
340 schoon en netjes te maken. En dat ze met zo'n veegwagen door de straat heen komen. Maar
341 dan heb je dus vooral met dat langsparkeren, het grote probleem, achter mijn auto daar
342 hoopt het zich dan op *lacht*. Want daar kunnen ze niet bij met de veegwagen. [1:00:00]
343 Maar dan is het een kleine moeite om het met de schep zelf even op te pakken.
344 **R1:** Ja, maar dat doet niet iedereen helaas.
345 **R3:** Even kijken, moeilijk lopen en fietsen voor de korte afstanden. Want daar hadden we het
346 eigenlijk over. Voor de korte afstanden, kunnen die mensen ook best wel lopen. Fietsen is
347 misschien iets minder voor de hand liggend, want dan moet je dat vervoermiddel pakken en
348 weer stallen ofzo. Maar juist met een scootmobiel, dus zorg dat het drempelvrij is, en met
349 rollators. Dan kunnen ze een heel eind komen. Met een rollator heb je ook je eigen stoeltje
350 bij je, want daar kun je gewoon op zitten. En dan hebben ze hun eigen rust plekken.
351 [1:01:00] Soms heb je ook van die bankjes waar iemand met een rollator makkelijk bij kan
352 schuiven, dan zitten ze toch bij elkaar in een groepje. Mensen met rollator en mensen
353 zonder bijvoorbeeld. Jan Kuijper maakt die geloof ik.
354 **I:** Zij maken die bankjes?
355 **R3:** Ja maar ik denk dat bijna iedere straatmeubilair maker die wel maakt tegenwoordig.
356 **R1:** Het is dus ook wel belangrijk, maar dat slaat er wel een beetje op aan, dat je goeie
357 afritjes hebt voor die rollators, qua toegankelijkheid. Bij ons hebben ze 2 jaar geleden een
358 actie voorgedaan. Want eerder moest je je rollator haast de stoeprand aftillen, nu kan je er
359 zo makkelijk afrijden, en aan de overkant er afrijden.
360 **R3:** En goed bereikbare bushaltes heb je natuurlijk dan ook. Voor als mensen lopend naar de
361 bushalte gaan.
362 (...)

363 I: Dus bereikbaarheid, beleving, voldoende rustplekken en goed onderhoud. (...) Wilde
364 iemand hier verder nog iets over zeggen?

365 R1: Ik denk dat we alles wel hebben besproken.

366 R2: Ja.

367 (...)

Slide 9 of presentation

368 I: Oké, hier kan ik mee vooruit. Dan gaan we naar de laatste dia waar ik het met jullie over
369 wil hebben, en dat is het verblijfsgroen. Je ziet hier, er zijn echt wel plekken in de wijken
370 waar veel groen is, [...] en mensen zijn ook relatief tevreden met de hoeveelheid groen. De
371 vraag is alleen soms of het groen het meest ideaal is ingericht. Bijvoorbeeld hier rijden auto's
372 niet echt door heen, en daar is weer het Semiramistuin in Rotterdam waar ik het overhad
373 met die vijver. En mensen zien dus ook wel ruimte voor verbetering, met name het
374 onderhoud dat beter kan. En grasvelden nodigt de gemiddelde bewoner niet uit om
375 daarnaartoe te gaan, ze gaan niet zomaar in het park op het grasveld zitten of daar iets
376 doen. Dus ik was benieuwd, wat zijn jullie ervaringen met verblijfsgroen. We hebben
377 natuurlijk al best wel wat dingen voorbij zien komen. Maar hoe nodig je mensen nou uit om
378 niet alleen door een parkje te wandelen, maar daar bijvoorbeeld ook wat meer te zijn.

379 R1: Wat me in ieder geval gelijk beginnen schiet is dat de hondenpoep geregeld opgeruimd
380 wordt. Want dat stoot mensen al af. En wat je vaak ziet is dat als je bijvoorbeeld een paar
381 van die doelpalen plaatst, dan wordt er al gauw gevoetbald. En dan is er dus wat te zien, en
382 een bankje erbij en dan wordt het gras ook gebruikt. Gras is natuurlijk goedkoop en het is
383 snel goed te onderhouden. Goedkoop en makkelijk, dus daarom kan ik me voorstellen dat er
384 veel gras is.

385 R3: En bij voetballen is wel het nadeel dat er heel vaak wel weer een hek omheen moet en
386 dan krijg je zo'n Johan Kruijff veldje, ofzo uh (..)

387 R1: Nou dat hoeft niet hoor, als ik gewoon in mijn dorp kijk. Dan heb je gewoon een aantal
388 plekken. Of trouwens waar ik vroeger woonde, hier zouden wij nooit gaan voetballen, dan
389 gingen we naar een plekje waar doelpalen stonden. En als ze hier doelpalen neer zetten,
390 kinderen hoeven geen jas ofzo op de grond te leggen als doeltje. Dus dat vonden wij altijd
391 heel fijn. Er hoeft niet per se een hek meteen om heen.

392 (...)

393 I: Ja er zijn wel wat velden in beiden buurten, maar die staan soms wat meer uit het zicht,
394 wat meer weg geduwd in een hoek bijvoorbeeld. Dus dat is minder toegankelijk voor andere
395 mensen om bijvoorbeeld naar te gaan kijken.

396 R2: Het is dan ook gevoeliger voor hangjeugd. En dat is wellicht niet wat je wilt.

397 R3: Ja he zou juist in het zicht moeten zijn, dat is veel leuker. En dan het informele wat jij
398 zegt. Zet er iets neer en dan komen ze vanzelf. Een voetbaldoel en dan gaan ze voetballen.

399 R1: En ook een hele simpele misschien hoor, maar dit is heel breed en heel veel steen erin.
400 Maar wat juist een beetje leuk is, zijn van die zandpaatjes die een beetje kronkelen. Dat
401 stimuleer ook om daar al meer [...] naar toe te gaan. Dat geeft meer parkkarakter dan die
402 hele brede straten.

403 R3: Maar in combinatie met mensen die niet zo goed kunnen lopen, dan zijn zandpaatjes
404 misschien niet het meest ideaal.

405 R2: Het moet ook mooi bestraat zijn, want je krijgt anders ook vieze schoenen. Dat willen
406 mensen niet.

407 R1: Maar een keuze voor een wat natuurlijkere manier van het pad aanleggen.

408 R3: Maar zandwegen worden vaak onvlak, dan krijg je kuilen door de regen enzo.

409 **R1:** Ja ik bedoel eigenlijk een beetje half verhard. Van dat hele fijne (...)

410 **R3:** Ja ik weet wel wat je bedoelt. Maar daar komen gewoon snel kuilen in, bijvoorbeeld al

411 door molsgangen ofzo en dan krijg je verzakkingen.

412 **R2:** Maar je zou een combinatie kunnen doen, sowieso van die verharde paden. En dan nog

413 van die half verharde paden erbij kunnen maken.

414 **R3:** Wat ik heel leuk vond, dat hoorde ik van iemand die een lezing had over biodiversiteit.

415 Dat je moet kijken naar welke bomen je er neer zet, om ook [...] de beestjes te verleiden

416 want je hebt bijvoorbeeld de Amerikaanse eik, wat een hele mooie boom is die heel mooi

417 kleurt, hele mooie park boom. Alleen er schijnt maar 'een soort insect of vogel ofzo op af te

418 komen. En je hebt de Europese eik, onze eik met de eikels. En daar komen wel honderden

419 soorten beestjes op af. En ja die kleurt misschien iets minder leuk en die bladen zijn iets

420 vervelender in het riool. Maar voor biodiversiteit en om dingen te bekijken heb je daar veel

421 meer aan. Bomen die niet in Nederland horen, daar komen geen Nederlandse beestjes op af.

422 Dus dat betekent veel minder biodiversiteit en dus minder dingen om naar te kijken.

423 **R1:** Of hang er allemaal nestkastjes in, dan krijg je weer allemaal vogeltjes die daaropaf

424 komen.

425 **R3:** Ja en dan houdt het zichzelf ook wel weer ins tand. Inderdaad dienen als nestkastjes,

426 activiteiten om dingen te zien, dingen te verkennen. Dat vinden mensen gewoon leuk. Of

427 wat denk je van buurtkippen ofzo, laat gewoon. We hebben een tijd gehad dat we een serie

428 kippen in die buurt hadden.

429 **R1:** Wel leuk inderdaad. En dan heb je sowieso inderdaad iets met dieren, want dat trekt

430 weer kinderen aan en kinderen trekken dan weer oudere mensen aan om te kijken wat er

431 allemaal gebeurt.

432 **R3:** ja en als je zoiets hebt, die beesten die voeden zichzelf. Die hoeven echt niet bijgevoerd

433 te worden. En daar komen ook konijnen en eekhoorntjes, en natuurlijk heb je dan weer

434 azijnpissers die dan zeuren dat er ongedierte op afkomt, maar ja dat heb je toch wel in de

435 stad.

436 **R1:** En sowieso dat middelste plaatje trekt mij het meeste aan, en ik zit te denken waarom

437 dat nou is. Het is minder rechttoe recht aan, het is natuurlijk echt een park. En de rest is

438 meer doorgaande weg of in een woonwijk.

439 (...)

440 **R3:** Maar ook honden-uitlaatveldjes zijn heel leuk, dat trekt ook mensen aan. Bankje erbij,

441 bankje erin ofzo.

442 **R1:** Ja en als je het dan over zo'n hondenveldje hebt is het ook leuk om dat een beetje met

443 groen te omheinen, in plaats van met zo'n hekje.

444 **R3:** Je moet wel een hek maken, maar die scherm je af met bijvoorbeeld een beukenhaagje

445 ofzo. Dan komen er ook wel weer beestjes op af. En dan heb je je biodiversiteit ook weer

446 aangepakt.

447 **R2:** Ja ik zit ook nog een beetje na te denken, want veel van de bedrijvigheid die we

448 aandragen zijn allemaal dingen die veel in de lente en in de zomer plaats vindt. En je hebt

449 natuurlijk in de herfst, dat zagen we laatst eigenlijk ook, dat er nog steeds leven is want

450 mensen lopen en fietsen het hele jaar. Dan ziet het er altijd grauwer uit en minder mooi, er

451 ligt een hoop blad op straat. En mensen hebben tegenwoordig een hekel aan blad, het moet

452 allemaal clean en opgeruimd zijn.

453 **R3:** Is dat zo?

454 **R2:** Ik heb wel het idee dat dat zo is. Ik weet niet wat deze wijk ervan vinden natuurlijk. Maar

455 ik hoor heel veel van het beheer van de gemeente noem maar op, maar vinden ze dan blad

456 dat van de bomen valt (...) je kunt heel veel bomen neer zeten, maar die gaan een keer hun
457 blad verliezen. En ook qua bedrijvigheid, kijk er gebeurt niet zo veel inde herfst of in de
458 winter in zo'n park.

459 **R1:** Kastanjes zoeken, eikels zoeken (...)

460 **R3:** Wel als je zo'n voetbalveldje hebt, die zijn 12 maanden per jaar in gebruik. Of een
461 grasveldje waar je een paar goals neer zet gaan ze daar voetballen.

462 **R2:** Ja, en vooral dan wel weer die Kruijff veldjes want daar word je niet smerig van.

463 **R1:** En heuvels zijn ook leuk, want als er dan een keer sneeuw ligt dan kan er worden
464 gesleed.

465 **R2:** Oh ja, dat is ook een goed idee. Het pad zelf moet natuurlijk vlak zijn, vooral voor
466 mensen die slecht ter been zijn. Maar dat je in bochten niet per se kunt zien wat erachter zit,
467 dat je een beetje nieuwsgierig bent naar wat daarna komt. Dat zijn leuke dingen om in je
468 ontwerp rekening mee te houden. (...) Want daarom is het middelste pad het meest
469 aantrekkelijk, want je ziet het pad maar niet waar het naartoe loopt. En op de andere paden
470 heb je gewoon rechte paden. Ik denk dat het ook handig is als je de routes naar dit soort
471 plekken, verblijfsgroen dat dat voor kinderen alleen ook goed te bereiken is.

472 **I:** Een soort kindlint? Daar is bijvoorbeeld in Holtenbroek best wel potentie voor, ze hebben
473 namelijk een groen assenkruis om het zo te zeggen die de buurt met elkaar verbindt.

474 **R3:** Is dat van Ineke Spapé? *sceptisch*

475 **I:** Ja, die inderdaad.

476 **R3:** Ja, daar ben ik niet zo enthousiast over. Maar het is bijvoorbeeld wel leuk om een blok in
477 een straat ofzo, voor kinderen beweeg vriendelijk te maken. Bijvoorbeeld een stukje
478 hinkelen, een stukje zigzaggen of stukjes springen. Dat soort dingen, gewoon met verf op de
479 vloer, dat maakt de omgeving beweegvriendelijk en aantrekkelijk voor kinderen. Maar het
480 kindlint daarbij is het de bedoeling dat je de bibliotheek weer koppelt aan de school en
481 koppelt aan de sporthal en noem maar op. Dat soms wordt het nogal moeilijk, dat heb ik
482 tegen dat kindlint, wordt het zo moeilijk om die dingen echt netjes met elkaar te verbinden
483 en ik vraag me af of kinderen dan wel die routes zo gebruiken. Omdat je niet van school naar
484 de bibliotheek gaat en doorloopt naar de gymzaal. Dat doen kinderen niet, je gaat naar de
485 bibliotheek en dan ga je naar huis, in de avond of in het weekend ga je dan naar de sport.

