

# URBAN HAPPINESS

How urbanists should carry out citizens' participation during the design process to improve citizens their lifes

## COLOPHON

### **URBAND HAPPINESS**

How urbanists should carry out citizens' participation during the design process to improve citizens their lifes

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## Abstract

Social inequility is still part of the current world, not only in the poorer countries but also in the wealthiest once. With the use of gentrification it was tried to hide the poverty by improving the quality of neighbourhoods. Although this improved the liveability and wealthiness of a neighbourhood, it did not improve the lifes of the former citizens as they were forced out. This shows the wrong focus of the regeneration that is often used in deprived neighbourhoods, improving the liveability instead of improving the lives of the citizens. To be able to improve the life of the citizens, it is important to find out what their wishes and needs are, so an urbanist can implement these in the design. Therefore, this thesis researches how an urbanist can establish citizens' participation as a design method to be able to design life improving neighbourhoods for its citizens. This will be done by answering the main question of: "how can the use of citizens' participation in the urban design process of the regeneration of deprived neighbourhood improve the liveability?". To answer this question, research on citizens' participation, happiness and liveability will be combined with analyses on a case studie to create a new design method for urbanists that is focused on participation as the main way of designing. The manual will show how participation can be used as a design method and how an urbanist should approach this way of designing. The main focus is on the way the urbanist should communicate with the citizens so they will both understand each other.

*Key words: citizens' participation, deprived neighbourhoods, liveability, design process, (role of) urbanists*

*“We might not be able to fix the economy. We might not be able to make everyone as rich as Americans. But we can design the city to give people dignity, to make them feel rich. The city can make them happy”*

Enrique Peñalosa, Former mayor of Bogotá, Colombia

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# 1. INTRODUCTION

During this chapter the reasons for the research carried out in this thesis will be explained. First a personal motivation will show **why** this research is important according to personal experiences. Then the main theme will be introduced by answering “**What** is the general goal of this research?”. When the main goal is explained, this goal will be linked with current societal problems by answering “**What** problems can be solved when the general goal is reached?”. After knowing the personal motivation, the general goal and the problem context, the relevance of this project will be described, based on the information gathered by answering the other questions. This will be done by answering “**Why** is this research important?”. This chapter will finally serve as the base for the research carried out and the decisions made in the rest of the thesis.



## 1.1. MOTIVATION

### Personal motivation

While growing up a lot of neighbourhoods were being 'improved' by the use of gentrification. A deprived neighbourhood was turned into a better liveable neighbourhood by focussing on improvements that will attract a new (often richer) group of residents. Although the idea of improving deprived neighbourhoods is good, in my opinion it should not be done by replacing the residents with new, 'better' ones.

Although I personally did not grow up in a deprived neighbourhood, on the contrary, there was one neighbourhood (Klarendal in Arnhem, The Netherlands) that I was known with that went through the process of regeneration. This neighbourhood was a great example of how regeneration is carried out, as the older and smaller houses were all being renovated and the neighbourhood was turned from the red-light district into the Fashion Quarters of Arnhem. This meant that the existing 'poor' residents were replaced by younger residents, with an interest in fashion and a wealthy future in front of them.



▲ Die entree van Klarendal onder het spoorviaduct. © Rolf Henseel

### Klarendal: hoe een krachtwijk toch weer een klachtwijk werd<sup>\*1</sup>

ARNHEM - Volkswijk Klarendal baait van de toegenomen overlast. Er wordt weer open en bloot gedeald. Maar ook agressie van verwarde personen en hutterige foutparkeerders zijn de Klarendallers zat.\*2

\*1; Klarendal: how a power district became a complaint district yet again

\*2; Arnhem - Working-class district Klarendal is bummed by the increased nuisance. Dealing happens openly again. But also with the aggression of confused people and asshole wrong-parkers are the Klarendallers fed up.

Image 1: Newsarticle about Klarendal. (De Gelderlander, 2019)

Although the neighbourhood was really improving on a lot of aspects, and I was able to move through it feeling safer than before, there was one question that was always bothering me: "What happens with the former residents?". The answer appeared to be that they moved into another neighbourhood, where there problems either stayed unchanged or even increased. For me this showed how horrible the idea of gentrification is, as it did not improve the lives of the residents, and this made me want to change something about it. In my opinion, the improvement of a neighbourhood should not be a goal, but a method that is used to improve the lives of the residents of the neighbourhood. And that is also why I think that an urbanist is not someone who just designs the living environment, but someone who designs a part of the life of the users of the living environment, by deciding what will happen in the living environment. Therefore, I want to research what is needed to be able to design a better life for citizens.

And to come back to Klarendal, the succes of the regeneration was only for short term, as a group of the original residents stayed and had total different interests than the new group of residents, resulting in a neighbourhood consisting of two opposite groups. This has resulted in situations where the new residents do not feel safe anymore, but the original residents do not feel welcome (image 1; De Gelderlander, 2019). Although this result is saddening, I'm personally happy to see that regeneration does not work and other methods (preferably focussed on the residents instead of the neighbourhood) should be used to improve the deprived neighbourhoods.

## 1.2. THE CONCEPT OF HAPPINESS

### Introduction

As mentioned in the personal motivation, the goal is to find a method by which the lives of citizens of deprived neighbourhoods can be improved with the use of urbanism, as a counterreaction on the concept of gentrification. Although this goal was clear, it was not yet clear how to start researching. What determines whether people their lives are good or not? It is often linked to the possessions someone has, to the environment someone grew up or to the social life of a person, to name some. Probably everyone can agree that all these aspects are true, but that would not explain why the children in image 2 seem to enjoy their lives, even when it is just in the moment when the picture is taken, although they do not even have a ball as a possession, but replaced it with a cardboard box.

Although the children in the image do not have the possession that they need (a ball), the possession that they use (a cardboard box) is able to improve the lives. Looking at the picture, it can be assumed that discussed whether the box really improves their lives in general, but it is certain that the children look happy in this moment. However, when these children get the opportunity to be happy all the time by having more of these 'good life' events, one could state that their lives is good. Therefore it could be said that a good life is determined by a lot of good life moments, meaning that someone should be happy is much as possible. That is why it is important to understand what happiness is, to be able to design an living environment that improves the lifes of its users. In this section, the concept of happiness will be analysed to function as a support for the rest of this thesis.



Image 2: Happy children playing with a cardboard box. (White, 2011)



## General happiness

Happiness is a phenomena everyone feels, can describe and it even appears to be one of the main goals in life. Behind almost every decision made lies the aim to improve a personal happiness (Veenhoven, 2012). The aim for happiness is not only something people do to make them mentally feel better, it also has shown to positively influences peoples health (Veenhoven, 2008). Whether someone is happy is influenced by a multiple different aspects. First there is the distinction between outer and inner qualities (Veenhoven, 2012). Where the outer qualities are effects on someones life according influences from their surroundings, the inner qualities are more focused on the way someone behaves. Then there are the life chances and life results (Veenhoven, 2012). In this distinction, the life chances focus more on the opportunity someone gets to life a happy life, while the life results focus more on the way the life is being lived. All these aspects show that happiness can be influenced by a lot of different events and that every decision made could be of a big influence. Although this seems likely, it appears to be only partly true. Research of Diener et al. (2009) describes that, although happiness has a lot of chances, happiness seems to steer back to a standard level. This is concept is named the hedonic treadmill. Although there is this standard level of happiness, this differs per person and can be influenced by some extreme events happening (Diener et al., 2009). But even if there is a standard level of happiness where everyone always steers back to, it would be best if everyone would manage to stay above that standard as much as possible, making lifes better.

## Happiness in the urban environment

As happiness is so important in life, trying to possibly influence it should be people their main goal, not only focused on a personal happiness but even more on the happiness of others. As the urban environment is one of the most used places, the designers of the urban environment have a big influence on the happiness of almost all people, influencing the outer qualities as well as the life chances (Veenhoven, 2012). Therefore, an urban designer is not someone who only designs the urban environment, but an urban designer is someone who shapes the lives of others. This makes the sociology aspects of urban designing at least as important as the technical aspects of urban designing, as not maybe even more important.

This sociology aspect within urban designing is close related to liveability, as liveability mainly discusses the way people experience the urban environment (Veenhoven, 2012). According to Howley et al. (2009) liveability consists of 6 different aspects:

- *Finance or cost of living*

The amount of money people receive and how much they have left after spending it.

- *Safety*

The feeling of safety created by visible and invisible interventions in the urban environment.

- *Health and climate*

Reducing different types of polutions to increase health, and the possibilities for people to make use of healthcare facilities.

- *Facilities and services*

The amount and proximity of needed facilities and services.

- *Mobility and transport*

The possibilities to move safe, fast and cheap from one point to another, within or outside of the area.

- *Social participation*

The involvement within local events, as well as the opportunity to be involved or the opportunity to meet others.

## Collective and individual happiness

Although considering the liveability aspects, as mentioned before, will have a big influence in the happiness of people, it is not influencing everyone their happiness similar. This is caused by the difference between the collective and individual happiness of people (Veenhoven, 2012). The concept of collective happiness states that all people have the same needs to be satisfied. By considering the general ideas of liveability, this satisfaction level can be reached. However, there is also the individual happiness. This type of happiness differs per person and is influenced by a lot of different factors, as the age, gender, cultural background and so on. Therefore it is possible that certain liveability aspects can influence some people their lifes in a positive way, while other people do not really get influenced by this change. It is thereby also possible that changes in one neighbourhood work positively, while it would not have that effect when the same changes were made in another neighbourhood. To be able to make an urban design that suits everyone within a certain neighbourhood, it is important to not only consider the liveability aspects as a general, but also the way individuals experience the liveability. This could be done by using citizens' participation methods during the urban design process. When these individual aspects have been considered, it still will not be possible to make everyone fully happy, as opinions of different people can be contrary, but the general happiness will be improved even further.

## 1.3. PROBLEM CONTEXT

### Poverty in the 'Western world'

The people that are in the biggest need of an increase of happiness, because they are most likely to have the worst basic happiness, are the poor. That there is still a lot of poverty around the world is something that can not be denied. This poverty, however, is often mainly linked to Africa, Asia or Southern America (the so called 3rd world), but that does not mean it does not exist within Europe or Northern America (the so called Western world) as well. In the Netherlands alone there are currently 939.000 people living in poverty, of which 251.100 children, which are almost a million people that are in a big need to have an improved basic happiness. All these people are not able to provide themselves with enough or good food, housing, healthcare and can not continue learning after they finished the obligated years in school. In the Netherlands poverty can be distinguished in two types:

- Relative poverty: Having worse living conditions as people in the surroundings.
- Social poverty: Not being able to participate in social activities, caused by the poverty. (Armoedefonds, 2021)

That poverty is a big problem that needs to be solved can be seen, looking at the consequences of poverty. Not only have the people problems with foreseeing in the basic needs for life, a lot of the people living in poverty have to cope with a worse health, a lot of stress and less changes in the society. For children it can also cause the lack of possibilities of carrying out or hobby, or even less opportunities or willingness to invite friends over because of the poverty. (Armoedefonds, 2021)

Although poverty is measured on the income of people, and urbanists are not able to design income for citizens, urbanists are able to design better life possibilities for the citizens. This can be done by giving children the possibility to play so they can reduce stress, by designing a cleaner and safer living environment so the stress and health improve, but also by designing shared allotment gardens or safer and easier ways to bike so the citizens can spend less money on food and mobility, leaving them with a better financial buffer to spend on 'luxury', which will improve their happiness as well. These were some examples that show how influential a good design of the liveability aspects can be for citizens.



Image 3: A building in a deprived neighbourhood. (Author)

### Deprived neighbourhoods

Eventhough about a million people are living in poverty, 'only' 36.000 of them are homeless (CBS, 2021a). Although most of the poor people do have a house to live in, this does not mean these houses and the living environment are in a good shape. Within the Netherlands, a lot of areas have been reconstructed after being demolished during the second world war, which happened in a fast and cheap way. According to CBS (2020), there still exist more than a million homes that have been build during the reconstruction period. Some of these have been renovated since, but some have not been upgraded in any way. This means that there are still a lot of houses within the Netherlands that do not fit the standard regulation as what is seen as normal when new houses are being build (for example the changed isolation regulations). By improving these neighbourhoods two things will happen:

1. The houses and living environment will improve, improving the lives of the citizens which reduces stress and bad health and improves life possibilities, therefore improving the happiness.
2. Houses are changed to the modern standards, meaning that living will be cheaper (lower energy costs due to isolation) and better (cleaner and safer houses). Important in this is that the rental prices stay the same and the original residents are able to live where they lived. Making it possible for the citizens to stay in their homes after the renovation also positively influences the liveability of the neighbourhoods as research has shown that a lot of movements between homes also negatively influences the liveability of a neighbourhood (Van Ham and Clark, 2009).

Most of the neighbourhoods that are discussed before are so-called deprived neighbourhoods (image3). Although a lot of them are build during the reconstruction period, they also can be build during other periods. Within the Netherlands, still 2 million people live in deprived neighbourhoods, of which the liveability score is below sufficient according to Leidelmeijer et al. (2019) in their research carried out for the government. On the other side, only 50% of all the residents in the Netherlands are living in a neighbourhood scoring good or above (Leidelmeijer et al., 2019). This means that about 9 million people live in neighbourhoods that can still make a lot of improvements.

Although these numbers show a clear need for improvements in the urban environment within neighbourhoods in the Netherlands, the research carried out by Leidelmeijer et al. to gather these numbers was only based on measurable liveability concepts. This means that they only looked at aspects as whether a playground was close or where and how many schools there are, but they did not include the opinions of the users themselves. Therefore it is possible that the numbers above could change, either in a positive or negative way. This does not mean, however, that the numbers can be seen as inaccurate and that the research does not show a problem, it only means that there is also a need in finding out whether all the aspects mentioned in the research are also really seen as a problem for the citizens. The way to get this information from the citizens is by involving them in research or during the design process for their neighbourhoods in the form of citizens' participation.



## 1.4. RELEVANCE

### Ethical considerations

The aim of the project is to research the possibilities to involve citizens in the design process of their own deprived neighbourhood. Involving them in the design process gives them the opportunity to say what problems they really face in their living environment, which then can be solved accordingly. Solving these problems will increase the liveability of the neighbourhood, as well as increase the lives of the citizens. This results in a better happiness for the citizens which influences a lot of aspects as an improved health and better live opportunities. Although as much participation as possible is needed, it is also important to research the role of the urbanist in the process, as citizens are not able to design a neighbourhood because of a lack of knowledge about regulations. Another problem where the urbanist can take a role in is as a mediator between the citizens. As mentioned before, every individual has different wishes and needs, which can be contrary to those of others. Therefore it is important to have someone from the outside who can make the final decisions, fairly weighted on all given arguments.

### Sociatal relevance

With still 2 million people living in deprived neighbourhoods, and 1 million of them living in poverty, there are still a lot of people in the Netherlands that have struggles being able to live 'normally'. All these citizens have an increased change on stress and health problems and have less opportunities in their lives to grow. Although these citizens are the once directly endure these problems, it also affects the rest of the country, for example in the increased costs for the needed healthcare for people who are not able to pay the care themselves. These costs are then often paid by the society as a whole, via taxes or increased insurances. Therefore, solving the problems of the living environment of the citizens of deprived neighbourhoods does not only increase the lives of about 2 million people, but also slightly increases the lives of everyone living in the dutch society.

### Scientific relevance

The use of citizens' participation as method to change the living environment of citizens is not a new concept. Therefore, a lot of research has been done throughout the years. Most of this research focuses on different types of citizens' participation and suggests different participation frameworks and has been written on the use of citizens' participation in deprived neighbourhoods, mainly focused on the different actors, and the way to involve all citizens within the participation process.

Where this research is different from the former researches is the way citizens' participation is being approached. Where earlier research focused mainly on participation models where either the municipality, the developers or the citizens are the drivers of the citizens' participation, this research will create a participation model focused on the role of the urbanists as the driver of the participation process. Eventhough urbanists have a lot of influence in the living environment, and therefore the happiness, of the citizens, research on the role of the urbanists within citizens' participation has not been an often discussed theme yet. Some researches can be found that explain specific situations in which the role of an urbanist during the participation is being described, but none has focussed on the whole process when the participation process is carried out as an analyse and design method by the urbanist. This is the gap that this research will start the discussion by beginning with gathering information to fill the gap.

### Conclusion

In the Netherlands there are still 2 million people living in deprived neighbourhoods of which almost 1 million is also categorized as poor. To solve the bad state of these deprived neighbourhoods, a lot of these neighbourhoods were improved with the use of gentrification. Although this often improved the quality of the neighbourhood, it did not improve the live quality of most of the former residents of the neighbourhood. Therefore, a new way of designing is needed that improves the liveability of the neighbourhood as well as the live of the citizens living in them. In this process, urbanists can, and should, play a big role.

Although urbanists are often seen as the designers of the urban environment, their role is much bigger then that. As the urban environment is one of the most used places by the citizens living and using this environment, an urban designer also influences the way the citizens can live. Research has also shown that the living environment is of a big influence on the happiness of the citizens as it influences their outhur qualities as well as the life changes one has. Therefore, an urbanist can be seen as a sociologist who influences and decides what happens with the lives of the citizens of the neighbourhood the urbanist designs.

This sociology role of an urbanist seems obvious, but in reality it is often either forgotten or used wrongly. A lot of designing is based around the liveability of the neighbourhood, and although this liveability is something that almost everyone wants to experience similar, the way it is achieved often differs per person. Therefore it is hard to use the liveability concepts as the solution to improve neighbourhoods, but should the opinion of the citizens also count. This can be done by involving the citizens within the urban design process by the use of citizens' participation.

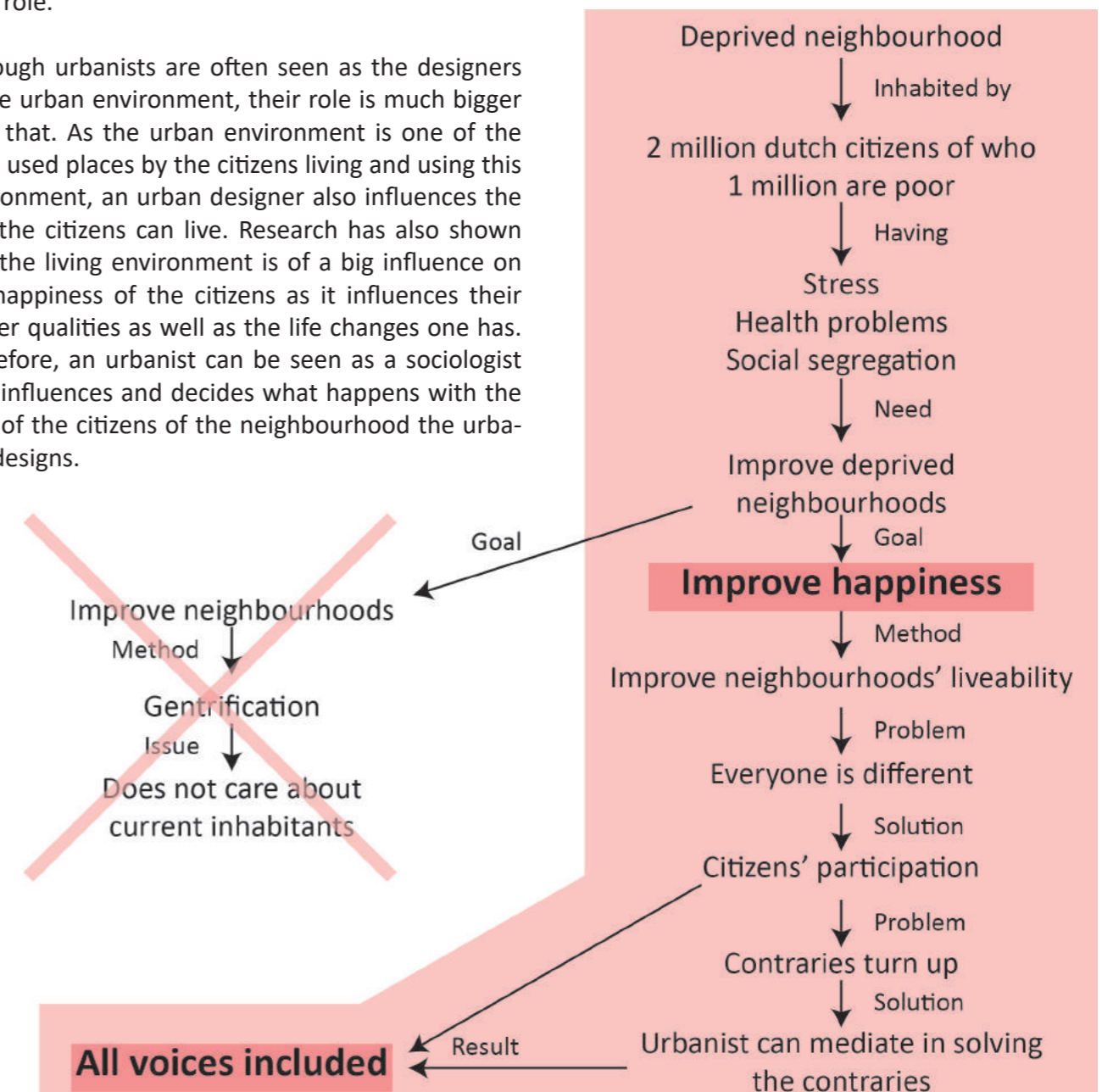


Image 4: Introduction framework (Author)



## 2. THEORETICAL UNDERPINNING

During this chapter the existing literature on the main topics of this research will be analysed. This will be done by answering the questions “**What** is liveability?”, “**How** is liveability measured?”, “**What** types of citizens’ participation exists?”, “**How** should the involvement take place?” and “**Which** other stakeholders should be involved during the citizens’ participation process?”. The results of these questions will be joined in a framework that will function as a base knowledge source for during the rest of the thesis. On the reason why the two topics, liveability and citizens’ participation, are chosen as the main topics of this research, will be elaborated in the section on the next page.

## 2.1. THEORETICAL CONTEXT

During the introduction it became clear that an urbanist is not only someone who designs an urban area, but also someone who shapes the lives of the citizens living in this urban area. In a lot of neighbourhoods within the Netherlands this is done well, but research by Leidelmeijer et al. (2019) also showed that there are still a lot of neighbourhoods within the Netherlands that are not graded as liveable. Within the neighbourhoods that scored below sufficient, still 2 million people are living. As they are living in these poor situations, they have an increased change on problems as stress, a reduced health or social segregation from the society. Therefore it is important to improve the happiness of these citizens but also to give them a voice as everyone experiences happiness differently.

In the framework in image 5, two methods are mentioned that can improve the happiness of all the citizens. First it is important to improve the liveability of the neighbourhoods, and secondly it is important to do this by making use of citizens' participation during the design process.

To be able to improve the liveability of the deprived neighbourhoods by the use of citizens' participation, it is first important to find out what these two aspects consist of. This will be done by answering the questions as mentioned in the introduction of this chapter, by analysing literature on both of these topics. The outcomes of this literature research will then be used as the knowledge base for the rest of this thesis, which will show how citizens of deprived neighbourhood can be made happier by improving their living environment.

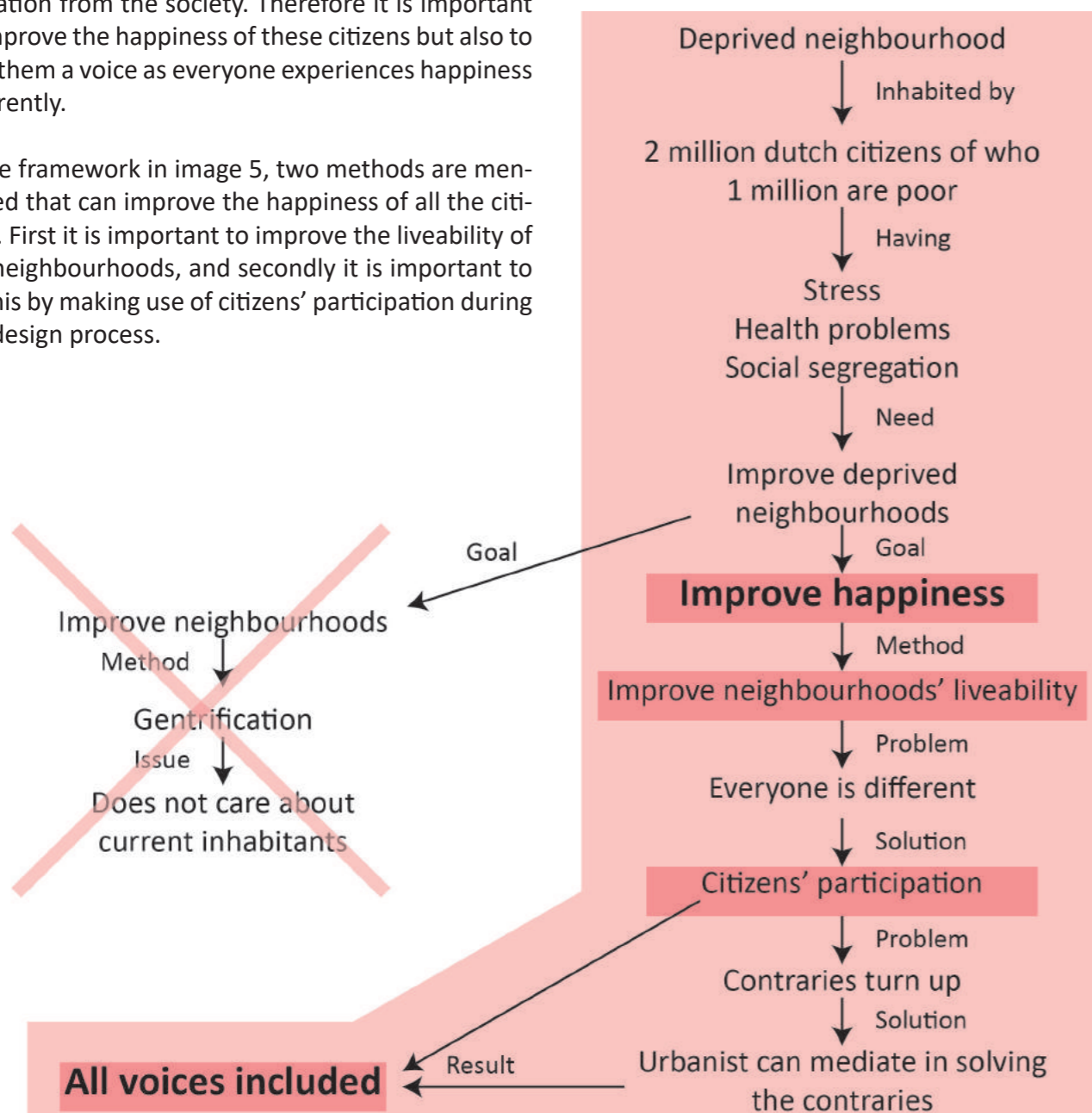


Image 5: Introduction framework with highlighted theory concepts (Author)

## 2.2. LIVEABILITY

### Introduction

As mentioned before, happiness in the urban environment can be linked to the liveability of this environment. Although happiness and liveability are both concepts that are experienced differently per person (Veenhoven, 2012), the basic values of them are often experienced similar. When discussing the topic of liveability, research by Howley et al. (2009) has shown that it can be divided into the following 6 topics: finance and cost of living, health and climate, safety, services and facilities, mobility and transport, and social participation. Although every topic is differently, they are all interrelated within the urban environment. During this section, each of these topics will be explained, linked with the urban environment and linked with its effects on happiness. This section will therefore answer the questions "What is liveability?" and "How is liveability measured?".

### Finance and Cost of living

The first aspect, finance and cost of living states that people with more money spending possibilities (income or savings) also have better opportunities to improve their lives thus improving their happiness (Howley et al., 2009). For the richer people, who have enough money to spend on the things they want, this liveability aspect is mostly already good, but for the poorer people a lot of improvement is still possible. For this last group, the best improvement would be an extra financial support or boost, but this is often reliable on a lot of aspects decided in governmental policies. As urbanists are not in charge of these policies, it is not directly possible for them to improve this liveability aspects directly. Although this direct influence is not possible, this does not mean there are no possibilities at all. So is it possible to provide in opportunities to save money. One such example is by improving slow traffic networks between a neighbourhood and the most important locations that the citizens use. As this increases the possibilities for the citizens to use the bike or go walking instead of going by car or public transport to the other location, this could save expenses. Also the possibility of growing food within their neighbourhood and for their own use can save expenses. With both these ideas, the citizens will not directly be helped as they do not receive a higher income, but the ideas would make it possible to save money which then can be spent differently, possibly on things or activities that do positively influence their happiness.

