

PERCEIVED SAFETY IN NEIGHBOURHOODS

A design to increase
the subjective safety

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EXECUTIVE SUMMARY

The motive for this thesis project was to translate an intervention into a product that is applicable and replicable in other neighbourhoods to improve the perceived safety. This project was executed in collaboration with MV Design and Matching Futures. These design consultancies initiated an intervention in 2019 to stimulate the energy transition in the neighbourhood Reyerood in the south of Rotterdam. This intervention used the frame of the night and was therefore called 'De Nacht Club' (The Night Club). During this intervention, the perceived safety in the neighbourhood came forward as an issue. In 2021, the design consultancies wanted to proceed with this concept with the new motive of improving the perceived safety in neighbourhoods in the Netherlands.

First, research was needed to identify why or how De Nacht Club could improve the perceived safety in neighbourhoods. Systems thinking is applied to describe how perceived safety in neighbourhoods originates. This research includes a theoretical study as to what perceived safety is, as well as field research with the neighbourhood Reyerood as a case study. The combination of the desk and field research leads to the insights needed to create a systems map of perceived safety in neighbourhoods. Based on this system, possibility space is identified to intervene in the system, incorporating the existing knowledge and resources of the initial intervention.

The research phase indicates that the perceived environment of people affects the perceived safety. By broadening people's (social/physical) environment, people affect their expectations and perceptions of the environment. This can be done by broadening the public familiarity or strengthen the collective efficacy. The following field of tension comes forward. To increase one's perceived environment, one must encounter or discover new environments. But discovering new environments is often unsafe and defiant in itself. This describes the frame of De Nacht Club: to offer a safe way to discover new – social and physical - environments. De Nacht Club uses the power of genuine encounters to do so. This way, De Nacht Club affects people's perceived environment and therefore their perceived safety.

In this report, a (re)design of the product (De Nacht Club) is presented with a coherent strategy to improve the perceived safety in neighbourhoods. The strategy consists of the substantiation of the design frame, a brand vision, mission and DNA and a three-piece method. Furthermore, the strategy includes a generic approach to applying the product to different neighbourhoods. This approach is presented in the shape of a set of design criteria for De Nacht Club. These criteria consist of six categories to ensure the value of an edition of De Nacht Club. Lastly, the set of criteria is refined based on expert validation.

The product and coherent strategy designed in this project, translate the initial intervention into a coherent product to improve the perceived safety in neighbourhoods. The set of design criteria offers a generic approach to applying De Nacht Club to other neighbourhoods while ensuring the value of the intervention.

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Chapter 1

Project introduction

1. PROJECT INTRODUCTION

1.1 Project context

1.2 Project approach

This thesis describes the final project of the MSc Strategic Product Design of the faculty of Industrial Design Engineering, TU Delft. The project is executed in a collaboration between the TU Delft, Matching Futures and MV Design. This first chapter gives an introduction to the project. It explains the context and the approach of the project. It also provides the structure of the report.

1.1 Project context

In 2019, the social design consultancies Matching Futures and MV Design started cooperating on a project. This project was commissioned by the municipality of Rotterdam. It was part of a national program for the energy transition in the Netherlands (PAW: Program for Gasfree Neighbourhoods). In 2019, the scope of this project was the neighbourhood Reyerroord in the south of Rotterdam. The reason for this was that this neighbourhood - Reyerroord – needed sewerage replacement in the upcoming years. The municipality wanted to use this as an opportunity to turn Reyerroord into a ‘gasfree’ neighbourhood. Therefore, the inhabitants had to be informed and stimulated to switch away from natural gas.

The project of Matching Futures and MV Design functioned as social groundwork to stimulate the energy transition in the neighbourhood Reyerroord. The intervention they designed was based on the frame of ‘the night’ and therefore the intervention was called ‘De Nacht Club’ (The Night Club). The frame uses the sincerity that the night can provoke in people to create a ‘safe place for unsafe topics’. De Nacht Club focuses on the relations between inhabitants and between inhabitants and professionals. Two physical and two digital editions (because of the Covid-19 pandemic) had been held until the starting point of this particular thesis project in February 2021. During this project, the perceived safety came forward as an issue amongst inhabitants in this particular neighbourhood.

In January 2021, Matching Futures and MV Design wanted to proceed with the concept ‘De Nacht Club’. For them, the initial design challenge to stimulate the energy transition in Reyerroord had come to an end. Instead, the potential influence of the concept on the perceived safety was now the motive for the continuation of De Nacht Club. An understanding as to how or why De Nacht Club seemed to address the complex societal issue of perceived safety in Reyerroord was lacking. Therefore, this thesis project was initiated in collaboration with the social design consultancies. The motive of this project is to translate De Nacht Club into a product that is applicable and replicable in other neighbourhoods to improve the perceived safety. This includes a design that offers a generic approach to do so. In the following paragraph, the project approach is stated. Also, the main research questions of the project are described. First, a general introduction to the issue of perceived safety is given.

Introduction perceived safety

Safety is a basic human need (Maslow, 1970). Safety is explained by Maslow in the broad sense of the word. It represents security, protection and ‘freedom from fear, anxiety and chaos’. An important aspect of safety is how people perceive safety. This describes the difference between objective and subjective safety. The perceived safety is subjective, for it differs for each person and context. Therefore, it is more complex than objective safety. An important theoretical framework that is used in this project is the research of Marnix Eysink Smeets on safety and perceived safety in 2016 (see also figure 4).

1.2 Project approach

In this project, the systemic design approach is used (Jones, Systemic Design Toolkit, 2021). The benefit of this approach is to look at complex (societal) issues as systems. This way, an overview and understanding can be gained as to how and why certain factors influence the system as a whole. The systemic design approach can be explained according to the classic double-diamond structure (figure 1). Whilst a design project often is a cycle in which the problem and solution co-evolve, it consists of two main phases. Therefore, the report is divided into two parts.

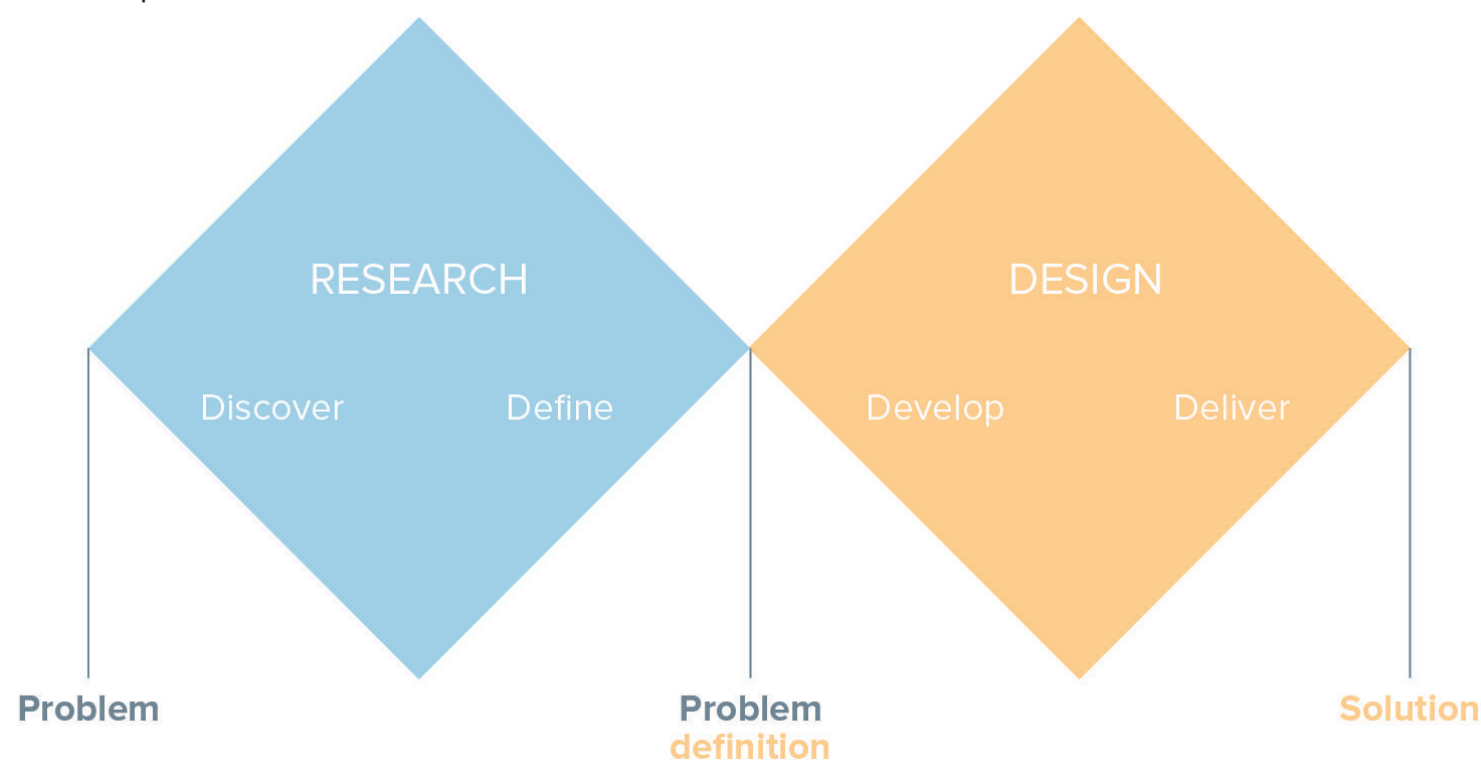


Figure 1: The Double Diamond process model.