486 **R2:** Het is natuurlijk wel, als je dat verbindt, en het is een solitair gebied voor fiets en
487 voetganger, als dat inpasbaar is. Dan kun je als ouder natuurlijk zeggen, nou ik kan mijn kind
488 gewoon die route laten lopen want er gebeurt daar niet zoveel. En ik denk dat dan zo'n
489 route best veel gebruikt wordt omdat ouders die kinderen dan ook leren die route te
490 nemen.

491 (...)

492 **I:** Wil iemand hier verder nog iets over zeggen? Of misschien heeft iemand een vraag?

493 (...)

494 **R1:** Nee, ik niet.

495 **R2:** Nee.

Slide 10 van presentatie

496 **I:** Dan gaan we richting de afronding van deze focusgroep. Had iemand nog een nabrander?

497 **R2:** Nou ik denk dat het allemaal valt en staat volgens mij allemaal met de wijk en met de
498 betrokkenheid van de bewoners. Het gros moet echt wel betrokken zijn in de zo'n wijk, om
499 er iets van te maken.

500 **R3:** Dat vind ik nog wel een hele goede vraag, hoeveel procent van de wijk betrokken moet
501 zijn in de wijk om er een maatschappelijke wijk van te maken? Want wat nou als

502 bijvoorbeeld 10% van de wijk dingen gaat doen en buiten is, dat dan de wijk misschien al een
503 stuk netter is en een stuk meer van elkaar wordt. Of misschien is dat wel 30% of de helft. We
504 willen altijd dat iedereen meedoet maar dat gaat toch niet lukken. Dus hoeveel procent
505 moet je dan hebben?

506 **R2:** Ja, en ook van uh, bij hoeveel procent. Kijk als je een straat hebt met heel veel blad op
507 de paden. Ik merk altijd aan mezelf, zodra mijn burens dat trottoir gaan leegscheppen, dan
508 denk ik ook ik kan niet achterblijven. Dan ga ik ook weer aan de slag. Dan houd je met elkaar
509 toch die straat schoon. Maar dan moeten wel een paar mensen daarmee beginnen. En hoe
510 verhoudt zich dat nou dat anderen dat ook gaan doen. En dan heb je natuurlijk altijd nog een
511 paar mensen die het echt niet doen omdat ze het niet willen. Maar dan pak ik dat stukje ook
512 nog wel even mee.

513 **R1:** Ja en als jij dat dan voor een ander doet dan krijg je dat andere mensen dat ook voor jou
514 gaan doen.

515 **R2:** Precies, en daarom is de mix in je wijk ook zo belangrijk. Daarom ben ik ook zo'n
516 voorstander van een combinatie van koop, huur, sociale woningen, oud jong, laag en hoog
517 opgeleid. Noem maar op.

518 **R1:** Ja, dat denk ik ook ja.

519 (...)

520 **I:** Verder nog nabranders?

521 **R1:** Nee [...] Leuk om hier zo samen over te filosoferen!

522 **R2:** Ja vind ik ook!

523 **R3:** Ja zeker, leuk om hierover in gesprek te gaan!

524 **I:** Nou vond ik ook, en ik heb er veel mooie inzichten van opgedaan.

Annex 21. Observation scheme

Observation Grid: Active Behavior in the living environment			
Site location:	Date:	Start time:	Stop time:
			Weather:
<u>Areas of Observation</u>	<u>Objects/elements</u>		<u>Perception (photo)</u>
Housing/parking/shops (density, maintenance, paving/asphalt)			
Greenery (trees, grass, fronts housing, roofs, paving)			
Network cars (dominance, balance, street view, priority)			
Network cyclists (quality, connectivity, attractiveness, oversteekbaarheid, priority)			
Network pedestrians (quality, connectivity, attractiveness, oversteekbaarheid, priority)			
Public areas (parks, plaza, playgrounds, resting-place, attractiveness, balance inclusive and exclusive public space*)			
Activity (what are people doing in the public areas?)			

Date:

Time:

Location:

Introduction

Thank you for participating in this interview. My name is Amber, and I am a student at the Radboud University. For my master thesis I am researching active behaviour (walking and cycling) in the neighbourhood >NEIGHBOURHOOD< because the municipality is thinking about improving the neighbourhood. The municipality wants to know about the wishes of residents. You can also tell me things you don't want the municipality to know, then I will leave them out of the paper. I'll ask you questions about your daily activity, the neighbourhood >NEIGHBOURHOOD<, and your opinion and experience. I'll be taking some notes during the interview, but also, I'd like to record the interview if that is okay with you?

>>> The recording will only be listened to by me and my professors, you will remain completely anonymous. Your name will not be mentioned. I expect this will take about 45 minutes. The results of this interview will again only be seen by me and my professor. If you'd like I can send you the results as well. Also, know that your input is very valuable, but may you want to stop at any time, that is always possible. Might you have any questions feel free to always ask. Do you have any questions right now? So, would it be okay if we begin?

Themes, subject, questions/possible follow-ups

Start with a few personal questions

Gender:

Age:

Job occupation:

Education:

Next, are some questions on traveling in an average week.

1. How do you travel to your work?
 - Why?
 - How long do you travel?

2. Do you ever – walk, - cycle, - travel by car, - use public transport?
 - Where do you travel to?
 - When?
 - Why?
 - How long do you travel?
 - Car: enough parking spaces at destination? Crowded?

3. Do you cycle or walk in your spare time?
 - When?
 - Why?
 - How long do you walk/cycle?
 - Where to? Or just for pleasure? (recreative intentions, what destinations?)
 - What could be better/different on the routes? (tiles, safe crossovers, cycling network, walking network, accessibility)

4. When you walk or cycle through >NEIGHBOURHOOD<, what do you think of the greenery in the environment?
 - Quantity trees, grass, plants, etc.? Maintenance?

- Enough, more?
 - Do you use the greenery? (stay, sports, walk through, etc.)
 - Do others use it? Who and when?
 - What could be different/better?
 - Probing: Could you tell me more about that?
5. What do you think of the water in >NEIGHBOURHOOD<? (>WATER IN NEIGHBOURHOOD<)
- Enough?
 - Maintenance?
 - Do you use it? (Route next to water, activity on the water?)
 - Do other people use the water? Who and when?
 - Probing: Could you tell me more about that?
6. Municipality thinks about improving >NEIGHBOURHOOD<, and the opinions of residents/visitors would be a valuable addition. If the municipality would like residents to think along for the plans on improving the neighborhood. How can the municipality organize this best? In what way do residents want to participate?
- What do you think? Any ideas?
 - What form? Where?
 - Are people willing? Why/why not?
 - What will it take to get them involved?

>>> Visual research (not for phone-interview)

Show Google-Street view images or photos of some typical streets from the neighborhood and discuss what the respondent thinks of this street.

7. If you look at this street, what stands out?
- Greenery, water, sidewalk, cycling path, car dominance?
 - Looks safe, looks pleasant?
 - Nice street?
 - Good? What could be better?
 - What do you think of this street?

Closure

So, is there anything else you'd like to mention?

Okay, then I want to thank you for your contribution and your openness. Again, the data will be processed anonymously and will only be reviewed by me and my professor. If you at a later moment would like to listen back to the interview you can contact me and I will send you the audio and transcript if that is finished already. And I will send you the results in a few weeks as well. Would it be okay if I contact you again, might this be necessary?

So is there anything you would like to mention or ask me?

>>> Okay then I want to thank you once more!

Annex 23. Examples of quotes – Interviews respondents

Code	Quote	Respondent
Maintenance	I think the maintenance could be better	R1:106
Urban furniture	You can sit there on a bench every now and then, but not that often. That could be a bit more.	R3:137
Build environment	I think the neighborhood center of Holtenbroek is a really nice place for such activities to take place.	R3:143
To play	But there also are parts that are not that green and where you [...] there is not much to experience from a child's perspective for example of even from a adult perspective.	R2:49
To experience	Uhm if I go by foot, then I always must choose between possible routes. One route has more nature. So that is the route I prefer.	R1:55
To reside	Yes, I think it is very beautiful. Especially if the weather is good, then you can sit there as well.	R1:141
Traffic	Yes, you have a crosswalk, and you must pay attention if there are none.	R3:94
Social safety	There are a lot of horrible things that happen here sometimes. Shootings and drugs and uh...	R3:194
School zones	There are a few schools next to each other, but mostly one school, the free school of Holtenbroek, where children cycle, and small children walk. And there is a lot of traffic there, but only a few uh, a few crossovers or something. But I think that part of Holtenbroek deserves some extra attention.	R2:68
Health	I have health problems and I do not always have a good day so to speak. And I prefer, when I want to move, I prefer something else. I do not like walking that much. *laughs*	R1:83
Mobility	I do not have a driving license.	R1:10
Reason bike	And for me it is more practical to take the bike because it is even faster than to go by car.	R2:11
Reason car	Because on Thursday I have a little niece that goes to the same school as my son, so I must take them both and that is a bit difficult to take them both on the bike as they are 5 years old. So, for me it is more practical to take them to school by ca rand than drive to my work.	R2:6
Reason walking	Well, I cannot walk so easily anymore, because I have had surgery to my knee. I have a new knee, and it is as if I am swerving. I am not that stable whilst walking.	R3:37
Reason pub. Trans.	Because I do not have anything else. I do not have a driving license, so I cannot take the car. And cycling is not possible due to health conditions. So yeah, most of the time it is fine. It can also be [...] It can be very uncomfortable.	R1:10
Current communication	Only yeah, they organized a big event to recruit people. So, then I enrolled myself and they never contacted me after that.	R1:196
Future communication	So, there are a few people that are open to the idea, and that you can involve in the preparation of such conversation and how we can arrange that, and during and after. And how we are going to arrange it and how to bring people together.	R2:158

Annex 24. Examples of quotes – focus-group experts

Code	Quote	Expert
Urban furniture - negative	Within my neighborhood alongside the canal, I see benches that have gotten all dirty, they have gone green so you're not going to sit there.	FG:S249
Refurbishing environment - positive	So, it is important to create good ramps on the pedestrian areas for walkers.	FG:S356
Build environment - positive	But it would be fun when paths are meandering through the environment. It stimulates to go there more.	FG:S400
To play - positive	It is fun to make a part of the street movement friendly for children. For instance, hopping, zigzagging, jumping, those kinds of things. Just with paint on the floor, that makes it more movement friendly and interesting for children.	FG:S476
To experience - positive	The path itself should be leveled of course, especially when people have trouble walking. But when you cannot see what's behind a bend, it creates curiosity for what's coming next. Those are fun things to bring into the design.	FG:S465
To reside - positive	Yeah, and if there are people, and a bench, then that will fortify each other. So, bringing things together that fortify each other.	FG:S301
Maintenance - negative	The municipality should make sure that garbage bins are emptied often.	FG:S333
To reside - negative	People do not just go outside without a reason	FG:S291
To reside	Yes indeed, and also taking into account the reflection of the neighborhood. There should be something to experience.	FG:S280
Active behavior	If people really go there, I don't know. But at least they have a destination to walk somewhere to. It's not just like they will go for a walk without purpose and sit on the benches when there is nothing attractive in the environment. Just an empty lawn.	FG:S257
Spare time	And schools often organize some national cleaning-day or something. Yeah, schools, churches, or sports clubs.	FG:S324
Reason transportation - bike	There are quite a lot of people who simply do not care. We just take the car.	FG:S10
Reason transportation - car	Where, to my surprise you find people who will take the car for every small trip.	FG:S24
Reason transportation - walking	But I think the footpath is quite small over there so that is less inviting to walk.	FG:S100
Problems	With parking at a distance, the part of the residence that have trouble walking and cycling, for them it is more difficult to have a car at a distance. They should take notion of that.	FG:S147
Inspiration	I saw in Leeuwarden, it's called the 'walking forest', where they had all kinds of crates with trees in them. They would be placed somewhere for maybe two weeks, as a refurbishment of the street of plaza. And then after two weeks, they would pick them up with a pump truck and place them somewhere else. Just to let people get used to the trees.	FG:S110
Solution for problem	So indeed, enough places to rest and that the environment is green.	FG:S240
Participation	Well, I think the most important success-factor with the involvement of the neighbors. Most of the residents should be involved and participating.	FG:S497

Annex 25. Design principles - nuances to the framework

Cycling network

(AP1 Main network walking/cycling + AP2 Cycling highway)

The European Commission (n.d.) distinguishes three levels of cycle routes:

- Main routes: they connect cities, villages, and towns with each other. These routes are not accessible by car and are only meant to be used by cyclists and a few other (motorized) vehicles such as scooters.
- Top local routes: functioning as the main cycling connection between different areas within the urban area. These are 'travel through' routes, used only by cyclists. They distribute large quantities of cyclists and are the link between their homes and surrounding neighborhoods.
- Local routes: every street or path that can be used for cycling, connecting all destinations to the top local and main routes. These are the routes that cyclists share with motorized vehicles and other road users.
- No cyclists allowed – Pedestrian area.

The European Commission (n.d.) also distinguishes two types of cycle routes:

- Utility Network, connecting shops, schools, work etc. in a direct way so that people can travel from A to B efficiently.
- Recreational network, which allows people to explore an area, focusing on leisure cycling, exercise, and socializing.