## Health and Climate

Health and climate, contrary to the other 5 aspects, is the only aspect that is not only influencing the happiness of the citizens, but that is also influenced by the happiness of the citizens. In the introduction it was already mentioned that a worse happiness negatively influences the health, but about the climate the same can be said. People that are happier in life, and therefore have more life possibilities, are also earlier willing to think about more than staying alive (Veenhoven, 2012), making them more likely to consider the climate while making decisions. The main ways to improve the health and climate within the urban area is by adding more greenery within this area. One of the reasons why this is done is to decrease the urban heat island effect, but also to reduce the air pollution, within the area. As both of them have a big influence on the human health (Mika et al, 2018), it is important to try to reduce these effects by any means possible. Aside of the direct effects of greenery on the climate, research has also shown that greenery around people positively influences their mental health (Dzhambov et al, 2021). This means that greenery can also contribute to the reduction of stress, which is more often present by poorer people.

Not only does greenery influence the air pollution, the climate and mental health, it can also contribute to a better smell of the surroundings and reduce the noise pollution of an area. This bad smell is not directly influencing peoples health, but often goes along with air pollution which does affect peoples health. Although the bad smell is not directly influencing the health, it does negatively affect peoples liveability (Howley et al., 2009), thus influencing their happiness. Contrary to the smell pollution, noise pollution does affect peoples health, as it can cause hearing damage and sleep disturbance (Gupta et al., 2018). This all shows how important the consideration of greenery and other health and climate supporting adaptations is in the urban environment when focussing on the happiness of the citizens.

## Safety

Third on the list of aspects is safety, which considers criminality as well as physically being safe or mentally feeling safe. Similar to finance and the cost of living, this aspect has a lot of influences from outside of the field of urbanism, but also within the urban environment a lot of changes are possible to improve the (feeling of) safety.

According to Suojanen et al. (2019) one of the most important aspects of safety is the feeling of within the urban environment. Another research, by Clevinger et al. (2018) also shows that safety is not similar experienced by everyone. In their researches it is described that, for example, certain citizens are happy with police presence in their neighbourhood, while others are being scared by the police presence. This again shows the importance of considering the individual opinion when designing or making decisions happens about the urban environment. Within the urban environment there are some ways an urbanist can influence the (feelin of) safety, for example by the means of infrastructural planning. Wider pavements or separate bicycle lanes give citizens the opportunity to move safely from one location towards another. There is the aspect of visibility within the city, mostly focused around city centres. Xu et al. (2018) researched the effects of streetlights in urban areas and found out that adding street lights in urban areas directly decrease the criminality rate within this area. Another benefit of street lights is that people feel safer when walking around at night. According to Rahm et al. (2021), people even tend to take detours to be able to walk through better lighted areas at night.

Although the interventions within the urban environment are not able to turn a unsafe neighbourhood into a safe neighbourhood, they are able to make an area safer, thereby increasing the liveability of the neighbourhood and the happiness of the residents of this neighbourhood.

## Services and Facilities

The fourth aspect to consider is the proximity and availability of services and facilities within and close to a neighbourhood. This can be divided into two groups again, the necessary services and facilities, and the leisure based services and facilities.

The first group consists of important services and facilities that provide in the daily needs of the citizens, thinking about education, healthcare, food, clothing and clean water. These daily needs are such important that most countries have added them as rights within their national law, and they are also mentioned by the UN (2021) within their overview of Sustainable Development Goals.

Besides this obligatory group there is also the leisure based group, in which the services and facilities contributing to improving people their lives, but are not obligated by law. This group mainly exists of religion, sport and culture based associations, more luxury shopping facilities and activity related services and facilities. According to Tonkens & Verhoeven (2018) most of the citizens are in a way making use of these kind of services and facilities.

What both of these groups have in common is that they do have a big influence on the liveability of a neighbourhood and therefore on the lives of the citizens, but mainly the first one is really important as it can help improving the lives of the poorest people when implemented well in their living environment.

## Mobility and Transport

The fifth liveability aspect, mobility and transport, is mainly focused on the connectivity from, towards and inside a neighbourhood. The first types of connections that need to be created are the once daily used by citizens (schools, workplaces, supermarkets etc.). Around school areas or workplaces it is for example possible to reduce the amount of cars when the bike and walking routes are of a good state, but around shopping centres and supermarkets car spaces are needed for the people to be able to transport the heavier goods they bought. It is also important to consider the safety aspects of the infrastructural network. Around schools, parks and shopping centres, where more movement is going on, the speed of cars should be reduced and the space for walking and biking should be increased.

Not only should the connectivity for the citizens be considered, also for other stakeholders, as shop suppliers, the connectivity in a neighbourhood should be considered. In some areas within the Netherlands timeslots are being created in which the areas are less crowded thus safer for delivery vans and trucks to supply the stores. As the Lijnbaan in Rotterdam is build around an infrastructural idea, by which slow traffic is paced inbetween the buildings and the supply delivery and fast traffic is placed behind the buildings, to separate the slow and fast traffic from each other.

All these types of ideas do contribute towards a better connected and safer neighbourhood, improving the liveability and happiness of the citizens that are living within these neighbourhoods



## 2.3. Citizens' participation

### Social participation

The last aspect mentioned by Howley et al. (2009) is social participation within the neighbourhood. Again, this one is only partly influential by urbanists as the designers are not able to make citizens go outside and make contact with each other. However, what an urbanist can do is making the urban area attractive, making it more likely for people to go outside, by creating places that also make it possible for citizens to come together, like playgrounds or parks, bars or cafes or even event places, or by giving the citizens shared spaces, like a community centre or shared allotment gardens. When these interventions are liked areas within a neighbourhood, they will support interaction between the people. Although the functionality of these places regarding the social participation within a neighbourhood is really reliable on the way the citizens use the places, giving them the opportunities already provides in the possibilities of improving the liveability of the neighbourhoods as well as improving the happiness of the citizens.

### Conclusion

While describing the idea behind every of the 6 liveability aspects, the question of “**What** is liveability?” is easy to answer. Liveability is the way citizens experience their living environment and the opportunities they get within making use of the living environment. Whether a neighbourhood is liveable or not can mainly be based by looking at the 6 aspects of liveability. When every one of them is carried out well, according to the wishes of the citizens, a neighbourhood will be experienced as liveable. However, it is possible that one neighbourhood is experienced as liveable by its residents, although external citizens would have a negative experience of the neighbourhood.

That is why it is also important to answer the questions “**How** is liveability measured?”. As the way liveability is experienced is different per person, it is never possible to give an enclosed answer on whether a neighbourhood is liveable or not. During the introduction of this thesis, a research of Leidelmeijer et al. (2019) was mentioned, in which they researched how liveable neighbourhoods within the Netherlands were. In this research they made use of data they gathered, based on the way the different liveability aspects were carried out within a neighbourhood. By the use of this method, a lot of the liveability can be measured, but to be able to measure liveability as good as possible, it is also important to consider the individual voices of the citizens. Therefore the best way to measure the liveability of a neighbourhood is a combination of data gathering based on the liveability aspects, and citizens' participation during the process of data gathering.

### Introduction

As mentioned during the introduction as well as during the analyses of the theories on liveability, it became clear that most decisions made within the living environment are affecting citizens differently. Therefore, the suggestion is made to involve citizens during the design process of their living environment, to be able to become aware of these individual opinions of all the users of this living environment. This can be done by making use of citizens' participation during the design process. To understand the basics of citizens' participation, as well as to understand when it should be used, during this chapter the following three questions will be answered: “**What** types of citizens' participation exists?”, “**How** should the involvement take place?” and “**Which** other stakeholders should be involved during the citizens' participation?”.

Together with the outcome of the research on liveability, the answers provided in this section will function as the base knowledge to be able to research how citizens' participation should be utilized by an urbanist during the design process, by which the goal of the design process is to improve deprived neighbourhoods as a method to increase the happiness of the citizens.

### Citizens' participation approaches

The use of citizens' participation is not a new phenomena. In the context of decision making, citizens' participation has for example been used by important decisions that had to be made by the government, in the form of a referendum. Where this type of decision making is decreasing in usage (mainly because not a lot of citizens make use of it as by the Ukrainian referendum), participation in the shaping of the urban environment is becoming more popular. However, whether the participation also functions is often depending on the type of project and the goal of the project. Sometimes it can be enough to ask the opinion of people, but in other situations, people should have the opportunity to co-decide during the whole decision making or design process.

The different approaches of participation are based on whether a bottom-up or a top-down approach is wished or needed for the project (Tonkens and Verhoeven, 2018; image 6). In a bottom-up approach, the citizens came with an idea that they work out, in which the influence of the government is mostly limited. This approach is often described as citizens' initiatives (Tonkens and Verhoeven, 2018). Although this approach only includes the wishes of the citizens that make use of the area, and therefore gives them a bigger voice, it can result in the exclusion of citizens that are not visible and it can cause complications as citizens mostly do not have the knowledge that experts have, or do not understand the bureaucratic part of the project (Tonkens and Verhoeven, 2018). On the other side of the scale the top-down approach can be found. The use of a top-down approach often gives more opportunities for the invisible people and the bureaucratic aspects are also taken care of. However, by the fully top-down approach the government is the one making the final decision, in which they do not have to include the voice of the citizens (Tonkens and Verhoeven, 2018).

Besides the participation approach, participation can also be divided in active and passive participation. In the active participation the involved citizens and other stakeholders are actively being searched to gather an as big as possible group of participants. This is mostly done by being present in the neighbourhood and visit the citizens (Tonkens and Verhoeven, 2018). The passive participation focuses more on gathering data from citizens that are willing to reply. This is mostly carried out either via online communication or in smaller groups that have an own interest of which they think it does not interest others (Bouzuenda et al., 2019).

In the image on page 19, the 4 most common types of citizens' participation are shown on whether they are top-down or bottom up and whether they are active or passive. These 4 different types are based on the research of Tonkens and Verhoeven (2018) and are explained on page 18.

### Political citizens' participation

The first participation type is the political citizens' participation. During this participation the citizens are allowed to give their opinion about a (mostly political) decision that can influence their lives. However, in the end it is often the government who decides what happens and it is also the government who decides whether they are carrying out this type of participation. Therefore, this type is top-down participation approach, mostly carried out as a passive participation. The advantage of the useage of this type is that citizens get the opportunity to give their opinion, but (mostly) experts decide what will happen in the end. The disadvantage is that it is sometimes used as a method to solve a complicated issue about which the citizens have to less knowledge or are provided to less information. The most common political citizens' participation are referenda's and on-topic questionnaires.

### General citizens' participation

The second type is general citizens' participation. This type can be top-down as well as bottom-up, as it includes citizens' within the process but also gives a role to the decision makers. The main idea behind this type of participation is that citizens get influence in decisions that directly influence there lifes, but that they also will be guided during the process. Therefore the participation process will be active. The involvement of the experts should prevent the decision from being made based on inaccurate information and it should provide all citizens the opportunity to participate. The disadvantage is that the process is often more time consuming as it takes time to be able to include all the citizens in the process, which should be done because it influences their lifes in a direct way.

### Civic action

During the participation type "civic action", citizens undertake action to influence decisions made by a government. This is mostly done in the form of demonstrations or other actions that create attention around a topic, or by the use of lawsuits against the government. Mostly it is important to include as much citizens as possible to be able to show the importance of the topic, which means that active participation is being used during this type. Civic actions are often carried out against decisions that have been made or are about to be made within the government, but in which the government does not want involvement, or in which the decision will likely be made in a way that the citizens will not prefer. Although the final decision will be made by the government, via the use of lawsuits or a lot of attention, civic actions often lead to changes in the decisions made by the government. Therefore the approach is more bottom-up, but it is not completely bottom-up.

### Citizens' initiatives

The last participation type is citizens' initiatives. In this type citizens have an idea that they want to change and they have a suggestion and the possibility to change it themselves. This participation type is mostly carried out about small-scale and less complicated decisions. During this approach citizens either undertake action themselves or present ideas to the government which they then carry out themselves. Sometimes the government will provide in some resources that are needed to be able for the citizens to carry out their idea. Because the whole participation is done by a on front established group of citizens, this type can be found on the bottom up side of the participation scale but it makes use of passive participation as the group is often kept smaller. This does not mean that it can not be active, when the ideas could also influence not involved citizens.

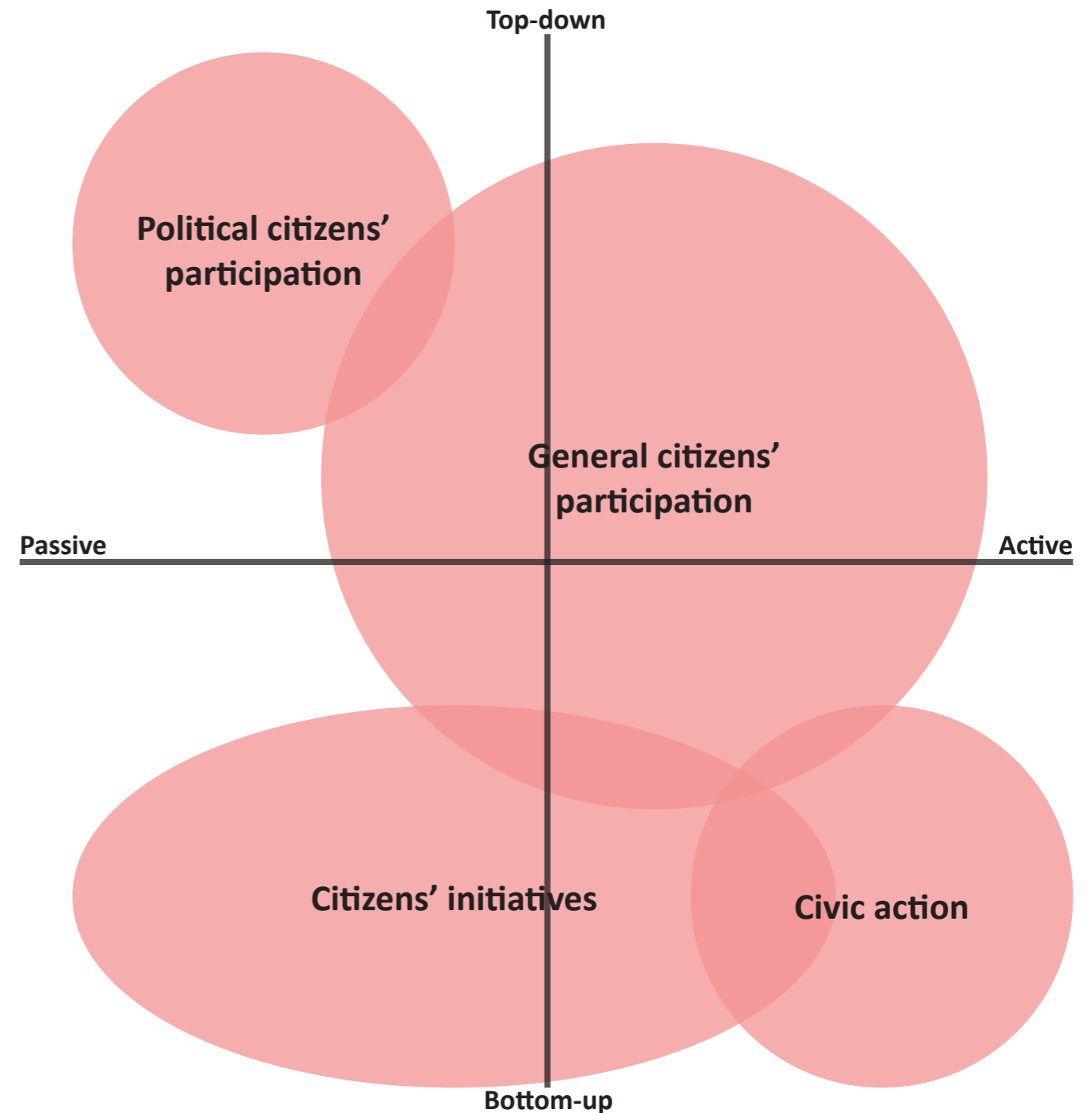


Image 6: Visualization of different participation types (Image: Author, Sources: Tonkens and Verhoeven (2018); Bouzguenda et al. (2019))

## Citizens' participation in this research

During this thesis the use of citizens' participation as method during the design process of a neighbourhood will be researched. Important in this research is therefore the role that an urbanist has during the participation process. As the idea is that urbanists organize the participation after they received the design assignment, the participation types "civic action" and "citizens initiatives" do not qualify to use for the aim of this research, as they are both organized by citizens themselves.

Besides the role of the urbanist, this thesis also aims to research the ways citizens can be made happier by the use of participation. Therefore it is not only important to ask the citizens what they want, but to let them participate in the decision making and designing as well. This means that political citizens' participation is also not useable, as this is only used to gather information about the wishes of citizens but it does not involve the citizens all too much in the final decision making.

Therefore the citizens' participation type that will be used during this research is "general citizens' participation". As mentioned, this will be organized by urbanists after they received an assignment from the municipality. The decision making and designing will be done with the citizens together in most parts of the process, but at some moments the urbanists will use their experts knowledge to make decisions as well to make sure that the project will be realistic.

How the involvement of the citizens and the experts knowledge and decision making of the urbanists should be balanced will also be researched during this thesis, by which the happiness of the citizens will be the driving reason for conclusions made during this research.

## Participation demands

The use for citizens' participation as design method is focused around the involvement of citizens during the design process. This means that it is also important how citizens can be involved during this process. According to Lowndes et al. (2006) there are five demands to a functional participation process, which are described with the acronym CLEAR:

1. Can, citizens are foreseen of knowledge and information
2. Like, citizens have a personal interest
3. Enabled, citizens have the opportunity to participate
4. Asked, all citizens are actively searched
5. Responded, citizens see they are taken serious

When these demands are considered during the participation process, it should result in a positive outcome for the citizens. Although this research of Lowndes seems to be accurate, Tonkens and Verhoeven (2018) did a research based on the research of Lowndes, and they added demands when the process is focussed on a more bottom-up approach. According to Tonkens and Verhoeven (2018) it is also important to help citizens to link them with other stakeholders and the responded demand should also include the support citizens become when they are facing barriers during the process. With the changes according to their research, Tonkens and Verhoeven (2018) created the acronym ACLR:

1. Asked, citizens should actively be asked to participate.
2. Can, citizens should be helped in the participation process
3. Linked, citizens should be linked with other stakeholders
4. Responded, citizens should get a respond on their ideas

## Communication with the citizens

When looking at the two acronyms, one thing becomes clear during every step of the participation process the communication is one of the keys for a successful project. This is not only focused on the communication between the urbanist and the citizens, but also on the communication between other stakeholders and the urbanist or the citizens.

The first step that should be taken in the communication is to make the project known in the neighbourhood. To be able to get the word about the project spread, it is important to be present within the area and actively search for the citizens (Dochorty et al., 2001; Simonofski et al., 2021; Tonkens and Verhoeven, 2018) as well as to start an online campaign to reach out to the less visible citizens (Bouzuenda, 2019; Simonofski et al., 2021). Not only do online campaigns result in the involvement of more citizens within the process, it is also a good method that can be used to gather basic information about the problems and qualities within the neighbourhood, which could function as basic for later, on-site, discussion (Bouzuenda, 2019; Khan et al., 2017)).

During the design process, multiple problems can appear that could negatively influence the possibilities for citizens to participate. One of the most common problems is a language problem between the urbanist, citizens and other stakeholders. This includes both the problem that some citizens are not able to speak the national spoken language and the problem of complicated language use during the process. Therefore an urbanist should make use of translation devices or people and should keep the language during the process as simple as possible. Besides keeping the language simple and helping the citizens with the translation of the language, it is also important to actively help the citizens with understanding the process itself. Hereby it is also important to take the time and show the citizens that their opinion does matter (Tonkens and Verhoeven, 2018). Besides being actively present and help and listen to the citizens, it should not be forgotten to also take the time to take a step back and order all the gathered information and to see whether problems could occur, to prevent the project from reaching into a tunnel vision (Irvin et al., 2004).



## Involving other stakeholders

Although this research will be focused on the involvement of citizens during the designing process of their urban environment, there are also other stakeholders that can or even should take part during the process. These stakeholders are all the persons or companies that own a part of the area or the ones that are active within the area. All these stakeholders should be searched and actively linked to the citizens, by creating a stakeholders network (Lownder et al., 2006). Creating such a network is preferably done by one person to prevent this network from getting chaotic (Simonofski et al., 2021).

Not only do these stakeholders have interests in the design that will be created, some of them can also function as a bridge between the citizens and the urbanist. As a lot of small companies or local organizations are known with the citizens, they can support by finding the citizens or by convincing the citizens to participate (Tonkens and Verhoeven, 2018).

## Involving other stakeholders

When looking at everything that should be done during the participation process, it should be clear that urbanists are not only designers during the participation process. They should also be networkers and mediators. The role of networker will make it possible to communicate with the citizens and the different stakeholders by linking them all together. As mediators, urbanist should bring the colliding wishes of different participant groups together and try to get them to one agreement.

A final role that is also important, is the role as translator. Citizens are not always able to turn the ideas in their heads into realistic design ideas (Tonkens and Verhoeven, 2018). To do so, they need support from the urbanist who sits with them and thinks along about with the ideas from the citizens.

## Conclusion

To research the literature about citizens' participation, during this section two central questions were answered. The first question "What types of citizens' participation exist?" was discussed at the beginning of this section. Literature showed that there are 4 mayor types of citizens participation, all with a different approach of bottom-up to top-down. Analyzing these types showed that only one of them, general citizens' participation, is relevant for this research as this is the only one in which citizens are asked about their opinion, but can also always contribute into the decision making and the designing. Besides the possibilities for the citizens to participate, in this participation type there is also a role for other stakeholders, with expended knowledge on the matter. In the case of this research this will include the role of the urbanist during the participation process.

The second question, "How should the involvement take place?" was answered during the second part of this section. This showed that the most important aspect of the participation is the communication with the citizens. This was shown by the joined acronyms CLEAR and ACLR in the acronym LEACLR as follows:

1. Like, citizens have a personal interest
2. Enabled, citizens have the opportunity to participate
3. Asked, all citizens are actively searched
4. Can, citizens are foreseen of knowledge and information
5. Linked, citizens are helped by making contact with other stakeholders
6. Responded, citizens are helped when facing barriers and see they are taken serious

To be able to communicate with every citizen, it is important to actively search for them, let active organisations help during the searching and take the time during the communication with the citizens to be able to listen and explain things well. Not only is it important to take the time for the citizens, but also to make the communication understandable for everyone, meaning the use of understandable language, as well as using translation when necessary. It is also important to use different methods for the way the different citizens are found, thinking about visiting the location as well as being present online.

The second question, "Who should be involved during the citizens' participation process?", was answered during the final part of this section. It is obvious that the client, urbanist and the citizens are will be involved in the process, but also companies and organisations who are active in the neighbourhood can play a big role in the process, as mentioned in the answering of the 2nd question.

Besides the groups that are active and present within the neighbourhood, it is also important to analyse whether there are other stakeholders that might have interest in the project or the decisions made during the process. When it appears that those interests are there, it is important to include these stakeholders as early as possible to prevent the process from getting delayed.

When all the earlier mentioned information is being considered during the participation process, the process will be carried out as efficient as possible, and will give the citizens the best opportunity to co-design into improving their liveability, making them happier then before.

## 2.4. Theoretical framework

In the framework below, the most important conclusions of the analyses made in this chapter are shown. The conclusions are divided into the two main theoretical topics, liveability and citizens' participation, and then also sub-divided into the results of the analyses.

The main conclusion from the liveability chapter is that liveability is an experience of the urban environment that has a common base but is in the end experienced differently per person. The common base exists of 6 aspects that should be considered as the starting points for the participation process.

In the research in citizens' participation it became clear that it is important to make use of an active general citizens' participation type to be able to include as much citizens as possible. The key to include the citizens' is the way the communication between the urbanist, the citizens and the stakeholder is carried out. Hereby is the urbanist the mediator between the different stakeholders. It is also important to include other stakeholders with potential interest in the project, to prevent the project from getting delayed.

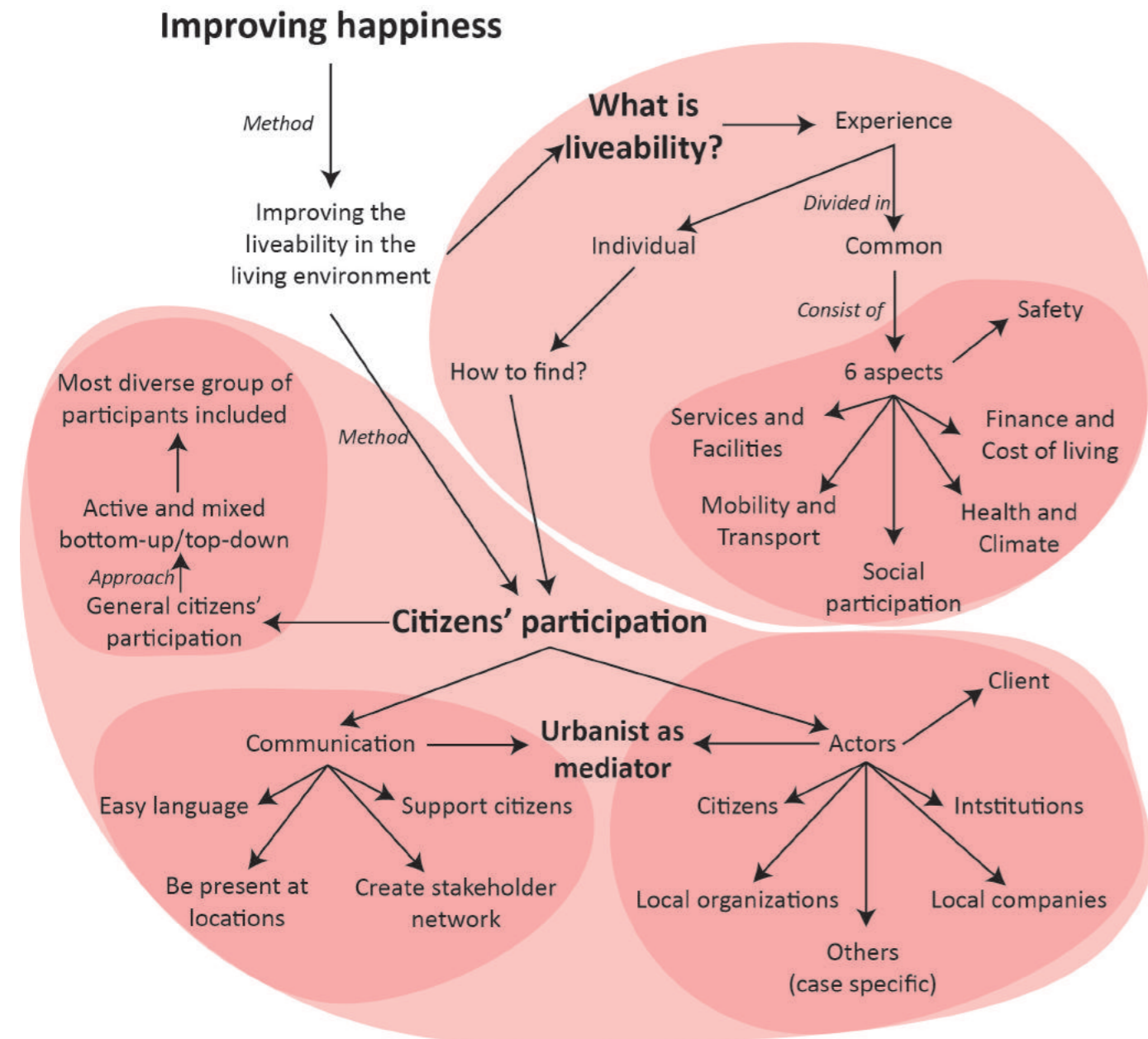


Image 7: Theoretical framework (Author)

## 3. RESEARCH METHODOLOGY

After the main theory has been researched, this chapter will create guidelines for this research by describing the research methodology. The main questions that will be answered within this chapter are “**What** is the exact problem that will be researched?” and “**How** will this problem be researched?”. First the topics discussed in the theoretical underpinning will be shown in a conceptual framework and the main problem field, problem statement and research aim as conclusion from the theoretical underpinning will be discussed. Then an analytical framework will be presented, showing the main research question, sub research questions, the methods that will be used to answer the questions and the expected outcomes. After the analytical framework this chapter the limitations regarding this research topic, the time span of the research and the current situation will be addressed. To finalize this chapter, a timeline will be presented, showing when which steps will be made during the research.