Part I - Research

In part I (Research; the first diamond) systems thinking is applied to create a systems map of a complex issue. In this project, systems thinking is used to describe and map the societal complexity of perceived safety in neighbourhoods. According to the methodology of systems thinking, the first step is to (desk) research the theory behind the issue of perceived safety. Next, a closer look at the system itself is taken. In this thesis, the neighbourhood Reyerwaard in Rotterdam is taken as a case study for this. Field research is executed to create a thorough understanding of the system. In the last step of this phase, a systems map is created by combining the insights from the theory and the field research.

Chapter two describes the desk and field research of the research phase. In chapter three the systems map is stated, including certain 'leverage points' that offer possibility space to intervene in the system in part II: Design. This identified possibility space incorporates the knowledge and existing networks and resources of the current concept of De Nacht Club.

The goal of part I is to gain a general understanding of how perceived safety in neighbourhoods arises. Therefore, the main research question in this part is the following: **'what is perceived safety and how does it originate in neighbourhoods?'**

Part II - Design

In part II (Design; the second diamond) design thinking is used to (re)design an intervention in the system. In this part, a generic approach for De Nacht Club to improve perceived safety in neighbourhoods has to be developed. This includes a design to make the concept applicable and replicable to other neighbourhoods. The main design question here is the following: **'how to design a generic approach for De Nacht Club to improve the perceived safety in neighbourhoods in the Netherlands?'** This generic approach is expressed in the form of a coherent strategy and method for De Nacht Club. As a part of this strategy, a design to practise this strategy generically is created. Chapter four describes the ideation and conceptualizing based on the possibility space that was identified. In chapter five, the product and coherent approach are described. Validation of the product is stated in chapter six.

Part I

Research

Chapter 2
The context

Chapter 3
The system

Chapter 2

The context

2. THE CONTEXT

2.1

Perceived safety

2.2

Perceived safety in Reyerood

2.3

The neighbourhood snapshot

2.4

Field research

The main research question for this project is stated as: what is perceived safety and how does it originate in neighbourhoods? This question can be divided into two aspects: perceived safety and neighbourhoods. The first step is to gain an understanding of these aspects to create a generic system of perceived safety in neighbourhoods. Therefore a context analysis of the two aspects must be executed. First, a rich understanding of safety and perceived safety is gained through literature. Secondly, an understanding of how perceived safety relates to a neighbourhood context is needed. To create this second insight a rich picture of the focus neighbourhood Reyerood in Rotterdam is created. This neighbourhood is used for a context analysis because of the resources and the network of De Nacht Club and the issue of perceived safety that came forward here (see introduction). Lastly, field research is done to gain a general understanding of the system of perceived safety in neighbourhoods. In the next chapter, this is translated into a (visual) understanding of the system of perceived safety in neighbourhoods.



Figure 2: Maslow's Hierarchy of Needs (Maslow, 1970) (Image: Jamie Grant, 2021).

2.1 Perceived safety

Literature research on perceived safety starts with an understanding of safety itself. In Maslow's hierarchy of needs (figure 2) safety is defined as a basic human need. Maslow describes safety needs in a broad sense as: 'security; stability; dependency; protection; freedom from fear, from anxiety and chaos; need for structure, order, law, limits; strength in the protector; and so on' (Maslow, 1970). This hierarchy of needs suggests that people go up the pyramid when making decisions. Only when basic physiological and safety needs are met, people address higher (psychological) needs like belonging and esteem.

As stated in chapter one, perceived safety can be explained as subjective safety. The perceived safety is subjective, for it differs for each person and context. Objective safety however can be defined as the actual numbers. For instance the number of burglaries or the number of reports of nuisance. The perceived safety is subjective and therefore unique for every person or context. A perceived value is the result of the comparison between the expectations and perceptions a person has. The expectations serve as a reference point on which the perception is formed (Bitner et al., 1997) (Yasir et al., 2019) (Zeithaml, 1998).

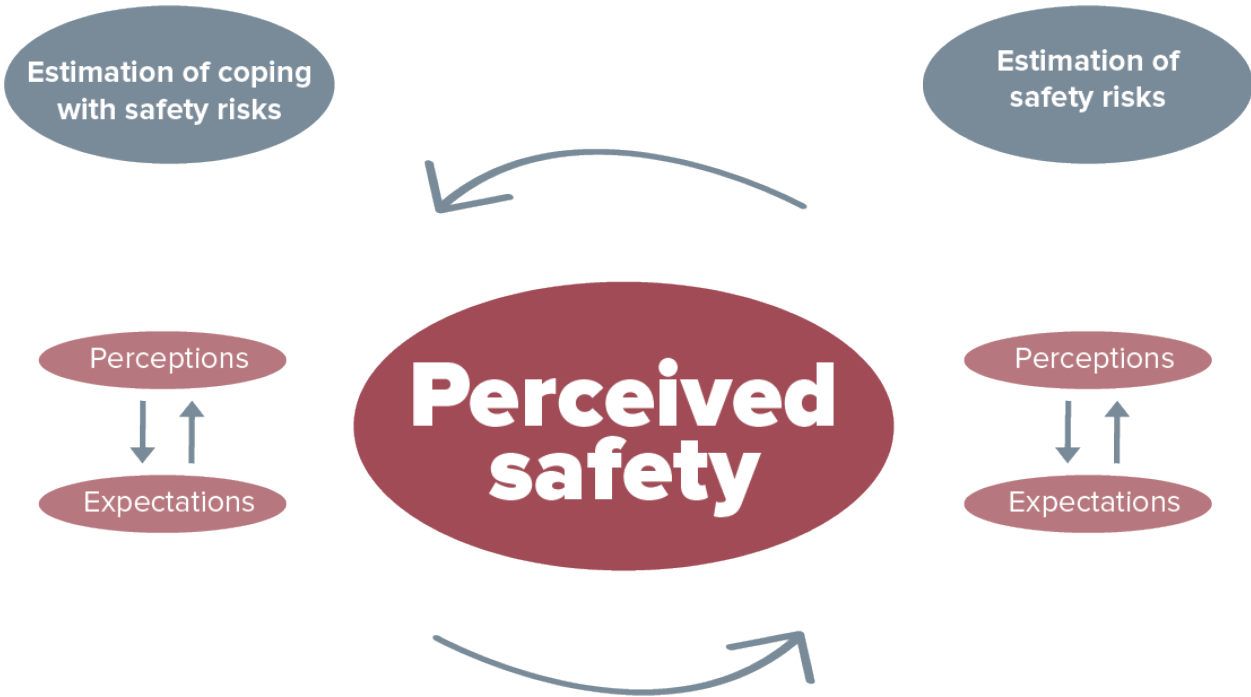


Figure 3: Perceived safety: a comparison of expectations and perceptions.

Thus, perceived safety in neighbourhoods is the result of a comparison between expectations and perceptions of one's safety in a certain context or environment (figure 3). Eysink Smeets (2016) states that: 'only if the estimation of the risks is greater than the estimation of coping with these risks, there exists a perceived unsafety.' A deeper understanding of factors that influence perceived safety in neighbourhoods is described in the next paragraph in three levels.

2.1.1 A complex societal issue

Personal level (characteristics)

Choi and Matz-Costa (2018) link perceived safety to the context of neighbourhoods on a personal level. They reveal 'a negative relationship between neighbourhood safety and psychological distress and depression' (Choi & Matz-Costa, 2018). This finding shows the interaction between neighbourhood safety and people's mood or characteristics. Other research shows the relationship between personal characteristics - like age, self-efficacy or attitude - and perceived neighbourhood safety (Beenackers et al., 2011). Self-efficacy is a personal characteristic of people. It describes not just the extent to which people can trust their capabilities (self-reliance), but also the extent to which people can organise help or assistance from others when needed (Reijmers, 2017).

Meso level

On a broader societal level, self-efficacy can be voiced as collective efficacy. Sampson et al. (1997) define collective efficacy as: 'social cohesion among neighbours combined with their willingness to intervene on behalf of the common good.' Baraka (2016) states that the connection between the area and the residents is important for a high degree of collective efficacy.