According to CROW (2021-a) a strong, future proof cycle path should follow the 10 design principles below. These principles should be applied to balance out form, function, and usage of the cycle path to establish optimal user behavior. The principles apply to the Main routes and Top local routes as formulated by the European Commission (n.d.) as these are the routes that are only used by cyclists (and small motorized vehicles). They are not used for the design of the local routes as these routes are used by bigger motorized vehicles such as cars and busses as well as cyclists.

1. Width of the path

The recommended width for a two-way Main route with an average intensity of 400 cyclists per hour is 5,60 meters. The recommended width for a two-way Top local route with an average intensity of 400 cyclists per hour, is 4,40 meters (CROW, 2021-a).

2. Profile division

CROWs (2021-a) recommendations for a utilitarian two-way cycle path are white axle and edge marking.

3. Edge of the path

To visualize where the cycle path ends and the verge starts, contrasting pavement and edge marking are recommended.

4. Verge of the path

CROW (2021-a) recommends an obstacle free verge of 1 meter between the cycle path and surrounding trees, roads etc.

5. Induration of the path

An even and whole pavement of the cycle path is recommended for safety measures. Asphalt or concrete are therefore recommended.

6. Wayfinding

Every crossroad that includes a cycle path should signal what kind of cycle path it is (not mandatory, mandatory for cyclists, mandatory for cyclists and small motorized vehicles). If the path is part of a regional or national cycle route, there should be a board for this as well

7. Pedestrian area

Recommendation by CROW (2021-a) on pedestrian areas within the urbanized environment is to always facilitate a footpath alongside a cycle path. This is to prevent pedestrians and cyclists

to disturb each other; if there is no footpath, pedestrians will probably use the cycle path as this is likely the most direct way toward facilities.

8. Lighting

CROW (2021-a) recommends lighting in cases where there is hardly any spatial guidance (housing, trees, etc.)

9. Bends and slopes

CROW (2021-a) explains that bends in the cycle path should be avoided as much as possible as they can be dangerous and inconvenient for the cyclists on the Main and Top local routes: bends can be complex, demand speed deceleration and cyclists can estimate the bend in a wrong way which can lead to dangerous situations. If a bend is unavoidable, they should have a bigger radius and the width of the path should be adjusted (make it wider).

According to CROW (2021-a) slopes should only be applied in cycle paths when it is unavoidable. And if slopes are unavoidable, the steepness of the slopes should be minimalized. The ideal slope rate is between 7,5% and 2%, depending on different factors.

10. Poles and speed decelerators

CROW (2021-a) recommends the use of poles and speed decelerators to be as little as possible as they both have a negative impact on the comfort and safety of cyclists. Poles are used to block the road for larger, motorized vehicles, and they form the biggest reason for one sided bicycle accidents. Speed decelerators function as warning mainly for users of the cycle path with a higher speed, such as scooters and speed-pedelecs. The speed decelerators might disturb the regular cyclists and can lead to abrupt, unexpected movements. Every pole and every speed decelerator are one too many and disturbs optimal cyclists experience (CROW, 2021-a).

The ten design principles of CROW (2021-a) are discussed for Holtenbroek – Zwolle, and Oosterflank Rotterdam, and will be used in addition to the building blocks 'Main network cycling/walking' (AP1), and 'Cycling highway' (AP2). This will contribute to a more in-depth analysis of the regional and national cycling routes in Holtenbroek.

Density and facilities

(AN3 Cultivation density + AN4 Proximity facilities)

In his book *Life between buildings*, Jan Gehl (2011) talks about four general city planning principles for working with the human dimension. The four principles deal with quantity in a city and ensuring that the build-up areas assemble people and events. In his book *Cities for people*, Gehl (2010) adds a fifth principle that focusses more on improving the quality of the city space to invite people to spend more time. The five principles are discussed below and will be used in addition to the Framework 'Building blocks for the movement friendly environment' created by Kenniscentrum Sport & Bewegen (2021). Specifically for the building blocks 'cultivation density, function blend, variation in buildings' (AN3), and 'proximity facilities' (AN4). Image 7 to 9 show an example of an area where the principles are applied and one that does not fit the principles.

- To assemble or disperse

Not the buildings, but the people and the events need to be assembled. Floor areas/site ratios and building density cannot be used to say something conclusive about the appropriate concentration of human activities (Gehl, 2011). Placing buildings at great distances from each other with entrances and residences facing away from each other will likely disperse people and activities. Placing the individual buildings and functions so that the system of public spaces is as compact as possible and distances for pedestrians are as short as possible will assemble people and activities more (Gehl, 2011). Dimensioning streets and squares in a realistic way relating to the range of senses (seeing, hearing) and the expected number of people to use the place, might assemble events and therefore people (Gehl, 2011). The range of the senses play an important role, as it is

almost always more interesting to be in a space of smaller scale where both the entirety as well as the details can be seen. This will increase the intensity of experiences.

The standard solution for placing buildings such as banks and offices in a pedestrian oriented street, is to only place the entrance to the function on eye level (no longer than 5 meters). The larger part of the units is situated behind or above the street on eye level (Gehl, 2011). When buildings are narrow, the length of the street will be shorter, which will reduce the walking distance and enhance street life. The same principles can be applied to residential areas. Sightlines are important, people will only use the spaces they can see. Public spaces should never be sunk or elevated unless there is a real good reason for it. Parallel paths instead of compact streets will result in dispersal of people and events, the same goes for underground or elevated pedestrian routes (Gehl, 2011).

- To integrate or segregate

A public space with a variety of integrated activities and functions allows people involved to function together, stimulate and inspire each other (Gehl, 2011). A differentiated planning policy will improve contact with surrounding society; to evaluate social relations and practical advantages from function to function, and to only accept separation when the disadvantages surely outweigh the advantages. All functions that do not interfere/oppose with each other, should on a large scale be mixed. The private living room (a place where different family members can be occupied with different activities at the same time, but activities and people can also function together), can be seen as a great model for integration of activities on a larger scale (Gehl, 2011).

Traffic

A differentiated road system (a different route for each traffic type) creates the peak of separation. The alternative would be to encourage replacement of individual car use trips with a combined network of pedestrian, bicycle, and public transport systems (Gehl, 2011). It is important to integrate traffic and outdoor related activities with each other. The Dutch Woonerf principle (multifunctional streets where slow automobile, cyclists and pedestrians together use the same space) offers an acceptable solution (Gehl, 2011).

- To invite or repel

A smooth transition between the public and private area creates an inviting living environment. Flexible boundaries (transitional zones that are neither entirely private nor completely public, i.e., semiprivate front yards) often function as a connecting link between the private and the public environment. They enable residents and activities to move easier back and forth between the spaces, both physically and psychologically (Gehl, 2011). Public spaces also seem to be more inviting if one can see what is going on there. The distance, quality of routes, modes of transportation available between the public and the private environment influence if an environment is experienced as inviting (the connection between people and the various functions).

The psychological needs for contact, knowledge and stimulation are requirements that need to be satisfied in public spaces (Gehl, 2011). I.e., a shopping trip can also be a pretext for people for contact and stimulation. The interweaving of motives shows the importance of public environment and its destinations. Places (lookout points, shops, community centers, sports facilities, restaurants, etc.) that the individual can naturally go to and use as a motive and/or inducement to go out. It is important that there are not only opportunities to sit and walk in the public area, but that one can also act, do, and be involved in activities (Gehl, 2011).

- To open up or close in

The human sensory experiences and the narrow parameters of these experiences partly determine if an event is opened up or closed in. I.e., a library with large windows, but 10-meters setback from

the pedestrian area, or a library with windows directly alongside the street. The first can be seen as a building with windows (opened up), the latter as a library in use (closed in) (Gehl, 2011). A planning policy that is based on a case-by-case evaluation of each situation and their (dis)advantages can contribute to a subtle, natural differentiation between open and closed buildings/areas. Streets with a more people centered design, instead of car centered design are generally more populated and more entertaining to be in, chances for informal meetings increase (Gehl, 2011).

- To increase or reduce

To invite for longer stays in a city space, the invitations should be strengthened. Because according to Gehl (2010), “a few people spending much time in a place provide the same sense of lively space as many people spending only a short time”. Inviting people is the simplest and most effective method to have people spend more time in city spaces. The quality of the outdoor space and the optional, recreational functions and social activities that are possible there, influence the various outdoor activities. If a space is attractive for sitting, walking, standing, seeing, hearing, and talking, this not only improves the quality of the space, but also lays a good basis for other activities such as play, sports, community activities, etc. (Gehl, 2011).



Image 7. Attractive street due to old architecture, light materials make the trees pop (CROW, 2021).

Image 8. Attractive street due to active plinth, architecture and mix of materials (CROW, 2021).

Image 9. Attractive street due to active plinth, old architecture, and greenery (CROW, 2021).

15-minute city

The five principles will be applied in combination with the ideology of the 15-minute city: “having all necessary amenities within a short walk, bike ride, or public transit trip from one’s home” (Chamberlain, 2022). Measured from the location where amenities are clustered within the neighborhoods Holtenbroek and Oosterflank towards the borders of the neighborhoods, will show if the 15-minute city applies. The above-mentioned principles will be applied on the area’s where the facilities are clustered. To do so, first the 15-minute city needs to be operationalized, translating the 15-minute walk/cycle trip into a distance in kilometers. The average walking speed is 4.5 km/h (Fletcher, 2022). When walking 15 minutes with a speed of 4.5 km/h, one will walk approximately 1.13 kilometers. The average cycling speed in the Netherlands is 12.5 km/h (KIM, 2017). When cycling 15 minutes with a speed of 12.5 km/h, one will cycle approximately 3.13 kilometers. Therefore, the ideal 15-minute city in the Netherlands has the most important facilities within a radius of 3.13 kilometers from every house within the neighborhood.

The child friendly neighborhood

(AN5 Kindlint + AS3 School zones + N3 Playground and inviting places for movement + RS2 Play inducement)

Facilitating a child friendly neighborhood consists of two main elements; the possibility to independence for children and the amount of play inducement and opportunities to play in the neighborhood. These two elements will be discussed below.

Independence

Gehl (2010) writes in his book 'Cities for people', how hearing and seeing contacts in public spaces are the most important contacts people experience. People's senses have a big impact on the experience of and the interactions with each other. Creating an inviting public space for seeing and hearing contacts require low speeds, clear views, short distances, only one level, and an experience-oriented environment.

Seeing and hearing contacts are not only important for the experience between people residing in the same public space, but also form important elements of spaces that parents experience as safe for their children. According to the website 'Alles over sport' (2019), in the absence of outdoor spaces within sight and hearing of the residence, parents are less likely to let their children play outside unsupervised. The average amount of days children between 4- and 11-years old play outside in the Netherlands decreased. From 2004 to 2014 the number of children that play outside 5 to 7 days a week decreased from 75% to 72%. As a result, however, the number of children that play outside 3 to 4 days increased by 4%. Research by RIVM in 2016 shows that children living in non-urban environments on average play outside two hours per week more than children living within the urban environment (Collard, et al, 2018). A kindlint can offer a great opportunity for children to safely and independently play and travel outside.



Image 10. Example neighborhood with kindlint, SOAB n.d.

A Kindlint is a child friendly route alongside important locations, such as schools, playgrounds, and sport clubs. The Kindlint creates an inviting public space for children to travel safely and independently between different destinations within the neighborhood (SOAB, n.d.). It consists of the following elements (see image 10.):

- Wayfinding of the route via child friendly tiles, boards, or poles.
- Child safe traffic recessionary crossovers (obstacles, crosswalk, traffic lights, etc.).
- Play elements and/or play inducement.
- More color and art.

One of the most important destinations for the children to independently travel to is school. The average age for children in the Netherlands to travel independently to school lays between 9 and 10 years old whilst most families live at walking or cycling distance away from school, up until 5 kilometers (Veilig Verkeer Nederland, n.d.). Elements that encourage parents to let their children travel to school independently because they create safe routes, are (Daamen, et al., 2022):

- Detached cycle paths, not on road shared with cars.
- Parked cars alongside the road.
- Priority for cyclists when crossing the street.
- Real-time speed display to encourage motorists to meet the speed limit.

The four elements of a Kindlint and the four elements of safe school routes will be used in addition to the Framework 'Building blocks for the movement friendly environment' created by Kenniscentrum Sport & Bewegen (2021). Specifically for the building blocks 'Kindlint' (AN5), and 'Schoolzones' (AS3).

Play inducement

According to Aziz and Said (2016), outdoor play is important in the healthy development of children as it helps them develop environmental connections and increases their performances. However, the design of the outdoor environment often does not fit the needs of the children, which results in low engagement. Aziz and Said (2016) explain how playgrounds carefully designed by adults do not always fit the needs of the children. Whereas "play" grounds, a simple space, a corner (that is not specifically

designed for play) that does trigger the playfulness and curiosity of the children sometimes organically becomes a popular play area.