## 3.1. Conceptual framework

The two drivers for this research are the bad liveability state of deprived neighbourhoods and the need of densification caused by the current housing shortage and a lag of space. They both could be solved by the use of regeneration within the deprived neighbourhood. As the liveability is not a complete collective experience, it is important to get to know the wishes of all stakeholders to be able to improve the liveability

as much as possible for everyone. Therefore it is important to consider the wishes of current citizens, as well as of the expected citizens, by making use of citizens' participation during the design process. This citizens' participation should be executed by the agencies involved, in which it is important realize the role of everyone of the agencies.

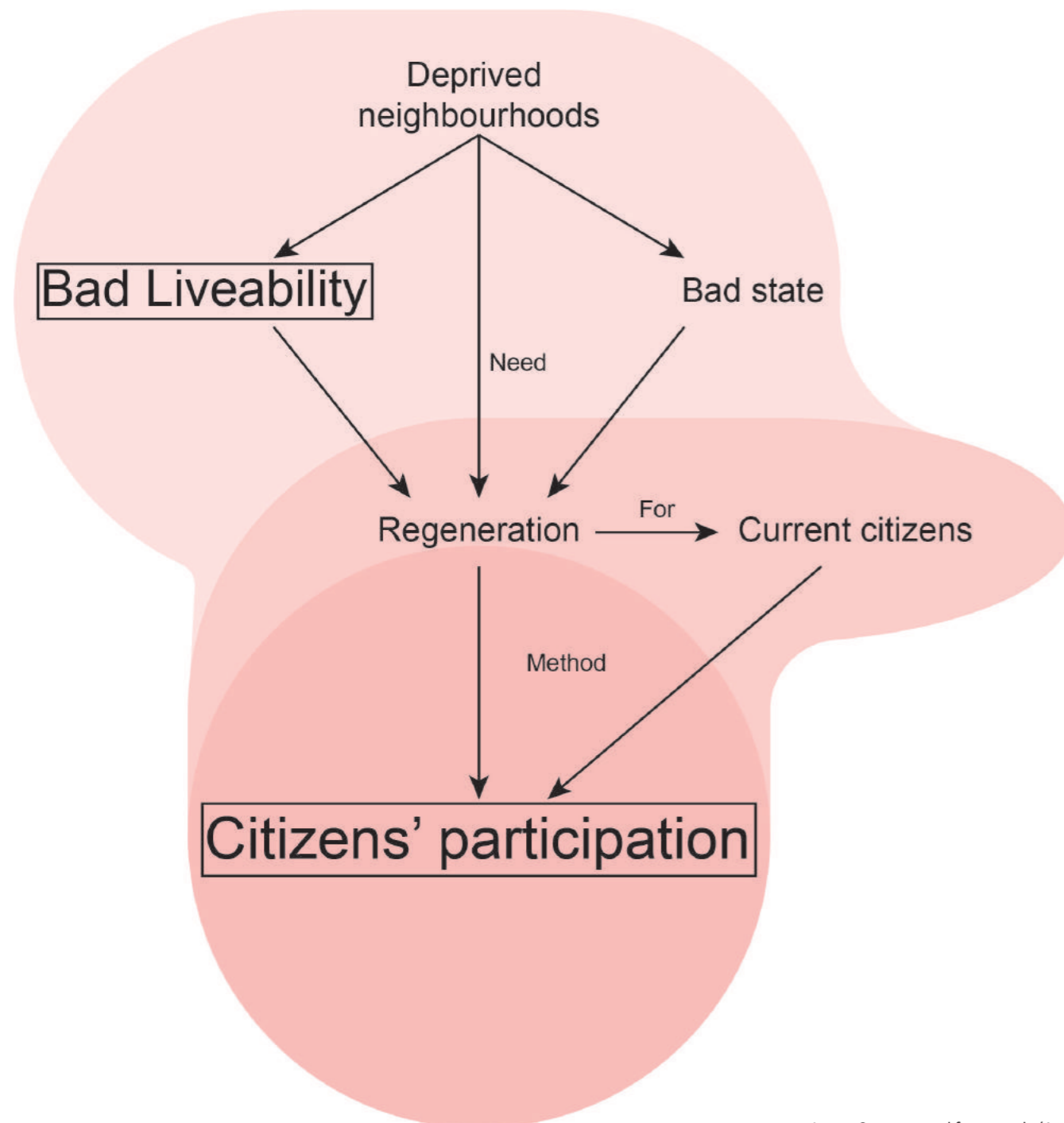


Image 8, conceptual framework. (Author)

## 3.2. Problem field

### Regeneration of deprived neighbourhoods

Although unliveable urban areas are mainly known from 3rd world and developing countries (the slums of South America for example), this does not mean other areas do not have liveability problems. Also in more developed countries urban areas are having liveability problems, the so-called deprived neighbourhoods. They are might not as bad as the slums and similar neighbourhoods, but the lives in these deprived neighbourhoods is also not conform the standards as mentioned by the local or national laws.

Within the Netherlands, the government has asked for a research<sup>1</sup> on the liveability of all neighbourhoods within the Netherlands, carried out by Leidelmeijer et al. (2018). This research showed that about 700.000 citizens of the Netherlands are living in neighbourhoods that score a insufficient liveability score, and another 1.3 million citizens live in neighbourhoods that received a weak liveability score. this means that about 1 out of the 9 citizens of the Netherlands do not live in neighbourhoods that are labeled as liveable. To make matters even worse, a total of 10 neighbourhoods had received a 100% insufficient score, meaning that they scored insufficient on all the aspects that were researched.

Although this research shows that most people are living in neighbourhoods that are labeled liveable, there is also still a lot of work to do within the Netherlands to make sure that every citizen will be living in a liveable neighbourhood, as every citizen has the right to live in such a neighbourhood.

<sup>1</sup> Although the research was carried out for the government of the Netherlands, and it shows a still existing problem, a side-note should be made about the research method. The research was based on numerical data that could be received online. This means that the experience of the citizens was not included. The research also did not consider the influence of individual differences of citizens or the demographic situation of neighbourhoods. This means that it is possible that some neighbourhoods would score better or worse when the opinions of the citizens would have been included.

## Liveability

After the second world war ended, cities were left destroyed and people were left homeless. A period of reconstruction began in which lots of cheap houses had to be created in a limit of time. The quantity of the houses was more important than the quality. Nowadays, about 70 years later, there still exist more than a million houses built within the period between 1945 and 1965 (CBS, 2020). As these houses were built fast and cheap, most of them don't suit the current housing standards. The houses are in a bad state and the neighbourhoods are mostly deprived, only being inhabited by people who have no other option. As there is more neighbourhood mobility within deprived neighbourhoods, and such mobility often results in a worse liveability of deprived neighbourhoods (Van Ham and Clark, 2009) a vicious circle has been created which can only be stopped by improving the liveability in these neighbourhoods, to reduce the mobility. Within the Netherlands about 2.000.000 people still live in deprived neighbourhoods, scoring below sufficient when talking about the liveability, and only about 50% of the residents live in a neighbourhood scoring good or above (Leidelmeijer et al., 2019). The need for change is therefore still clearly visible.

According to Howley et al. (2009) liveability consists of 6 different aspects. First the financial situation of the people is an important aspect in how people experience their life. Poorer people often tend to live in less liveable situations, mainly because they can't afford living in a better environment. This aspect is hard to be influenced by urbanists as urbanists are not in charge of any income and cost of the residents. Contrary to the first aspect, the other 5 aspects are all within influence range of an urbanist. The first of these five is the health of the people. Creating healthier and greener environments have proven to be influencing the health of the citizens using it (Source?). Secondly a safer living environment increases the liveability of a neighbourhood. Of course, criminality can't directly be solved by urbanists, but some urban elements, as street light, can have an influence on the feeling of safety in a street (source?). The third aspect mentioned by Howley et al. are facilities and services. This one might be one of the most important to be considered by urbanists, as they design the urban area, and therefore also the placing of service and facility buildings. Of course, also here an urbanist is depending on how other actors are willing to make use of the facilities and services, but by not making them available, no-one is able to use them. As the fourth aspect mobility and transport are being mentioned. Again this can be well influenced by urbanist, as they design the mobility network, but the way it's being used also depends on the maintenance and costs of the mobility network. As last Howley et al. mention the social participation as a key-factor of a liveable neighbourhood. This one is also being influenced by all the earlier mentioned aspects. People need safe outdoor spaces and facilities to meet and good access to these places (Source?). When all these aspects are being solved, partly by great urban designs, partly by other instances and methods, the liveability of neighbourhoods will improve. Important is to realize that all this should be done without harming the current citizens, which was not the case with the use of gentrification.

## Citizens' participation

Almost everywhere in the world people have influence in decisions that are being made around their living environment. In some parts of the world this influence is limited by voting on the party that represents a person's opinion the best but in other parts this influence goes all the way to voting on specific topics or addressing problems and ideas to the government with which the government will (have to) work. Lately the interest in citizens' participation seems to increase as more initiatives of involving citizens within decision making are presenting themselves. Within the Netherlands and Germany more and more small community gardens, initiated by citizens, are popping up in the street view and parks are being designed together with the residents. The trend of citizens' participation is not a new one, but it has been changing over time. Where citizens' participation within the 1960s citizens' participation was a method used to inform people about what is going on, currently citizens' participation is more used to ask people about what they want, or to give the people the facilities of working out their own ideas (Polletta, 2016).

A current problem within the planning and designing of deprived neighbourhoods is the gap between the citizens and the initiators. Where the citizens are often lower educated, poorer people from all different cultures and backgrounds, the initiators are often still higher educated, rich white men (Tonkens and Verhoeven, 2019). As the need of regeneration of deprived neighbourhoods is big, and the liveability of the current residents should be the starting point of the planning of these neighbourhoods, reducing the gap between the citizens and the initiators will be important. A big role in the regeneration rests on the shoulders of urban planners, as they will be the ones responsible for the final design of the neighbourhoods. Where the use of citizens' participation has often been tackled from the role of the municipality, developers or citizens who come with initiatives, the role of the urban planners has not been pointed out yet. As urban planners have a big influence in the liveability of the neighbourhoods of the citizens, researching the possibilities for urban planners to make use of citizens' participation methods will be a helpful step into improving the liveability for citizens of deprived neighbourhoods.

### 3.3. Problem statement & Research aim

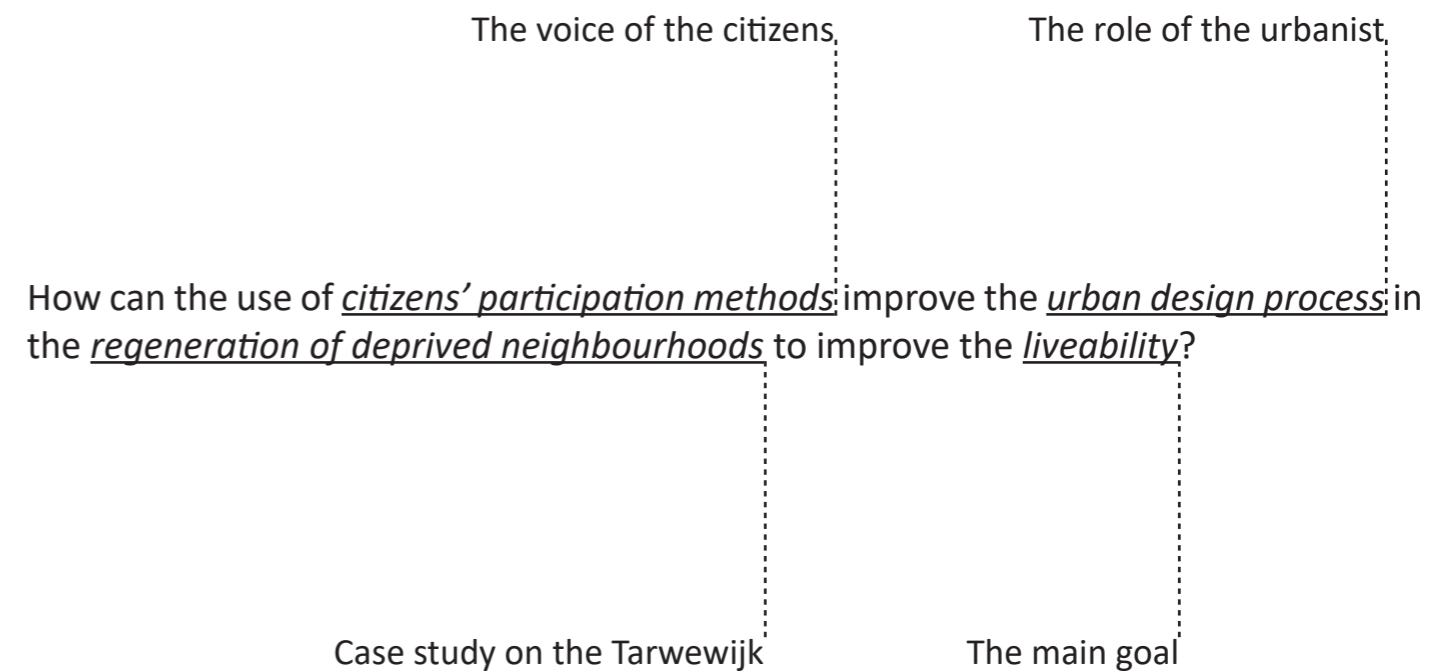
#### Problem statement

The Netherlands is facing a big housing shortage but also a lag of space to establish new neighbourhoods. Besides the housing shortage a lot of, mainly deprived, neighbourhoods are in a bad liveable shape as they were cheaply build around the 2nd world war. By regenerating these neighbourhoods they can be desnified to solve the housing shortage and they can be improved to solve the liveability problems. To solve the last it is important to know the wishes of the citizens. Although urbanists are educated to design considering wishes of the citizens, there appears to be a gap between knowing the wishes and understanding the wishes. To close this gap the use of citizens' participation during the design process should be used more often. The use of citizens' participation is not new, but using it during the whole design process is not something that has been done or researched often. Also the role that urbanists can or even should play is unknown till now. When this role is being researched, the urbanists can make better use of citizens' participation during the design process, resulting in even better liveable neighbourhoods for the citizens.

#### Research aim

The main aim of this research is to close the gap between the wishes of the citizens and the understanding of the wishes by urbanists. This will be done by researching the role urbanists can take to involve citizens within the urban design process. The final product of this research will be a new design concept that can be used by urbanist to involve citizens in the design process. The aim is to create this design concept by using existing literature as well as by analysing a going on participation process. The focus of the new design concept will mainly be on the way the urbanist should communicate with the citizens. This will be done by looking at how the citizens can be found, how they can be kept interested, how the urbanist can translate the wishes of the citizens into a realistic design, and how the urbanist can make this design and the ideas understandable for the citizens.

### 3.4. Research question





### 3.5. Analytical framework

Themes	Sub-questions	Methods	Expected outcomes
<b>Happiness and liveability</b>	What makes citizens happy?		
	How can happiness be defined and measured?	Literature research on happiness	A reflection paper on happiness in general and in the urban environment
	What makes a neighbourhood liveable?		
	How can liveability be defined and measured?	Literature research on liveability	Knowledge about the needed focus during citizens' participation
<b>Citizens' participation methods</b>	How does citizens' participation work?		
	What different citizens' participation methods have been used, and how did they function?	Literature and case study research on citizens' participation methods	An overview of different citizens' participation methods with conclusions on what functions and what needs to be considered
<b>Urban design process for the regeneration of a deprived neighbourhood (with the use of citizens' participation)</b>	Who are involved in the urban design process?		
	Where and how can citizens be found, and what are their roles?	Literature and case study research on the finding and roles of citizens in citizens' participation processes	An overview of places, organisations and methods to consider during a citizens' participation process for reaching citizens
	What other stakeholders are involved, where can they be found and what are their roles?	Literature and case study research on the different stakeholders involved in citizens' participation processes, including their location and roles	An overview of places, organisations and methods to consider during a citizens' participation process for reaching all other stakeholders
	How can the opinions of the different stakeholders be translated into a design?		
	How do citizens communicate their opinions?	Analyse literature and a case study on the outcomes of different participation methods	An overview of detailed information about the expected outcomes of different participation methods
	How should the communication to and between the citizens and other stakeholders be carried out?	Literature and case study research on the communication between the citizens, other stakeholders and the urbanist	An overview of methods and techniques to be used when communicating with citizens  A suggestion for a new design method
	What is the role of the urbanist in the design process?	Literature and case study research on the role of urbanists during design processes and on missing people during citizens' participation processes	A guideline or description of the role of an urbanist during a design process.



## 3.6. Limitations

This report should be executed in a period of 1 year, in which the literature research, the creation of the toolbox and the testing and revising of the toolbox should be finished. Mainly this last part is going to be hard during a timespan of one year, as a design process normally takes place in a couple of years. Therefore the final toolbox will not be a final product, but will be made in such a way that future research can use this toolbox to elaborate on it.

Besides the limitation of time, another limitation is the changing society. Where for 20 years most of the communication was still being done by talking, nowadays social media and other digital communication is increasing in popularity. As it is hardly possible to predict the future, it is important to create a toolbox which is adaptable to the time. Therefore, the basic input of the toolbox should be based on civic problems that have been happening for ages, but the final use of the toolbox should be timeless.

The final limitation at this moment is the corona crisis. As the communication with people, and how to find the people, are the two main aspects of this research, the lockdowns are making this research not easier. However, where this can be seen as a limitation, this can also be used as an opportunity. As situations like COVID-19 can happen more often, which could lead to different types of lockdowns and limitations on communication, creating a timeless toolbox also means that it would be adaptable in these situations.

## Conclusion

The main issue that is addressed in this thesis is the pursuit of happiness and the liveability linked to it. To be able to find out what is needed to improve the happiness and liveability of literature research on these topics will be done. This has shown that it is important to consider the collective of people, but also the individual. To be able to find out what these individuals need, citizens' participation methods could be used. By doing literature and case study research on citizens' participation processes, as well as by analyse a going on participation process, different methods will be analysed and compared with each other. During the going on process, urban plans will be analysed backwards (from the result to the starting points) and compared with the wishes of the citizens to be able to get more knowledge about the way wishes of people can be turned into designs that are also liked by these citizens. The combination of all the research and analyses will show what citizens' participation methods can be used, and how they can be executed to be able to improve the happiness and liveability of the citizens.

## 4. TARWEKRACHT

For the creation of the participation manual, theory gathered from the literature research will be combined with the analyses on the case study 'Tarwekracht' in the Tarwewijk in Rotterdam (The Netherlands). To be able to make use of Tarwekracht, it is necessary to analyse the way the participation process is carried out, and what positive results and problems showed up. This will be done by answering the questions "**How** Is the participation process carried out?" and "**What** were the results of the participation process?". These questions will be answered by analysing the way the process was carried out, showing and analysing alternative participation methods, and by creating alternative designs based on the alternative methods and comparing these designs with the real outcomes.

## 4.1. Introduction

### Introduction chapter

The goal of this thesis is to improve the life of citizens by improving their living environment. Out of research, as shown in the previous chapters, it appeared that the way people experience life is closely connected with the happiness of the citizens. Improving the happiness can be done by different means, of which a comfortable living environment is an important one. As all the citizens experience a comfortable living environment differently, the individual opinion is important when designing and realizing the urban living environment for the citizens. Therefore, it is important to give the citizens an opportunity to participate in the designing and realizing of their urban living environment.

As an urbanist has an important role in the designing of the urban environment, this thesis focuses on how an urbanist can find and include the opinions of the citizens during the design process. This will be done by analysing the literature as done in the previous chapters, and connecting the outcomes with a case study of a participation process, Tarwekracht, in the Tarwewijk in Rotterdam. The joint outcome of these researches will be shown in an instruction manual that can be used by urbanists to carry out participation during their design projects.

During this chapter, the participation process Tarwekracht will be analysed on the types of participation that have been used, the moments during which they have been used, the (wished) outcomes, and comments on the process. By showing what went right and what could have been done differently, an alternative design will be created that will show the differences in outcomes when other approaches would have been used. The analyses will also show what the role of the urbanist should be during the different moments of the participation process, as well as suggestions on the involvement of third parties during. The outcomes of these analyses will form the base for the instruction manual that will be presented as the final product for this thesis.

### Tarwewijk location

Tarwewijk is a neighbourhood located in the south of Rotterdam, as shown on the maps on this page. Because of its location close to the water, the neighbourhood was built for the employees of the factories located at the water. One such factory was the weath factory, also giving the name to the Tarwewijk (Wheatneighbourhood).

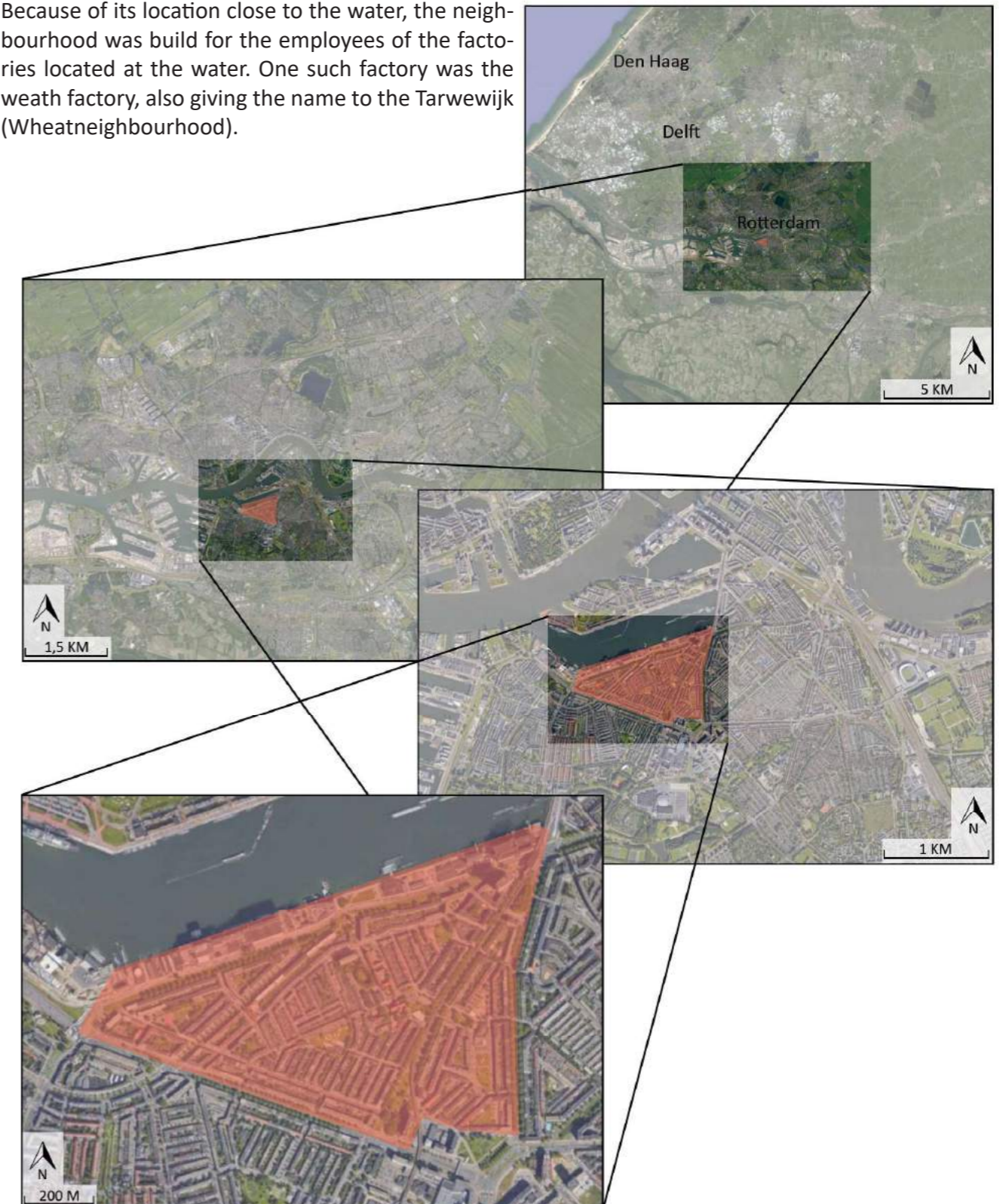


Image 10, Context Tarwewijk. (Author, Background: Google (2021))



## Introduction Tarwekracht

Since 2010, a co-operation of the national government, the municipality of Rotterdam and several other instances and organizations started improving Rotterdam Zuid under the name of Nationaal Programma Rotterdam Zuid (NPRZ, National Program of Rotterdam Zuid)(NPRZ, 2017-2022). The reason for this national program was the lagging behind of this area on other areas in Rotterdam and the other big cities within the Netherlands. The main goal is to improve the educational level, employment participation, and the living quality.

One of the projects that is carried out as part of the NPRZ is Campus Tarwewijk (image 13), in which a safe slow traffic route is being created through the Tarwewijk, connecting Rotterdam Zuid with the city centre. Part of this project is the redevelopment of the places along this route within the Tarwewijk. For every one of these places, the municipality of Rotterdam created a separate project. During some of these projects, the municipality will make use of participation to get towards a final design (Gemeente Rotterdam, 2021).

For this thesis, first the general vision created by the municipality of Rotterdam will be analysed on how the citizens were involved and whether the problems and wishes of the citizens are also included and solved by the vision. Afterwards, the participation process for the design of two places around a school building on the Zwartewaalstraat will be analysed (Image 13, focus area). This will also be done by analysing the way the citizens were involved and analysing whether their problems and wishes are being considered in the final design made for the area.

The analysing process, both for the vision and the design, will be done by analysing the participation methods used and comparing them with the literature found on this topic, as well as by creating alternative designs based on the comments of the citizens and comparing these designs with the design made by the municipality.

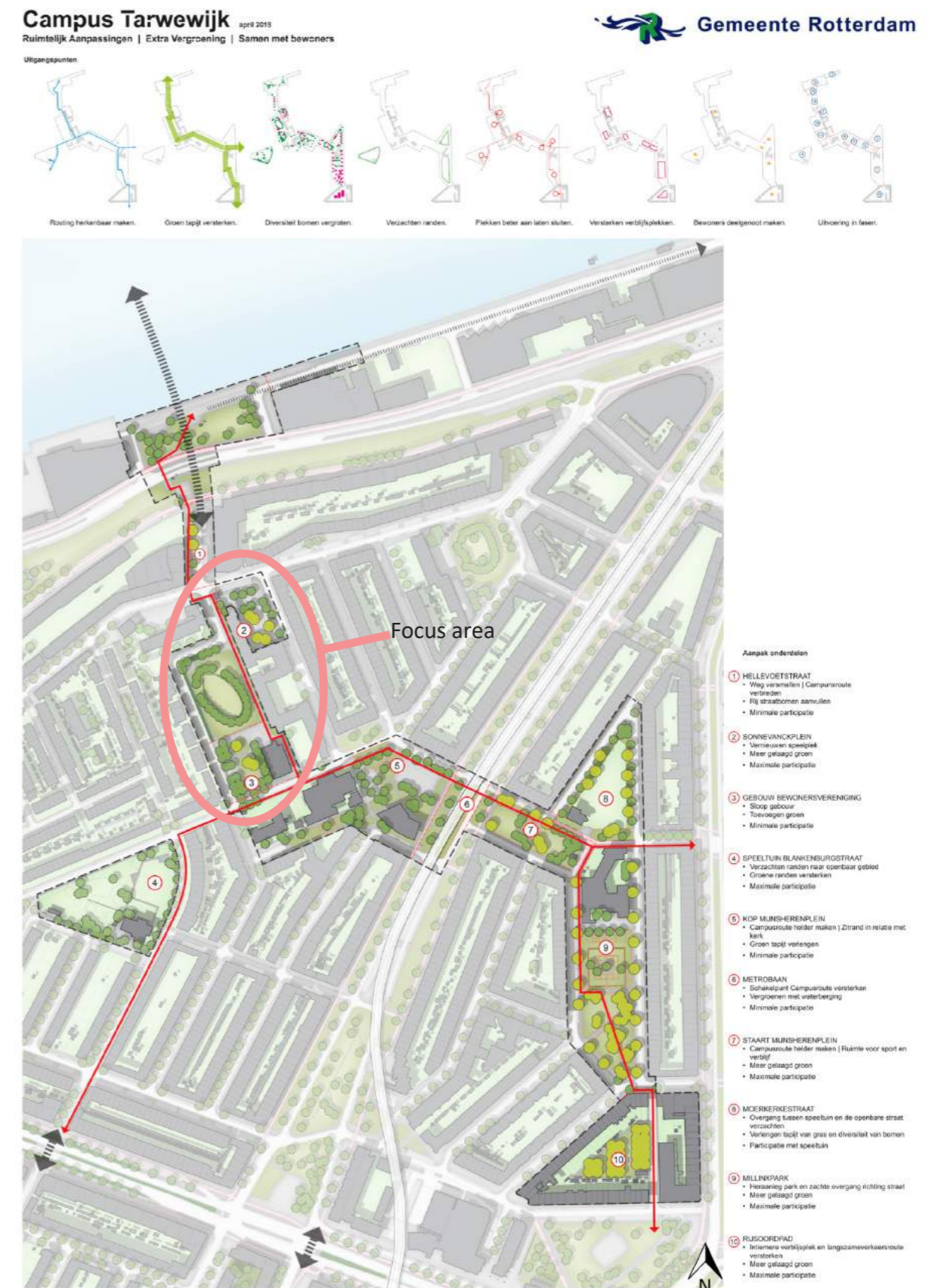


Image 11, Campus Tarwewijk. (Gemeente Rotterdam, 2021)



## 4.2. Assignment

### Introduction

The assignment functions as the foundation of a project. It shows the problems that need to be solved, and will sometimes give some suggestions in how to solve these problems. In the case of the Tarwekracht, this is not different. During this chapter, the given assignment will be analysed on the problems the project should solve, the solutions the municipality gives, and whether these solutions will also solve the problems. To conclude this chapter, some suggestions will be given on how to work with the assignment and given solutions.