Other research also addresses this influence of broader (meso) societal levels on neighbourhood safety. For instance the social and physical neighbourhood characteristics of an environment (Helbich et al., 2020). The social environment is defined by Eysink Smeets (2016) as the 'social quality of the environment'. He explains this as the ethnographic structure of a neighbourhood describing differences in ethnicity, age or confronting lifestyles. Public familiarity is an important factor in this social environment. Blokland and Nast (2014) explain public familiarity as: 'both recognizing and being recognized in local spaces'. The address especially the importance of so-called weak ties: 'it is through conversations with people whom we do not know that public familiarity develops and brings about a comfort zone: here we learn to deal with differences, here we acquire new information about unknown others, and in such conversations we learn what to expect' (Blokland & Nast, 2014).

'It is through conversations with people whom we do not know that public familiarity develops [...] in such conversations we learn what to expect.'

- Blokland & Nast, 2014.

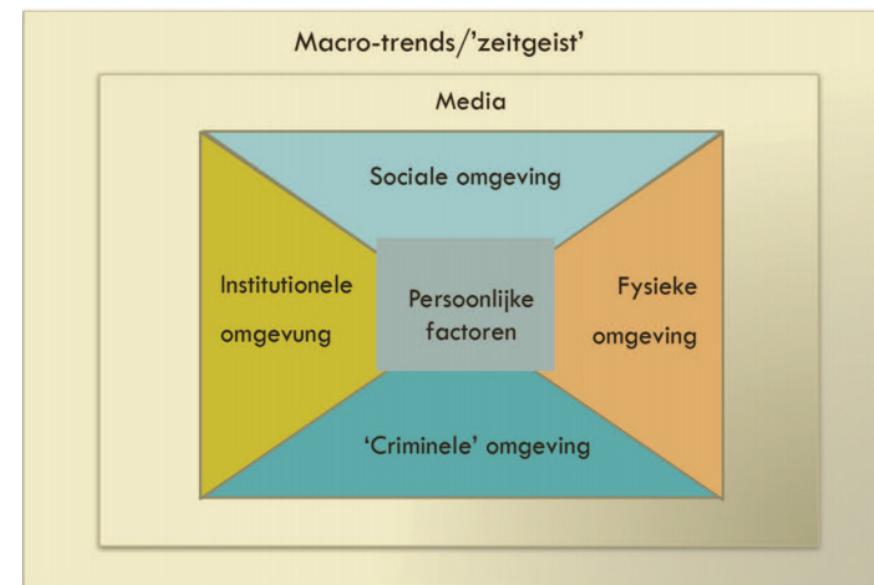


Figure 4: Factors that influence perceived safety (Eysink Smeets, 2016) (Dutch).

De Rooij and Van Nes (2015) stress the importance of the physical environment of a neighbourhood concerning perceived safety in three case studies in Rotterdam. They link perceived safety to physical characteristics like 'buildings or blind walls'. The European Spatial Development Perspective (ESDP) is also committed to what they call spatial integration: '[it] expresses the opportunities for and level of (economic, cultural) interaction within and between areas'. (Uszkai, 2015).

Furthermore, the cleanliness of a neighbourhood influences how people perceive the (physical) environment, and thus the subjective safety. Besides litter, cleanliness describes the extent to which an area is clear, pleasant and legible (Eysink Smeets, 2016). Also, the layout of the public space is a typical physical environment factor. Loewen et al. (1993) showed that 'light, open space and access to real refuge' are the most important features of the physical environment in relation to perceived safety. Furthermore, Sayin (2015) argues that social presence - 'the sense of being with another' (Biocca et al. 2003) - is of direct influence on the perceived safety of an area.

Eysink Smeets (2016) points out two more characteristics of the neighbourhood concerning perceived safety (figure 4). Besides the social and physical environment, he addresses the 'criminal' and 'institutional' environment. The institutional environment he explains as the 'credibility and involvement of authorities'. It has to do with to what extent people trust in the support of institutions like the police or the municipality. The criminal environment that Eysink Smeets points out has to do with objective safety. It is about the actual numbers, but also about the consequences like criminal groups or subversion. Undermining is a special factor in this criminal environment. It connects the subjective and objective safety. Boelens (2020) explains undermining as a two-sided phenomenon. The illegal activities on the one side, and the undermining behaviour on the other side where the criminal activities meet society. Money laundering or shady lawyers are examples of undermining. Undermining can influence the perceived safety because it can blur the lines between organized crime and society. Undermining can affect the norms and values that people have.

National (global) level

In figure 4, two more factors that influence perceived safety are stated by Eysink Smeets. He points out the 'Zeitgeist'. This refers to national or global trends and developments. Lastly, there is the role of the media. The media influences expectations and perceptions. The role of the media is especially important in areas or environments where personal experiences lack. As Eysink Smeets (2016) gives the example: 'people tend to think better of their neighbourhood.'

2.2 Perceived safety in Reyerood

In the previous paragraph, a thorough understanding of safety and perceived safety is gained. Key factors and influencers are described. The next step is to relate this theory to neighbourhoods. To do so, a closer look is needed at a specific neighbourhood. This way, a deeper understanding of how perceived safety originates in neighbourhoods can be gained. For this project, the specific neighbourhood Reyerood, in the south of Rotterdam, the Netherlands, is used as a case study. In the previous work of MV Design and Matching Futures, the issue of perceived safety came forward in this neighbourhood (see introduction). For this reason, it is important to research whether this relatively low perceived safety in Reyerood can be confirmed. Moreover, what causes this lower perceived safety in Reyerood. In the end, a closer look at the perceived safety in Reyerood creates a more generic understanding of the complex system of perceived safety in neighbourhoods.

The figures on this page are produced on behalf of the municipality of Rotterdam. They describe the district of Groot IJsselmonde-Zuid. Reyerood is one of three neighbourhoods that constitute this district in the south of Rotterdam. Wijkprofiel Rotterdam (2020) describes the physical, safety and social index. Every year they create these indexes based on registrations and survey data. They include for the **physical index** themes like 'living (experience), public space and facilities'. For the **safety index**, they include for instance 'perceived safety, burglary and vandalism'. They describe the **social index** by 'perceived quality of life, (collective) efficacy, participation and (social) bonding'. (Wijkprofiel Rotterdam, 2020)

Figure 5 and 6 show the difference between the physical, safety and social index in Groot IJsselmonde-Zuid. Thus, data from 2020 compared with 2018 (figure 5) shows that the physical and social index have decreased and the safety index has increased. However, since 2014 (figure 6) the physical and social index have barely increased, while the safety index clearly has. Still, the **perceived safety** in Groot IJsselmonde-Zuid is relatively low (figure 7). Here, the increased perceived safety is shown over the years. It is still well below the average of Rotterdam. (Wijkprofiel Rotterdam, 2020)

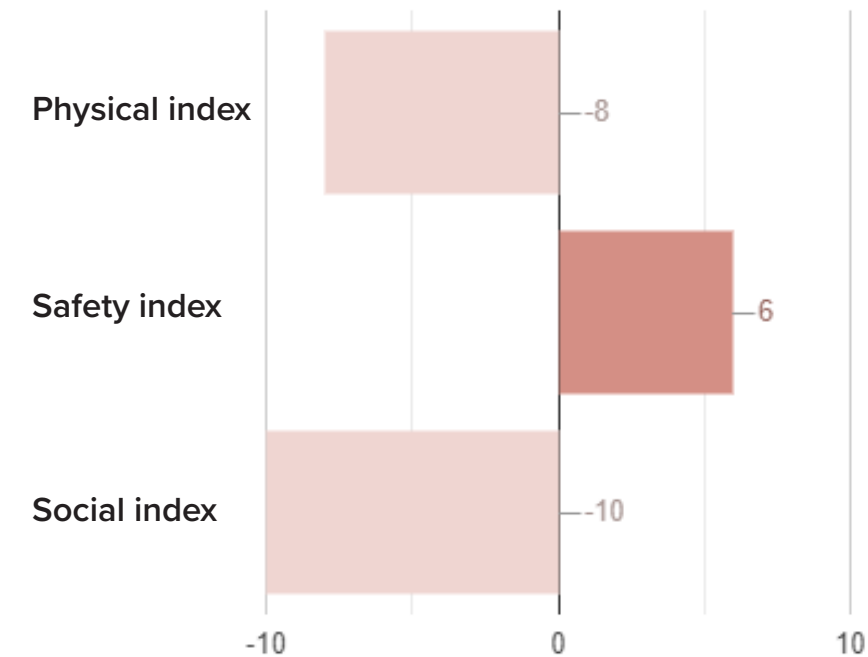


Figure 5: A comparison of the physical, safety and social index of Groot IJsselmonde-Zuid between 2018 and 2020. (Wijkprofiel Rotterdam, Groot IJsselmonde-Zuid, 2020).