Moreno (2023) describes 10 design principles of a playground, these are:

1. Design for different types of play.
Think of active play (running, jumping, climbing), sensory play (feeling different textures, smelling flowers and plants), creative play (drumming, dancing, drawing), social play (talking, cooperating). Combining multiple types of play in one play area enhances the play inducement.
2. Create a sense of place.
A strong sense of place means the playground has the spirit of the community, the location. It could not be found all over the world, because it specifically fits that neighborhood/area. Focus on the specific cultural elements (certain shops, logos, businesses) to create an authentic experience.
3. Trust children's creativity.
Children are creative and they will use that creativity to use elements for purposes they were not designed for, i.e., climbing the slides instead of just sliding down. According to Moreno (2023) loose elements are endlessly interesting as they spike the creativity in children.
4. Make room for secrets and surprises.
Children pay attention to the small details and unexpected elements of the playground. These unexpected details are sometimes even more important than the bigger structure of the playground. Think of secret hiding places, interesting textures, peep holes etc. These elements make the playground interesting and will induce play.
5. Consider the flow of the space.
A good 'flow' of the playground, a fun path leading from one play element to another, will give opportunities to explore the area in different directions.
6. Create zones for different energy levels.
Different zones by separating spaces with different levels of energy, will allow children to reside for a longer time within the play area. A garden and bench might create a moment of rest and provide some quiet time. Whilst the area with the swing and slide create room for loud talking and laughing.
7. Don't get too preoccupied with looks.
Interesting colors, shapes and textures are important for play inducement. However, it can look messy and chaotic, the playground should simply provide spaces where play can happen.
8. Design for intersections.
Think of designing the playground with different levels of difficulty. Instead of labeling areas for "abled" and "disabled" children, instead try to think of scales of difficulty. Intersections accessible for all children, due to the different levels of difficulty.
9. Work with, not against nature.
Incorporating nature in the playground as much as possible (trees, flowers, logs, stumps etc.) contributes to an optimal play inducement.
10. Don't forget the basics.
Include practical necessities such as shade, drinking water, seating for adults, trash cans.

Greenery and water

(AP3 Green routes + RP2 Green-blue structure + RP3 Small water network + RN2 Parks and greenery + RN5 Water playgrounds)

A high-quality green-blue structure within the living environment improves the air quality, decreases heat stress, enhances biodiversity, and has a positive impact on the quality of life (atelierGROENBLAUW, n.d.-a). Green-blue grids, such as green roofs, community gardens, natural playgrounds, façade gardens, benefit the quality of life for inhabitants making the district healthier and more attractive. More greenery reduces micro-dust and increases biodiversity, less asphalt/pavement increases water drainage, a better green-blue structure creates a healthier living environment and enhances the quality of life (atelierGROENBLAUW, n.d.-b).



Image 11. Greenery softens the build environment (CROW, 2021-b)

According to Bureau KM (2016) inviting and attractive green spaces have similar characteristics. They are green with trees, bushes and hedges softening the edge of the build environment. The spaces are alternating and have their own identity. There is a variety of architecture and the space is not just straight but slightly curvy. Bureau KM (2016) explains how people appreciate a bit of greenery directly surrounding their homes more, than a bigger area of greenery further away. Image 11 is an example of how private greenery makes a street feel friendly and how it softens the edges of the brick housing. Green areas are highly valued and color, smells, abundant vegetation, compensate the build environment and create peace (CROW, 2021-b). In their research on the ideal amount of urban green spaces, the World Health Organization (2012) that the availability of urban green spaces should be at least 9 m² per individual. The ideal amount of urban green spaces is much higher, 50 m² per individual.

For integrating larger public green spaces such as parks and corridors, the UNESCO MAN working group (n.d.) identifies four different categories of urban biosphere reserves (learning places for sustainable development). Category 1 contains the ‘urban green belt’, which refers to a circular ring of greenery around the urban area. Category 2 shows the urban green corridor, category 3 contains clusters of urban green spaces and Category 4 shows an urban green region (see image 12.). Categories 2 to 4 show varying options for integration of urban green spaces in compact cities. In planning and designing futureproof urban areas with enough public greenery, these four categories of urban green spaces can be used as starting point.

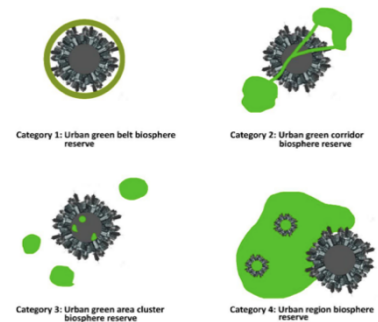


Image 12. Types of biosphere reserves (UNESCO MAN, n.d.)

Water features within the urban area can cause different value increases, from aesthetic enhancement to enhancement of the well-being of the inhabitants. Merely the visible presence of water elements, such as water playgrounds and small streams, will improve the (physiological) well-being of people. In addition, the presence of water structures in the urban environment will support the presence of pedestrians and cyclists, which positively contributes to the improvement the active movement of the citizens (Langie, et al. 2022). In the urban design, Langie et al. (2022) distinguish 10 different types of water elements in public spaces of cities, these types are:

1. Basin fountain
2. Cascade
3. Urban trickle
4. Pavement fountain
5. Swimming pool
6. 2D, 3D reflective pool
7. Water square
8. Mist fountain
9. Semi-natural pond

10. Percolation trench

Annex 1. shows an exemplification of the ten types and the possible positive effects it may have on the public spaces. The four types of biospheres reserves by UNESCO MAN (n.d.) and the 10 types of water elements by Langie et al. (2022) will be used to analyze Holtenbroek and Oosterflank in addition to the Framework 'Building blocks for the movement friendly environment' created by Kenniscentrum Sport & Bewegen (2021). Specifically for the building blocks 'Green routes' (AP3), 'Green-blue structure' (RP2), 'Small water network' (RP3), 'Parks and greenery' (RN2) and 'Water playgrounds' (RN5).

Mobility

(AN2 Mobility hubs + AS2 Parking spots)

Mobility hubs facilitate easy access to shared mobility such as cars, scooters and bikes, all together at one location. These shared vehicles can offer transportation for the so called 'last mile' of someone's travel (Bureau Mijksenaar, 2022). They are often located around the border of the reach of public transportation, where destinations are still too far to walk. Mobility hubs can also be in areas where the shared mobility can offer a great alternative for private car use or public transport (Bureau Mijksenaar, 2022). In the Netherlands the mobility hub will be deployed for solving urban problems related to traffic, such as congestion and limited urban space. Municipalities envision the use of mobility hubs at strategic locations in hopes of solving these traffic-related problems. Till this day there are only a few mobility hubs in use in the Netherlands, but there are many of plans for more hubs (Rongen, et al., 2022).

Public space is highly valued in the urbanized environment, good management of parking will leave room for more sustainable public spaces and enhance the quality of life. Each vehicle requires spaces to park; however, the parking spaces should not just be looked at from a functional and land use perspective. "Parking should be analyzed both from the physical perspective (the space it occupies, its size, location and provision etc.) and also from as an experimental element between activities": so, writes the European Platform on Sustainable Urban Mobility Plans (2019). It is important to think of the activities around the parking, and the way the parking is integrated within the landscape. Clustering parking areas in the neighborhood leaves more room for cyclists and pedestrians (European Platform on Sustainable Urban Mobility Plans, 2019).

The definition of mobility hubs by Bureau Mijksenaar (2022) and the view of the European Platform on Sustainable Urban Mobility Plans (2019) on the importance of integration of parking will be used in addition to the Framework 'Building blocks for the movement friendly environment' created by Kenniscentrum Sport en Bewegen (2021). Specifically for the building blocks 'Mobility hubs' (AN2) and 'Parking spots' (AS2).

Small network

(AN1 Smaller network walking/cycling + RP1 Recreative network + RN1 Small path network)

With the growing attention for a healthier city, the network for pedestrians and cyclists becomes more prominent within the spatial plans of the urban areas. Therefore, many municipalities adopt new legislation that aims to stimulate walking and cycling (College van Rijksadviseurs, 2020-a).

Based on their research on possibilities for scaling up the cycling network, the College van Rijksadviseurs (2020-a) recommends 10 measures for city planning.

1. Lower speed limit to 30km/u within the city (goes for streets where car traffic and cyclists/pedestrians cross paths or share the street).
2. Prioritize cyclists within the build-up area.
3. Create cycle-free zones and streets for pedestrians.
4. Create sufficient parking facilities at the borders of the city center.

5. Promote use of OV-fiets during the 'night' (take a public transport bike home, bring it back the next day when you go to work).
6. Facilitate park and bike mobility hubs.
7. Create a car-bike sharing system (like train-bike systems at stations).
8. Introduce the bicycle-porch (seasonal parking facility for bikes).
9. Facilitate a public platform for shared mobility.
10. Go for a beautiful *and* efficient cycle network.

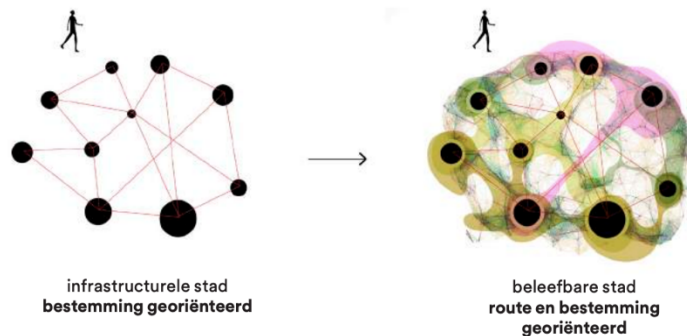


Image 13. 'Infrastructural city - destination oriented' --> 'Experience city - route and destination oriented' (College van Rijksadviseurs, 2020-b)

The College van Rijksadviseurs (2020-b) also recommend a method for improving the pedestrian network in a city. To analyze an area on walkability, three criteria that people use in their decision to walk or not (nearness, comfort, enrichment) should be considered. Therefore, the core of this method is to transform the infrastructural network to a functional experience landscape. View the pedestrian network of the city as route

and destination oriented, not simply destination oriented (see image 13.). The route itself becomes a temporarily destination, a part of the experience.

Here follow examples of how the three criteria of decision making for walking can be translated to practical measures.

Nearness

- Mix use facilities within the neighborhood
- Functions within walking distance
- Clear pedestrian routes to public transport
- Clustered carparking
- Public greenery within walking distance
- Micro mobility

Comfort

- Community streets
- Safe landscapes during nighttime
- Pedestrian areas/streets
- Promenade connecting facilities
- Active plinth

Enrichment

- Waterparks
- Façade garden
- Water forest
- Natural shores
- Diversity in greenery

Both the recommendations for a strong cycling network (College van Rijksadviseurs, 2020-a) and the recommendations for improving the pedestrian network (College van Rijksadviseurs, 2020-b) will be used in addition to the Framework 'Building blocks for the movement friendly environment' created by Kenniscentrum Sport en Beweging (2021). Specifically for the building blocks 'Smaller network walking/cycling' (AN1), 'Recreative network' (RP1), and 'Small path network' (RN1).

Reside in the neighborhood

(AS1 Shared spaces + RN4 Neighborhood and school plazas + RS1 Residential street + RS3 Attractive resting places)

Two main types of activities in city spaces can be distinguished: moving activities and residing activities. When it comes to residing activities, like meet, play and stay, streets and plazas should be inviting and facilitating places (Gehl, 2010). One of the most important principles for the design of such 'residential' streets is safety (van Dijk & Marmeleira, 2021). The residential streets should be safe enough for children to play, travel and reside independently. People should feel safe when residing in the area, pedestrians should have the priority, cyclists and cars come second or are even banned. According to van Dijk & Marmeleira (2020), traffic calming measures are therefore important:

- Use bumps, guiding paint and traffic signs at the entrance and exit of the residing area to signal the entering of the domain.
- Narrow streets physically and visually with (natural) barriers.
- Parking only on one side or special parking places.
- Creating speed limits (10-15 km/h).
- Integrating bicycle routes and bicycle parking points.

In his book 'Cities for people', Jan Gehl (2010) states 12 quality criteria for comfortable and inviting spaces. These criteria can be used to create and/or improve residing areas in the neighborhood. The 12 criteria are:

- Protection: against traffic and accidents, crime and violence, unpleasant sensory experiences.
- Comfort: opportunities to walk, to stay/stand, to sit, to see, to talk and listen, to play and exercise.
- Delight: scale, opportunities to enjoy the positive aspects of climate, positive sensory experiences.

Both the traffic calming measures by van Dijk & Marmeleira (2021) and the 12 quality criteria by Gehl (2010), will be used in addition to the Framework 'Building blocks for the movement friendly environment' created by Kenniscentrum Sport en Bewegen (2021). Specifically for the building blocks 'Shared spaces' (AS1), 'Neighborhood and school plazas' (RN4), 'Attractive resting places' (RS3), and 'Residential streets' (RS1).

Observatie Zwolle - Holtenbroek

1. Vivaldistraat (stempel)



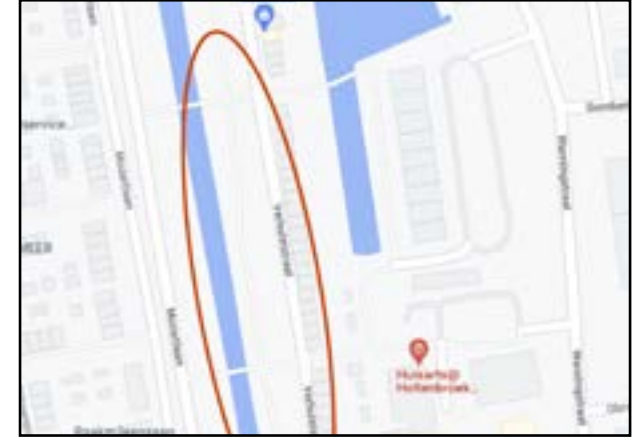
2. Palestrinalaan (doorgaandeweg)



3. Playground de Regenboog (openbaargroen)



5. Verhulstraat (fietspad/voetpad, openbaargroen)



4. Chopinstraat stempel)



Main network cycling/walking (AP1)
Every place should have a comprehensive cycling- and pedestrian network, for active movement to work, school and other facilities. And to connect the place to surrounding areas/places/cities. (Kenniscentrum Sport en Bewegen, 2021)

Holtenbroek has a national cycling route that connects the neighborhood to the surrounding places such as Hasselt and Kampen. It also has a regional pedestrian network. Both those networks follow the same route in Holtenbroek, connecting two schools, a few harbour areas and the children's farm with the surrounding area. The routes are mostly separated from motorised vehicles.