### Problems

According to the municipality of Rotterdam (2018) there are 3 major problems within the Tarwewijk. These problems are:

- Social problems
- Safety and security
- Lack of social cohesion

It is unclear whether these problems can be solved by urban interventions, as it is not made clear what the reasons behind the problems are. Although the reasons are unclear, it is likely that the reasons are only for a small part possible to solve by urban interventions, and need other changes as social benefits or reduced housing prices to be completely solved. This means that these problems should not be mentioned as the problems that are going to be solved, as the project will not solve these problems. Urbanists can try to do their best by involving the stakeholders responsible for the problems and try to find a way the problems can be solved, but this should not be the main task of the urbanists.

### Given solutions

In the vision as presented with the assignment, 8 urban interventions are shown that should solve the 3 mentioned problems.

These interventions are:

- Make routing recognizable
- Strengthen the greenery carpet
- Improve tree diversity
- Soften the edges
- Connect place better
- Improve the places to stay
- Let citizens participate
- Carry out in phases

On themselves, these interventions will improve the liveability of the neighbourhood for the citizens, and they also leave space for the wishes of the citizens as it is not explained how they will be improved. Therefore, making such statements as starting points will not harm, as probably everyone will agree that these interventions are in favor for citizens' personal wishes.

One problem with the vision is the area that it covers. The problems are mentioned about the Tarwewijk as a whole, but the solutions only focus on a certain route through the Tarwewijk. When looking at the surface, 2/3th of the Tarwewijk will not be intervened with, although the problems are also visible within these areas.

Also carrying out the project in phases could cause a problem. When every place will be separately designed, all the places are likely to look like an average of the wishes. By designing the whole area in one go, and then carry out the realization in phases, it can be prevented that places will be copy/pasted, and it is more likely that there will be more diversity within the neighbourhood, meaning that more wishes can be granted.

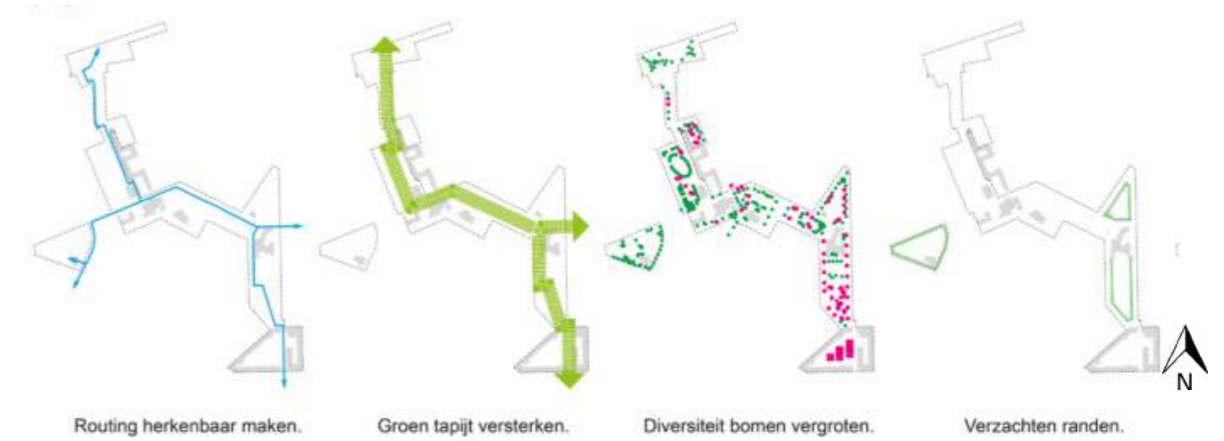


Image 12, First 4 interventions. (Gemeente Rotterdam, 2021)

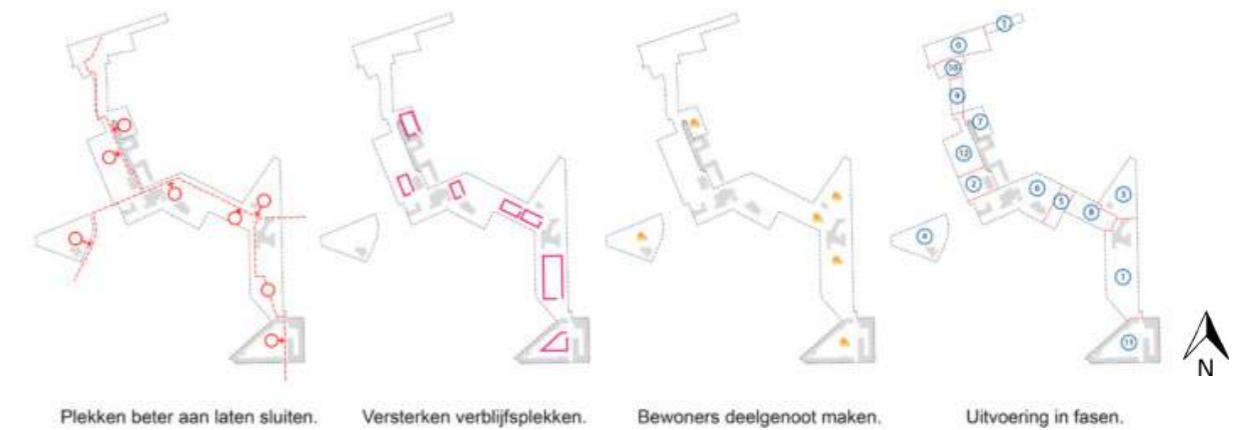


Image 13, Last 4 interventions. (Gemeente Rotterdam, 2021)

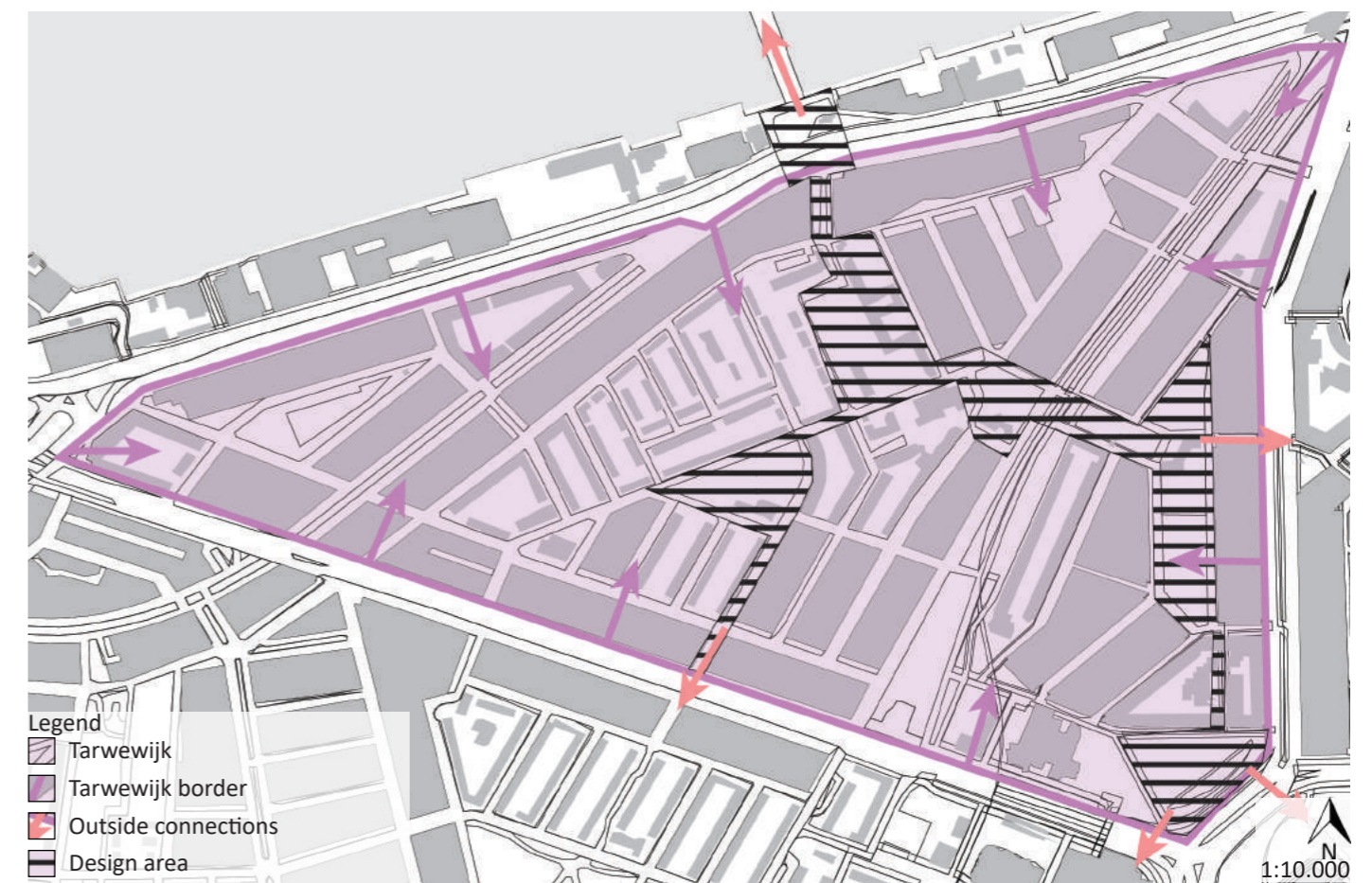


Image 14, Tarwewijk and design area. (Author)



## Results solutions

The main question in this section is whether the solutions will also solve the problems. Although the causes of the problems are not totally clear, it can be said that the solutions are not likely to solve the problems. The way the detailing of the project will go can influence whether there will be contributed by solving the problem, but within the given solutions, no solutions for the problems are mentioned. Solutions that could have been added and that would contribute to solving the problems could be:

- Adding more light on walkable areas (improving safety)
- Make use of edible greenery when greenifying (Decrease poverty by giving food)
- Focus on slow traffic (improve safety, is done but not separately mentioned)

Another problem with the vision of the municipality, is that it only covers part of the area, as mentioned in the last section. This is probably caused by the bigger aim of the municipality, connecting Rotterdam South to the city centre. It could be asked whether this connection will improve the lives of the current citizens, or whether this route will increase the connectivity from this neighbourhood, meaning that new citizens want to move into the area. This could result in an increase of property prices, which would solve the poverty problems of the neighbourhood, but not the poverty problems of the current citizens. Therefore, it is questionable whether this vision is really contributing to the improvement of the liveability of the citizens, or whether it is a sham by making it look great for the citizens, but having it focused on other aims.



Image 15, Connection South <-> city centre. (Author, underlay: Google Maps)

## Assignment Tarwekracht

Although the municipality wants to develop the whole route, the Tarwekracht project is only focused on a small part of this route, namely the places around the central school building (image 18). The aim of the Tarwekracht is to make a design for those two places with the use of citizens' participation. Therefore, the Veldacademie (an independent company focused on urban development) was asked to carry out the participation. Some of the participation was already carried out, others were focused on the general route and some were focused on the two places themselves. The main method used was a design game during which the citizens could design their vision in the two places.

In the case of the Tarwekracht, no external urban designer or design company is involved. The municipality has taken the role as the designer and the Veldacademie is responsible for the participation. This caused that the designer was only later introduced to the neighbourhood, and there was barely direct communication between the citizens and the designer. This could cause problems as it could show a lack of interest from the designer into the project. On the other hand, the involvement of the Veldacademie was not a bad choice, as the Veldacademie was already known with some of the citizens. This would make it easier to reach the citizens. This shows that it is not bad to involve other parties within the project.

## Conclusion

In the Tarwekracht project, 3 problems have been given and 8 solutions are mentioned to solve these problems. However, it is questionable whether these solutions will also solve the problems or whether they only slightly contribute to the solving. Therefore, the planned design interventions are vague regarding the mentioned problems. This could be prevented by either explaining in what way the problems will be solved, and by explaining how the solutions will contribute to the solving of the problems.

It is also important to explain the project area. During Tarwekracht, the project area is the route between Rotterdam South and the city centre of Rotterdam, but it is presented as a project that will solve problems within the Tarwewijk. This means that the interventions in the Tarwewijk are only incidental as the route goes through the neighbourhood, and a big part of the neighbourhood will not be intervened with although there are problems as well.

Also the development in phases could be an issue, when the participation is also carried out in phases. This will likely result in multiple similar places, but when the participation would be carried out in once, more wishes could be fulfilled meaning that the neighbourhood would be more diverse and liked by more citizens. How the phasing will take place exactly is unclear, but it looks like every area is carried out separately.



Image 16, Places Tarwekracht. (Author)



## 4.3. Gathering information

### Introduction

As Tarwekracht is a participation process, information was gathered from the citizens from an early stage of the process. During these events, different groups of citizens and other stakeholders have been asked questions about the neighbourhood. The results have been used as a base for the design competition that was being held afterwards.

In this chapter, the used participation methods will be analysed on how they have been carried out, who participated and what the results were. Afterwards, the participants will be compared with the demographic numbers of the Tarwewijk to find out whether all citizens have been represented, and the results will be compared with the problems and solutions as mentioned by the government. The result comparison will be done to find out whether the municipality had any idea on what the problems were within the neighbourhood.

With this chapter, information for the manual will be gathered on how to set-up participation during the process, and when the different types of participation could be useful.

### Street interviews (Veldacademie, 2020a)

The first method to gather information was via street interviews. Joined by a coffeecart and a big map of the area, the interrogators talked with citizens on the street about their opinion of the Tarwewijk. A total of about 31 people were asked during the interviews of who at least 24 were between 24 and 64 years old. As there was no target group, but the aim was to ask as much citizens as possible, it can be concluded that this method only reaches a small amount of citizens (31 of +/-12.000 (CBS, 2018)) and the division of participants is unequal (+/- 80% of the participants represent 56% of the citizens in the age of 25-64 years old).

When looking at the results of the participation, stands out that most of the answers are about detailed interventions and not about the general problems in the neighbourhood. As this probably was the aim, it is not a problem for this project, but for gathering the problems from the citizens, this method could be a less preferred one.

Most of the wishes of the citizens are regarding an improvement in the public space, in the forms of more (useable) greenery, more variety and less trash within the neighbourhood. Also the wish for a neighbourhood centre was mentioned more often, in which it could function as a community area, as well as a place where citizens could share toys.



Image 17, Impression interviews. (Veldacademie, 2020a)

### Youth interviews (Veldacademie, 2020b)

Separately from the Tarwekracht project interviews with 9 young people (4 citizens, 5 students, all 12-18) have been carried out about their experience in the Tarwewijk. Although this was not carried out for the Tarwekracht project, the results have been used for the project.

During the interviews, it was found out that all respondents wanted more outdoor space that they can use. The younger once were more focused on playing, the middle aged group wanted more sport activities and the older group wanted to have places where they can chill. They also all complained about the amount of trash laying around and want to have a solution for that.

Again, the outcomes are really detailed and do not say anything about the movement of the youth or the places they would prefer to stay and the places they would ignore. Probably, this is the result of the focus of the interviews, as the aim was to discover the talentdevelopment potentials in the neighbourhood. When these interviews would be carried out for the participation process, it is either better to focus more on the general life, or to carry it out later in the project.

Also when looking at the results, it can be doubtful how good these interviews will contribute. Within the Tarwewijk there are 5 public playgrounds and 6 sportfields divided over 4 places. All these places are spread over the neighbourhood so they should be well accessible. The question that remains is why the youth is asking for more of them. There could be different reasons for this problem, meaning that it is interesting to ask about the existing places and where they prefer to go or what is exactly missing.



Image 18, Sport- and playareas. (Author)



## Place builders (game) (Veldacademie, 2020c)

The third method to gather information for the Tarwewijk was by carrying out a design game in a primary school within the Tarwewijk. This design game was focused on the two places that stay central in the Tarwekracht project. The children were given a big map of the area and some small icons that they could place within the places to show which they wanted to have and where they wanted them. By asking the children to focus on certain themes, as green and nature, the children were again asked to place the icons they thought were relevant on the places they wanted to have them.

Again, this method is mainly focused on the detailing and less on what they general are missing or want to have within the area, meaning that it is better useful during later stages of the process. But, as it is easy to limit the options, this method can be really useful during a later process when a specific problem needs to be solved by a specific group of citizens.

The outcomes of the participation showed that there was a wish for more greenery, sport and play areas, and possibilities to eat outside. Although these are clear outcomes, the themes could have influenced these outcomes, meaning that this information could not be representative for what the children want and therefore should be carefully used.

## Stakeholder interviews (Veldacademie, 2020d)

The last participation method to gather information are interviews with stakeholders. These interviews were also not held as a method to gather information for the Tarwekracht project, but the results are being used. The interviews were held with some organizations that are located and active within the neighbourhood, and some that are externally located but organize activities within the neighbourhood.

What all these stakeholders have mentioned is that there is a lack of variety within the neighbourhood which blocks the possibilities for citizens to develop. However, all the stakeholders had other suggestions on how to make the neighbourhood more diverse, by stating what the citizens wanted, but all these wishes are also in the benefits of these organization. So it is not strange that the children that are present at football workshops want to have more football places when asked about it during the workshops.

Involving other stakeholders is important, as they do make use of the area and space should be provided for them so they can use it, but it should be watched that the wishes of these stakeholders are being separated from the wishes of the citizens. Also when they say that certain wishes are from the citizens, it is likely that this only counts for a part of the citizens who is already interested in the topic these stakeholders are representing.

## Participation results

Based on the results from all the participation events, the diagram below could be formed. In the diagram all the wishes are placed and ordered to how often they have been mentioned (bigger is more often).

All the wishes could be divided in 5 problems:

- Lack of (valuable) greenery
- Lack of educational public space
- Lack of safety
- Low community feeling
- Poverty

It should, however, be taken into account that the participation was not focused on the establishing of the vision, meaning that the outcome might be different compared to when the participation focus was on the vision. How the participation should take place for the creation of the vision will be going in later in this section.

For the creation of a vision this information is already detailed, but as this information has been used to gather information for the creation of a list of demands for the design contest, the result shows some relevant problems. The focus on the two places made that all the wishes, as shown in the diagram, are focused on interventions that can be made within the urban environment. Another interesting conclusion is that all the wishes seem to be realistic to carry out. Some or easy implementations within the urban environment, while others will need the co-operation of other parties. This shows again that other stakeholders should be involved within the design process.



Image 19, Impression interviews. (Veldacademie, 2020c)



Image 20, Wishing diagram. (Author)



When trying to work out all of the wishes, one problem occurs: it does not fit on the two places (see image 21,22). This shows that either a lot of citizens will be disappointed, or the participation should be carried out over a bigger area. Within the Tarwekracht project, there are 2 other big places that should also be developed. When these two places where already involved at this point, it is possible to satisfy more wishes from all of the citizens. This could be improved even better by focusing the project on the whole of the neighbourhood, as 2 other big places will then also be included in the project, giving even more possibilities for the urbanist (image 23).



Image 21, Sketch design of all wishes. (Author)

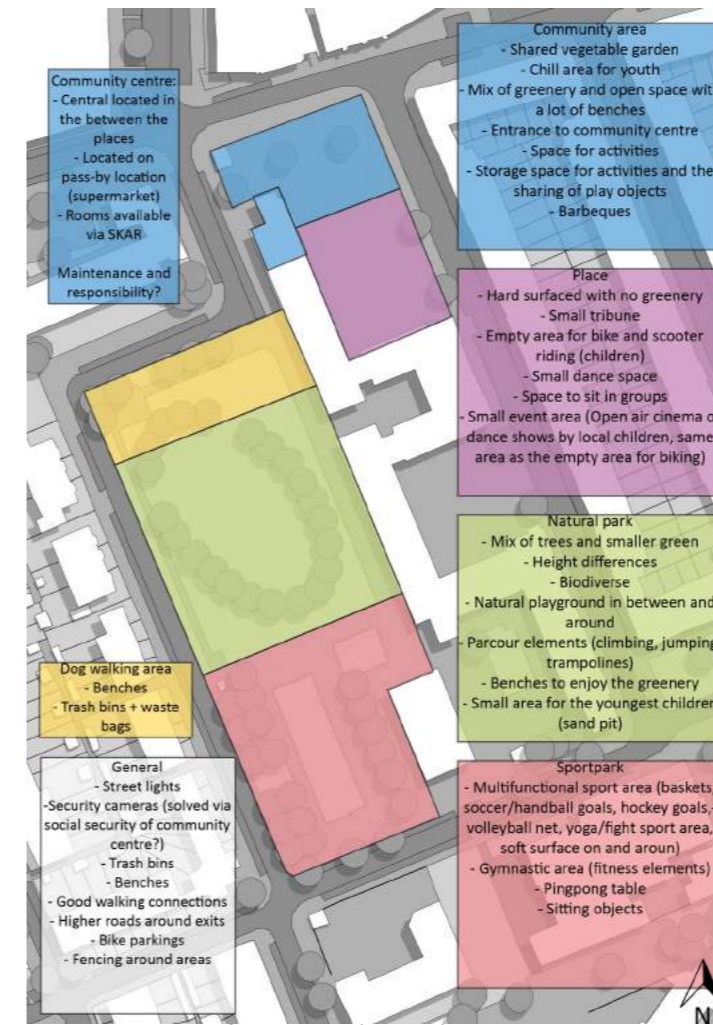


Image 22, Vision of all wishes. (Author)



Image 23, Including more places. (Author)



## Results comparison

To find out whether the participation was relevant and would provide in new input for the project, the results of the participation should be compared with the assignment of the municipality. This comparison will be made by simply looking at the wishes of the citizens, divided into the 5 given categories (Lack of (valuable) greenery, Lack of educational public space, Lack of safety, Low community feeling, Poverty), and see whether these wishes are solved by the ideas in the assignment as given by the municipality.

### Lack of (valuable) greenery

The most often mentioned issue by the citizens is the lack of (valuable) greenery. The citizens mentioned multiple times that the neighbourhood has a good amount of greenery, but most of this greenery consists of dense bushes or unmaintained greenery. The citizens would like to see more greenery in a bigger variety of species. They also mention that the greenery should be useful, so either nice to watch, possible to eat from (vegetable garden), or maybe even part of the playing grounds (natural playgrounds).

Where the citizens talk more about the functionality of the greenery on a detailed scale, the municipality says to wanting to improve the green carpet over the area, as well as to improve the diversity of the trees. The way this should look is left open, either for debate or for the urbanist to decide. This means that the wishes of the citizens are not conflicting with the municipality, but they give ideas on how they want to have the assignment of the municipality to be worked out.

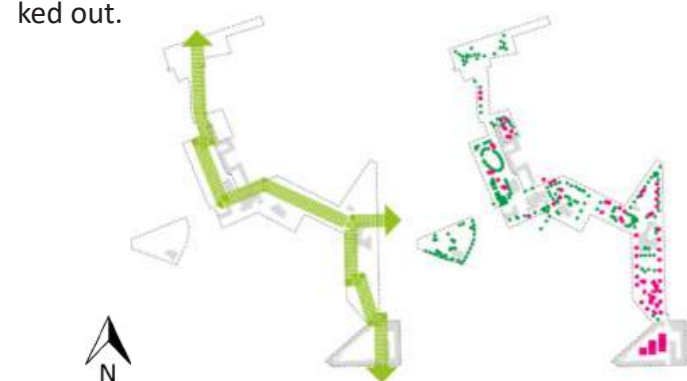


Image 24, Green assignment. (Gemeente Rotterdam, 2021)



Image 25, Impression greenery citizens. (Author)

### Lack of educational public space

The second problem, according to the citizens, is a lack of educational public space. What is meant is the lack of variety within the public space, all places have a footballfield but there is no place to bike, as well as the lack of objects that stimulate creativity or personal development, because all places are filled by design or are too filthy to play on.

The municipality does mention that they want to improve the places but they do not mention how. This means that there is an opportunity for these wishes to be carried out during the design phase of the project. One problem is the execution in phases, as mentioned by the municipality. As mentioned before, this way of executing could result in having places that all are an average of the wishes of the citizens, which will result in a lack of diversity within the neighbourhood. Therefore, it would be good to execute the designing of the project at once so all the wishes could be included as much as possible and being spread out over the neighbourhood.

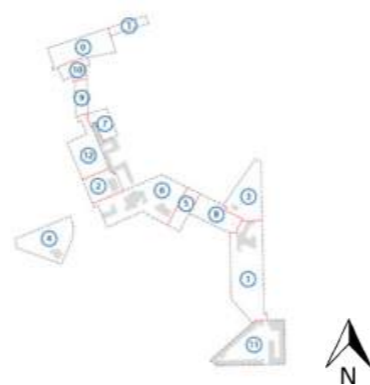


Image 26, Execution in phases. (Gemeente Rotterdam, 2021)

### Lack of safety

Citizens: Cars are too fast -> municipality: slow traffic route through part of the area  
 Citizens: Too much trash laying around, lack of streetlight, too little place for dogs -> municipality: does not mention, but could be included during detailing  
 Safety is partly solved, but there is a difference between feeling safe and being safe (Suojanen et al., 2019). Do people feel unsafe and why? -> more questions regarding this topic are needed to find the cause and solve it

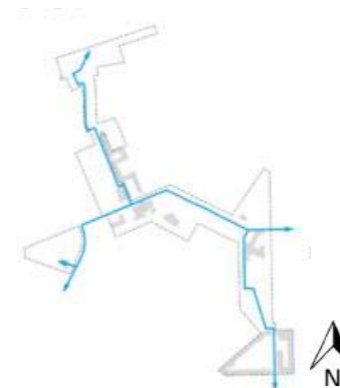


Image 27, Slow traffic routing. (Gemeente Rotterdam, 2021)

### Lack community feeling

Citizens: lack of places to meet, sit, eat together -> municipality: not mentioned, but the detailing of the places does give opportunity to solve these problems.

Citizens: wish neighbourhood centre back -> municipality: remove the building, does not talk about bringing it back.

Neighbourhood centre can also function as a place for advice and support, meaning it could reduce poverty within the neighbourhood when carried out well, but other stakeholders are needed.

Municipality mentions cause for lack of community feeling: people move too fast out of the area. What is the cause? Boring or unsafe public place, too expensive housing prices, too few opportunities. If the movement is the problem, the focus of questioning should be on these topics to find and solve the cause. In case of opportunities or housing prices, cause can not easily be solved by improving the urban environment. More changes and stakeholders are then needed.

### Poverty

Citizens: not all children are able to play as they do not have the toys -> municipality: does not mention or solve this, could be solved by changes in the urban environment (toy rental place: neighbourhood centre) but other stakeholders should want to participate and facilitate.

Other poverty problems as low income, illiteracy and unemployment are not solved and can not be solved via urban designing alone. These problems should therefore not be mentioned by the municipality, or they should mention how they want to solve these problems.



Image 28, Impression community feeling. (Author)

## Demographic comparison

During all the participation events within the Tarwewijk, a lot of different citizens participated. The aim of the participation should be to involve all citizens, or to have all groups equally involved. Whether that is the case can be found by analysing the existing demographic numbers with the participants.