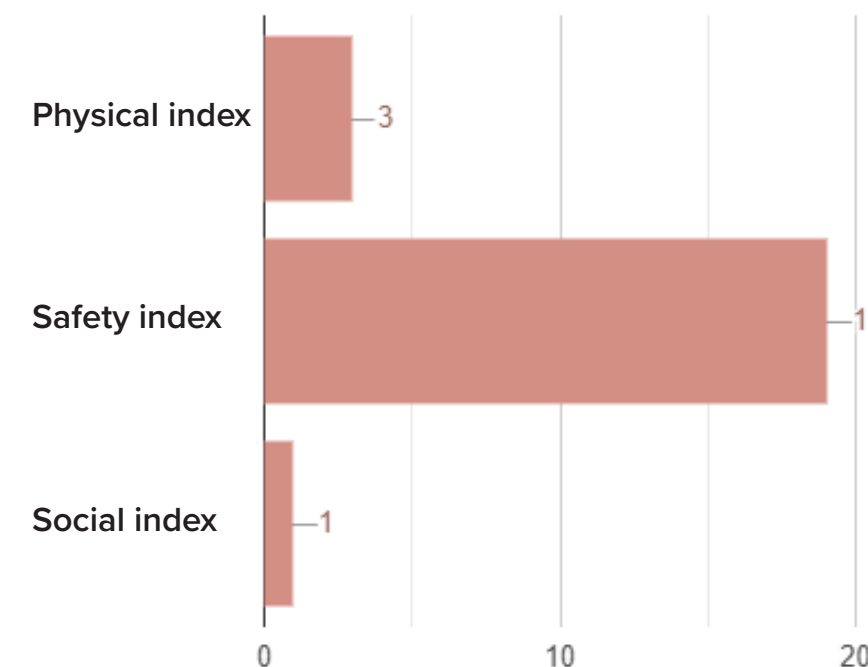


Figure 6: A comparison of the physical, safety and social index of Groot IJsselmonde-Zuid between 2014 and 2020. (Wijkprofiel Rotterdam, Groot IJsselmonde-Zuid, 2020).

Perceived safety index (average Rotterdam in 2014 = 100)

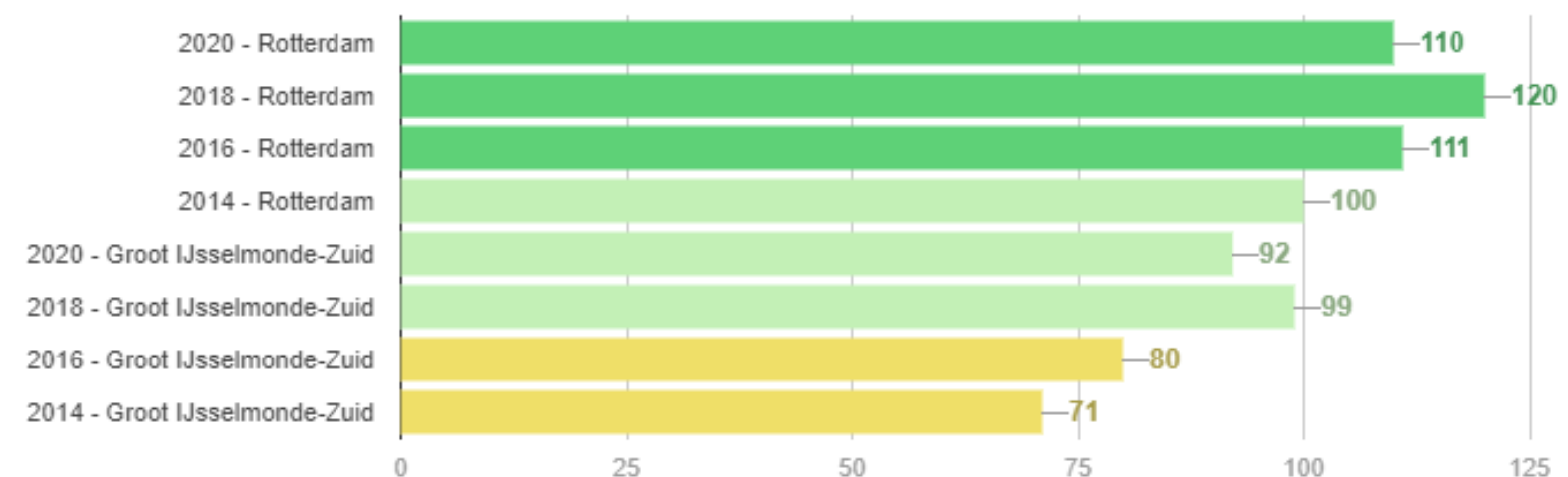


Figure 7: Perceived safety in Groot IJsselmonde-Zuid and Rotterdam over the years (Wijkprofiel Rotterdam, Groot IJsselmonde-Zuid, 2020).

2.3 The neighbourhood snapshot

The figures and numbers of the previous paragraph confirm the relatively low level of perceived safety in Reyerwaard. It is important to take a closer look at the neighbourhood and its characteristics itself to understand how this originates. In this paragraph, the desktop research in the form of a context analysis of Reyerwaard is described. This is also visualized in a neighbourhood snapshot of Reyerwaard (figure 8). In the next paragraph, the field research and interview insights are stated.

Reyerwaard is a neighbourhood that is quite average in terms of numbers and data. Therefore the neighbourhood has always been quite average and ordinary. The municipality did not pay too much attention to it because of this reason. This resulted in low involvement of the neighbourhood and low social capital. While the average objective safety has decreased in the last few years in Rotterdam, subjective safety has not, according to Wijkprofiel Rotterdam (2020) and Eysink Smeets (2016). Reyerwaard is an example of this phenomenon as can be concluded from the field research (see next paragraph).

The context analysis of the neighbourhood Reyerwaard is presented in this report in a neighbourhood snapshot (figure 8). The model of Eysink Smeets (2016) (see figure 4) offered a framework to categorize the context analysis and its findings. That is why the neighbourhood analysis is divided into five main parts. The inhabitants, the social area, the physical area and the institutional environment (the municipality) are represented in the Reyerwaard snapshot. The criminal environment is discussed separately.

“Reyerwaard is a place that hasn’t been looked after too well for a long time, that’s how the people feel it too.”

- Local official

2.3.1 Criminal environment

The criminal environment in Reyerwaard, also explained as the objective safety, is quite average in comparison with the south of Rotterdam. But the average in the south of Rotterdam is below the average of the rest of the city. In terms of objective safety, the neighbourhood has improved since 2014 just like the entire city has. Still, Rotterdam - being one of the major cities in the Netherlands - constantly has to deal with safety issues (Wijkprofiel Rotterdam, 2020) (Eysink Smeets, 2016).

2.3.2 The inhabitants

In Reyerwaard there is a relatively high amount of residents below the age of 14 and above the age of 65. This causes a generation gap. Because of a relatively high amount of ethnicities, the second gap is an ethnic gap. There also is a relatively high amount of temporary residents. For instance temporary housing for immigrant workers, refugees, asylum seekers or ex-offenders. This results in minimal social interactions and familiarity among neighbours due to a high level of different cultural habits and interests. (Shah, 2020) (Borgman, 2019).

2.3.3 Physical environment

Reyerwaard is built in the 1960s. The area is spaciouly laid out with large, open and anonymous spaces. The majority of the buildings throughout the neighbourhood are residences. There are few shopping facilities or hospitality services. Most of these are gathered in one central leisure and shopping area: the mall. This decreases the motivation and spread of street life and social interaction throughout the neighbourhood. It is described as ‘dull and not vibrant’ (Shah, 2020) (Borgman, 2019).

2.3.4 Social environment

The social environment is illustrated as non-active and there is a lack of social spaces, especially for the youth (Koekoek, 2019). Also, Reyerwaard is described by a lack of ‘sense of togetherness’ and ‘belonging’. Shah (2020) even states that ‘there is a unanimous concern about the safety in the neighbourhood. The key social spaces in the neighbourhood are limited and very ordinary. Borgman (2019) concludes that the ‘social and cultural capital below average’. As described in the ‘inhabitants’ section above, the social interactions and (public) familiarity are low in Reyerwaard. This affects the overall social environment negatively.

2.3.5 Institutional environment

The institutional environment in Reyerwaard is mostly represented by the municipality and the police. Reyerwaard+ is a split-off from the municipality of Rotterdam. These local officials are still part of the municipality but they experiment with a new form of policy. Their ambition is first to increase the low level of participation and involvement of Reyerwaard. But secondly to transform the municipal organisation itself. In their words: to practise a ‘middle up-down approach’ instead of the traditional top-down approach of municipalities. This new approach of Reyerwaard+ results in a proactive attitude of the municipality in the neighbourhood since 2019 (interview with a local official, 2021). They want to increase the participation and involvement of the inhabitants in the neighbourhood. Some new initiatives and activities in (the social environment of the) neighbourhood are a consequence of this. For instance Oeverloos en de Duurzaamheidswinkel (see also figure 8).