Cycling Highway (AP2)
Cycling Highways connect places in the municipality and the region. These cycling highways are attractive for commuting cyclists, sportive and recreational cyclists if they are separated from motorized vehicles. (Kenniscentrum Sport en Bewegen, 2021)

The regional cycling network functions as a cycling highway in Zwolle, it connects Holtenbroek to the city centre, train station and other areas of the city. It connects to other main routes in the city and allows citizens, tourists and visitors to cycle easily and quickly through the entire city, and thus Holtenbroek.

Green routes (AP3)
Routes within a green main structure form an inviting addition to the urbanized network of paths and routes. A greener route contributes to the experience of people within their daily environment. If one connects these green routes through parks and forests with the main routes of cyclists and pedestrians, it will enhance the recreative and active mobility for users. (Kenniscentrum Sport en Bewegen, 2021)

The cycling and pedestrian network in Holtenbroek does not cross a park or forest, it does have some trees and greenery beside the routes. Both networks do connect Holtenbroek to the Westerveldese woods but do not connect directly to other green or water areas.

Smaller network cycling/walking (AN1)
Due to smaller networks of routes and paths, citizens become more active. The spatial plan of the neighbourhood influences the activity within the neighbourhood. (Kenniscentrum Sport en Bewegen, 2021)

Holtenbroek has a strong small network for cyclists/pedestrians. The network connects parts of the neighbourhood, the facilities, greenery and water.

Mobility hub (AN2)
A mobility hub is a junction of mobility and new mobility (electrical vehicles, shared cars). The residential quality and experience are central elements. It brings together work, recreation and residing. (Kenniscentrum Sport en Bewegen, 2021)

There is no mobility hub in Holtenbroek.

Cultivation density, function blend, variation in buildings (AN3)
Reside/work areas with a high cultivation density and function blend invite to short active movements (cycling or walking). This gets enhanced by comfortable, accessibility places with many facilities, creating liveable and lively public spaces with feeling of social safety. (Kenniscentrum Sport en Bewegen, 2021)

The density of facility is average: there is one area with shops, supermarkets, healthcare facilities, neighbourhood centre. In the other parts of the neighbourhood, there is only a mix between residential and greenery areas.

Proximity facilities (AN4)
Stimulating citizenry to move more by enabling a good proximity of the facilities. Think of the 10- or 15-minute city where facilities are close enough to reach by foot or by bike (conform the CROW-publication on acceptable walking distance) (Kenniscentrum Sport en Bewegen, 2021).

The typical facilities (sport facilities, supermarket, drugstore, hairdresser, coffee place etc.) are within the 10 to 15 minute walking range through out all areas of Holtenbroek.

Kindlint (AN5)
Kindlint or 'childfriendly play- and movement route' is a traffic safe, care free route for slow traffic connecting important destinations for children. Goal of the Kindlint is for children to go through the neighbourhood independently (Kenniscentrum Sport en Bewegen, 2021).

There is no Kindlint in Holtenbroek.

Recreative movement network (RP1)
A movement network in a city or village is a continuous network of opportunities to play, move and meet. The routes connect neighbourhoods with each other and the outskirts (Kenniscentrum Sport en Bewegen, 2021).

There is no recreative movement network in Holtenbroek.

Green-Blue structure (RP2)
A green-blue main structure contributes to the experience of the daily living environment, offers coolness on warm days and reduces changes on urban heat islands.

Holtenbroek is located next to the river Zwarte Water, and has multiple water structures within the neighbourhood. There is a cross (two main lanes that cross each other in the middle of the neighbourhood) of greenery within Holtenbroek. On the North and East side of Holtenbroek there are spaces with greenery and many trees.

Small waternetwork (RP3)
Water in the city has a positive effect on the biodiversity, fighting urban heat islands, and better distributes rainwater in a build environment. People enjoy walking or residing beside the water. A small waternetwork within the city facilitates the needs and desires of the water tourists and sporters.

The water structure in Holtenbroek invites residence to walk beside it. However the areas surrounding the water do not invite for residing or sport activities.

Small pathnetwork (RN1)
Within the neighbourhood a small path network makes walking and cycling more attractive and convenient.

There is a good small path network within Holtenbroek. A combination of cyclepaths, footpaths, pedestrian areas, shared areas for cyclists and pedestrians, shared areas for cyclists and cartraffic. One can travel comfortably and directly throughout the entire neighbourhood by foot and bike.

Parks and greenery (RN2)
Green play fields, and other green places facilitate more spaces to play, move, sport, meet and relax within the neighbourhood. Green spaces hold more water, create shadow and cooler places, and enhance the biodiversity of the city.

There are multiple parks, lanes of greenery in Holtenbroek. These areas have trees and grass areas which provide shadow and a cool environment on hot days.

Playground and inviting places for movement (RN3)
A movement friendly neighbourhood has multiple small playgrounds, like grassfields, climbing- and scrambling-areas. The areas need to be accessible, public, clean, whole and safe.

There are both public and not public playgrounds, basketball and football fields in Holtenbroek. They are neat, whole and safe (open spaces next to residence, shops and schools). The locations are very well accessible for pedestrians and cyclists.

Neighbourhood and school plazas (RN4)
School plazas are important areas for children to be active during and after school. By making school plazas accessible for play and sports after school hours as well, the usage will be stimulated and the plaza will hold a stronger function within the neighbourhood.

There are nine elementary schools in Holtenbroek, each with a school plaza. Some of them are open during certain hours beside school hours.

Water playgrounds (RN5)
Playing with water is attractive. But also abiding in the area surrounding the water is nice and provides cooling. Possibilities within and around the neighbourhood to play with water, stimulate residents to move more.

There are no water playgrounds

1. Vivaldijkstraat (stempel)

1. Vivaldijkstraat (stempel)

Streetview



Streetview



Observation



Observation



4 greenery | pedestrian | car/cyclist

greenery | meet | relax

greenery | meet | relax | pedestrian

car/cyclist | parking

car/cyclist | parking | pedestrian

pedestrian | car/cyclist | parking

1. Vivaldistraat (stempel)

Streetview



Observation



OBSERVATION SCHEME

Site location: VIVALDISTRAAT	Date: 11-10-2022, 09:00u	Framework for buildingblocks of the movement-friendly environment (Kenniscentrum sport en bewegen, 2021)	
Areas of observation	Objects/elements	Active movement - Street	Recreative movement - Street
<i>Housing/parking/shops (density, maintenance, paving/asphalt)</i>	Housing on both sides of the streets, flats on one side, terraced housing on the other. Paving, both pedestrian area and car area.	Shared Space (AS1): A concept where the traffic area is also meant to be used as a reside area. In Dutch 'woonerf'.	Residential street (RS1): Reside and usage function of the street are central: street is a social space for meet, play and relax.
<i>Greenery (trees, grass, fronts housing, roofs, paving)</i>	Terraced housing on shared (public) front yard (green area), public greenery in front of housing.	The street is not meant to be used as reside area, pedestrian area is a separated area	The street has a few green areas beside it where residents can meet, play and relax.
<i>Network cars (dominance, balance, street view, priority)</i>	Car dominance, car parking on both sides of the street, priority to cars. Speedbumps to slowdown traffic.	Parkingspots (AS2): Clustering parking areas in the neighbourhood leaves more room for cyclists and pedestrians.	Play inducement (RS2): Can be street furniture, trees, art, fountain, highth differences, railing, etc.
<i>Network cyclists (quality, connectivity, attractiveness, oversteekbaarheid, priority)</i>	Cyclists on car road, no priority to cyclists.	There are some clustered parking areas, however parking beside the road is allowed which creates the feeling of cardominance.	The greenery can be play inducing, The rest of the street is poorly maintained and will likely not invite to play as children might trip or fall.
<i>Network pedestrians (quality, connectivity, attractiveness, priority)</i>	Sidewalk on both sides of the street, trees, containers and pole are obstacles. Seemingly old paving.	Schoolzone (AS3): Carfree area around schools, for a safe environment for the children.	Attractive restingplaces (RS3): Movement-friendly environment has a sufficient amount of resting places.
<i>Public areas (parks, plaza, playgrounds, resting-place, attractiveness, balance inclusive and exclusive public space*)</i>	Public greenery as 'shared' front yard, trees on one side of the road, private greenery: front yard. No resting-places, no garbage cans.	No school(zone).	No resting places, no benches.
<i>Activity (what are people doing in the public areas?)</i>	People are leaving/arriving at their private place/homes, cyclists are passing through.		

2. Palestrinalaan (main road)

Streetview



Observation



8 pedestrian | car/cyclist | pedestrian

greenery | pedestrian | car/cyclist

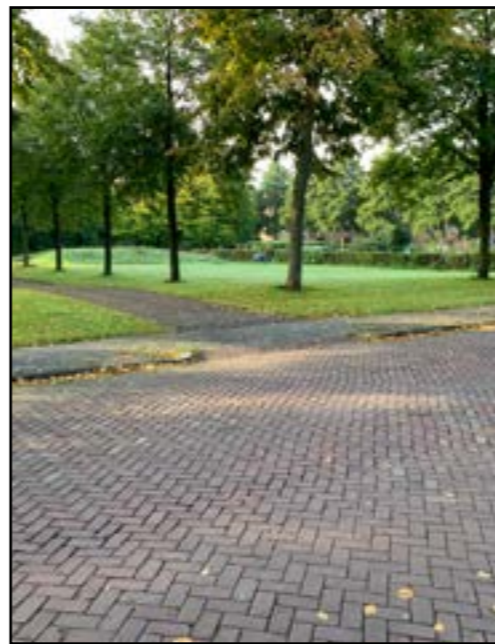
greenery | play | meet

2. Palestrinalaan (main road)

Streetview



Observation



greenery | pedestrian | car/cyclist

car/cyclist | pedestrian | greenery

car/cyclist | pedestrian | greenery

2. Palestrinalaan (main road)

Streetview



Observation



OBSERVATION SCHEME

Site location: PALESTRINALAAN	Date: 11-10-2022, 09:15u	Framework for buildingblocks of the movement-friendly environment (Kenniscentrum sport en bewegen, 2021)	
Areas of observation	Objects/elements	Active movement - Street	Recreative movement - Street
Housing/parking/shops (density, maintenance, paving/asphalt)	No buildings (directly) on this road. Paving for carroad and pedestrian path.	Shared Space (AS1): A concept where the traffic area is also meant to be used as a reside area. In Dutch 'woonerf'.	Residential street (RS1): Reside and usage function of the street are central: street is a social space for meet, play and relax.
Greenery (trees, grass, fronts housing, roofs, paving)	Grass area and trees on both sides of the road, park area, public greenery, no private greenery.	The street is not meant to be used as reside area, pedestrian area is a separated area.	The street has a a lot of green and park areas beside it where residents can meet, play and relax.
Network cars (dominance, balance, street view, priority)	Car is dominant, no parking on or next to the road, clear view on the road.	Parkingspots (AS2): Clustering parking areas in the neighbourhood leaves more room for cyclists and pedestrians.	Play inducement (RS2): Can be street furniture, trees, art, fountain, highth differences, railing, etc.
Network cyclists (quality, connectivity, attractiveness, oversteekbaarheid, priority)	Cyclists mixed with cars, therefore no specific cyclists network, crossing road without priority (less safe).	There is no parking beside the road, also no parking spaces. This creates a lot of room for cycle and pedestrian areas.	The green area with trees and playground facilities will induce playing, the street itself has little play inducement.
Network pedestrians (quality, connectivity, attractiveness, priority)	Pedestrian road next to carroad, crossing road without priority, less safe. Path through parkareas for better connection between neighbourhood, network.	Schoolzone (AS3): Carfree area around schools, for a safe environment for the children.	Attractive restingplaces (RS3): Movement-friendly environment has a sufficient amount of resting places.
Public areas (parks, plaza, playgrounds, resting-place, attractiveness, balance inclusive and exclusive public space*)	Park area on both sides of the road, playground/skate area, no resting place next to road/ pedestrian area, benches in park area. No private greenery.	No schoolzone.	The bus stop has a small bench, however this is not a very inviting resting place unless you plan on taking the bus. There are no resting places, not in the green area either.
Activity (what are people doing in the public areas?)	People are passing through, people are residing in park, playing children.		