In case of the Tarwekracht project, a total of about 102 citizens participated over the different workshops, while 12.000 citizens live within the neighbourhood (CBS, 2021b). This means that less than 1% of the citizens was involved in the participation. Also when looking at the age of the citizens, some extremes showed up. During the participation, 62% of the citizens was 0-12 years old, and only 1% was 18-25 years old and 65+. Within the neighbourhood, these numbers lay different, as only 13% is 0-12, and both the 18-25 and 65+ groups are with about 10% presented within the neighbourhood (CBS, 2021b). These differences are caused by the participation event that was held on the primary school, during which about 60 children participated, which is already 60% of the citizens.

That these numbers are so different from the actual demographic situation within the Tarwewijk does not mean that it is a problem, but it should be taken into consideration that the wishes from the less involved should count equally to those of the citizens, although they were mentioned less. In general, it would have been better if more citizens participated and when the groups of 18-25 and 65+ would be more present. One person representing each of these groups is to less as there could be a lot of citizens from these groups with other wishes.

Besides the ages, it would also be interesting to analyse other aspects as gender, culture. Both these informations were not (well) documented during the process in the Tarwekracht. This can also be hard to do, but the urbanist should then try to make sure that all the groups are involved by actively searching the ones that were not present yet.

## Conclusion

The problems mentioned by the municipality are not being solved by their solution and can partly not be solved by urban designing.

It is unclear what the problems of the citizens are, as most of the participation is focused on the detailed level. This means that it is unclear whether the problems, as mentioned by the municipality, are also the problems the citizens face and want to be solved. When the focus is on improving the lives of the citizens, this is key knowledge.

The solutions of the municipality are not focused on improving the Tarwewijk, but on improving places along a South <-> city centre connection that goes through the Tarwewijk. It is unclear whether this route is beneficial for the current citizens or whether it would contribute to a switch of citizens within the neighbourhood. Other parts of the Tarwewijk are being ignored, meaning that no problems will be solved around these areas for sure.

The solutions given by the municipality do not mention how to solve, or influence, the problems as mentioned by the municipality. Some of the wishes by the citizens give examples on what could have been mentioned in the solutions so solutions for the problems would be given.

The wishes of the citizens are mostly not mentioned in the solutions by the municipality, but this does not mean that they will not be included, as the solutions of the municipality are general ideas and the wishes are mainly focused on detailed ideas.

The biggest problem for the wishes of the citizens is the idea of the municipality to carry out the project in phases. This could mean that the diversity gets lost as all the places are averages of the wishes of the citizens, while most wishes are focused on more diversity in the neighbourhood.



## 4.4. Design competition

### Introduction

During the design competition, citizens get the opportunity to design their own ideas for the two places as shown in image 28. During this section, the way the design competition was set-up will be analysed by looking at the assignment and the list of demands, as well as by analysing the participants, guidance, the voting system, and the final outcome. The aim of this section is to find out whether, and how, design competitions could be carried out during the participation process.

### 4.2. Assignment (Gemeente Rotterdam, 2021)

The main question that the citizens should design an answer for is “How can a new meaning being given to the places with the use of a spacial design?”. This should be done by creating a solution for three issues.

First a spatial vision for the places should be created in which the meaning of the places to the neighbourhood should be presented. This should be done with the consideration of the themes safety, social connection, meeting, talent development, greenifying and sustainability.

After the vision, the design should be furnished, during which statements should be made about the furnishing, programming, functionality, green concept, materialization, and maintenance of the places.

To conclude the process, a name should be created that describes the places in the best way.

### 4.2.1 List of demands (Gemeente Rotterdam, 2021)

For the competition, the municipality created a list of demands and a list of themes that deserve extra attention. These two lists are based on the outcomes of the participation or a demanded by the municipality itself. First, all these demands and themes will be shortly described. Then they will be sorted in whether they were wished by the citizens, whether they are general and should be considered in every project, or whether they are not generally needed but also not wished by the citizens. This will be done in the order as how it was written, meaning that if a demand was wished by citizens, it will not be looked whether it is also general. Finally, it will be analysed whether all the wishes of the citizens are included.

List of demands:

#### *Connect infrastructure*

Connect the design with the surrounding infrastructure.

#### *Connect buildings*

Connect infrastructure with the building entrances.

#### *Bicycle parking*

There should be place made available to park bicycles.

#### *Fencing*

Places need to be accessible at all times.

#### *Trees*

No trees can be taken out.

#### *Management and maintenance*

Ideas should be shown about the responsibilities and the materialization should be sustainable.

#### *Utilities*

Utilities can not be moved and should be considered.

#### *Accessibility*

Places should be accessible for everyone.

Themes with extra attention:

#### *Diverse targetgroups*

Places should be suited for different target groups, focused on children and youth (8-18). Also provide attractiveness for boys and girls.

#### *Multifunctionality*

Create multifunctional elements or places, leave the places up for creativity.

#### *Safety*

Think about lightning and supervision.

#### *Talent development*

There is place for the discovery, development and presenting of talents in different areas (sport, art, culture).

#### *Motorical development*

Create places where citizens can play outside without hurting themselves (fall safe surfaces).

#### *Place programming*

Consider other stakeholders that utilize the places when programming the places.

#### *Art and culture*

Create space for art and culture.

#### *Pedestrian route*

Contribute to existing walking routes over the places. Was not mentioned by the citizens, but is logical.

#### *Climate and water*

Make the places climate proof.

#### *Noise disturbance*

Buildings around the places are used.



Image 29, Places Tarwekracht. (Author)



All these wishes are added in the groups, as mentioned before (see text below). It shows that most of the mentioned wishes and themes were either mentioned by the citizens or, if not mentioned by the citizens, should generally be considered. This shows that the list of demands was built up logically and explainable to the citizens, which is important for participation decisions (Tonkens and Verhoeven, 2018)

#### Wished by the citizens

- Bicycle parking
- Trees
- Diverse targetgroups (mentioned about all target groups)
- Multifunctionality
- Safety
- Talent development
- Motorical development
- Place programming
- Art and culture

#### Generally needed

- Connect infrastructure
- Connect buildings
- Fencing (although this was mentioned by the citizens, they focused on the safety and the municipality focusses on the accessibility)
- Management and maintenance
- Utilities
- Accessibility
- Pedestrian routes
- Climate and water
- Noise disturbance

#### Randomly added

- Diverse targetgroups (focus of municipality is only on the groups younger than 18 years old, this was not wished by the citizens and is also not necessary)

Below, the 5 themes as mentioned by the citizens are shortly analysed with the lists as created by the municipality. All these topics were not specifically mentioned, but the participants of the competition are left enough space to implement these problems. As it is not possible to implement all the wishes on these two places, the citizens are left to make decisions into which wishes they do consider and which not. This could also mean that the participants come with new ideas, which could be good, but could also be a danger as the wishes of the citizens could then also be ignored. Therefore, it could have been good to create a list of the exact wishes and provide that to the participants so they have some ideas to choose from and it can be granted that the wishes of the citizens are considered.

#### Wishes comparison:

- Lack of (valuable) greenery

There is nothing mentioned about greenery, except for leaving the trees and improve climate adaptation. This wish was therefore not considered by the municipality, although it would have been easy to mention it.

- Lack of educational public space

Also not specifically mentioned, but involved in the talent and motorical development. Could also be involved during the working out of the designs by adding small information signs, but could have been mentioned more explicit.

- Lack of safety

Wish was granted by the municipality in the list of demands by adding lightning and supervision. Fencing around the places was not mentioned.

- Low community feeling

Not explicitly solved, but by considering all different target groups, opportunities are given. Could be improved by not focusing on a certain group but on community activities (eating, events etc.)

- Poverty

Not considered at all. There is nothing mentioned in the wishes that directly solves the problem of poverty in the area except for the effect of nicer places on the happiness of the citizens (Veenhoven, 2012).

## 4.2.2 Participants (Gemeente Rotterdam, 2021)

During the competition, two groups of people were allowed to participate. On the one side, these were the citizens, but also students were allowed to participate. It is unclear why students are allowed to participate as the design competition is included as an participation event. It is unclear what the effects are of the inclusion of the students, but they did not co-operate with the citizens meaning that their designs were only based on the list of demands. It is questionable whether there is a need to let citizens participate in the competition. In the end, 12 teams subscribed and finished a final design. It is unclear how many were created by students and citizens.

## 4.2.3 Guidance (Gemeente Rotterdam, 2021)

During the design process, citizens were supported in 3 ways:

- A posterformat was presented with a map that the citizens should use for the presentation of the project.
- Citizens who were not able to design something themselves (timeshortage, expression problems etc.) could join a group of citizens led by a independent designer.
- A workshop was organized on the location during which citizens could ask questions to the Veldacademie or other stakeholders about the project. They could also ask for support during this moment.

For the citizens who would have struggles to participate, these ways of supporting could provide them the opportunity to participate. However, it could also have been helpful to organize some workshops explaining drawing techniques or giving citizens the opportunity to co-design to get some more feedback in how their ideas would function. The more support is being given during this stage, the less should still be changed when the final designs are turned into a final realistic design.

#### 4.4. Presentation and voting (Gemeente Rotterdam, 2021)

After the designs were finished, they were presented on boards through the neighbourhood. Every design was shown with a number, so the names of the once who created were not visible. The idea also was to present the designs, but this was not carried out due COVID-19.

After the citizens had the opportunity to see the designs, they could vote on their favourite three designs, by giving them place 1, 2 and 3. The 3 designs with most votes were selected of which a jury chose 2 designs who were allowed to participate in the definitive designing.

The involvement of the jury made that the citizens did not have the final vote on what happened. Although the jury could only choose from 3 designs, they were free to choose from those three. Therefore, it could happen that the most liked design was voted out.

Another issue that can occur with the voting, and might occur, is partiality. Two from the top 3 designs were looking really professional, but the third one was clearly less nice looking. This one still got in the top 3 and was later voted as one of the winners, which could be caused as it was made by a big group of citizens who might have asked others to vote on their design. Therefore, it might not be the design the citizens wanted, but it was made by citizens they knew. On the other side, it can also be useful to have an acquaintance working together with the designer, as it is possible to communicate with the designer via the acquaintance.

To make clear: it is not said that partiality has played a role, it is just to show that partiality could play a role in the design competition.

#### 4.5. Final outcome (Gemeente Rotterdam, 2021)

The two winning designs will be shortly analysed on the designs and compared with the wishes of the citizens and the list of demands. This will show whether it is possible and realistic to let citizens design or whether design competitions are not a great method to use.

The first winner was a collective of citizens, supported by two urban artists. They made a design for one of the two places only, as visible in the image below. The idea was to create a multifunctional place by leaving a part empty where people can drive their bike or dance and where shows can be given from by a danceschool present within the building. On the area that filled, a combination of greenery, multifunctional playing elements, sitting elements and a small glass house are placed.

- Lack of educational public space  
The spaces provide place for presenting art or having shows or lectures. The empty space should also be used for bike riding so the citizens can learn this.

- Lack of safety  
The fencing around the place is kept, and the empty area is given an equal and soft surface.

- Low community feeling  
The aim is to get citizens co-operating in the maintenance of the place. Furthermore there are a lot of different functions that can be carried out on the places so everyone can participate.

- Poverty  
The place does not contribute in solving poverty problems, except by the small glass house that could provide food for some citizens.

Analyses:

- Lack of (valuable) greenery  
The citizens want to manage and maintain the greenery. They want to give it more variable greenery than currently present. How it would look depends on what is available and what the citizens like.

### Het Buurtplein - Doe je mee?

Inschrijfsnummer: 122

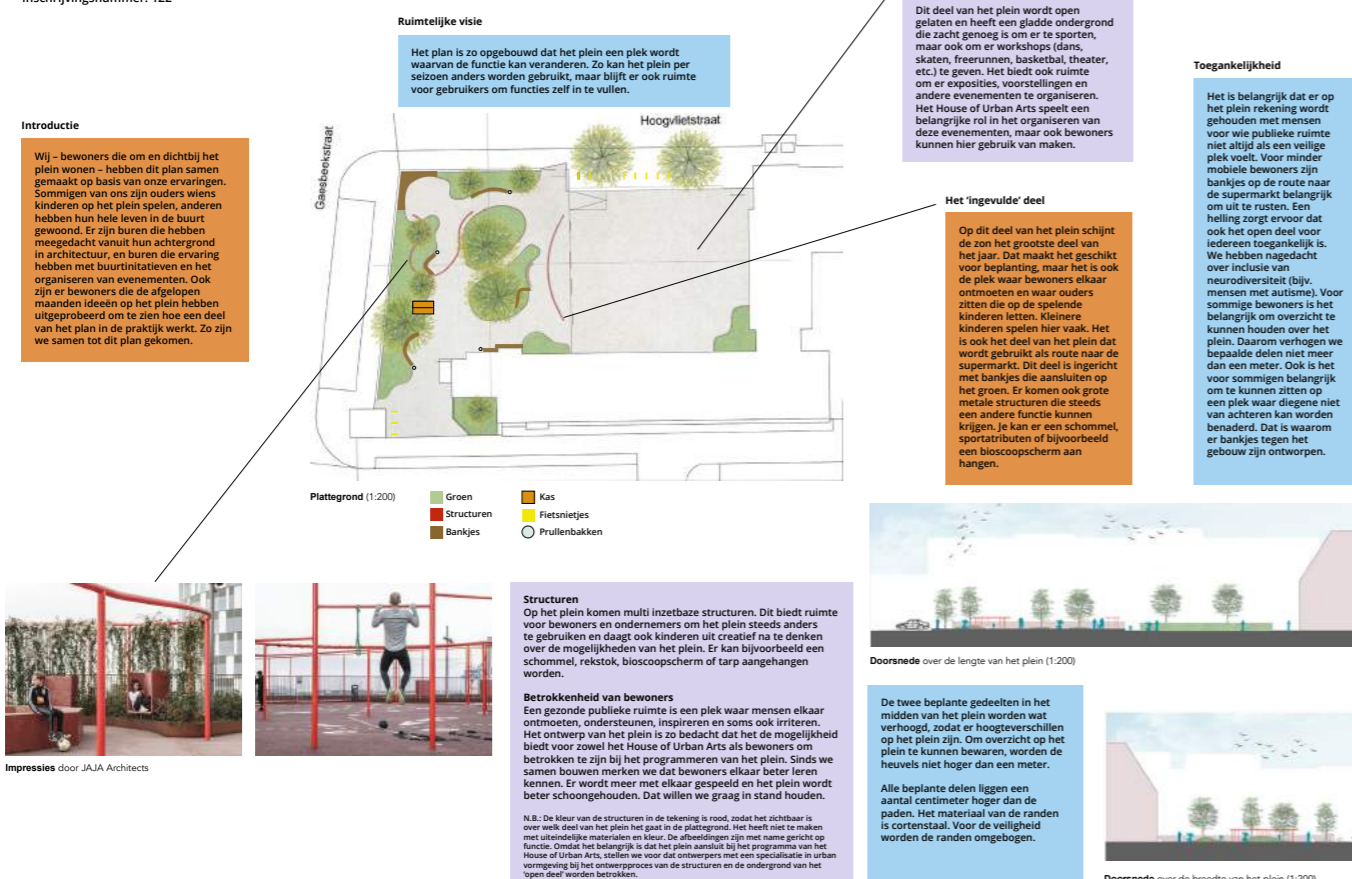


Image 30, Design buurtplein. (Veldacademie, 2021;1)

### Het Buurtplein - Doe je mee?

Inschrijfsnummer: 122

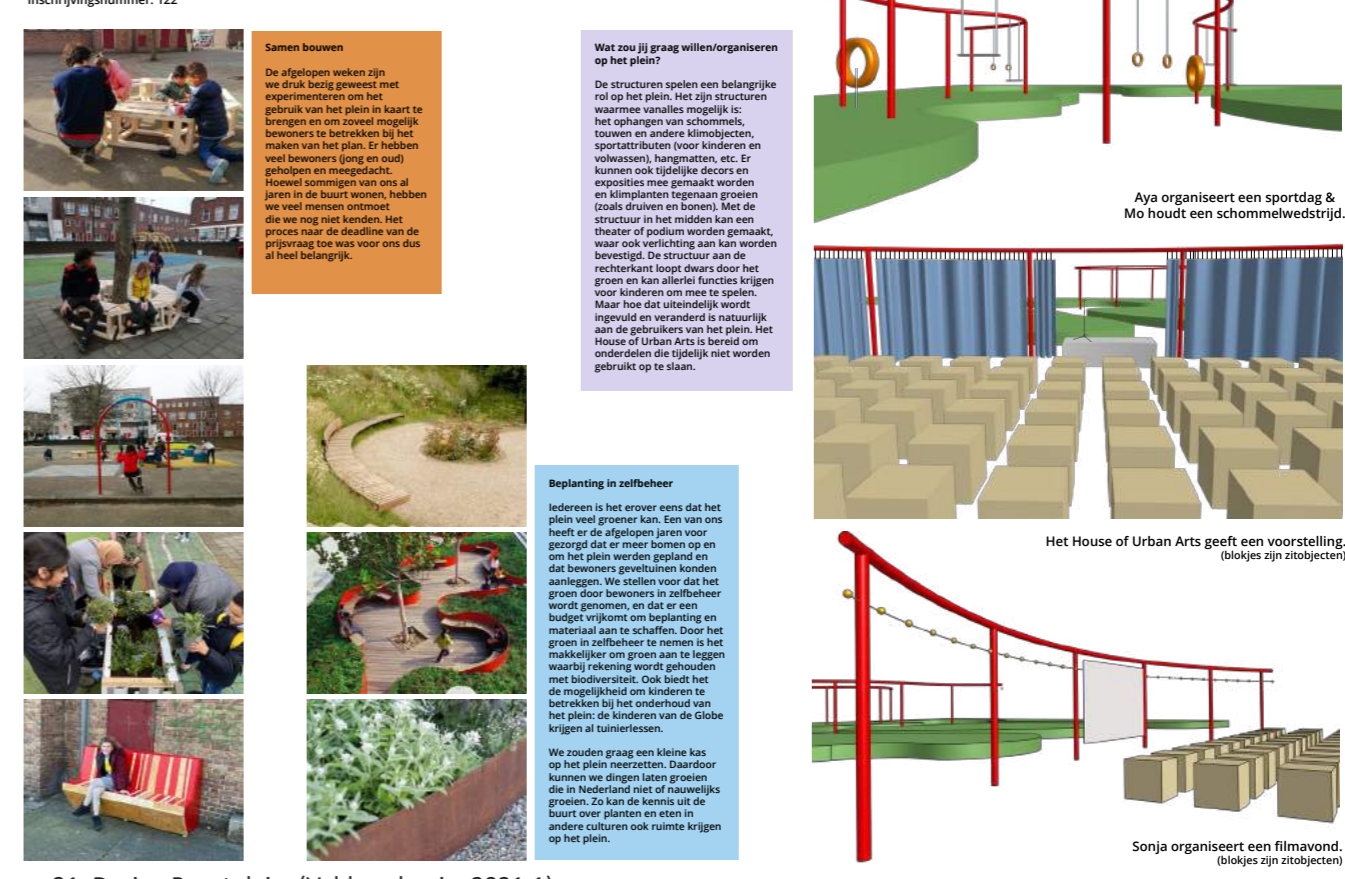


Image 31, Design Buurtplein. (Veldacademie, 2021;1)



The second design was created by two students of Rotterdam. Their aim was to make the places part of the bigger route of the Tarwewijk and they divided the places into different zones with different functions.

Analyses:

- Lack of (valuable) greenery  
Along the schoolbuilding, a small area of vegetable gardens will be added. The tree circle will be greenified with different types of greenery. The big place will also get more of a prak image and in the smaller place some small scale greenery will be added.

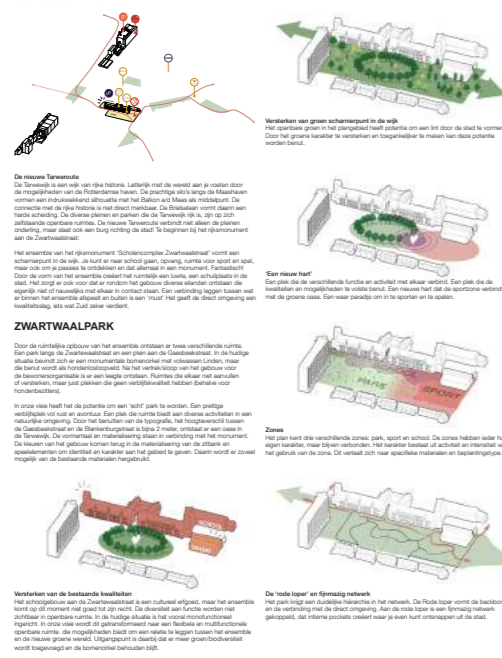
- Lack of educational public space  
Different sport functions will be added on the big place, but the main focus is on ballsports. The sport facilities will be in management of the school. On the small place, a small pit will be created where citizens can dance or perform. A small tribune is added so the other citizens can sit.

- Lack of safety  
The fencing around the small place is kept, and the surfaces for sporting are kept soft. The sportarea is placed on a distance from the road and separated with greenery.

- Low community feeling  
A lot of different functions and types of areas are added to the places, so a lot of different people can come together. There are no places added with the focus on coming together.

- Poverty  
Nothing is added that could solve the poverty problems in the area.

## DE NIEUWE TARWEROUTE



## ZWARTWAALPARK



## DE KUIL



## DE KUIL

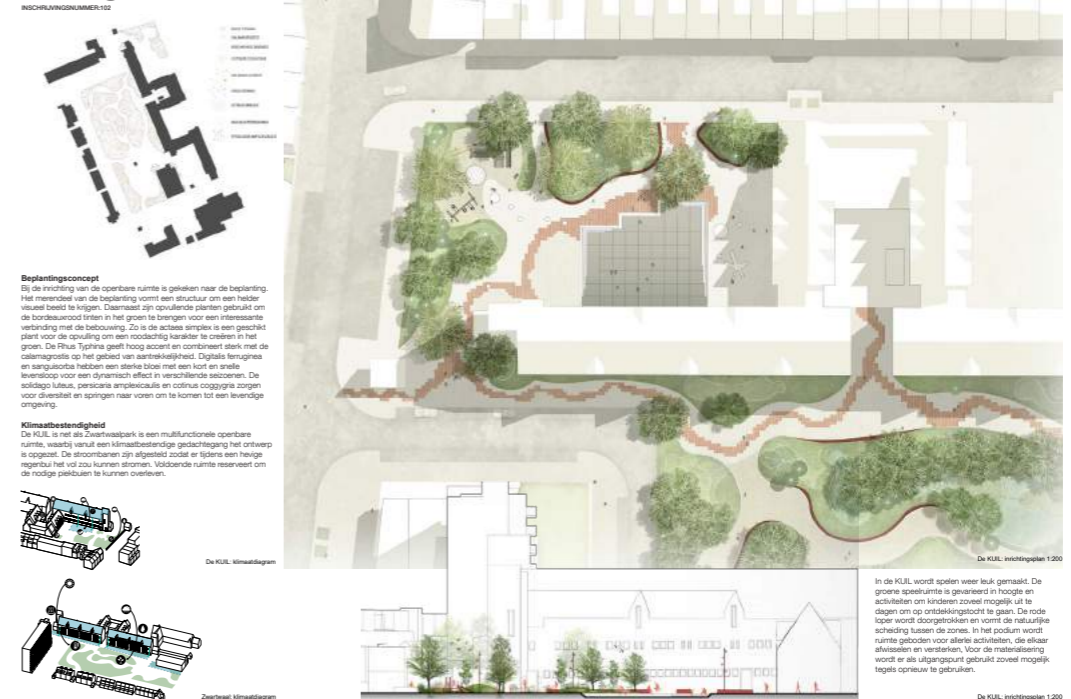


Image 32, Design Zwartewaalpark. (Veldacademie, 2021;2)

Image 33, Design De Kuil. (Veldacademie, 2021;2)



In both situations, the list of demands is well worked out in the designs. As the areas are small, it was not possible to include every demand from this list, but there were no decisions made that went against the list of demands.

One big difference between the two designs is that the design of the citizens is more a vision in which some elements have been placed. The drawings are not made overly nice looking, but are accurate to show the idea of the design. In the design of the student, it looks more like a professional design in which the drawings look really nice, but there are fewer impressions and barely any objects presented that show how the place would function.

This will be backed up by the analyses made on the designs, which are already made but are not made visible in this report.

#### 4.6. Conclusion

The competition looked well organized:

- A clear list of demand that links to most of the wishes of the citizens, could be better by including all to wishes or explaining why some are ignored.
- Other support was also provided by giving guidance on how to present.
- List of demands does not solve mentioned problems, but that was clear as they are hard to solve in the urban environment only.
- Questionable whether other groups than citizens should participate.
- Voting could cause partiality, but also give citizens influence in the decision. Is a jury necessary?
- Winning designs are made well and includes most of the points of the list of demands. Does not have to be nice looking.
- Design competitions are a good method to include the citizens, but should be build up clearly and citizens can use a lot of support during the process. Therefore it can be time consuming.

## 4.5. Design workshops

### Introduction

The winners of the competition were allowed to co-design together with an urbanist of the municipality via workshops. This chapter focuses on the workshops by looking what was done during the workshops, who was present and by comparing the final design with the designs of the winners and the wishes of the citizens. This will show whether there are aspects that should have been introduced in earlier phases or whether there are problems with designing for the citizens that could have been prevented.

### Set-up

3 workshops were carried out with all a different theme and zoom-in focus on the project. During the first workshop the winning designs were compared and a joined vision was created. During the second workshop the materialization and maintenance were discussed and during the final workshop a provisional design was finalized.

During every workshop an urbanist, one executive of the Veldacademie, the representatives of the winning designs and sometimes external stakeholders were invited.

The designing happened by drawing on a big printer map of the area, and by discussing about certain ideas. Everyone was able to draw themselves. Issues were also raised that could not be solved directly but needed enquiry by other departments of the municipality.

After every workshop, the urbanist took the results home and worked them out into one conclusion drawing that was used as a conceptual design. This design was worked out during the next workshop until a provisional design could be created. The urbanist or the winners, depending on the issue, also did the inquiry on topics that were left open.

The usage of different themes within the workshops was helpful to guide the discussions, as it sometimes happened that discussions moved into directions that were not topic related anymore. When this happened, the comments were written down for later but the discussion was brought back to the theme that was being discussed, making the workshops more efficient. This is important as the workshops already took more than 3 hours, which is long when it is carried out together with a lot of citizens.

Because only one citizen had been present during only one of the workshops, it is hard to tell whether there are problems for citizens to communicate with the urbanist. Research (Tonkens and Verhoeven, 2018) has shown that this was the case, but a solution was not given and can also not be given from this point of view. One thing that became clear by the involvement of the citizen was that citizens sometimes know more about problems in the area than the municipality does. In this case, this became clear as the



citizen mentioned that there were floodings on one of the places during periods of heavy rainfall. This meant that these flooded areas are not well suited for every type of greenery, which is important to consider.

Although communication methods with citizens can not be concluded from these workshops, it can be said that co-drawing is an effective communication method in general. During the workshops almost everything that was said was also being drawn, and the participants used the pen to draw what they just described. In multiple situations, this drawing worked more efficient than the discussing itself.

Besides the drawing, it also happened that all the participants looked or went outside to watch the place and discuss by pointing at certain objects. This was possible because the workshops were being held in the building in between the places. Being able to watch the places made the discussion easier but also appeared to be helpful in the discussing, as sometimes small issues turned up that could directly be solved. During the workshops, this was the case when there was a discussion about the height difference at one entrance and the outside area. This discussion only took shortly, as this height difference could be checked and the decisions could be made based on this check.

## Conclusion

A design competition as method to gather information from citizens and let them co-design and decide what will happen in the area is not a bad method. The designs made by the citizens are not too unrealistic and it is possible to translate their designs into a final design that can be realized. By the involvement, aspects as management and maintenance can be discussed easier.

The disadvantage is that co-designing can only take place with smaller groups, meaning that it is never possible to include all the participants of the design competition during the workshops.

Another issue that should be watched for is the possibility that partiality occurs during the voting process.

All in all, design competitions can lead to a great design made and liked by the citizens, which is the aim of the participation and the research.

## 4.6. Conclusion

### Introduction

A design competition could be a helpful method for the designing. A lot of people can participate, but most citizens would need support to participate.