The context Reyeroord



Figure 8: A neighbourhood snapshot of Reyeroord, Rotterdam.

2.4 Field research

In the first paragraph of this chapter, a conception is gained – through research - of perceived safety. In the second paragraph, this theory is related to neighbourhoods with a closer look at the neighbourhood Reyerwaard in Rotterdam. The previous section describes the characteristics of Reyerwaard in a neighbourhood snapshot. After this desk research, this fourth paragraph describes the field research that is executed in Reyerwaard. This is needed to create a system overview of how perceived safety originates and relates to a neighbourhood.

Besides theoretical knowledge, understanding and insights from the field (Reyerwaard) are desired. The purpose of the interviews is to gain insights into the perceptions and expectations of the different actants in the system. Specifically the perceptions and expectations of the social, physical, institutional and criminal environment ('meso level', see 2.1.1). The insights contributed to the generic understanding of the system that is discussed in chapter three. This step is described as 'listening to the system' (Jones, Systemic Design Toolkit, 2021). In this paragraph, the key insights of the field research are presented. For background information and elaborated details from the interviews, see appendix III.

The interviews were executed with a diversity of stakeholders (actants) of the system. To create an objective view of the different stakeholders in the system, interview profiles were set up according to the systemic design approach (Jones, Systemic Design Toolkit, 2021). The purpose of these profiles was to create a broad spectrum of interviewees and to be able to 'listen' to a diversity of stakeholders in the neighbourhood. The interview profiles included: inhabitants (adults, youngsters and elderly), local officials (Reyerwaard+, municipality of Rotterdam), local professionals (welfare/neighbourhood (net)workers: pit010) and a local policeman. In total, ten interviews with twelve different interviewees were executed according to these profiles. The interviews were executed on location (in Reyerwaard) or online. The interview insights are now described according to the four types of environmental characteristics (see 2.1.1 and figure 4).

“Everyone is like: ‘ah, it’s not that bad, look at the numbers!’ That’s wrong because it is a problem.”

- Local official/inhabitant [concerning safety in Reyerwaard]

2.4.1 Interview insights

Social environment

During an interview, a local official said: 'Reyerwaard is an area that hasn't been looked after too well for a long time, and that's how people feel it too.' This reflects the vibe in the neighbourhood in a good way. It summarizes the feelings of the interviewees from different profiles. Inhabitants mentioned the feeling that 'the neighbourhood has deteriorated in the last couple of years.' Youngsters said they would definitely 'leave the area in the future'. On the other hand, one inhabitant mentioned the fact that he greets everyone in his block of houses. Another inhabitant answered that she knew most of the neighbours 'in her block'. She continued: 'People used to keep an eye on each other, it was more village-like, people spoke to each other and dared to address people. Nowadays, that is no more.' This contributed to the impression that public familiarity is low in Reyerwaard, apart from some direct neighbours. Interviewees also spoke of the lack of sense of belonging and respect in the neighbourhood. Inhabitants, local officials and a local professional all addressed the generation and ethical gaps in the neighbourhood. They mention for instance working immigrants that rent apartments for short-terms or asylum seekers as temporary residents. But also elderly people that have been living in the area for decades. The interviews show that the composition of the population is diverse and the stability is low, due to a relatively high number of temporary residents.

Physical environment

During the interviews that were done on location, observations could be made of the physical environment. It occurred that the ratio of public and private buildings was not in balance. The public buildings, like the hospitality industry and shops, were centralized in one shopping mall. This results in a relatively high amount of houses throughout the neighbourhood itself. One inhabitant mentioned this was 'ideal' for him. Another inhabitant mentioned she could imagine that this did not contribute to social interaction in the streets. Also, youngsters mentioned the lack of public spaces or activities for them. They would always leave the neighbourhood to spend time with friends they said. A local official said: 'it doesn't have to look so boring' concerning the physical layout and structure of the area. And the quote: 'there is no real place to meet' was supported by observations during the interviews. Another local official said that Reyerwaard is never considered a real 'problem neighbourhood'. This resulted in a lack of attention from the municipality which is reflected in the deprecated physical characteristics of the neighbourhood. Inhabitants also mentioned several issues of pollution like litter or dog faeces but also the general attractiveness. For instance, interviewees indicated several unkempt and 'noisy' balconies and public spaces. Observation indeed indicated a certain amount of litter or 'unkempt' spaces in several areas.

Institutional environment

As for the institutional environment, some facts are already discussed in section 2.3.5. The interviews however gave a deeper understanding of the role of the institutions. They showed that the local officials and local policeman all seemed to indicate that the involvement of institutions in Reyerood had been relatively low for a long time. Decentralisation of enforcement and policy of the last decade caused less credibility and less low-threshold communication. This resulted in less (personal) interaction between institutions and inhabitants in the neighbourhood. 'We no longer have footholds in the neighbourhood through which we meet people' the policeman stated. A local official specialized in safety also mentioned that the institutions are 'less approachable' nowadays. She reflected on the role of the municipality and said that this decentralisation and withdrawal from the neighbourhood was not thought through properly.

Criminal environment

An interview quote of a local official concerning safety is: 'everybody is like: 'ah, it's not that bad, look at the numbers. Which is wrong because it is a problem!' As stated in section 2.3.1, the criminal environment in terms of objective safety (the numbers) has been quite average for a long time. The local officials mentioned this as well. The inhabitants had contradicting answers. Some indicated a perceived increase in overall safety, others mentioned the opposite. This underlines the subjectivity and complexity of perceived safety. The local policeman had multiple takings on the safety in the neighbourhood. He stated the over the last decade, the first criminal offence of people was more severe and on average conducted at a younger age. He argued that due to the pandemic, the institutions lost contact with the youth. He fears that this will result in a peak of criminality and criminal offences in the future.

Interview insights conclusion

The most important insight from the interviews is the relatively low social interaction and public familiarity in the neighbourhood. The physical environment is not contributing to the efficacy of individuals nor the collective. There were contradicting finding as to the perceived cleanliness. Another insight was the mutual concern about perceived safety. The interviews suggested a decline in overall attractiveness and sense of belonging in the neighbourhood. Also, low involvement of institutions was indicated in the field research. The pandemic (Covid-19) multiplied this effect.

“People no longer know each other”

- Local official/inhabitant

“It's not that I feel unsafe, but I don't feel safe either.”

- Inhabitant (youngster)

“We no longer have footholds in the neighbourhood through which we meet people.”

- Local policeman

“People can do a lot more in terms of safety than they think.”

- Local official/inhabitant



Oeverloos (Stichting Tussentuin) in Reyerood, Rotterdam (photo by author).

2. THE CONTEXT

KEY INSIGHTS

Expectations and perceptions



Perceived safety is formed by a comparison of people’s expectations and perceptions.

Three levels



Perceived safety is influenced on three levels. Personal characteristics, environmental characteristics and national developments.

Four environmental categories



The environmental characteristics can be divided into four categories. Social, physical, institutional and criminal.

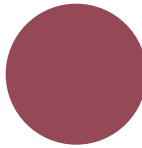
Role of the media



The media influences expectations and perceptions of people, especially when personal experiences lack.

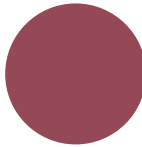
FIELD RESEARCH

Social and physical environment



In the focus neighbourhood, Reyerood, especially the social and physical environment seem to affect the perceived environment. The criminal environment (objective safety) is around the average of the south of Rotterdam.

Public familiarity



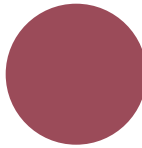
It seems that a low public familiarity in Reyerood affects the perceived safety of people in that neighbourhood. Also, the physical environment is not stimulating social interaction and therefore familiarity and a sense of belonging amongst the neighbourhood.

Institutional environment



The low involvement and approachability of institutions result in low credibility and trust in the institutions in Reyerood. The interview indicates that this has a similar effect on the inhabitants in the neighbourhood. There is low involvement and social interaction between inhabitants and between institutions and inhabitants.

Possibility space



The environmental characteristics offer possibility space for local initiatives or policy to influence the perceived safety in neighbourhoods. Especially the social and physical environment which seem highly interrelated. The approachability and personal involvement of the institutions is an important factor for public authorities that influence perceived safety in neighbourhoods.