3. Playground de Regenboog (public greenery)

Streetview



Observation



12

greenery | pedestrian

play | greenery

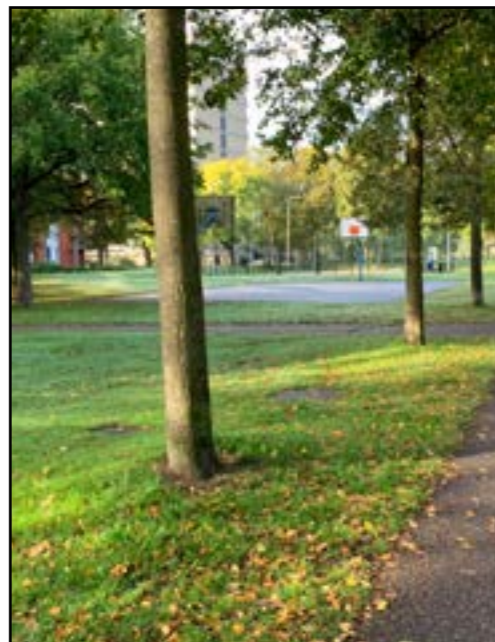
greenery | pedestrian | greenery

3. Playground de Regenboog (public greenery)

Streetview



Observation



play | greenery

play | greenery

play | greenery | pedestrian

13

3. Playground de Regenboog (public greenery)

Streetview



Observation



OBSERVATION SCHEME

Site location: Playground de Regenboog	Date: 11-10-2022, 09:30u	Framework for buildingblocks of the movement-friendly environment (Kenniscentrum sport en bewegen, 2021)	
Areas of observation	Objects/elements	Active movement - Street	Recreative movement - Street
Housing/parking/shops (density, maintenance, paving/asphalt)	No buildings. Pedestrian path, asphalt.	Shared Space (AS1): <i>A concept where the traffic area is also meant to be used as a reside area. In Dutch 'woonerf'.</i>	Residential street (RS1): <i>Reside and usage function of the street are central: street is a social space for meet, play and relax.</i>
Greenery (trees, grass, fronts housing, roofs, paving)	Grass area and trees on both sides of the road, park area, public greenery, no private greenery.	Carfree reside area, park area. No cars, shared space for cyclists and pedestrians.	This area has a cycle and footpath, but the main function is residential for play, meet and relax.
Network cars (dominance, balance, street view, priority)	None.	Parkingspots (AS2): <i>Clustering parking areas in the neighbourhood leaves more room for cyclists and pedestrians.</i>	Play inducement (RS2): <i>Can be street furniture, trees, art, fountain, highth differences, railing, etc.</i>
Network cyclists (quality, connectivity, attractiveness, oversteekbaarheid, priority)	None.	No parking spaces as it is a car free area.	Many trees, grass area, many play facilities, art that induces to play.
Network pedestrians (quality, connectivity, attractiveness, priority)	Pedestrian area, dominance, attractive environment around path.	Schoolzone (AS3): <i>Carfree area around schools, for a safe environment for the children.</i>	Attractive restingplaces (RS3): <i>Movement-friendly environment has a sufficient amount of resting places.</i>
Public areas (parks, plaza, playgrounds, resting-place, attractiveness, balance inclusive and exclusive public space*)	Park area on both sides of the path, playground, area for teenagers. No resting place beside road/pedestrian area, benches in park area. Playground 'de Regenboog' has private greenery/ playarea (area only accessible during opening hours, free of charge).	Two schools are located right beside this area and can be reached trough this carfree zone. This is verry attractive and safe for the children (and parents) that arrive by bike or foot.	Only a few restingplaces in the park area, but one would have to get off of the pedestrian path to get there. No restingplaces alongside the path.
Activity (what are people doing in the public areas?)	People are passing through, people are residing in park, playing children.		

4. Chopinstraat (stempel)



Streetview

4. Chopinstraat (stempel)



Streetview



Observation



Observation

4. Chopinstraat (stempel)

Streetview



Observation



18 car/cyclist | parking | pedestrian

parking | pedestrian

pedestrian | car/cyclist | parking

OBSERVATION SCHEME

Site location: Chopinstraat	Date: 11-10-2022, 09:45u	Framework for buildingblocks of the movement-friendly environment (Kenniscentrum sport en bewegen, 2021)	
Areas of observation	Objects/elements	Active movement -Street	Recreative movement - Street
Housing/parking/shops (density, maintenance, paving/asphalt)	Housing beside street, terraced housing, asphalt road, parking spaces on square in the middle.	Shared Space (AS1): A concept where the traffic area is also meant to be used as a reside area. In Dutch 'woonerf'.	Residential street (RS1): Reside and usage function of the street are central: street is a social space for meet, play and relax.
Greenery (trees, grass, fronts housing, roofs, paving)	Trees beside road one road, small front yards with private greenery. No public greenery	The traffic area is not meant for reside purposes. It is for car and cyclists usage.	The traffic area is not meant for reside purposes. It is for car and cyclists usage.
Network cars (dominance, balance, street view, priority)	Car dominant street. Parking spaces on side of the street.	Parkingspots (AS2): Clustering parking areas in the neighbourhood leaves more room for cyclists and pedestrians.	Play inducement (RS2): Can be street furniture, trees, art, fountain, highth differences, railing, etc.
Network cyclists (quality, connectivity, attractiveness, oversteekbaarheid, priority)	No network, cyclists on car road, no priority in crossing the road.	The parking spaces are clustered in multiple places in the street, however parking beside the road is also allowed. This makes the parking areas very dominant.	No play inducement from the design of the street.
Network pedestrians (quality, connectivity, attractiveness, priority)	Pedestrian roads beside the street. no greenery next to the path. Good connectivity with rest of the neighbourhood.	Schoolzone (AS3): Carfree area around schools, for a safe environment for the children.	Attractive restingplaces (RS3): Movement-friendly environment has a sufficient amount of resting places.
Public areas (parks, plaza, playgrounds, resting-place, attractiveness, balance inclusive and exclusive public space*)	No public area, only parking spaces and roads. Exclusive, private greeners: front yards.	No school zone.	No resting places.
Activity (what are people doing in the public areas?)	Arriving/leaving home, cyclists passing through.		

5. Verhulsstraat (Public greenery)

5. Verhulsstraat (Public greenery)

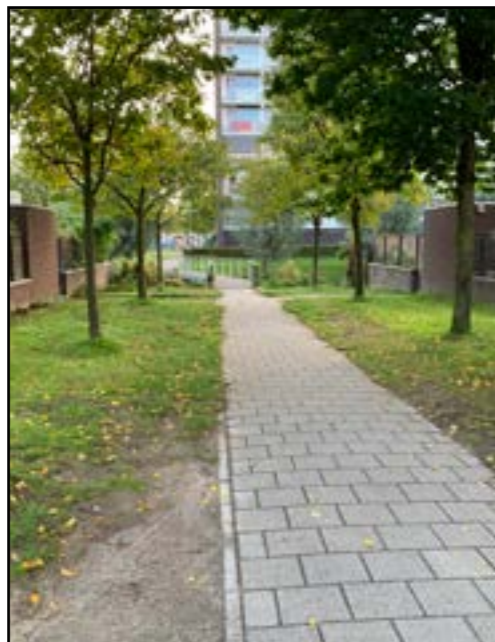
Streetview



Streetview



Observation



Observation



5. Verhulstraat (Public greenery)

Streetview



Observation



22

parking | car/cyclist
| pedestrian | private

greenery | parking | car/cyclist
| pedestrian | private

play | pedestrian | greenery

OBSERVATION SCHEME

Site location: VERHULSSTRAAT	Date: 11-10-2022, 10:00	Framework for buildingblocks of the movement-friendly environment (Kenniscentrum sport en bewegen, 2021)	
Areas of observation	Objects/elements	Active movement -Street	Recreative movement - Street
Housing/parking/shops (density, maintenance, paving/asphalt)	One side of the road terraced housing. Parking, greenery and water on the other side. Paving for car road, gravel path.	Shared Space (AS1): A concept where the trafficarea is also meant to be used as a reside area. In Dutch 'woonerf'.	Residential street (RS1): Reside and usage function of the street are central: street is a social space for meet, play and relax.
Greenery (trees, grass, fronts housing, roofs, paving)	Grass, plants, hedges, trees, water/ditch.	Variety of car road, bike and footpath. Cyclists, pedestrians and cars shared area on some roads.	The pedestrian area beside the houses, next to the water can be used to meet, play and relax. This is a main feature in the area.
Network cars (dominance, balance, street view, priority)	Street is car dominant, car parking on one side, hedges between parkingplaces.	Parkingspots (AS2): Clustering parking areas in the neighbourhood leaves more room for cyclists and pedestrians.	Play inducement (RS2): Can be street furniture, trees, art, fountain, high differences, railing, etc.
Network cyclists (quality, connectivity, attractiveness, oversteekbaarheid, priority)	cyclists on car road, no priority whilst crossing roads. Connected to main cycle roads.	Parkingspace is clustered, there is a clear distinction between parking/ car area and pedestrian area.	The green area, art, hedges can be play inducing.
Network pedestrians (quality, connectivity, attractiveness, priority)	Strong pedestrian network, gravel path beside water, through greenery.	Schoolzone (AS3): Carfree area around schools, for a safe environment for the children.	Attractive restingplaces (RS3): Movement-friendly environment has a sufficient amount of resting places.
Public areas (parks, plaza, playgrounds, resting-place, attractiveness, balance inclusive and exclusive public space*)	Public green area, park area, water. Few benches, no reside area.	No school zone.	There are a few benches in the green pedestrian area.
Activity (what are people doing in the public areas?)	Car leaves or arrives home, cyclists arrive/leave home or pass through. Pedestrians recreate, pass through or arrive/leave home.		

23

Regional pedestrian routes



National cycling routes



Cycling- and pedestrian routes



Maps of Holltenbroek



Buildings



Buildings and bigger greenery



Bird-view photo

Main network cycling/walking (AP1)

Every place should have a comprehensive cycling- and pedestrian network, for active movement to work, school and other facilities. And to connect the place to surrounding areas/places/cities. (Kenniscentrum Sport en Bewegen, 2021)

Oosterflank has two regional pedestrian routes and one national cycling route that connects the neighborhood to the rest of the city, Schollebaar and the surrounding places such as Capelle aan den IJssel. The regional cycling route connects to the shoppingmall Alexandrium and the city centre of Rotterdam. The national pedestrian route Connects the city centre of Rotterdam to Capelle aan den IJssel and only passes through the South side of Oosterflank.

Cycling Highway (AP2)

Cycling Highways connect places in the municipality and the region. These cycling highways are attractive for commuting cyclists, sportive and recreational cyclists if they are separated from motorized vehicles. (Kenniscentrum Sport en Bewegen, 2021)

There is no cycling high in Oosterflank, however the cycling network does connect to the bigger cycling network of Zuid-Holland. Also, the realisation of a cycling highway in Capelle aan de IJssel will most likely mean Oosterflank will become better connected to the city and the region aswell.

Green routes (AP3)

Routes within a green main structure form an inviting addition to the urbanized network of paths and routes. A greener route contributes to the experience of people within their daily environment. If one connects these green routes through parks and forests with the main routes of cyclists and pedestrians, it will enhance the recreative and active mobility for users. (Kenniscentrum Sport en Bewegen, 2021)

There are no green routes, all main cycling and pedestrian routes are through urban areas.

Smaller network cycling/walking (AN1)

Due to smaller networks of routes and paths, citizens become more active. The spatial plan of the neighbourhood influences the activity within the neighbourhood. (Kenniscentrum Sport en Bewegen, 2021)

Oosterflank has a strong small network for pedestrians and cyclists. Following the network follows the main roads, and become more refined through out the rest of the neighbourhood.

Mobility hub (AN2)

A mobility hub is a junction of mobility and new mobility (electrical vehicles, shared cars). The residential quality and experience are central elements. It brings together work, recreation and residing. (Kenniscentrum Sport en Bewegen, 2021)

There is no mobility hub in Oosterflank.

Cultivation density, function blend, variation in buildings (AN3)

Reside/work areas with a high cultivation density and function blend invite to short active movements (cycling or walking). This gets enhanced by comfortable, accessibility places with many facilities, creating liveable and lively public spaces with feeling of social safety. (Kenniscentrum Sport en Bewegen, 2021)

Oosterflank has one main shopping centre, throughout the rest of the neighbourhood are some smaller shops and facilities. The neighbourhood is build from so called 'stamps', meaning the smaller structure of streets (4 to 5 streets) is copied multiple times in the exact same format. This makes the area dense with little blend of facilities.

Proximity facilities (AN4)

Stimulating citizenry to move more by enabling a good proximity of the facilities. Think of the 10- or 15-minute city where facilities are close enough to reach by foot or by bike (conform the CROW-publication on acceptable walking distance) (Kenniscentrum Sport en Bewegen, 2021).

The shopping centre Alexandrium has a wide range of facilities, which are within a 10 to 15 minute walk of most points in Oosterflank.

Kindlint (AN5)

Kindlint or 'childfriendly play- and movement route' is a traffic safe, care free route for slow traffic connecting important destinations for children. Goal of the Kindlint is for children to go through the neighbourhood independently (Kenniscentrum Sport en Bewegen, 2021).

There is no Kindlint in Oosterflank.

Recreative movement network (RP1)

A movement network in a city or village is a continuous network of opportunities to play, move and meet. The routes connect neighbourhoods with each other and the outskirts (Kenniscentrum Sport en Bewegen, 2021).

There is no recreative movement network in Oosterflank. However, the Scandinaviepad is a pedestrian path through greenery with play facilities along side it. It connects the neighbourhood with other areas and can be inviting to go for a walk.

Green-Blue structure (RP2)

A green-blue main structure contributes to the experience of the daily living environment, offers coolness on warm days and reduces changes on urban heat islands.

There is no main green-blue structure in Oosterflank. However, Oosterflank has a small green-blue structure. There is a waternetwork throughout the neighbourhood that is surrounded by green pedestrian and cycle areas.

Small waternetwork (RP3)

Water in the city has a positive effect on the biodiversity, fighting urban heat islands, and better distributes rainwater in a build environment. People enjoy walking or residing beside the water. A small waternetwork within the city facilitates the needs and desires of the water tourists and sporters.