To make sure that the competition runs smoothly, it is important to make a clear list of demands and explain the choices that are made in this list. Try to base the list on the wishes of the citizens.

Also create the opportunity for citizens to participate when they do not have the possibility to design themselves, cause of a lack of knowledge or skill. Create a group that is led by an external person with design experience who will translate the ideas.

Either use all the design and try to work them out by looking at the similarities and differences, or have a voting moment during which the citizens can vote on the best designs. In the last case, the winners could be invited for design workshops and co-design until the end.

Also do not forget about other stakeholders and groups that were less involved. They do also have wishes. By keeping a feedback session, these wishes can also again be heard and the design could be altered based on this.

## 5. Participatory designing

The most important part of the participation turned out to be the communication with the citizens and between the citizens and other stakeholders. To provide urbanists with a guidance on how to communicate with the citizens, and therefor on how to carry out the participation, a new design method will be created. This will be done by finding answers on the questions “**How** should the communication with the citizens be carried out?” and “**When** should which communication method be used?”. These questions will be answered by joining the theories as analysed in the theoretical chapter and the results of the analyses on the participation process.



## 5.1. Introduction

### Introduction

The main goal of this research is to provide information on how urbanists can include citizens' participation during the design process, so the citizens can explain how their lives can be improved within their urban environment. This information will be provided in the form of a new design method. During the earlier chapters, information has been gathered that can be used for the establishment of the new design method. During this chapter, all the gathered information will be translated into this method.

First the set-up of the design process will be explained, by looking at how the timeline should be build up and by explaining for which projects the method will be useful. Secondly, it will show how citizens and other stakeholders should be approached so they are able to participate. Then different ways of gathering information will be discussed, which is not only focused on how to gather information, but also on what type of information should be gathered during which stage. To conclude, the way urbanists should translate the ideas into a design and the possibilities to receive some last feedback will be discussed.

With this chapter, the bases for the participation manual will be created and the information will be explained.

## 5.2. Set up

### Introduction

Urban designing can take place on a lot of different scales, in different types of areas and with different aims. Preferably, all these different types of projects would include citizens' participation. Although this might be the ideal image, this is not (yet) a realistic image. Within this research, decisions have been made on when the participation, as described in this manual, could be carried out. This is based on which group of citizens and which urban areas are in most need of participation according to the ideas of the author.

During this chapter, it will be explained on which projects this participation manual is focused, and how the participation process should be build up. This will be done by showing a timeline and roadmap on the overall process, and by explaining the project type based on the project area and size, the client, and the assignment.

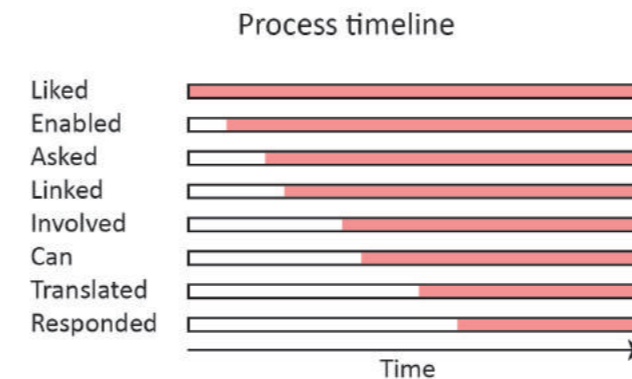


Image 34, Process timeline. (Author)

### Process timeline

Based on the researches of Lowndes et al. (2006) and Tonkens and Verhoeven (2018), the acronym LEACLR was created that included all the steps that should be taken during a participation process. However, this acronym did not consider some extra phases that are also important in design processes. So does it not consider the involvement of the citizens in the process, during which the citizens are able to co-design or make decisions, and it also does not consider the translation of the ideas into a design. When those two steps are also included and placed in the order in which the different steps start, the acronym LEALICTR will be formed standing for:

- L: Like, citizens have a personal interest.
- E: Enabled, citizens have the opportunity to participate.
- A: Asked, all citizens are actively searched.
- L: Linked, citizens are helped by making contact with other stakeholders.
- I: Involved, citizens are actively involved in the process.
- C: Can, citizens are provided with knowledge and information, and are supported when facing problems.
- T: Translate, the input of the citizens is being translated into design ideas.
- R: Responded, citizens get the opportunity to respond on the design ideas.

Although these steps are placed in an order, this order only presents the order in which the different steps start. During the process, all different steps can occur simultaneously or only some are temporary relevant (see example image...). During the rest of this chapter, every of these steps will be mentioned during the moment this steps is taking place.

## Participation process roadmap

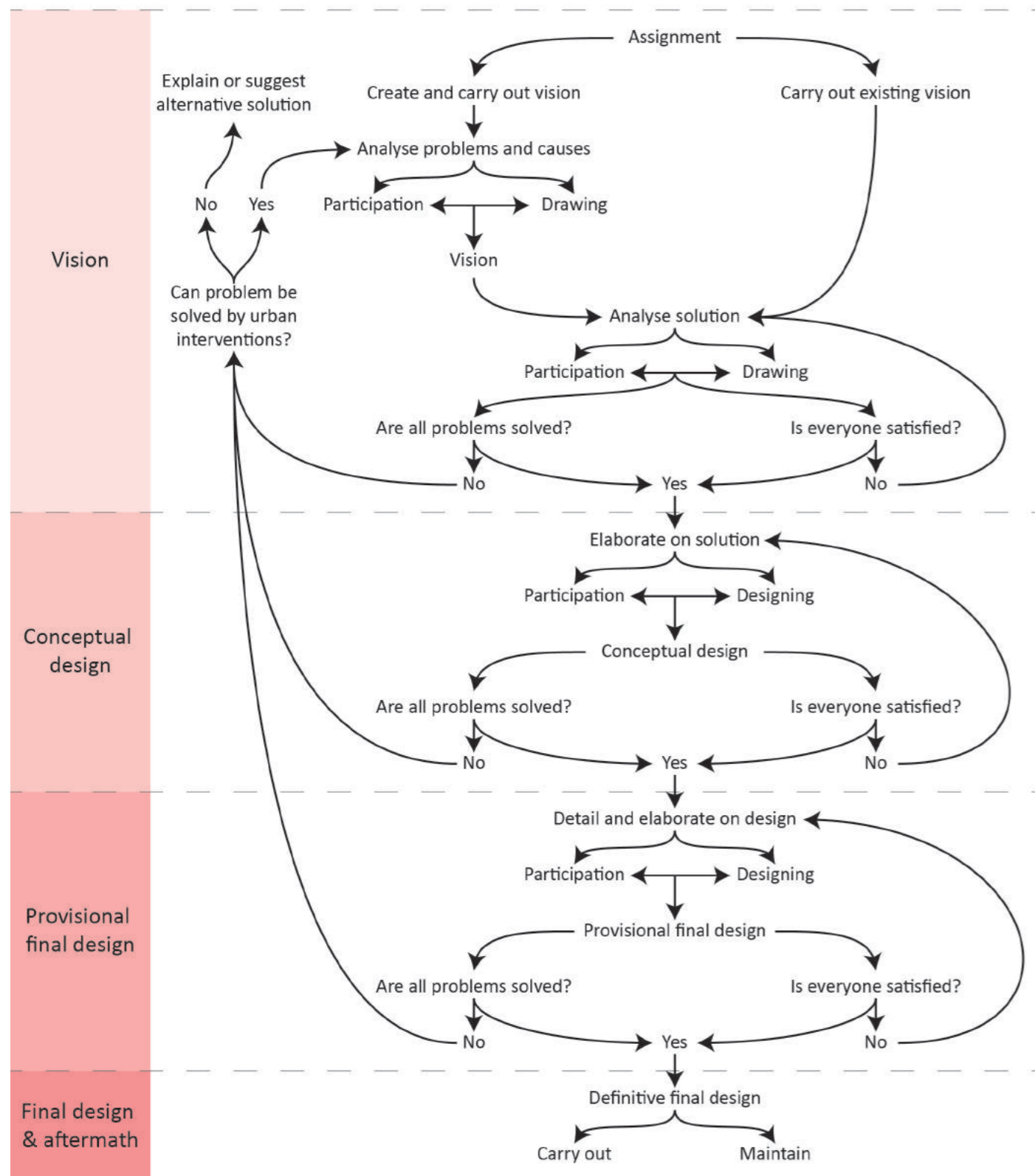


Image 35, Participation project roadmap (Author)

## Roadmap

Besides the participation timeline, a design process is also built up in different phases, during which different types of designs are being created (image...). During every one of these phases, the different steps of the earlier mentioned acronym will take place. The different phases are based both on the process in the Tarwekracht and general carried out design processes.

During the first phase, the assignment as given by the client, will be analysed and translated into a vision. If the assignment is already a vision, this vision will be analysed. The analysing will be done by both mapping and participation, to get to know the area and the wishes of the citizens. When a vision is created that does not suit the wishes of the citizens, this vision should be altered, again via mapping and participation. If the vision is according to the wishes of the citizens, or only small adaptations should be made, the process can continue into the next phase. During the following two phases, first a conceptual design and secondly a provisional final design will be created. During these two phases, the design will be created by the use of mapping and participation. After each of the phases, the outcomes should be analysed and altered if necessary. It can happen that new problems or wishes appear from the citizens. In those cases it is also good to take a step back in this specific theme and create a minor vision for this theme. Different problems and themes can be present in different phases simultaneously.

During the last phase, the final design will be created, carried out and maintained. The final design will be created based on all the input before, during which the urbanist will work alone. The outcome should be presented to the citizens one final time before it can be carried out. During the earlier phases, it could be helpful to discuss aspects as the carrying out and the maintenance of the final outcome, so no problems occur during this final phase. To make the design functional, all issues around maintenance and responsibilities should be solved during the designing, otherwise it is likely that the design will decay over time. During the participation, it is also possible that problems show up that can not be solved by urban designing, or that need support from other stakeholders. In those cases, this should be well explained to the citizens, and the discussion should be started with the responsible stakeholders.

## Type of project

As mentioned before, this research is focused on the participation in deprived neighbourhoods to gather the wishes from the citizens within their own living environment. With the focus of this research on the liveability of the citizens of deprived neighbourhoods, some aspect should be considered to be able to carry out this participation process in a good way. This will be done by looking at the project area and size, the client, and the project type.

### Area and size

Because the project is about the improvement of the liveability of citizens in their living environment, the relevant areas are the areas where the citizens live. This means that the manual is only relevant for projects that improve the environment of housing areas. As it was focused on the participation of deprived citizens, the manual will be best suited for housing areas within deprived neighbourhoods.

Also the size of the design area is important, as was also shown in the Tarwekracht project. When the area is too small, a lot of the wishes will not be realized, but it is also likely that similar areas in the proximity will be copies of each other. However, when the area is too big, too many citizens should be involved in the participation and a lot of new issues would also need solving. Those two arguments considered result in an ideal project size of a neighbourhood (Image ...), as different places are present that give enough space for the realization of a many wishes as possible, but big urban problems are not included and the amount of citizens is limited compared to bigger sized areas.

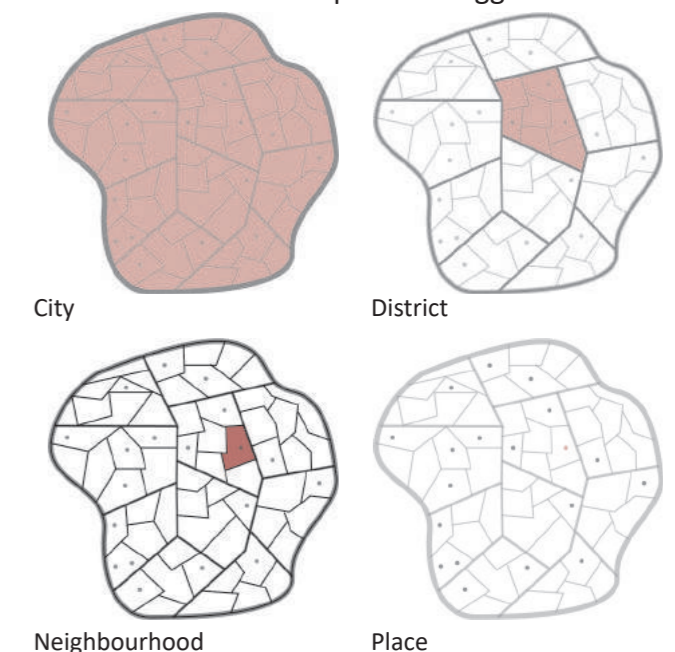


Image 36, Project scales, with the neighbourhood highlighted (Bottom left) (Author)



## 5.3. Starting the project

### *Client*

The most likely client for any project on a neighbourhood scale is the municipality. They are the ones owning most of the public space within the area and they are responsible for the well-being of the citizens within that public space. Therefore, they are also the type of client that is needed for participation projects.

Other possible clients could be a housing corporation or a private investor, but those two are often more focused on the income that can be received, meaning that they are less likely to accept participation as a design method. Mostly, they also do not own a piece of land the size of a neighbourhood, but they are mostly responsible for parts of land within the neighbourhood. This means that these stakeholders should be involved, but not as a client.

### *Project*

The type of project is already narrowed a lot by the earlier boundaries. So should the project include the public place of housing areas within deprived neighbourhoods. Important for the type of participation as explained in this research is that the citizens are already present within the neighbourhood. This means that the project should be the re-development of the public space within a deprived neighbourhood. Because the participation does not consider the participation of future inhabitants, this projects should preferably not include densification.

### **Introduction**

Before citizens can be involved in the project they should be made aware of the project. During the first step (Like) of the design process, the foundation for the communication with the citizens will be laid. This foundation is based on two different ways of communicating with the citizens. First there is the active approach, during which the urbanist talks directly with the citizens. To be able to do so, a place is needed to talk with the citizens. Secondly, there is the passive approach. This approach is mainly focused on online communication with the citizens. Where the active approach is better to use when gathering information from citizens, the passive approach can reach a lot more citizens and is functional to keep the citizens up to date during the process. To be able to use these different approaches efficiently during the course of the project, some steps should be taken at the start of the project. During this section, these steps will be explained.

### **Active approach**

To be able to keep citizens involved in the project, they should like what is going on. This mainly means that the citizens should be kept up to date and that direct communication with the citizens should take place. The best way to do so is by being present within the area (Bouzguenda, 2019; Khan et al., 2017). Being present does not only mean to organize participation activities in the neighbourhood, but also to have a base where the citizens can go to when they want to be involved. The best way to do so is by looking for a building where the urbanist could be present during some moments of the week. In this location, the urbanist could be working on the design, participation events could be held, and progress or upcoming events could be shown on the outside.

The best locations that could serve for these purpose are either empty buildings or buildings in possession of local organizations that are likely to rent out rooms (Image ...). Important is to consider multiple aspects when searching for a building:

- There should be multiple rooms available, so urbanists could work while others keep a participation event.
- The building should not experience any noise nuisance (school buildings can be eliminated).
- Either the separate rooms (in case of multi-functionality) or the whole building should be lockable, and the urbanist should be able to receive a key or other way to get into the building.
- Restrooms should be present. If possible, it would also be good to have a small kitchen (streaming water + coffee maker).
- The building should preferably be located centrally in the neighbourhood. This would make the building better accessible (Image ...).



Image 37, Possible locations Tarwewijk (Author)



Image 38, Ideal locations (Author)

## Passive approach

Besides being present in the neighbourhood, a lot of work can be done via online platforms. These platforms can be used to make the process known and to inform the citizens about latest updates or upcoming events. The big advantage of the use of online platforms is that it can be reached by everyone whenever they want, and it is easy to share with friend or family (Bouzguenda, 2019; Simonofski et al., 2021). There are two different types of online platforms that should be used, a website and (social) media).

### Website

The first platform that should be created is a website. The aim of the website is to inform the citizens about the project on different aspects:

- The assignment of the project and some information about the area and regulations.
- An agenda consisting of:
  - Past events and links to the results.
  - Upcoming events with information about the event and the date or time period this event will take place.
- Updates on the project including:
  - Results of past events.
  - Updates on the latest progress (preferably regular as every friday).
  - Information about future events and how citizens could prepare for them.
- Personal information.
  - Urbanist team + role.
  - Involved other parties + role.
  - Contact information.
    - Address + opening hours.
    - E-mail.
    - Phone number.
    - Company website.
- Social media links.

### Media

Besides creating a website, it is also important to be active via the local media and on social media. These are two sources that are seen by a lot of the citizens. The local media can be used once in a while to present bigger updates, and on the social media a weekly update could be spread or information about coming events and a link to the website for more information.

To keep the website and the social media up to date will take a lot of time. Therefore it is important to make someone responsible for these tasks, meaning that this person is parttime or maybe even fulltime occupied with keeping these platforms up-to-date and with responding to messages received via these platforms.



Image 39, Website example (Veldacademie, 2022)



## 5.4. Creating the base

### Introduction

Another important aspect of the use of participation as a design method, is the needed base information to start the project, to enable the citizens. The main aspects included in this section are to create a personal overview of the neighbourhood and to find some interesting information that could be valuable as discussion points, and to make those visible. It is important to create some of these maps before the project has started, so the first discussions are about areas and problems that the urbanist could recognize, but also during the course of the project, new input will result in the need of new maps of the area and its surroundings to be able to communicate well with the citizens.

### Neighbourhood overview

The maps that are needed for the neighbourhood overview are maps as usable greenery of the area (image 40), infrastructural connections, or building functions. To be able to use the maps for future conversations, it is also important to try and find names of locations, which could be placed on the map as well. These names could make it easier to communicate with the citizens because everyone knows what place is being mentioned.

Not only should these maps look at locations within the neighbourhood, but also the important places within close proximity of the neighbourhood should be included, because citizens could also use those locations. These places could be recognized, either because they are big or because they house functions that are not present within the neighbourhood.

### Ownership

Another aspect that is likely to pass by during the participation is the ownership of the area. Before the participation starts, it is important to map which areas are owned by the government and which are in private hands. It is important to map this so decisions can be explained according to the ownership. If citizens want to see changes in an area that is publicly used by privately owned, it will take more effort to include this area into the design. When the ownerships are being mapped, such problems could be handled easier when these maps are present.

The maps can also be used to show which owners are responsible for which areas (Image 41). This will show the complexity of the area but will also provide information about possible stakeholders that also have interests in the outcome of the design.



Image 41, Ownership detailed (Author)



Image 40, Greenery overview (Author)



Image 42, Tarwewijk ownership (Author)



When looking at the ownerships in the area, it is also important to zoom in into the area. On the smaller scale, aspects as the property border or semi-private areas could be shown and explained (Images 43, 44, 45). Important while zooming in is not to work with maps only. Also sections or images of the area can provide a lot of information that will make it easier to communicate with the citizens. However, try to be careful with showing the exact property borders (image 45). Property borders are a common discussion topic in-between citizens or between citizens and other stakeholders. As the urbanist should be neutral and wants to avoid any discussion about off-topic problems, it is best to leave the exact borders out if it is not necessary to show them.



Image 43, Ownership Tarwewijk (Author)



Image 44, Ownership property borders (Author)



Image 45, Ownership section (Author, underlay: Google Maps)

### Going-on projects

Besides the participation project, it is also possible that other projects are going on in or around the neighbourhood, which could influence the functioning of the final outcome. Therefore, it is important to show these projects, if possible with the expected outcomes, and to include these outcomes in the maps that will be used when communicating with the citizens. This should be done to prevent the design to go into a direction that would not fit with the planned project, which would create a disadvantage for the functioning of the design.



Image 46, Changed base map (Author)



Image 47, Current projects (Author)



## 5.5. Finding the participants

### Introduction

Finding participants starts with getting the citizens known about the project. This should be done by creating online platforms (Bouzuenda, 2019; Simonofski et al., 2021) and by being present within the neighbourhood (Bouzuenda, 2019; Khan et al., 2017), as described during the 3rd section of this chapter. Besides finding a location within the neighbourhood, it is also good to organize a first event to actively invite citizens to participate. It is also important to try to keep track of who participated, to make sure all citizens are represented during the participation process.

### Visiting the neighbourhood

When the online platforms are being created and a location in the neighbourhood is found, the process of actively finding citizens can start. The best method to do so is by creating a stand on a busy location (supermarket) or by walking around the neighbourhood with a small cart. Not only should this activity be used to find the citizens for later involvement in the project, but it can also be used to gather the first information from the citizens. When asking the citizens about their neighbourhood and their experiences, they will get more interested in the project. To make sure this will go efficiently, it is important to have a big map of the area present, as well as post-its and writing tools. In this way, the citizens can explain their opinions and show things on the map. The information gathered here can be used as a base for the rest of the project.

Because the discussion takes place about the current state of the neighbourhood, it is important to create a map that shows the current situation, and not the one as mentioned in the former section about the planned projects. It is also smart to show the current location on the map as it can be hard for citizens to understand where on the map they are.

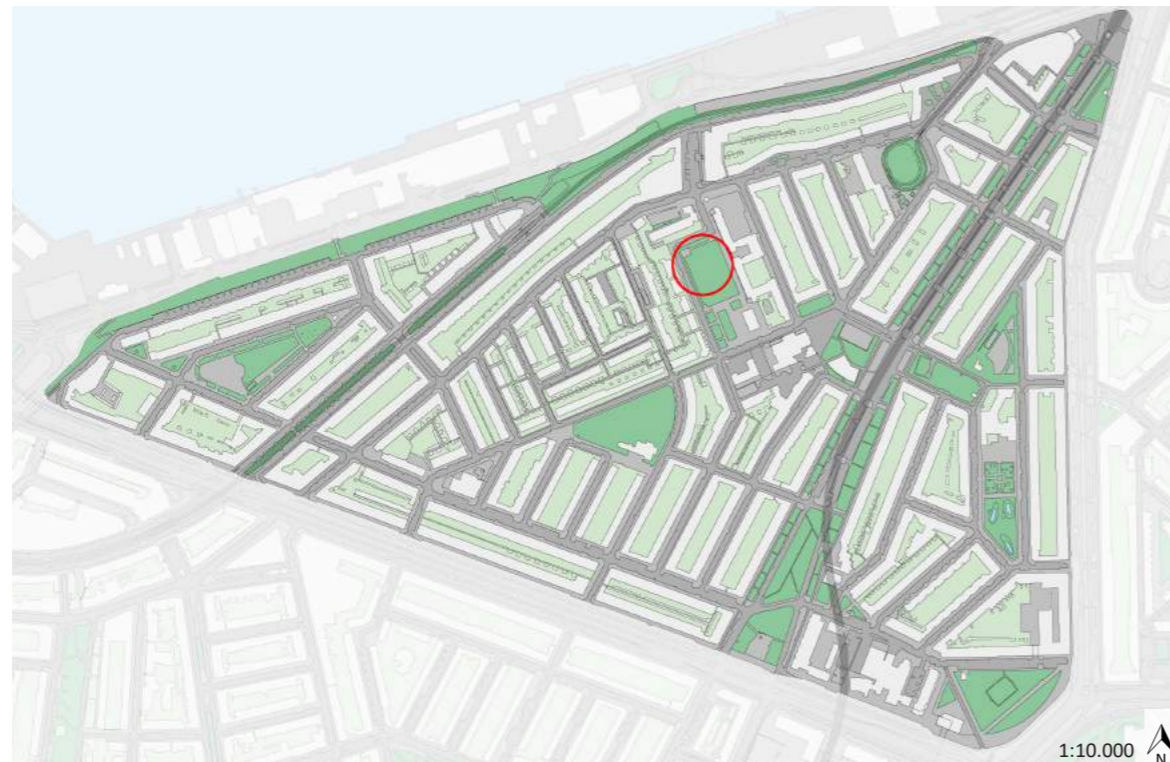


Image 48, Base map with current location (Author)

### Keeping track of the participants

Because of the urbanization and international migrations, neighbourhoods are becoming more diverse. Because the participatory design method focuses on getting input from as much citizens as possible, it is important to keep track of the citizens who participated (and of the once who did not). From most neighbourhoods, demographic data is publicly or via the government available. During the project, this data could be compared with the data gathered about the participants. This is important to do so the groups who are not or unequal included could be shown and could actively be searched and included.

The two diagrams as shown below (images 49 and 50) show an example of the ages of the citizens in the Tarwewijk, and the ages of the participants of the coffee cart event in the Tarwekracht project. What becomes clear of the diagrams below is that the group 45-65 was overrepresented during this event, and the groups of <15 and 16-25 were underrepresented. This means that the last two groups should be involved more during later events, or events should be organized focused on these groups.

Important while gather the demographic data from the citizens is to make clear that everything is anonymous and that the citizens do not have to give this information if they do not want. Therefore, try not to ask this right-away, but ask afterwards whether they are willing to give this information. If citizens are not willing to give such information, it is also possible to make some broad guesses. Over time, groups who were not equally included will likely stand out.

It is also important to make a difference between citizens who will live in the neighbourhood for a short period and the citizens who will spend their lives in the neighbourhood. This second group should have more influence in the project, but the first group should not be forgotten and has the right to be included as well. This first groups could, for example, be migrant workers that will always be present within the area, but the individual persons change every couple of years. This means that they do have interests as a group and could also provide nuisance if there is no place for them within the area.

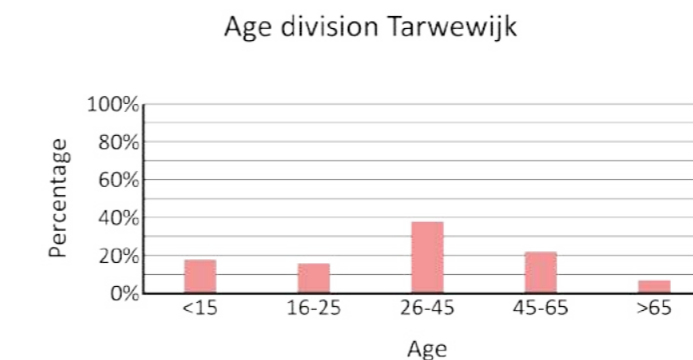


Image 49, Age division Tarwewijk (Author)

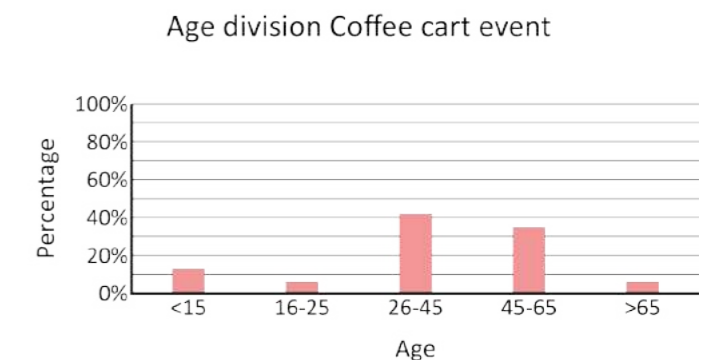


Image 50, Age division coffee cart event (Author)

## 5.6. Involving other stakeholders

### Introduction

Besides involving citizens, there are also a lot of other stakeholders in the neighbourhood with interests in the public space of the neighbourhood. These stakeholders should also be involved in the project, and be linked with the citizens and each other, because they could be able to make the progress a lot slower when they would not be involved and start complaining about the project. On the other side, a lot of the stakeholders also have connections to the citizens and play an important role in the functioning of the neighbourhood, meaning that involving them can also be beneficial for the project. So are they able to link the urbanist with citizens that were not yet included or is it possible that they are willing to maintain parts of the design so ideas could be easier accepted by the client.

### Finding and involving the stakeholders

To be able to find and involve the other stakeholders, they should often actively be searched. The first step to take is by mapping all the stakeholders that are present within the area and by dividing them in groups, as shown on the map below. Then these stakeholders could be contacted and asked about their interests in the neighbourhood. By writing down the interests they have, different stakeholders with similar interests could be linked and invited during specifically themed events that regard their interests.

On the example shown on the next page, all the primary schools are mapped. The school centrally located (The Globe, image 51) mentioned to make use of the public places around the building and of the neighbourhood- and playground association's playground. This means that they should be involved during events about either of the two areas, and they could be linked with the association to search for possibilities to work stronger together. By doing this, an urbanist is not only gathering information and designing, but also bringing stakeholders together and mediate between them to find connections.