Chapter 3

The system

3. THE SYSTEM

3.1	Perceived safety in neighbourhoods
3.2	The leverage points

After the discovering phase in the previous chapter, the findings are to be defined. In this chapter, the insights from the desk and field research are translated into (an overview of) the system of perceived safety in neighbourhoods. This overview is shown on the next page. Some factors are highlighted. These are the leverage points in the system. The leverage points are a result of the knowledge and insights from the previous chapter. They describe the combined knowledge of theory and field research to identify possibility spaces to intervene in the system. The leverage points that offer the most possibility space for De Nacht Club will be discussed in the second paragraph. First, the system itself is explained.

3.1 Perceived safety in neighbourhoods

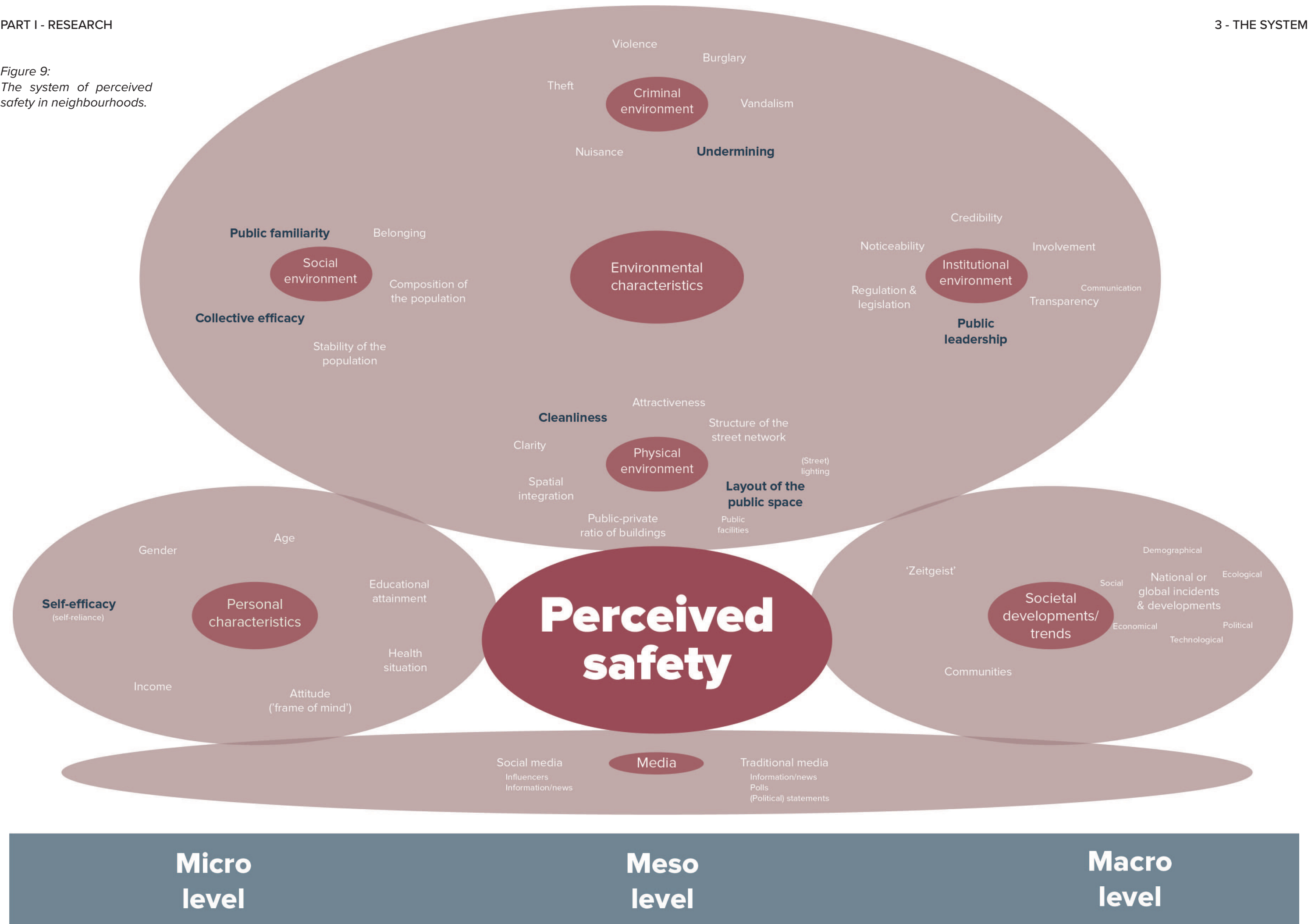
Perceived safety in neighbourhoods is a complex system. It is influenced by multiple factors and variables. Roughly, these factors can be divided alongside Eysink Smeets’s (2016) model: micro-, meso-, and macro-level (see also 2.1.1). The factors are clustered and explained per level. It should be clear that the factors are often interrelated which each other. Both within as between clusters. For an overview of the system that includes how these factors are related, see appendix IV.

First, there is the **micro-level**. This is about the personal characteristics of people. Personal characteristics influence a person’s perceived safety because they affect how people create expectations and perceptions. It is who they are. For local policy or initiatives, this micro-level is difficult to influence. Factors like gender or age for example contribute to the perceived safety because they can affect the expectations of people to cope with safety risks for instance (see also 2.1). However, gender or age cannot be influenced by local initiatives or policy because of their nature. Educational attainment, income or a person’s health situation are personal characteristics that can be influenced by society. But on an individual’s level, this is more difficult.

Then there is the **meso-level**. This level covers the environmental characteristics that influence a person’s perceived safety. These characteristics can be clustered in the social, physical, institutional and criminal environment (see chapter 2). These factors and clusters offer possibility space to improve the perceived safety for local initiatives or policies. Namely, physical environmental characteristics are typically factors that can be affected by actants in the system like the municipality, the inhabitants or local professionals. The structure, spatial integration or clarity of an environment are properties that can be altered within a foreseeable timeframe. The physical environment has a clear link with the social environment. For instance, the public-private ratio of an area can influence the social interaction in that area. The criminal environment includes objective measurable activities like burglary, theft and violence. The institutional environment consists of factors like the noticeability, credibility and involvement of the local institutions in the area.

Lastly, there is the **macro-level**. This is what Eysink Smeets (2016) calls ‘Zeitgeist’. Trends and developments on national or global level influence the perceived safety on this macro-level. Like the micro-level, this level is hard to influence for local initiatives or policies to improve the perceived safety in neighbourhoods. As stated in the previous chapter, the media influences expectations and perceptions of the factors across all three levels.

Figure 9:
The system of perceived
safety in neighbourhoods.



3.2 The leverage points

In the system overview on the previous page, the leverage points in the system are highlighted. The leverage points are selected based on their (inter)relations (influence) with other factors that resulted from the desk research. This, in combination with the insights from the field research, resulted in a selection of leverage points that offer possibility space to intervene in the system for this project. For the description of the full set of leverage points, see appendix V.

This project is done in collaboration with two design consultancies. In the intuition of the author, it is therefore not feasible to focus on influencing people's expectations and perceptions of the institutional or criminal environment. Through the leverage points in the physical environment, it is possible to influence the perceived safety. However, affecting the cleanliness or layout of the public space is not completely in line with the current background of De Nacht Club. Influencing the expectations and perceptions of the social environment, however, does offer possibilities for this project and the work that has already been done by the design agencies. The possibility space for the design phase of this project will therefore focus on the public familiarity and collective efficacy in neighbourhoods.

Public familiarity

Blokland and Nast (2014) mention the importance of both strong and weak ties in a neighbourhood (see also 2.1.1). Eysink Smeets (2016) defines public familiarity as: 'the way in which people can anticipate and count on both people they 'know' and don't know in the neighbourhood'. So, when this is related to neighbourhoods, public familiarity describes to what degree people meet and greet each other. Public familiarity is a key factor in the social environment. It influences the degree to which people trust their environment and to what degree they feel like they belong in the area. Public familiarity, therefore, has a major influence on the perceived safety in neighbourhoods. In return, public familiarity is highly influenced by the physical environment in neighbourhoods. Namely, the degree of cleanliness, stimulation of social interaction and attractiveness influences the degree to which residents are short-term or long(er)-term inhabitants. And creating a connection with an area of people does not originate in a fortnight.

Collective efficacy

The background theory of collective efficacy is described in chapter two. As stated before, Sampson et al. (1997) define collective efficacy as: 'social cohesion among neighbours combined with their willingness to intervene on behalf of the common good.' In other words, the term explains the willingness of people to undertake activities for the greater good, because they care about this greater good. In terms of neighbourhoods, this relates to the willingness to undertake an activity that either benefits the physical or the social environment of the neighbourhood. For example, to start a cleaning action with other neighbourhoods to improve the cleanliness of the neighbourhood. As stated in 2.1.1, the connection between the area and the inhabitants influences collective efficacy (Baraka, 2016). Again, a key factor to ensure such a connection is the degree of long-term residents in such a neighbourhood.