The small waternetwork invites to walk, stroll, play and reside besides. However the areas surrounding the water do not invite for residing or sport activities.

Small pathnetwork (RN1)

Within the neighbourhood a small path network makes walking and cycling more attractive and convenient.

There is a good small path network within Holtenbroek. A combination of cyclepaths, footpaths, pedestrian areas, shared areas for cyclists and pedestrians, shared areas for cyclists and cartraffic. One can travel comfortably and directly throughout the entire neighbourhood by foot and bike.

Parks and greenery (RN2)

Green play fields, and other green places facilitate more spaces to play, move, sport, meet and relax within the neighbourhood. Green spaces hold more water, create shadow and cooler places, and enhance the biodiversity of the city.

The Semiramiustuin is the only park in Oosterflank. However, there are multiple green lanes, grassfiels for playing and relaxing, and perks alongside roads.

Playground and inviting places for movement (RN3)

A movement friendly neighbourhood has multiple small playgrounds, like grassfields, climbing- and scrambling-areas. The areas need to be accessible, public, clean, whole and safe.

Throughout the neighbourhood are multiple small playgrounds, grassfields, socker and basketball fields.

Neighbourhood and school plazas (RN4)

School plazas are important areas for children to be active during and after school. By making school plazas accessible for play and sports after schoolhours aswell, the usage will be stimulated and the plaza will hold a stronger function within the neighbourhood.

Oosterflank has 4 elementary schools, with a few school plazas. Some of them are open outside school hours.

Water playgrounds (RN5)

Playing with water is attractive. But also abiding in the area surrounding the water is nice and provides cooling. Possibilities within and around the neighbourhood to play with water, stimulate residents to move more.

There are no water playgrounds in Oosterflank.

1. Faborgerf/Gedserpad (stempel)

1. Faborgerf/Gedserpad (stempel)

Streetview



Streetview



Observation



Observation



4 parking | pedestrian

pedestrian | car/cyclist | greenery

parking | car/cyclist | greenery

pedestrian | car/cyclist

car/cyclist | parking | pedestrian

parking | car/cyclist

1. Faborgerf/Gedserpad (stempel)

Streetview



Observation



6 car/cyclist | greenery | pedestrian

Car/cyclist | parking

parking | pedestrian

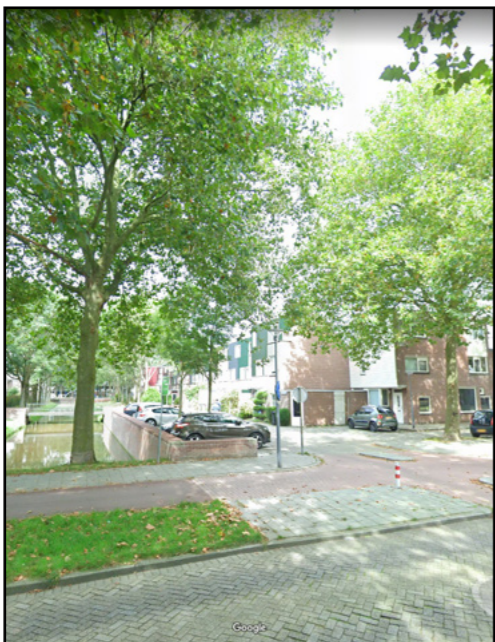
pedestrian

OBSERVATION SCHEME

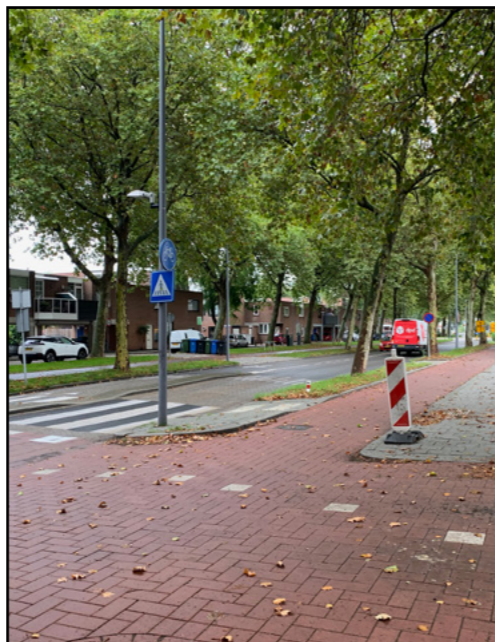
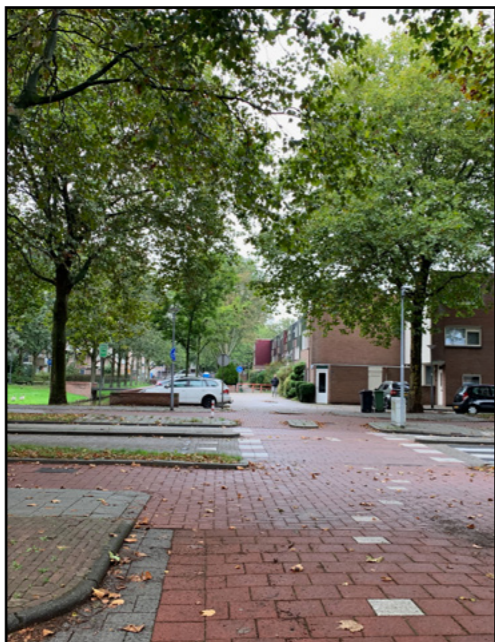
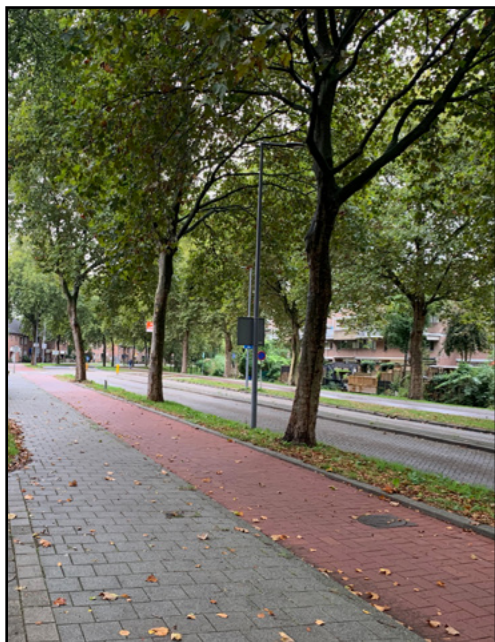
Site location: Faborgerf/Gedserpad	Date: 24-09-2022, 10:00	Framework for building blocks of the movement-friendly environment (Kenniscentrum sport en bewegen, 2021)	
Areas of observation	Objects/elements	Active movement - Street	Recreative movement - Street
<i>Housing/parking/shops (density, maintenance, paving/asphalt)</i>	Grey housing, tiles 20x20 streets, terraced housing, maintenance: crooked tiles, weeds.	Shared Space (AS1): A concept where the traffic area is also meant to be used as a reside area. In Dutch 'woonerf'.	Residential street (RS1): Reside and usage function of the street are central: street is a social space for meet, play and relax.
<i>Greenery (trees, grass, fronts housing, roofs, paving)</i>	7 trees, grass/plants, public greenery lane, asphalt, driveway	The street is not meant to be used as reside area, pedestrian area is a separated area.	The traffic area is not meant for reside purposes. It is for car and cyclists usage. Pedestrian area is relatively small.
<i>Network cars (dominance, balance, street view, priority)</i>	Bikes and cars blended. Car parking dominant, more street than greenery	Parkingspots (AS2): Clustering parking areas in the neighbourhood leaves more room for cyclists and pedestrians.	Play inducement (RS2): Can be street furniture, trees, art, fountain, high differences, railing, etc.
<i>Network cyclists (quality, connectivity, attractiveness, crossability, priority)</i>	No cycling network, car dominance, blended street usage.	Parking beside the road is allowed, cars are parked through the entire street, which creates the feeling of cardominance.	A little play inducement due to greenery.
<i>Network pedestrians (quality, connectivity, attractiveness, priority)</i>	Pavement badly maintained, plenty of paths, strong network.	Schoolzone (AS3): Carfree area around schools, for a safe environment for the children.	Attractive resting places (RS3): Movement-friendly environment has a sufficient amount of resting places.
<i>Public areas (parks, plaza, playgrounds, resting-place, attractiveness, balance inclusive and exclusive public space*)</i>	Only public greenery, no private greenery.	No school(zone).	No resting places.
<i>Activity (what are people doing in the public areas?)</i>	No activity, walking from house to car, walking from a to b, no reside-function of the outside area.		

2. Evenaar (main road)

Streetview



Observation



8 pedestrian | cyclist | greenery | car

cyclist

cyclist

2. Evenaar (main road)

Streetview



Observation



car | greenery | cyclist | pedestrian

cyclist | greenery | car

greenery | water

2. Evenaar (main road)

Streetview



Observation



OBSERVATION SCHEME

Site location: Evenaar	Date: 24-09-2022, 10:15	Framework for building blocks of the movement-friendly environment (Kenniscentrum sport en bewegen, 2021)	
Areas of observation	Objects/elements	Active movement - Street	Recreative movement - Street
<i>Housing/parking/shops (density, maintenance, paving/asphalt)</i>	Terraced housing, no stores, division car, cyclists and pedestrians.	Shared Space (AS1): A concept where the traffic area is also meant to be used as a reside area. In Dutch 'woonerf'.	Residential street (RS1): Reside and usage function of the street are central: street is a social space for meet, play and relax.
<i>Greenery (trees, grass, fronts housing, roofs, paving)</i>	Greenery, public green area, lane of trees between road and cyclepath, water, grass area.	Main road of Oosterflank. The street is not meant to be used as reside area, pedestrian and cyclists area are separated areas.	Area not meant as reside area, main road, meant as travel area.
<i>Network cars (dominance, balance, street view, priority)</i>	Main road car traffic, priority for cyclists and pedestrians (crossover), view seems green	Parking spots (AS2): Clustering parking areas in the neighbourhood leaves more room for cyclists and pedestrians.	Play inducement (RS2): Can be street furniture, trees, art, fountain, highth differences, railing, etc.
<i>Network cyclists (quality, connectivity, attractiveness, crossability, priority)</i>	Strong connection between areas, safe crossover with priority.	Parking area clustered, small parkinglots beside the road at a few places. Pedestrians/cyclists have their own spaces.	No play inducement as it is a heavy traffic area, playing alongside this street could be dangerous.
<i>Network pedestrians (quality, connectivity, attractiveness, priority)</i>	Strong connection between areas, safe crossover with priority.	Schoolzone (AS3): Carfree area around schools, for a safe environment for the children.	Attractive resting places (RS3): Movement-friendly environment has a sufficient amount of resting places.
<i>Public areas (parks, plaza, playgrounds, resting-place, attractiveness, balance inclusive and exclusive public space*)</i>	Plenty of public greenery, grass area, water, little private green, fiew front yards.	No school(zone).	No resting places.
<i>Activity (what are people doing in the public areas?)</i>	Pass by, drive through, from a to b, traffic flows through, public area has no reside-function.		

3. Semiramistuin (public greenery)

Streetview



3. Semiramistuin (public greenery)

Streetview



Observation



Observation



12 greenery | pedestrian

greenery | pedestrian

greenery | pedestrian

greenery | pedestrian

water | pedestrian

pedestrian

3. Semiramistuin (public greenery)

Streetview



Observation



greenery

pedestrian

greenery | pedestrian

OBSERVATION SCHEME

Site location: Smiramistuin	Date: 24-09-2022, 10:40	Framework for building blocks of the movement-friendly environment (Kenniscentrum sport en bewegen, 2021)	
Areas of observation	Objects/elements	Active movement - Street	Recreative movement - Street
<i>Housing/parking/shops (density, maintenance, paving/asphalt)</i>	Park area, no buildings, paths of asphalt, bridges from wood and metal.	Shared Space (AS1): <i>A concept where the traffic area is also meant to be used as a reside area. In Dutch 'woonerf'.</i>	Residential street (RS1): <i>Reside and usage function of the street are central: street is a social space for meet, play and relax.</i>
<i>Greenery (trees, grass, fronts housing, roofs, paving)</i>	Greenery and water, bridges, maintenance seems neglected, asphalt is broken, grass, plants, trees.	Not a shared traffic area, cars are banned. Pedestrian area: cyclists are allowed, but pedestrian is main user, meant to reside.	This area has a footpath, the main function is residential for meet and relax. No play facilities.No cycle paths, but cyclists do use the area.
<i>Network cars (dominance, balance, street view, priority)</i>	No cars allowed in the park.	Parking spots (AS2): <i>Clustering parking areas in the neighbourhood leaves more room for cyclists and pedestrians.</i>	Play inducement (RS2): <i>Can be street furniture, trees, art, fountain, highth differences, railing, etc.</i>
<i>Network cyclists (quality, connectivity, attractiveness, crossability, priority)</i>	Not meant for cyclists, small paths, with obstacles (cracked paths, water on the paths).	Parking on the borders of the area.	Park area not designed for playing, fountain and water could be dangerous area for little children. No play inducement.
<i>Network pedestrians (quality, connectivity, attractiveness, priority)</i>	Inviting green area, good connection, strong network, plenty of water and greenery.	Schoolzone (AS3): <i>Carfree area around schools, for a safe environment for the children.</i>	Attractive resting places (RS3): <i>Movement-friendly environment has a sufficient amount of resting places.</i>
<i>Public areas (parks, plaza, playgrounds, resting-place, attractiveness, balance inclusive and exclusive public space*)</i>	All public area, few benches, reside-area in the centre of the park, water with fountain, maintenance paths/greenery seems neglected.	No school(zone).	Benches placed alongside the footpath frequently.
<i>Activity (what are people doing in the public areas?)</i>	Meet, leisure activity, walk, cycle, walk the dog, pass through.		