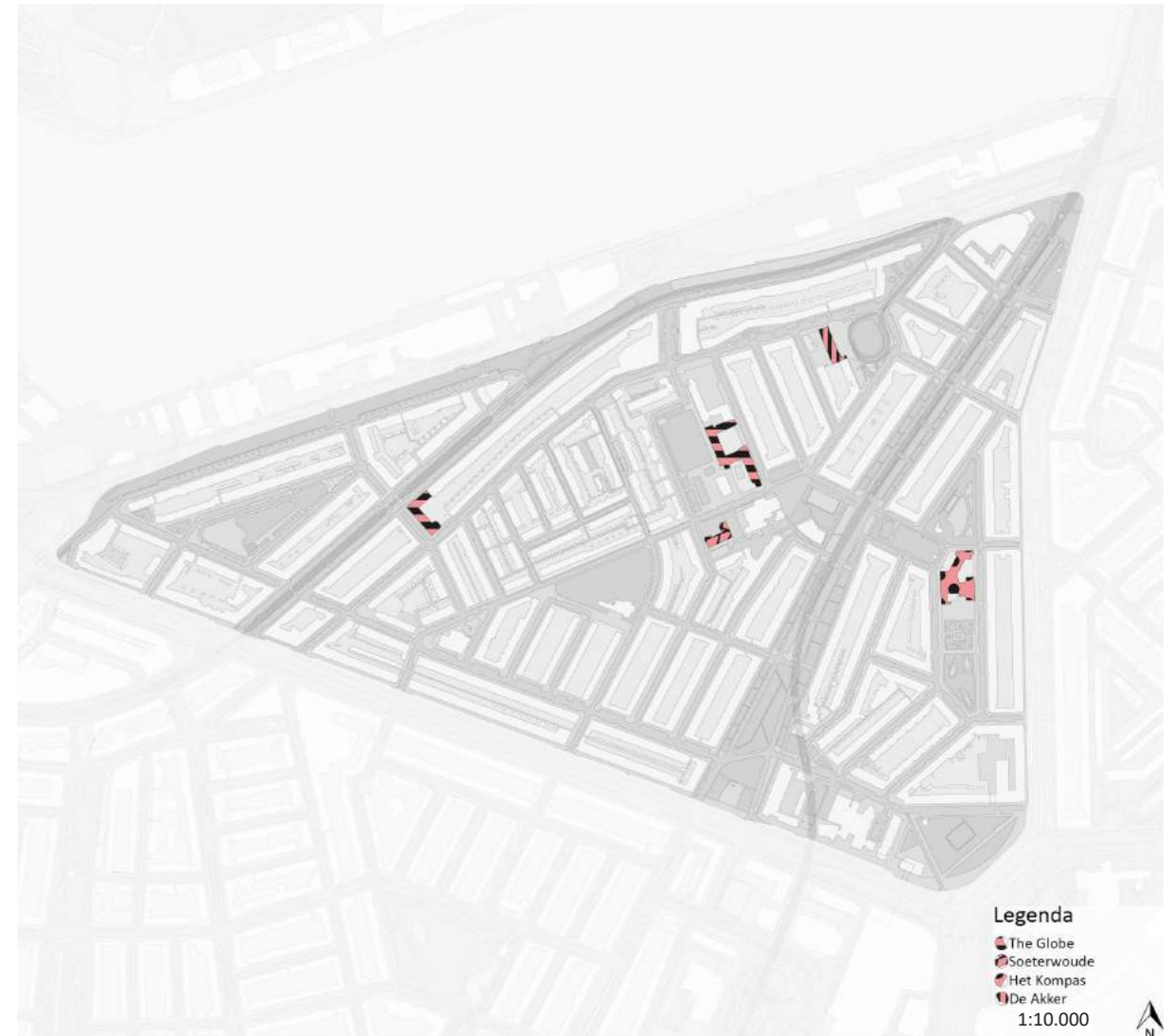


Image 51, Schools in the Tarwewijk (Author)



## 5.7. Gathering and translating information

### Introduction

The final four steps of the participation process are discussed in this one section, as the way they should be carried out is similar between them. During this section, the focus will mainly be drawn to the way the communication with the citizens should happen. During every one of the last steps, the communication should be carried out in a similar way, as all the steps are focused on gathering information from the citizens and translating this information into ideas and products that can be presented to the citizens.

First, this section will discuss some basic communication methods and events that will make it easier for citizens to understand what is going on and that will prevent from issues turning up during the process. Secondly, examples of images, models and other communication means that should be considered during different moments of the process. The combination of these two parts will provide the urbanist with a base of input that will make it easier for the urbanist to communicate with the citizens, but it will not be complete because every project is different and asks for different approaches. Therefore, it is important that the urbanist uses the information as provided in this chapter and translates this into the needs for the individual project.

### Communication

There are two ways of communicating with the citizens. First there is the verbal and written communication, and secondly there are events that support the communication, and finally there is the communication via images. For both types of communication there are some things that should be considered and realized to make the communication go as smoothly as possible.

#### *Verbal and written communication*

When talking with citizens, there are two problems that are likely to occur, which should be prevented as much as possible:

- Neighbourhoods are becoming more multi-cultural, which also means that not everyone is able to understand the national spoken language. Therefore, documents should also be provided in English as well, and it could be helpful to also organize some events in English so a broader group of citizens could be involved. Do not turn the whole participation process in English, because that would exclude citizens because not everyone could speak English.

- Citizens are mostly not educated as urbanists, meaning that they will not be able to understand jargon used in the field of urbanism. Try to avoid using jargon in any possible way, and if it is really necessary to use jargon, explain the citizens what it means.

To improve the communication with citizens, the most important step is to take the time and listen to the citizens (Tonkens and Verhoeven, 2018). Citizens want to be heard and often have most struggles by expressing themselves. By taking time while communicating with the citizens, it is possible to get their real opinion and let them express what they really mean. It is also important to actively support them in doing so, by thinking along with what they are saying, and by drawing along so they can see what is meant.

### Events

There are different types of events that can be organized to talk with citizens. Which event should be used in which situation depends on the wished outcome of the event. Below, some possible events will be discussed.

#### - Questionnaire

Although it does not sound as a communicative mean, the use of questionnaires can be useful to gather information from citizens. They are mainly useful when collecting a lot of data from the citizens that will be used as input for later discussions. The big disadvantage is that citizens can only answer on the questions and are not able to discuss with the urbanist about the topic.

#### - Interviews

Interviews have a similar function as the questionnaire but function totally different. Where questionnaires are good to reach a lot of citizens to gather general information, interviews are mainly useful when gathering detailed information about a certain topic from a certain group of people. The disadvantage of interviews is that they take a lot of time in comparison with the amount of information that can be received out of it. Therefore interviews are better to use later in the project on narrowed citizens who represent bigger groups of citizens.

#### - Workshops

During workshops, small groups of citizens and urbanist (and maybe other stakeholders) will join and discuss about a certain topic. Depending on what the outcome of the workshop should be, different types of workshops could be organized. So are workshops useful to present progress to the citizens and discuss about the progress, but they are also useful to tackle a detailed problem with a small group of participants that have interests in the problem. Important is to watch the group size. If the group gets too big, citizens could feel excluded. If that is likely to happen, try to divide the workshop into multiple events with smaller groups.

#### - Fieldtrips

A final method is the use of field trips. When going on field trips, ideas can be explained on the location itself. This method can be well combined with one of the other communication methods. The big advantage of fieldtrips is that the urbanist and the citizen could point at objects or get a realistic image of what sizes would mean on the design area. It also gives the possibility for a lot of citizens to participate, or to have an event going on on the place that takes a whole day during which citizens can pass by and discuss their ideas.



Image 52, Impression interviews. (Veldacademie, 2020a)



Image 53, Impression workshop. (Veldacademie, 2020c)

### Image usage

Maybe the most important aspect of designing is drawing. Not only are the drawings used by urbanist to think and try things, but they are also an important part of the communication with other stakeholders, in this case the citizens. To make sure that the communication will go smoothly, there are certain things urbanists should consider when using images as communication method, which will be discussed below.

### - Map lay-out

Maps can be hard to understand for people who are not using them on a regular bases. Therefore, it is important to make the maps as understandable as possible. The first thing is to keep the north to the top on every map. This also counts for images that are made on the smallest scale. Having all the maps pointing to the north makes it easier to use them aside of each other.

It is also important to try and use the same base map every time. This way citizens can get known with the lay-out of the map which will make it easier for them to understand the map.

Thirdly, the maps should a scale bar, but not one that only shows the scale compared to 1 (1:10.000), but a bar that shows a distance (Image 54). A distance is easier to explain and therefore easier to understand by citizens. The use of these bars also makes it easier to play with the sizes so the wanted area can be as visible as possible.



Image 54, Scale bar (Author)

### - Themes

During a design process, a lot of different themes are being addressed. To make things better understandable for citizens, it is good to create some themes that cover all the discussion issues. Because the 6 liveability aspects as mentioned in the theory are key to creating a liveable living environment, these 6 aspects could be used as main themes.

To make the process even better understandable for citizens, it is important to be coherent during the process. It could be helpful to give every liveability aspect a colour (image...) and to use these colours as well when drawing or discussing with the citizens about certain issues. This way, citizens can immediately see about which topic they are talking. By also making or using icons for every of these aspects, and having them present in every image where the theme is being discussed, this coherency could be improved even further.

Besides showing the themes that are being discussed, it is also helpful for citizens to make the maps easy readable, which means that a map preferably shows only one theme. Only when the link between different themes is necessary to show, it could be chosen to do so, but try to avoid doing so. Image that show only one theme or issue are far easier to read than images that are placed full with different types of issues. In those cases it would be best to divide one map into multiple maps. Also when showing a link between different themes, it could be helpful to use one map showing all the themes, and some separate maps that show the individual themes.

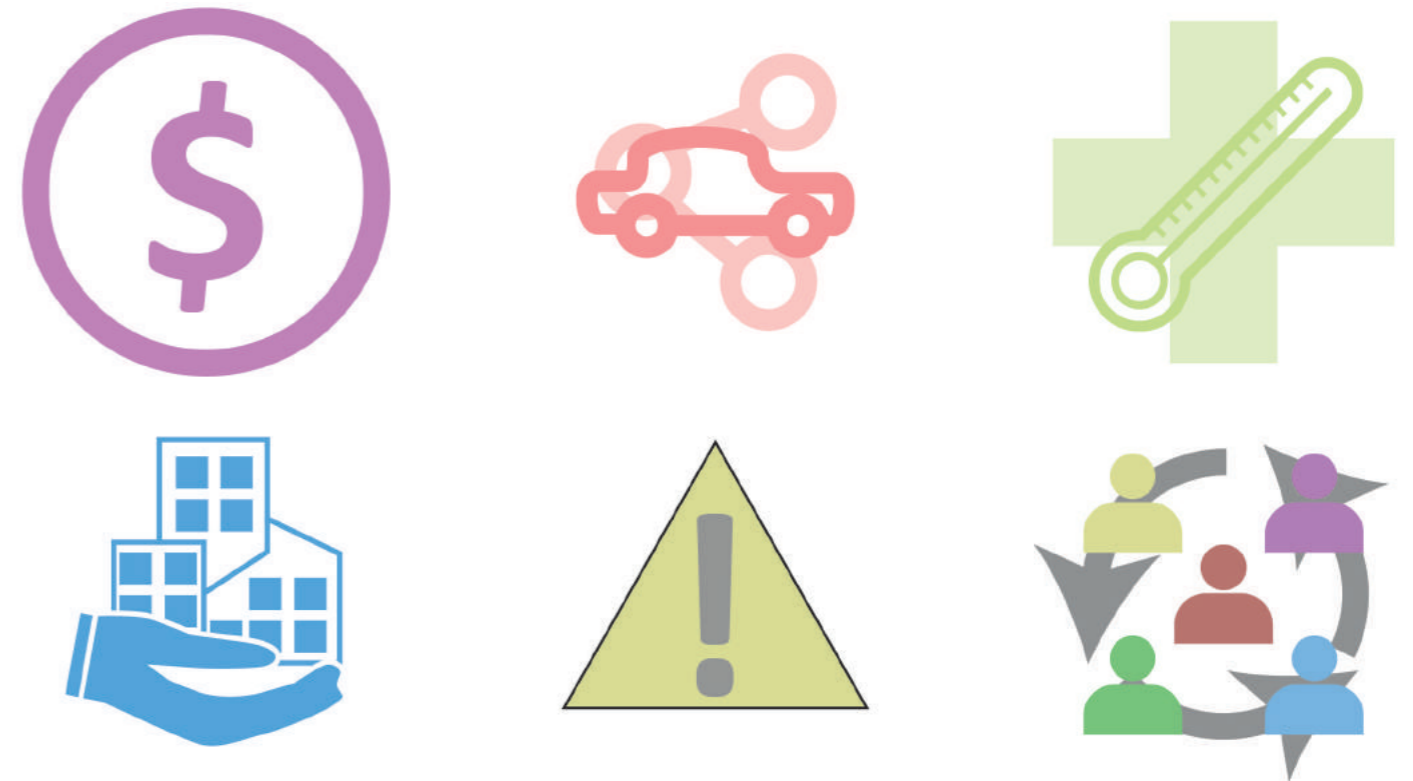


Image 55, Liveability icons (top row L->R: Finance, Mobility, Health; bottom row L->R: Services, Safety, Social participation; Author)



Image 56, Usable greenery Tarwewijk (Author)



- Co-drawing

A good way to get the ideas of citizens on paper is by drawing together with them. This can be done in a sketchy way (image...), as it should show the opinions of the citizens. It is also possible to make use of words instead of drawing everything, as that could be easier to understand for everyone, or a remark is hard to draw on paper.

After those drawings are made, it is important to translate the drawings into useable images for the rest of the process. The best way to do so is by making one drawing with all the discussion points in it, and then trying to separate the drawing into drawing according to the different themes as mentioned in the sub-section before. This would make the result of the discussion, during which the drawing were drawn, a lot better understandable and it can be discussed with the participants whether the outcome was also what they meant.

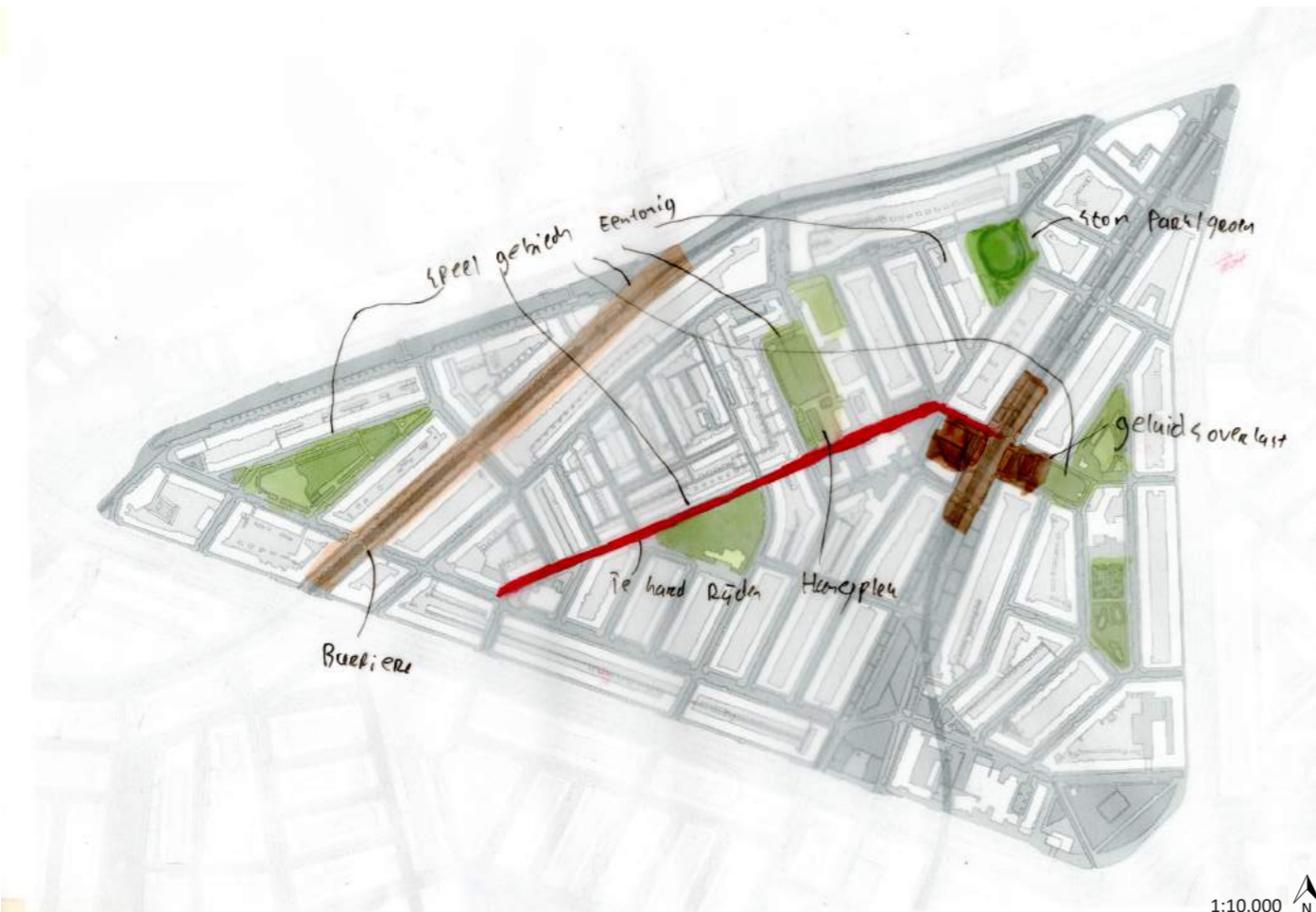


Image 57, Co-drawing result (Author)



Image 58, Co-drawing worked out (Author)



Image 59, Co-drawing result separated in themes (Author)



- Informative images

When using images to communicate with citizens, there are multiple things that should be considered. First it is important to think about what images would present the ideas best. When talking about a certain area or street, it is good to show maps, section and pictures of this location. It would be even better to go to the specific location to discuss with the citizens. Using all the different images for the same location makes it easier for the citizens to understand the area and the ideas that are made by the urbanist. In the example images, a map of the neighbourhood shows about which street is being discussed and the exact cut-out where the zoom-in are made. The zoom-in shows the current situation of the street and the place the section has been taken. These section then shows how the street looks from the side and the other sections show alternatives that have been created for the street (to use them most efficiently, they should be coloured as the bottom section). The bottom lined section is an examples of how it should not be done, as they show unrealistic ideas. It could be good to make such sections as well, but then it is also good to create a map (image 66) that shows what the effect of these implementations would be. All these images are finally also supported by a screenshot of the street showing how the real situation of the street currently looks. Adding this last picture is important because this is the image the citizens will recognize and by which they could place the other images better.

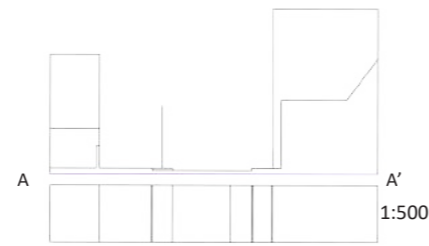


Image 61, Current situation (Author)

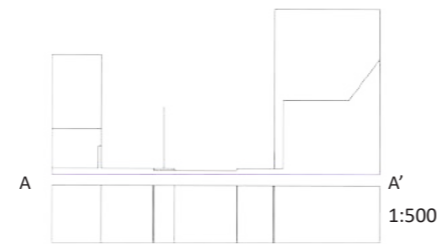


Image 62, 1-sided parking (Author)

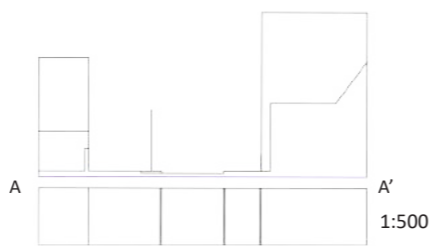


Image 63, Bicycle street (Author)

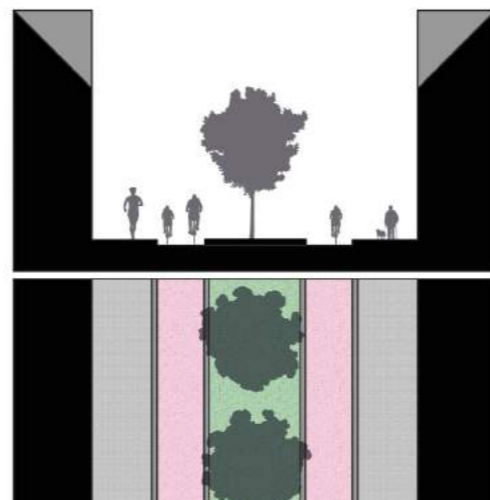


Image 64, Coloured example (Author)



Image 65, Street to be changed (Author)



Image 66, Effects closing street for cars (Author)

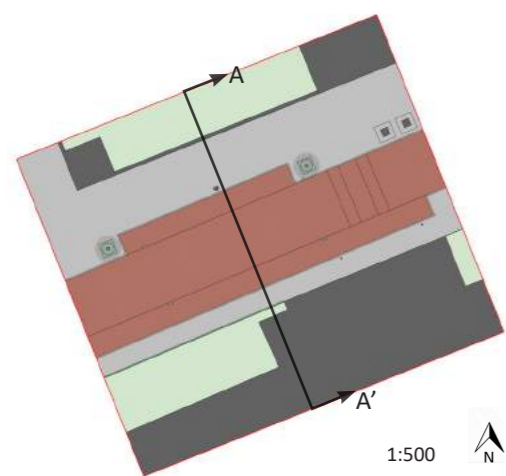


Image 60, Street cut-out (Author)



- Complexity

Although the urban environment looks simple, the reality is different. A good example is the underground infrastructure. It is important to leave this infrastructure out of the maps and sections that are used to communicate with the citizens, but it is smart to create a map and section of the underground situation to be able to show the citizens why certain ideas are not possible and that it could be more complicated than it looks at first sight. The same counts for the usage of distances in sections. Normal sections could be made including objects to show sizes, but writing down the wideness of a street can best be done in separate image.

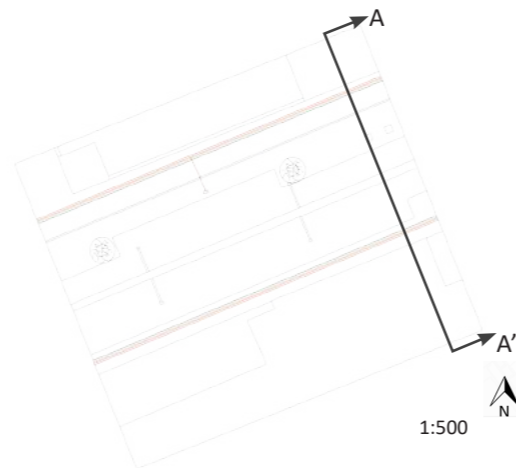


Image 67, Example of underground map (Author)

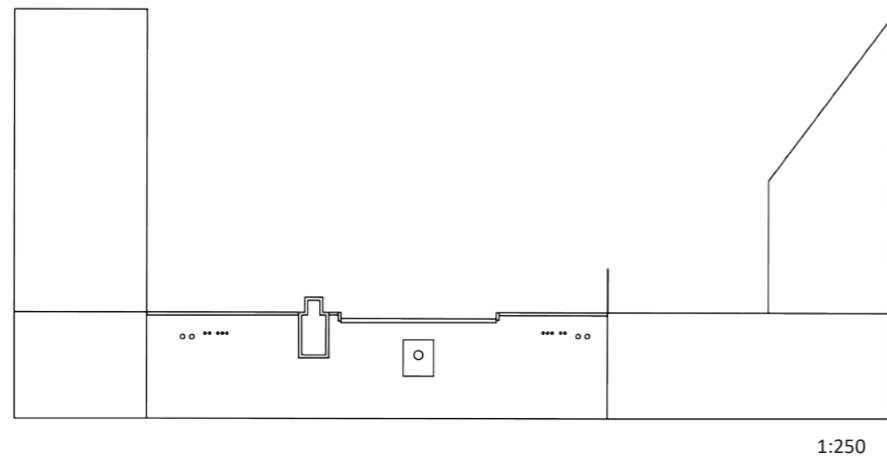


Image 68, Example of underground section (Author)

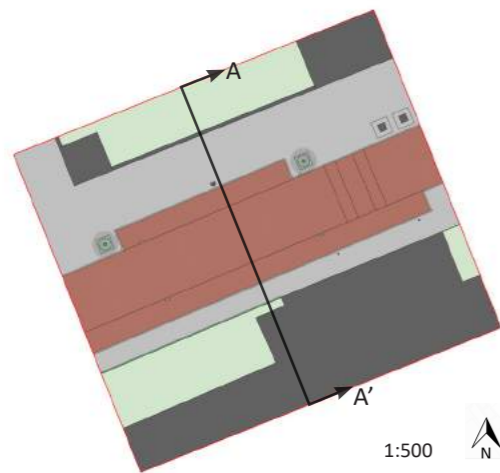


Image 69, Location section (Author)

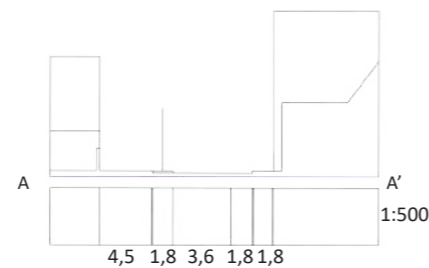


Image 70, Wideness street (Author)

- Support pictures

When talking with citizens, it should be realized that words can mean different things, depending on who is talking about it. For one person, a sport area could be a fitness place, where someone else expects a soccer pitch. When talking about such objects, try to bring pictures along that either show how it will be looking, or bring different pictures to give the citizens the option to tell what they want.



Image 71, Parcour area (Techrampsgroup)



Image 72, Skate park (La Nucia)



Image 73, Parcour area (Author)



Image 74, Soccer pitch (Stichting Bea)





Image 75, Sight from 2 meters (Author)



Image 76, Sight from 1,80 meters (Author)



Image 78, Sight from 1 meters (Author)

- Who do you talk with?

The urban environment is experienced differently by every person, but some reasons for the different experiences can be so obvious that they almost seem to be forgotten. One example is the different in height. Small children could see the world from a height of about 1 meter, but meanwhile adults see the world from a height between 1,50-2 meters. And then there are also exceptions that see the world from a lo-



Image 77, Sight from 1,60 meters (Author)



Image 79, Sight from 0,50 meters (Author)

- 3D models

Although maps are provided with scale bars, it can still be hard for citizens to understand what the different sizes are and what it means. A way to prevent long discussions about whether things are possible or not, regarding the sizes, is by creating a 3D model of the area (or a part of the area) and create some of the objects the citizens have wished for. In case these objects do not have standard sizes, it could be helpful to create multiple alternatives. With these objects and the model, the citizens are able to play and try different combinations themselves, but it can also be used by an urbanist to show why a soccer pitch can not be located in a certain area.

Important while creating a model is to also add standard objects as the present trees, walking paths and static objects that can not be removed. When these types of objects are not present, it could look as if an object with fit, but in reality it would not. To prevent from any disappointments afterwards, it is important to include these objects and explain about them before the citizens start puzzling.

In the two examples on the side (image 80 and 81) it is clear that the soccer pitch would not fit. In the top image, the pitch would be placed in a facility building and in the bottom image, the place would need the removal of trees.