The possibility space

In the field research, it became clear that the environmental characteristics – especially the collective efficacy and public familiarity - are relatively low in Reyerwaard (see paragraph 2.4). The system shows that indeed these factors affect the perceived environment, and therefore the perceived safety. Therefore, these leverage points offer possibility space for this project to influence the perceived safety in neighbourhoods.

The design question is to design a generic approach for De Nacht Club to improve the perceived safety. Therefore, the scope of this design question will be on the perceived environment, specifically these two leverage points: public familiarity and collective efficacy. The purpose for the design phase is to design a generic approach for De Nacht Club to affect people's expectations and perceptions of their environment. Thus, by affecting the public familiarity and collective efficacy in the neighbourhood.

An interesting field of tension comes forward from this design challenge. To improve the perceived safety, one must broaden the social environment by for instance increasing the public familiarity. But discovering or encountering new people or places is often unsafe and new in itself. This interesting tension offers a theoretical background for the working frame of De Nacht Club (see chapter one). It offers the start for the design phase.

RESEARCH CONCLUSION

Perceived safety is the result of a comparison made between the expectations and perceptions people have. Therefore, to increase the perceived safety, the expectations and perceptions should be influenced. The research into perceived safety in neighbourhoods shows that the environmental characteristics offer possibilities to do so. Environmental characteristics can be divided into the social, physical, institutional and criminal environment.

In the systems map of perceived safety in neighbourhoods, several leverage points are distinguished to intervene in this system. In other words, to improve the perceived safety. Two leverage points are identified that offer possibility space for the design phase of this project: public familiarity and collective efficacy.

Thus, the research phase indicates that the perceived environment of people affects the perceived safety. By broadening people's perceived environment, people affect their expectations and perceptions of the environment. The leverage points public familiarity and collective efficacy offer the possibility space to broaden people's perceived environment. And therefore to affect their perceived safety.

From this research, an interesting field of tension comes forward. To increase one's perceived safety, the perceived environment should be affected. This can be done by broadening the public familiarity or strengthen the collective efficacy. However, encountering or uncovering new environments to do so is challenging and unsafe at first. This interesting field of tension offers a theoretical background for the frame of De Nacht Club (see chapter 1). It also provides a start to design a generic approach for De Nacht Club to improve the perceived safety in neighbourhoods.

Part II

Design

Chapter 4
Exploring the possibilities

Chapter 5
The product

Chapter 6
The validation

Chapter 4

Exploring the possibilities

4. EXPLORING THE POSSIBILITIES

4.1 Ideation
4.2 Conceptualizing

In this chapter, the leverage points (public familiarity and collective efficacy) distinguished in part I are explored. A brief understanding of the ideation phase and the conceptualizing phase are presented. Ideas are developed in the directions of the possibility space that was identified in part I (see 3.2). Three concepts are developed (see appendix VI). The concept that fits the original frame and project assignment best is presented in this chapter. In the next chapter, this concept is detailed and elaborated into a product with a strategy to target new neighbourhoods including a generic design approach. In the last chapter, the approach is validated and iterated based on expert insights.

4.1 Ideation

In the ideation phase of this project, the network, knowledge and experience of the intervention ‘De Nacht Club’ were taken into account. The same applied to the frame of the night (see chapter 1). On the other hand, a fresh start to look at perceived safety in neighbourhoods - based on part I: Research – was considered valuable. Therefore, the ideation phase included two main sessions. The first one was including the knowledge and the frame of the current intervention, next to the insights from part I. This led to one concept in this direction.

The other session was solely based on the research of part I and the leverage points that were identified (public familiarity and collective efficacy). This second session was done with two other design students. This resulted in several drafts of ideas in different directions. Two ideas were elaborated to a concept. The three concepts are presented in appendix VI.

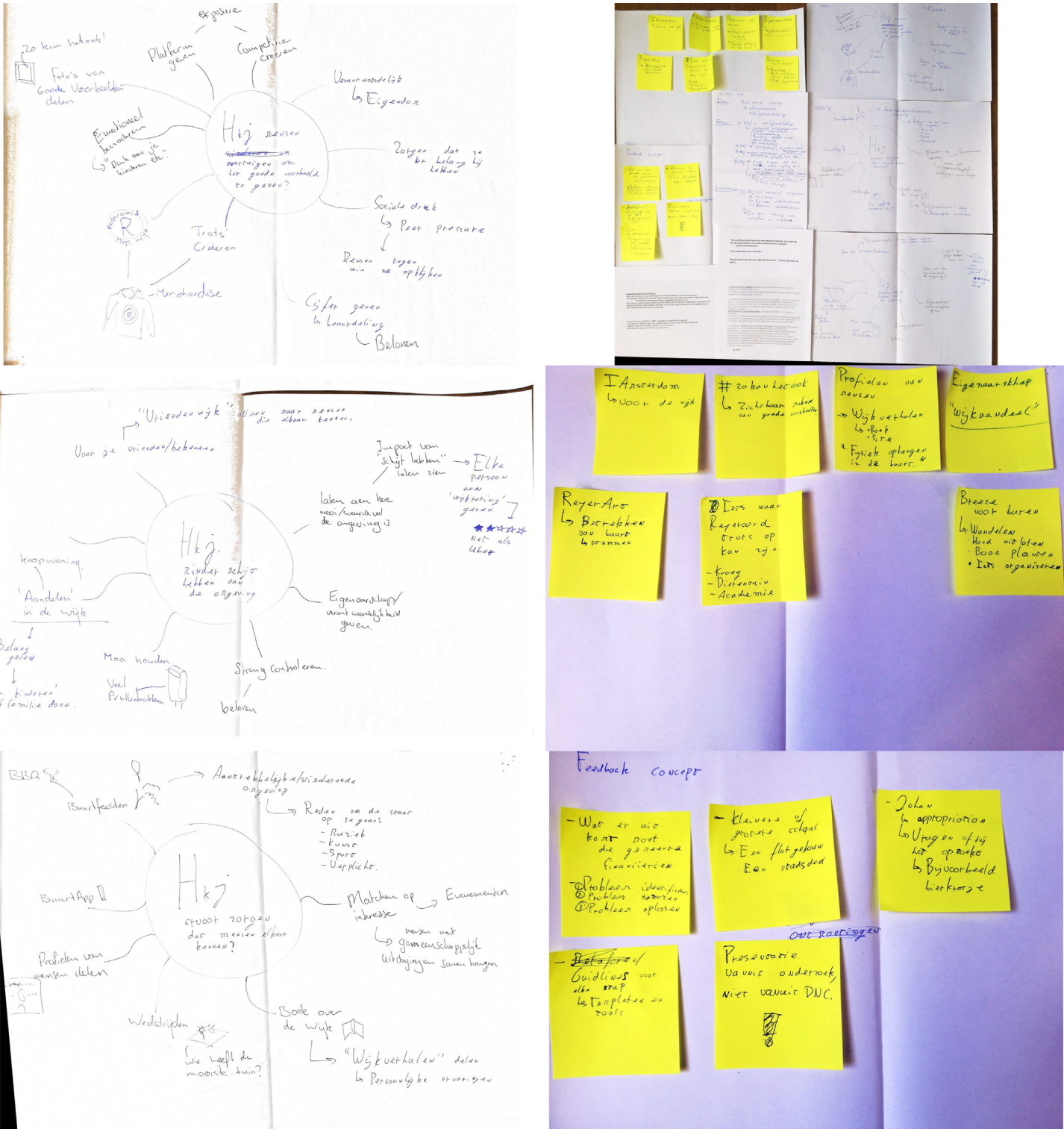


Figure 10: Some output material of the second ideation session.

4.2 Conceptualizing

After the ideation phase and conceptualizing three ideas, the first concept – based on the current frame and intervention of the partners of this project - ‘De Nacht Club’ was chosen for several reasons. First of all, the initial design question and assignment is based on the knowledge and resources of the current intervention of ‘De Nacht Club’. Therefore, this concept fits the motive of this project the best. Also, the frame of ‘the night’ offers an interesting way to deal with the field of tension described in the research (see 3.2): encountering new or different environments can increase the perceived safety, but doing so is often unsafe in itself. Secondly, the concept is built upon the initial work of Matching Futures and MV Design in Reyerood. Therefore these partners are naturally more involved and interested in the further elaboration of this concept. Thirdly, because of the previous work, (practical) experience is gained as to how to concretize this concept in Reyerood. Thus, the partners can provide first-hand insights and knowledge on their experiences. Fourthly, the first concept is most in line with my personal learning ambition of my interest in what creates movements or communities amongst (groups of) people.