4. Arendalhof

4. Arendalhof

Streetview



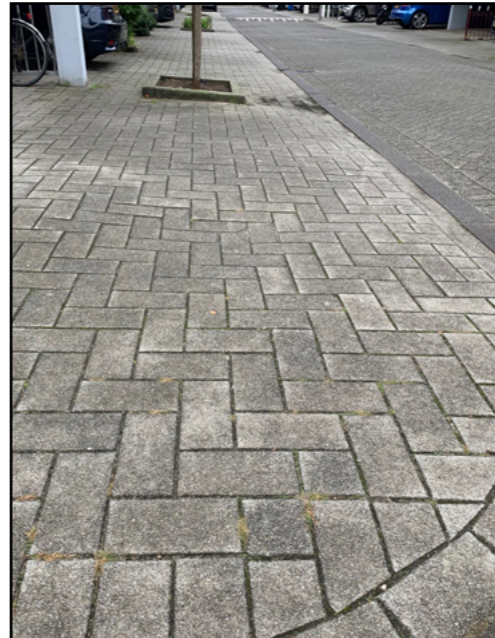
Streetview



Observation



Observation



16 parking | car/cyclist | pedestrian

car/cyclist | pedestrian | private

private | pedestrian | car/cyclist

pedestrian | car/cyclist | private

pedestrian | car/cyclist

parking | car/cyclist | pedestrian

4. Arendalhof

Streetview



Observation



18 private | pedestrian | car/cyclist

pedestrian | car/cyclist | parking

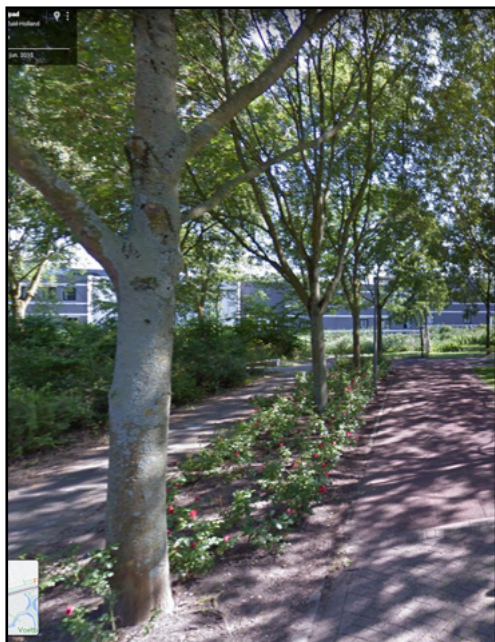
OBSERVATION SCHEME

Site location: Arendalhof	Date: 24-09-2022, 11:00	Framework for building blocks of the movement-friendly environment (Kenniscentrum sport en bewegen, 2021)	
Areas of observation	Objects/elements	Active movement - Street	Recreative movement - Street
<i>Housing/parking/shops (density, maintenance, paving/asphalt)</i>	Terraced housing, 3 floors, parking underneath the roof of the first floor, pavement next to houses, road in the middle, silence (no sounds).	Shared Space (AS1): A concept where the traffic area is also meant to be used as a reside area. In Dutch 'woonerf'.	Residential street (RS1): Reside and usage function of the street are central: street is a social space for meet, play and relax.
<i>Greenery (trees, grass, fronts housing, roofs, paving)</i>	5 trees, no public/private greenery, 2 houses with greenery on the front of the house, bricked road, the side-streets have some greenery but mostly parking.	The street is not meant to be used as reside area, pedestrian area is a separated area as can be seen from the different paving.	The traffic area is not meant for reside purposes. It is for car and cyclists usage. Pedestrian area beside the road, obstacles (trees, cars, dumpsters) on the path.
<i>Network cars (dominance, balance, street view, priority)</i>	Cars are dominant, cyclists on the carroad, grey looking, road catches attention.	Parking spots (AS2): Clustering parking areas in the neighbourhood leaves more room for cyclists and pedestrians.	Play inducement (RS2): Can be street furniture, trees, art, fountain, high differences, railing, etc.
<i>Network cyclists (quality, connectivity, attractiveness, crossability, priority)</i>	Cyclists share road with cars, good network, no priority.	Private parking spots for each house, parking zone between building blocks, parking on one side of the street. Not particularly clustered	Area not meant for playing, no play inducement.
<i>Network pedestrians (quality, connectivity, attractiveness, priority)</i>	Pavement on both sides, trees and cars are obstacles, holes in pavement, sloping pavement.	Schoolzone (AS3): Carfree area around schools, for a safe environment for the children.	Attractive resting places (RS3): Movement-friendly environment has a sufficient amount of resting places.
<i>Public areas (parks, plaza, playgrounds, resting-place, attractiveness, balance inclusive and exclusive public space*)</i>	No benches, no reside-function, only access roads for houses.	No school(zone).	No resting places.
<i>Activity (what are people doing in the public areas?)</i>	Traveling to housing/residence, no passing through, no people only cars.		

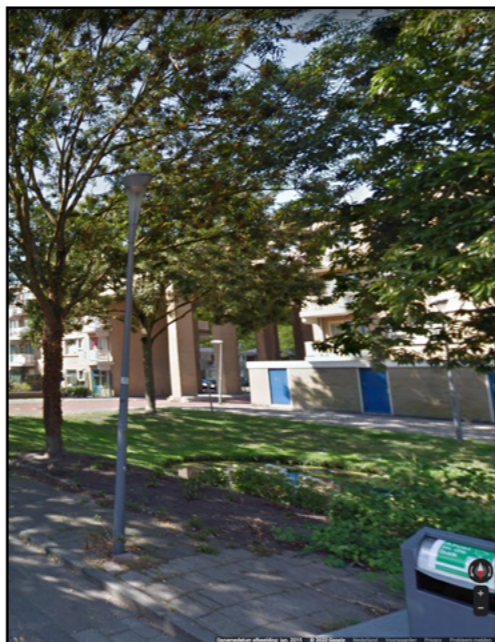
5. Scandinaviëpad

5. Scandinaviëpad

Streetview



Streetview



Observation



Observation



20 greenery | resting

greenery | play

pedestrian | greenery | cyclist | play

pedestrian | greenery | cyclist | play

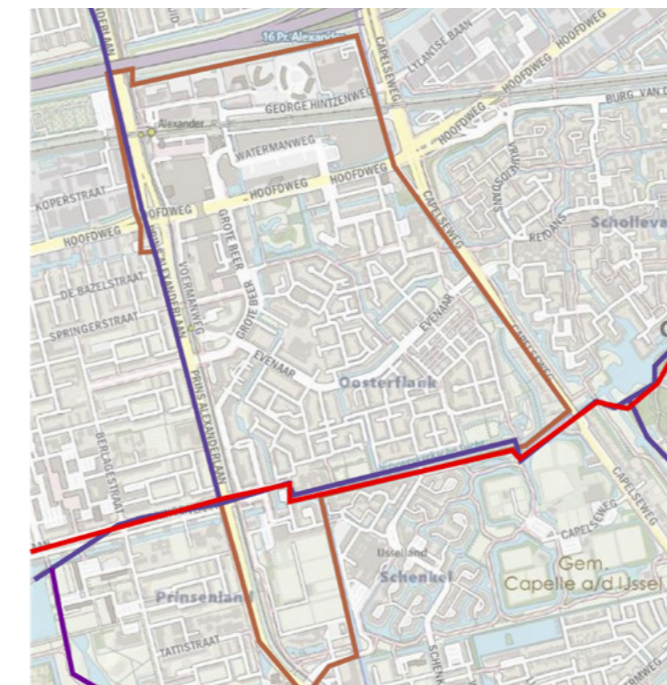
greenery | play

pedestrian | cyclist

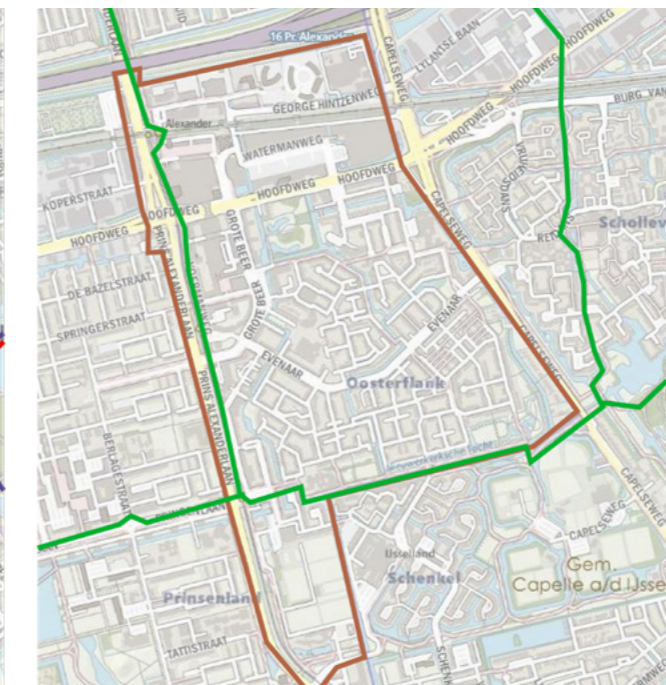
OBSERVATION SCHEME

Site location: Scandinaviëpad	Date: 24-09-2022, 11:25	Framework for building blocks of the movement-friendly environment (Kenniscentrum sport en bewegen, 2021)	
Areas of observation	Objects/elements	Active movement - Street	Recreative movement - Street
<i>Housing/parking/shops (density, maintenance, paving/asphalt)</i>	No housing alongside the Scandinaviëpad, pavement and asphalt cycle paths.	Shared Space (AS1): A concept where the traffic area is also meant to be used as a residential area. In Dutch 'woonerf'.	Residential street (RS1): Reside and usage functions of the street are central: street is a social space for meet, play and relax.
<i>Greenery (trees, grass, fronts housing, roofs, paving)</i>	Park-like area, a lot of grass, trees and plants.	Not a shared traffic area, cars are banned. Reside area for pedestrians, cycle paths connect the areas of Oosterflank.	This area has a cycle and footpath, but the main function is residential for play, meet and relax. Fields to sport, play and reside.
<i>Network cars (dominance, balance, street view, priority)</i>	No cars allowed, no network.	Parking spots (AS2): Clustering parking areas in the neighbourhood leaves more room for cyclists and pedestrians.	Play inducement (RS2): Can be street furniture, trees, art, fountain, height differences, railing, etc.
<i>Network cyclists (quality, connectivity, attractiveness, crossability, priority)</i>	Strong cycle network, priority, green area, neglected maintenance of paths.	Parking at the borders of the area.	A lot of trees, grass area, sport facilities such as soccer goals, basketball area.
<i>Network pedestrians (quality, connectivity, attractiveness, priority)</i>	Strong pedestrian network, second priority after cyclists, green area.	Schoolzone (AS3): Carfree area around schools, for a safe environment for the children.	Attractive resting places (RS3): Movement-friendly environment has a sufficient amount of resting places.
<i>Public areas (parks, plaza, playgrounds, resting-place, attractiveness, balance inclusive and exclusive public space*)</i>	A few benches, a park-like area, a football field, only public green areas, and inclusive space.	No school(zone).	A few benches beside the foot and cycle path, but not very frequent. No benches near the play and sports areas.
<i>Activity (what are people doing in the public areas?)</i>	Meet, leisure activity, walk, cycle, walk the dog, pass through, play.		

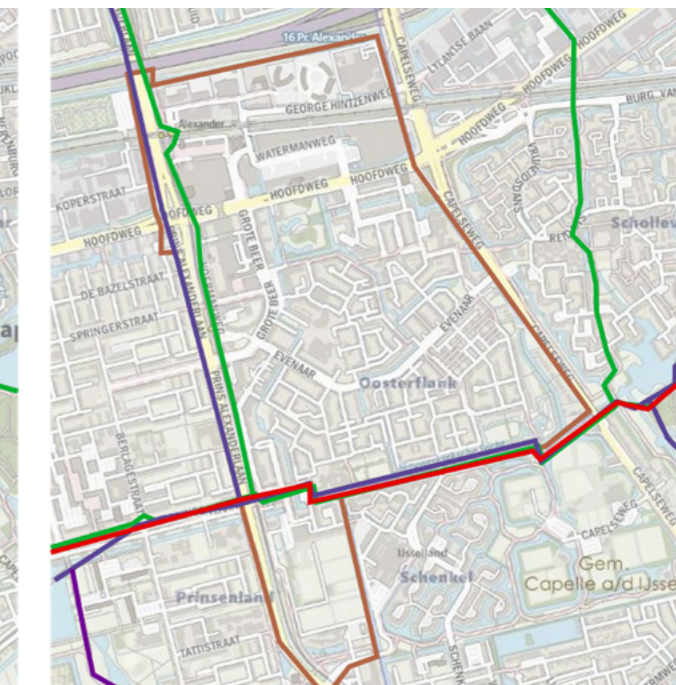
National pedestrian routes



Regional cycling routes



Cycling- and pedestrian routes



Maps of Oosterflank



Buildings



Buildings and bigger greenery



Bird-view photo