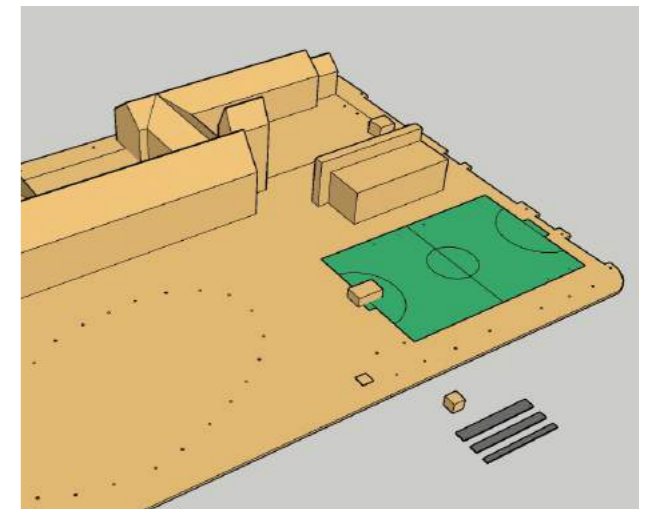


Image 80, Model with soccer pitch (Author)

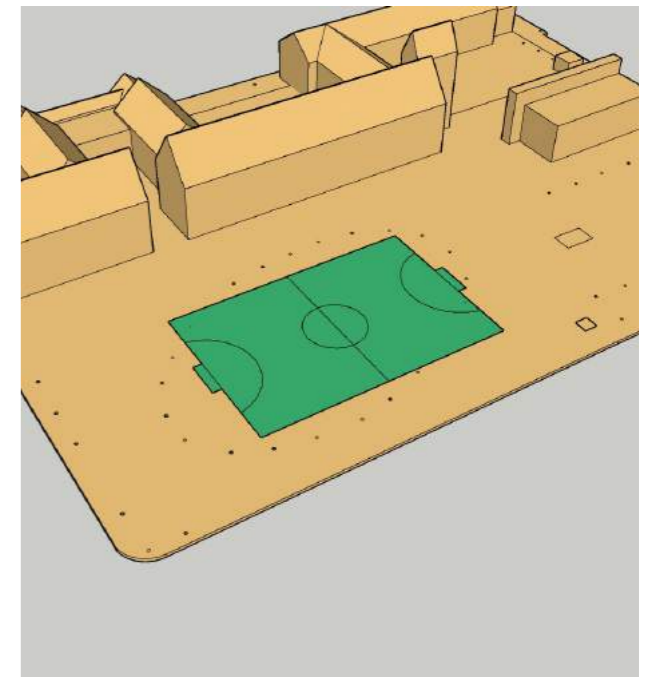


Image 81, Model with central soccer pitch (Author)

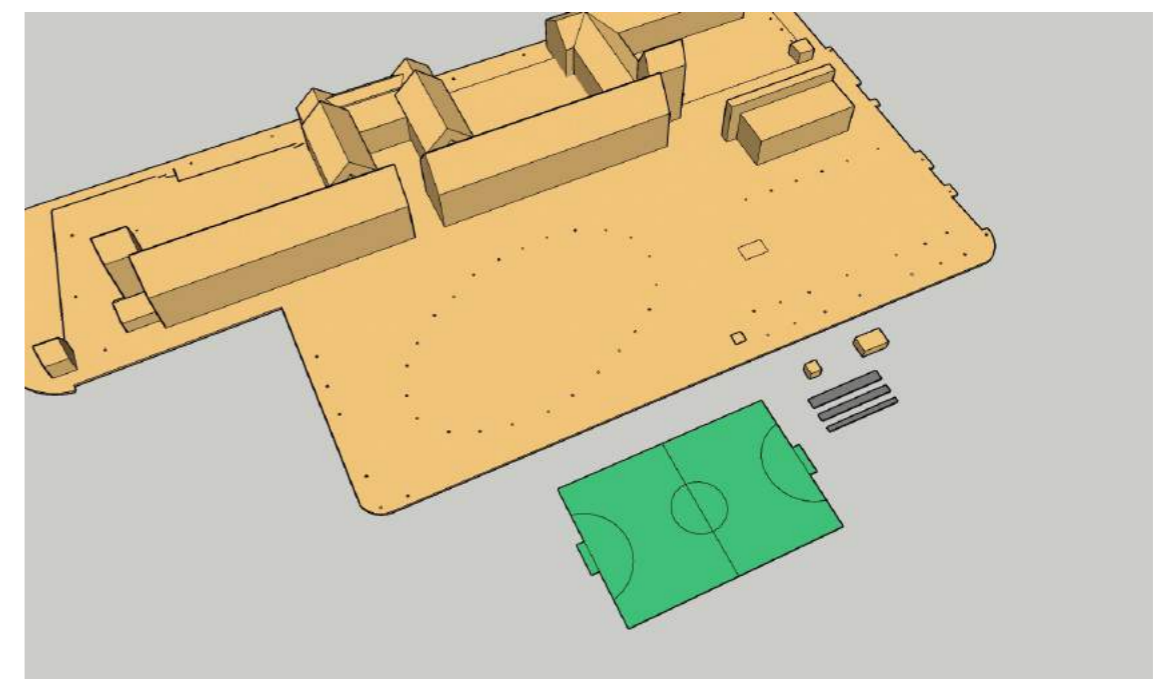


Image 82, Model with objects to be placed in (Author)



- Life size models

Besides creating 3D models of the area to let citizens play with them, it is also possible to go to the place and create object in real life. This can best be done in the final part of the project as it can be time consuming. Small types of objects could be made out of wood, plastic or cardboard, and bigger objects could be shown by using rope to show how big it would be or how it would be placed. By using this method to communicate with the citizens, it is easier that start a discussion as the problems could be pointed at immediately. The method also improves the possibilities for the citizens to understand with is meant which also opens better possibilities for a discussion

- Final response

Because the participation is about involving the citizens in the design process, mainly to give the citizens the opportunity to participate in improving their lives, it is important to give the citizens a final vote when the design is finished. To do so, the final design should be presented to the citizens, so they can react on it. This gives the citizens a final opportunity to ask for changes if some decisions are made that do not fit their wishes, but it also gives the urbanist a final change to explain why certain decisions are made. The research by Tonkens and Verhoeven (2018), explaining the decisions is often more important then fulfilling the wishes of the citizens, as long as the citizens understand why the decision is made, they would be able to life with it.



Image 83, Easy buildable and moveable objects (Author)

## 6. CONCLUSION

During the final chapter, the whole research will be concluded. This will be done by answering the questions “**What** was researched” and “**What** came out of the research”. Also the main research question “How can the use of *citizens’ participation methods* improve the *urban design process* in the *regeneration of deprived neighbourhoods* to improve the *liveability*?” will be shortly discussed. To finalize this chapter a reflection will be made on the five aspects: “social relevance”, “advantages and limitations of the chosen methodology”, “possible problems and its compensation”, “generalization of the outcome”, “ethical issues and dilemmas”. This reflection is included because there will be no peer-reviewing on this research, so the reflection is meant to have a critical look into the project by the author.



## 6.1. Conclusion

### The research

During this thesis, methods were researched via which urbanists could carry out participation as a design method. The reason why this was being researched is because a lot of citizens are living in poorly liveable areas that should be improved, but it is strange that an urbanist decides what will happen there although the citizens are the ones that will be using that place. Research has shown that every citizen experiences the same area differently, meaning that every citizen has other wishes and ideas for an area. This makes it impossible for an urbanist to design an area that suits the wishes of the citizens without involving the citizens.

To research how citizens' participation could be carried out by an urbanist, theoretical research was carried out on the functioning of happiness of the citizens and the functioning of participation during other types of processes. That research was joined by the analyses of the case study Tarwekracht in Rotterdam, during which the municipality of Rotterdam carried out citizens' participation to improve two places within the neighbourhood.

### The results

To carry out the participation, there were 8 steps that should be taken, which can be found in the acronym LEALICTR.

- Like, the citizens should like the project, which happens as the project is about their neighbourhood.
- Enable, the citizens should have the opportunity to participate. This is done by enabling participation as the design method for the project.
- Asked, the citizens should actively be asked to participate. This is done via posts on social media platform, but also by having conversations with the citizens and contacting local stakeholders and ask them to support the participation.
- Linked, the citizens should be linked with other stakeholders. This linking is important as there are also other stakeholders with interests in the designing, and the citizens should have the opportunity to debate with these stakeholders about the wishes.
- Involved, citizens and other stakeholders should be

involved in the process, by asking them about their opinion via events as interviews, workshops and discussions, and by letting them participate in the designing, also via workshops or via a design competition.

- Can, the citizens should be provided with knowledge and support so they are able to participate. In this the communication with the citizens is important, considering the omit of jargon and by making use of different presenting methods as images, models or fieldtrips.

- Translate, the wishes of the citizens should be translated. This can best be done by withdrawing and designing by the urbanist alone. The withdrawal gives the urbanist the opportunity to order the gathered information, create ideas and find topics on which more information is needed.

- Respond, the citizens should get the opportunity to respond on the project. Also when the final design has been finished, the citizens should get an opportunity to get a final vote. This also gives the urbanist the opportunity to explain why certain decisions have been made.

When the steps as above are considered seriously and carried out as described in the research, it should be possible to improve the liveability of the citizens of deprived neighbourhoods by making use of participation during the design process.

## 6.2. Reflection

### Societal relevance

To be able to design public places in a way that they increase the liveability of the citizens, which should be the main starting point for every design, it is important to find out what the citizens want and need. This can be done by involving them during the design process. This can be done during parts of the process, but citizens can also be involved during the whole course of the process. Although participation as a design method has been used before, there is not yet a good overview that explains how this should be done efficiently and what traps can occur and be prevented. The manual created during this research is therefore covering this lack of information and with the creation of this manual, a new way of designing is being introduced that could improve the liveability of all citizens of deprived neighbourhood and solve a lot of existing urban problems, when used and used correctly.

### Advantages and limitations of the chosen methodology

The main method that is used for this research is the analyses on a case study (Tarwekracht in the Tarwewijk, Rotterdam). As it was possible to be present at some of the activities carried out during this project, it was possible to gather information based on the experience of the involved parties. Issues found during the research on the case studies could be fed with the use of existing literature done on the topic of citizens' participation or compared to another case study (Sporpark, Tilburg). As the combination of the case studies and the literature functioned as the basis for the manual, the ideas could be backed up by its functioning in a real case, as well as being explained by literature research done on similar topics. This has resulted in a strong and varied base for the manual.

Although the use of the case studies and the literature was helpful during the research, there were three issues around the use of these methods for the creation of the manual. First, the use of citizens' participation in urban designing is not being researched often, most of the literature that was used was not specific on design cases. Secondly, every design case is different. Although this research has focused on specific design cases in deprived neighbourhoods, the use of only two case studies is not enough to be able to conclude whether the methods would function in other cases as well. The final issue also links to the lack of knowledge about the methods. Although the two case studies clearly explained what methods were used, how they were used and what the results were, all the methods can be improved as well. These improvements were often backed up by literature, but due to the time limit and the limits around possibilities in the case studies, it was not possible to test whether the improved methods also have improved results or whether they do not, or even negatively, influence the process.

For future research, it would be good to get deeper in the functioning of these methods, by implementing them during different types of cases. This would improve the quality of the separate participation methods, making the whole process also more efficient.

### Possible problems and its compensation

As mentioned before, some of the improvements in the manual could not be tested on it functioning during a design process. Therefore it is possible that some of the results of this thesis do not function in reality as they seem to do on paper. To be able to prevent this as much as possible from happening, most of the improvements that are suggested are either based on literature that also supports the suggestion, or the problems are being mentioned but only possible solutions are given.

Besides these two applications, it is also clearly explained that every case needs a different approach and that the suggestions made only function as a base, that can be turned into realistic applications by the urbanist for the specific case.

## Generalization of the outcome

The focus of the manual is on the specific cases of renovation of deprived neighbourhoods with the aim to improve the liveability of the neighbourhood for the current citizens. The participation methods therefore mainly focus on the use for citizens that are harder to find or do not understand the process. Eventhough the focus on deprived neighbourhoods is also seen as important for this research, the outcomes can also be used on any other type of neighbourhood, as it is explained how the participation methods should be turned into usable methods for a specific case. The only important aspect for the use of the manual is the willingness of the client to make use of the participation. When the client is not open for the idea, it will not function.

Another way this manual can be used is as a kind of encyclopedia for different participation methods. Some methods can also be used on itself when the urbanists want to get specific information without making use of the whole participation process. As all the methods are described on when they could be implemented, how they should be implemented and what the outcomes will be, they can all be seen as methods that would function on their own.

Although it is possible to use the information of the manual on other causes than deprived neighbourhoods, it would be good to do more research on the usage outside of deprived neighbourhoods, as well as on the implementation of participation during densification processes in deprived neighbourhoods.

## Ethical issues and dilemmas

The reason for the research on citizens' participation carried out in this thesis, is mainly because of the concept of gentrification, which is often taking place during the improvement of a neighbourhood. Citizens are forced to move a lot because their neighbourhoods become unpayable for them, influencing their well being. As this mostly happens for citizens living in deprived neighbourhoods, a new method is needed by which the citizens are able to improve the neighbourhoods for their own liveability.

In this thesis it is shown how an urbanist can gather and implement the wishes of the current citizens of deprived neighbourhoods so the design will be focused on how they want their neighbourhood to be, and not how the society as a whole want a neighbourhood to look like. Although the citizens would have the possibility to participate, the new design method does not solve any problems about the raising rent prices. Therefore, it is also important to change the regulations about increasing rents after the improvements of the neighbourhoods, but that is a discussion that should be conducted outside of the usage of citizens' participation as it is a broader problem.

Besides the use of participation during the design process, this research also shows how to give all citizens the possibility to participate. An often occurring problem is that some people have a louder voice or are more present than others, although everyone (wants to) make use of the same places. Also giving the more silent citizens a voice is therefore important, as the final outcomes of a design also influence their lives. Although this is well addressed during this research, there will always be people that can not be reached. By addressing this gap means that research is still necessary on this topic until it is possible to include every last citizens in the participation process.



## 7. APPENDIX

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## 7.2. Essay

**Abstract** Happiness is the key-concept to life. It does not matter how we live or where we come from, one thing we all have in common is that we always steer to greater happiness. Within this essay it is discussed whether it is possible to increase our happiness by making changes in our urban environment as the urban environment is one of the areas we most use, this is also an area that has great influences on our happiness. When changing this urban environment, it is important to consider aspects of liveability, directly and indirectly influencing our happiness. Not only do changes in the liveability affect our short term happiness, but they also contribute to our long term happiness. Although there is discussion about whether long term happiness can be largely influenced, it is proven that there are some small changes possible within our long term happiness. Another thing that always needs to be considered is that every one of us perceives happiness differently. Within decision making in the urban environment, this could be solved by using citizens' participation methods, as this gives every one of us the opportunity to show our opinion. When considering citizens' participation methods as well as the aspects of liveability, it is possible to make us happier by changing our urban environment.

Key words: happiness, urban environment, liveability, welfare

### Introduction

When asking ourselves why we are doing something, we mostly answer something in the context of 'I like to do it' or 'I want to receive ... out of it (with which I can get ...)'. Although it is not always realized, both answers refer to increasing our happiness. In the first answer this happiness is mostly achieved on a short term, where in the second answer it is more often focused on a long term goal. Even if we do not always realize, the motive behind almost every decision we make or almost every action we undertake is to improve their happiness (Veenhoven, 2012). Therefore it is not strange that a lot of research is being done on this topic, but it is strange that the topic of happiness is not always that publicly discussed, although this is also slowly changing (Veenhoven, 2012).

As the urban environment is one of the most used places by us, it could be said that it has one of the biggest influences on our happiness. This means that urban designers and urban decision makers are not just creating a liveable environment, but they have a big responsibility for the happiness of the whole society. Although their influence is so big, in this field of work 'happiness' is not often used or mentioned as a steering motive for decisions made in the urban environment. As happiness is such a big aspect of our lives, it is important to discuss the way decision making in the urban environment is influencing the happiness of its users. In this essay this topic will be discussed by answering the question: "How can the urban environment improve our happiness?". To be able to answer this question, two main concepts should be analysed. The first is the concept of happiness. By answering the question: "What is happiness and how can it be measured?" the main idea of happiness will be discussed to create a knowledge base for what is needed to make people happy. By answering the question "How does or can the urban environment influence happiness" the second concept of the main question, the urban environment, will be linked towards the topic of happiness. This will filter out the happiness aspects that are not influenced by the urban environment and therefore narrows the concept of happiness down to be able to answer the main question.



## Happiness

That being happy is important for us is not something unknown. We all want to feel happy, but it is not just good because we want it, research has also proven that happier people are healthier. According to Veenhoven (2008) happiness is not a method to cure sickness, but it can protect against sicknesses and its effects are comparable to the health differences between smokers and not smokers. Although happiness can prevent from sicknesses, when we describe happiness, the first thing that comes to mind is that happiness is a feeling. We are able to describe what makes us happy, but when we are being asked why something makes us happy, we are often not really able to explain it other than saying 'I feel it'. Before being able to find out whether it can be measured, it is important to know what happiness is.

### Quality-of-life concepts

According to Veenhoven (2012) happiness can be divided into two distinctions (see table 1). The first distinction is between life chances and life result. The other distinction is being made between the outer and inner qualities of life. In this, the outer is more focused on external influences while the inner is more focused on the individual. These two distinctions together provide a matrix (table 1) with four quality of life concepts (Veenhoven, 2012).

First, there is the liveability of the environment, in which the liveability can be described as environmental friendly (used by ecologist), the good life (used by urban planners) or quality of society (used by sociologists). The one thing they all have in common is that it doesn't consist of just one factor, and not every factor has the same influence.

Secondly there is the life-ability of the person, which is more focused on the way we cope with the problems of the daily life. In this quality-of-life the health of an individual plays the main role, as a healthier person is mentioned to be happier.

The third quality, utility of life, which states that people who contribute more to society also preserve a better quality of life. In this case the quality of life is not just important on an individual level, but with everything someone does, they also influence the quality of life of others.

The last quality, contrary to the third one, is mainly focused on the individual. The concept of life satisfaction focuses on the way people reflect on their lives. By thinking about what felt good and what felt bad, changes in life can be made. In most literature this is described as 'life satisfaction', 'well-being' or 'happiness', all should it be clear that happiness is more than just the subjective enjoyment of life. About this quality of life, Kroll (2010) has also done research, describing that what makes us happy differs per person, which shows the importance of considering the individual while aiming for a greater happiness for a group.

	Outer qualities	Inner qualities
Life chances	<b>Liveability of environment</b>	<b>Life-ability of the person</b>
Life results	<b>Utility of life</b>	<b>Life satisfaction</b>

Table 1, quality of life matrix. Table: Author; Data: Veenhoven, 2012

### Long- and short term happiness

As happiness is often realized at a moment, there could be said that happiness is based on a short term event. Although this is through, also happiness over a long term should not be forgotten. It is possible to be happy or sad at one moment, but it is also possible to be happy or sad about an event occurring over a period. Thereby, it is also possible to be sad about a short term happening while being happy about the long term effect of this event. Whether we are happy is therefore not just determined on the current mood or emotions, but is also influenced by long term satisfaction of our own life (Veenhoven, 2012). However, according to the theory of the hedonic treadmill, it is doubtful whether the long term satisfaction could really influence our happiness. The hedonic treadmill states that every one of us has a basic level of happiness, which is influenced by moods or emotions, but will always move back towards the basic status (Diener et al., 2009). According to a research of Diener et al. (2009) there are multiple aspects which influence the base of the hedonic treadmill. As the treadmill is based on a base level of happiness, this doesn't mean this base level is similar for every one of us. Diener et al. also state that there is not just one base point, but everyone of us do have different base points. Then there is the possibility to change the base point, based on external conditions. As last they mention that not everyone is able to adapt similarly to a certain event. Where some of us can suffer from an event leaving them with a changed base, others can recover from the event and move back to their predetermined base level. (Diener et al., 2009).

### Measurement

Where some people are stating that happiness can be measured by a doctor, others say it is not at all possible to measure happiness. The truth lies somewhere in between, as happiness is not yet proven to be measurable on someone's body, it is proven that we can explain their happiness by answering questionnaires about their life (Veenhoven, 2012). When using questionnaires, critics state that other aspects are being measured, as a respondent is not able to really describe how happy they are. Along with that criticism, it is also mentioned that respondents do not answer how happy they themselves are, but how happy other people would be when they would be in a similar situation, which would mean that higher educated people should be happier. Although these notions are sometimes found to be true, both are only occurring in such small amounts that it doesn't influence a questionnaire's result (Veenhoven, 2012), when it would be made conform to the scientific regulations regarding taking questionnaires (high response, variety of respondents etc.).

The only problem that can be found by measuring happiness, is that happiness is influenced by short term events, and can therefore differ per day or even multiple times per day. Also aspects as the location where a respondent is asked, or by who a respondent is asked, can already influence their outcomes (Veenhoven, 2012). While testing this statement it appeared to be true, as multiple respondents gave different answers. Although these different answers make that the outcomes could be doubtful, the effects of these different answers are not significant, as most of the changes were small, and where some respondents were a bit happier, others were a bit unhappier (Veenhoven, 2012).

### Conclusion

As described by Veenhoven (2012) happiness is a feeling influenced by two distinctions ('outer qualities' versus 'inner qualities' and 'life chances' versus 'life results') resulting into four qualities of life (liveability of environment, life-ability of a person, utility of life, and life satisfaction). All these qualities either have a short or a long term effect, by which it is also possible that one event has a negative short term effect but a positive long term effect, or vice versa. However, in the end our happiness seems to aim for a base happiness caused by the so called hedonic treadmill. This base point is different for every one of us, and can be changed by influences, but is mainly a set value. To be able to measure our happiness, it is only possible to do by questioning people about their happiness. As happiness is a moment based concept, it is possible that a person answers to be unhappy, but would have said to be happy a short term earlier or later. Although this creates doubts about the reliability of such questions, when covering a big sized group, these effects are negligible.

## The urban environment

We all make daily use of the urban environment. Whenever we move outside going somewhere, we make use of our direct urban environment, but even when we are not moving outside for a day, we often still use the urban environment by looking outside into this environment or getting influenced by sunlight entering our homes. It is therefore not strange that the liveability of the environment is one of the four qualities that have a big influence in how happy we are (Veenhoven, 2012). As this area is often designed by urban planners, only a small group of people who sometimes does not even use the specific environment they are designing, they have a big influence on the happiness of the whole society. Therefore it is important that they realize this influence and gain knowledge about the wishes of the residents, as well as gaining knowledge about what makes them happy.

### *Liveability*

As described in the former chapter, the liveability (the good life, as called by urban planners) of the environment has a big influence on the happiness of people (Veenhoven, 2012). As we all make daily use of this space, it is important to know how the urban environment can be made liveable. As described by the authors of Victorian Competition and Efficiency Commission (2008) liveability can be defined as follows: "Liveability reflects the wellbeing of a community and represents the many characteristics that make a location a place where people want to live". Important from this sentence is the fact that it is based on 'the wellbeing of the community' and 'the place where people want to live' which shows clearly that the residents should be standing central when improving their liveability of an area. According to Howley et al. (2009) liveability can be divided into six themes which should all be considered when designing an area.

The first theme is the finance or cost of living, which not only influences the liveability, but also contributes to the life satisfaction. Although this has a lot to do with the income and social benefits people can receive, which is not directly influenced by designs made by urban planners, this does not mean urban planners could not influence this by other means. So is it possible to find out the locations often visited from the design area, and by creating better bike and walk connections between these points, biking and walking can be stimulated above using the public transport or car. This is just one simple example on how the urban design can influence the cost of living for people, without influencing any of their incomes.

Not only can bike and walk connections influence the cost of living, it is also of great importance for the theme of mobility and transport. According to the research of Howley et al. (2009) poor public transport and traffic congestions were among the most important problems within the researched area. Not only does this cause unhappy people as their way to work or other places take long, it also costs lots of money (Jayasooriya and Bandara, 2017; Arnott and Small, 1994), as well as causes a lot of pollution within the area (Farda and Balijepalli, 2018). Therefore, a good infrastructural network is not only important for the direct happiness, but also for the health of people which indirectly also affects the happiness (Veenhoven, 2012).

As third, the health and pollution of an area are important of the liveability of an area. An area with more pollution has negative effects on the health and is seen as less liveable (Howley et al., 2009). This is not only related to reducing pollution by reducing traffic or supporting cleaner traffic methods, but also the addition of greenery or sound barriers can play roles within the reduction of pollution, thus increasing the health of the people.

The fourth theme is focused on the availability and proximity of facilities and services. As mentioned at point three, the health plays an important role in the happiness of people. Not only can the health be influenced by less pollution, but also the proximity of a hospital or general practice has influence in this health aspect. Aside of the effect on the health, it is also proven that the proximity of all other types of services and facilities makes a neighbourhood to be experienced as better liveable (Howley, et al., 2009).

Not only do the proximity of close services and facilities generate direct happiness, it also supports for meeting points within the area, which influences the indirect happiness as it foresees in better opportunities for social cohesion within the neighbourhood. According to Howley et al. (2009) this social cohesion is another important aspect of the liveability of a neighbourhood. The better the social cohesion is, the better

liveable the neighbourhood is. Not only does a better social cohesion foresee in a better liveability, it also improves the happiness of the people as it also touches the liveability of the environment quality as seen from the sociologic point of view (Veenhoven, 2012).

The sixth and final theme mentioned by Howley et al. (2009) is the safety of the neighbourhood. As well as the cost of living or finance, the safety is not often directly influenceable by urban planners. This is caused by the many causes leading to criminality, and all the different actors playing a role within creating safety. Although it is hard to influence safety, there are methods to make an area feel safer. One of such methods is by using more street light, making the surroundings better visible at night, which reduces the crime rate within an area (Xu et al, 2018).

### *Citizens' participation*

To increase happiness, a lot of different measures should be taken, having all different effects on our happiness. In the discussion about liveability, some of these aspects have been mentioned, but one issue has not been tackled yet. As mentioned by Kroll (2011), happiness is not similar for everyone, but is something different per individual and period. Therefore, it is not only important that urban planners consider the general knowledge about liveability to increase the happiness of a neighbourhood, but they should also consider individual wishes. Of course, it is not possible to consider the wishes of all of us when designing a neighbourhood, as there will be to many different and colliding wishes. Although this is not fully possible, it is possible to get to this goal as close as possible. To get this done it is important to involve the citizens of a neighbourhood within a design process. This could be done by making use of citizens' participation methods, in which citizens can be involved in the design process via questionnaires asking about opinions, all the way to workshops which let the citizens co-design. As co-designing gives us the opportunity to participate within the design of our neighbourhood, it foresees in even more opportunities to improve the liveability, and thus improving the happiness of all of us.

### *Conclusion*

Happiness within the urban environment is mainly influenced by the liveability of this environment. To make an area liveable, six aspects should be considered. First the finance or cost of living, which can be difficult to influence by urban planning but there are some cost saving opportunities. Secondly there is the mobility and transport, showing direct and indirect effects on happiness in the form of traffic time, costs and pollution. Thirdly our health and general pollution are themes influencing our happiness, as it is shown that healthier people are happier and a less polluted area positively influences the health. The fourth theme is the availability proximity services and facilities. Having these close saves time, thus making people happier, but also stimulates social cohesion, which also has proven to make people happier. This social cohesion is therefore mentioned as fifth point, directly linking to the liveability concept seen from the eye of sociologists. As last the liveability is also influenced by the safety of the area. Although a lot of actors are involved within the safety, urban planners are able to contribute to safer areas, for example by using more street light.

Although all these themes improve the general liveability of a neighbourhood, it is also important to consider the individual liveability and happiness. As it is shown before, everyone has different things that makes them happy. To be able to get to know these individual aspects, the use of citizens' participation methods within urban designing should be used. These methods provide a platform for us to explain our personal wishes and to make it possible for us to co-design. Although citizens' participation within the urban design can be a helpful method, we should also be aware of the fact that it is never possible to satisfy all participants for a 100 percent.



## Conclusion

To be able to improve the happiness by the urban environment, the four qualities of life are being considered. The most important one is the liveability of the urban environment, as this quality of life is all about the way the urban environment is perceived. The liveability of the urban environment consist of multiple aspect, all having a direct influence on the happiness of the people. The first aspect, cost of living or finance, not only influences our happiness from the liveability quality, but also from the life satisfaction quality. As the cost of living is mainly focused on income and expenses, it is harder to influence this by the mean of urban design. One of the only methods is by designing in such a way we can save costs, for example by using the bike or walk instead of using a car or public transport. Not only can changes in mobility and transport influence our costs, shorter travel times also increase our happiness directly, and the decrease of pollution influences the health of the people. It is proven that a better health also influences our happiness, mainly causing a better life-ability. This makes that creating green areas or sound barriers to reduce different types of pollution, as well as the availability and proximity of healthcare services are also indirectly influencing our happiness. Not only does the availability and proximity of healthcare services influence the liveability, also the availability and proximity of other facilities and services contribute to a better liveability of an area. It gives us more opportunities to participate in activities taking place in these facilities and services, thus increasing our social cohesion within the neighbourhood. This increased social cohesion does not only affects our happiness as we have other people around us, it also affects our happiness as it gives us possibilities to contribute to society, tackling the utility of life quality.

As all these liveability aspects are considered to make our lives happier, it should not be forgotten to also consider our personal happiness. Everyone has a base happiness, according to the hedonic treadmill, making our happiness moving back towards this base point after a period of extreme happiness or sadness. As this base point is different for everyone of us, it is important to also consider these differences within the planning of the urban environment. This could be done by citizens' participation methods, giving all of use the opportunity to show what makes us happy and to let us contribute within the decision making of our own neighbourhoods, being able to improve our happiness and maybe even improving our base level of happiness to make us happier

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