It should be noticed that the ideating and conceptualizing phases in this project were very useful. Two concepts were designed that are not based or inspired on the current background and frame of ‘De Nacht Club’. This resulted in a broader and more objective take on the issue of perceived safety in neighbourhoods. For a brief description of the concept ‘De Nacht Club’ see this page. For a more elaborated illustration of all three concepts, see appendix VI. For the elaboration of this concept into a product and a generic approach to improving perceived safety in neighbourhoods, see the next chapter.

De Nacht Club
Together you ensure a safe neighbourhood

The concept is mainly focused on the possibility space of the social and physical environment in neighbourhoods. The leverage points public familiarity and collective efficacy in particular. Also, it uses the frame of the night and is therefore called ‘De Nacht Club’ (coherent with the current design frame). It builds on the initial intervention of ‘De Nacht Club’. Next to this, it builds on the interview insights of low social interaction in Reyerood. The purpose of this concept is to learn Dutch neighbourhoods that together, they can ensure a safe neighbourhood.

Unlike the current intervention of MV Design and Matching Futures, this concept includes a three-step process (approach) to boost the social and physical perceived environment in neighbourhoods. When the process is finished in one neighbourhood, it can start in another.

De Nacht Club
Voor een veilige wijk zorg je samen



Figure 11: Concept website of ‘De Nacht Club.’ (Dutch)

Chapter 5

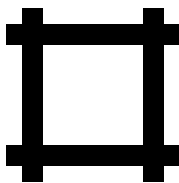
The product

5. THE PRODUCT

5.1	The frame
5.2	The strategy
5.3	The method
5.4	The value
5.5	The criteria

To turn the concept into a ‘product’, several steps are crucial. This chapter includes these steps. During the project, this was an iterative process. For the sake of reporting, these steps are structured in a logical order. In the first paragraph, the frame is explained. This frame deals with the field of tension concerning perceived safety and encountering new or different environments. Then, the strategy is presented including a vision, the ‘DNA’, a rationale and the method itself. Next, the (social) value of the product is illustrated. This includes two important aspects to maintain and communicate this value. Finally, these steps result in criteria for De Nacht Club that offer a generalized approach to intervening in the system of perceived safety in neighbourhoods. This enables it to be applied in different neighbourhoods and by other ‘hosts’ of De Nacht Club.

5.1 The frame



De Nacht Club

Een veilige plek voor onveilige onderwerpen

As stated in the research conclusion, an interesting field of tension came forward. To increase perceived safety, one can familiarize him/herself more with the environment. But uncovering new territories or environments is challenging and unsafe at first. So how can a ‘safe’ way to uncover new environments be designed?

The night provokes uncertainty and unexpectedness. The night differs from the day. During the day there is light and clarity, people have a certain role in society and people do ‘what is expected of them’. The night, in its uncertainty, offers sincerity, equality and honesty. During the night these societal roles and proportions fade. In the night new relationship are formed, perspectives are shared and different environments (social, physical) are explored. A nightclub is a place where this eminently happens. This is the frame that the product utilizes and why it is called ‘De Nacht Club - een veilige plek voor onveilige onderwerpen’ (a safe place for unsafe topics/subjects).

5.2 The strategy



De Nacht Club rationale

The perceived environment of a person (social, physical, institutional and criminal) has a lot of influence on the perceived safety of this person. The perceived environment is formed by one’s expectations and perceptions of this environment. To improve one’s perceived environment, one must affect its expectations and perceptions of this environment. People should encounter ‘new’ environments to do so. The paradox here is that encountering new environments is often ‘unsafe’ in itself. While it improves – when successful - one’s perceived safety. That is why De Nacht Club has value. It offers a safe way to encounter new environments and to affect expectations and perceptions.

De Nacht Club is a mechanism for encounters. It creates relationships of mutual trust. Because of that people can ‘safely’ encounter new (social, physical, institutional) environments. De Nacht Club brings a diverse group of people together in the neighbourhood. This small group of local inhabitants and professionals intimately meets each other in a public space. De Nacht Club does this in neighbourhoods where social interaction or encounters are not necessarily self-evident. De Nacht Club uses the (temporary) uncertainty and sincerity of the night, to provide a place for genuine encounters. People can meet other people, places or perspectives, without the daily prejudices and social structures. This affects the expectations and perceptions of these people and contributes to the perceived safety in the neighbourhood.

Mission and vision

Our vision

...is a safe neighbourhood for everyone.

Our mission

...is to increase people’s perceived safety by affecting the expectations and perceptions of their environments.

DNA

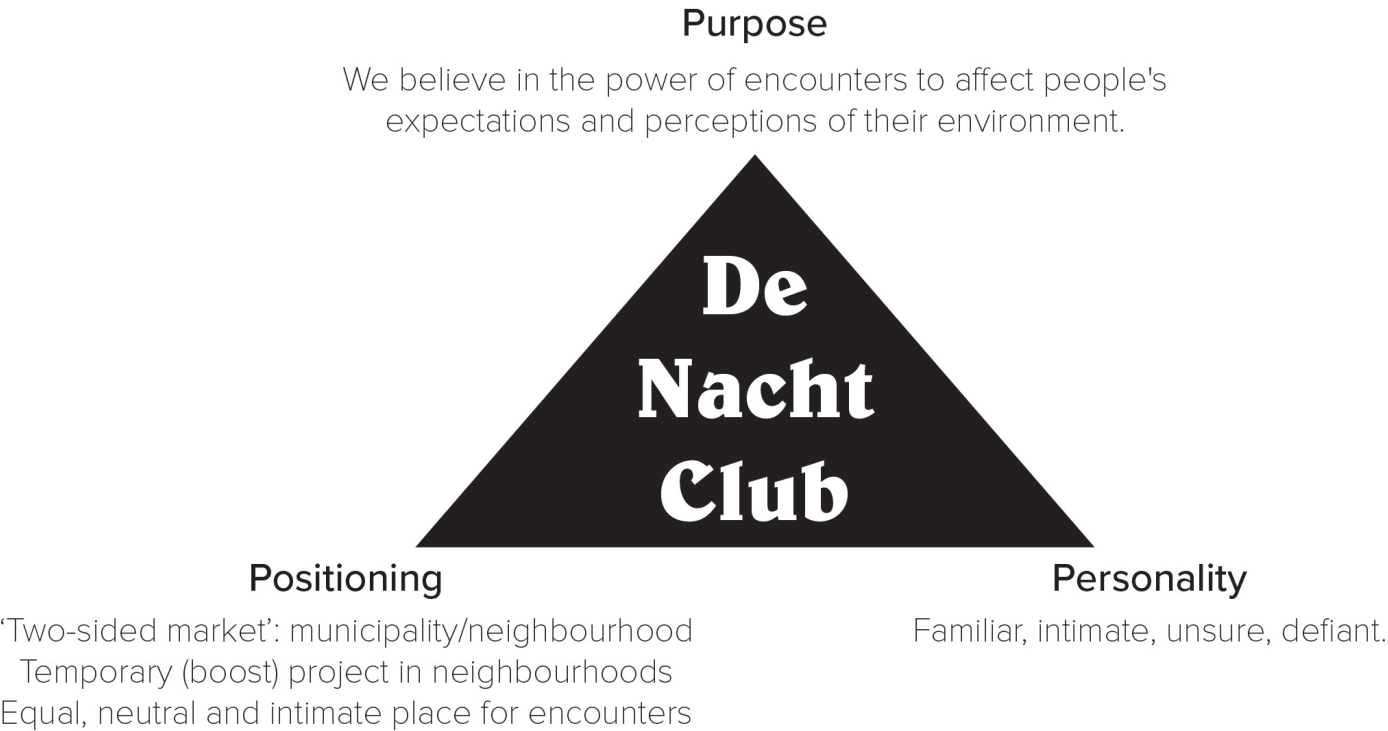
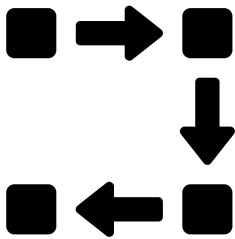


Figure 12: The DNA of De Nacht Club.

During a strategic session, the DNA of De Nacht Club was discussed and developed. The DNA is the core of (the brand) De Nacht Club. It provides the guidelines for external communication and organisation. Above, the final DNA is shown. The purpose of De Nacht Club is to use the power of encounters to affect people’s expectations and perceptions of their environment. The exact nature of a ‘De Nacht Club encounter’ is defined later on in this chapter. To provide equal and sincere encounters, the personality of (the brand) De Nacht Club is familiar, intimate, unsure and defiant. It provides a temporary intervention in neighbourhoods where social interaction is low and not self-evident.

The product serves a ‘two-sided market’. For the neighbourhood, it offers valuable encounters that increases the capacity of trust in the concerning environment. For the municipality, it offers experiment and reflection that create new connections in the neighbourhood. This supports the municipality in value-driven policy instead of a top-down approach or bottom-up ‘participation’ approach.

5.3 The method



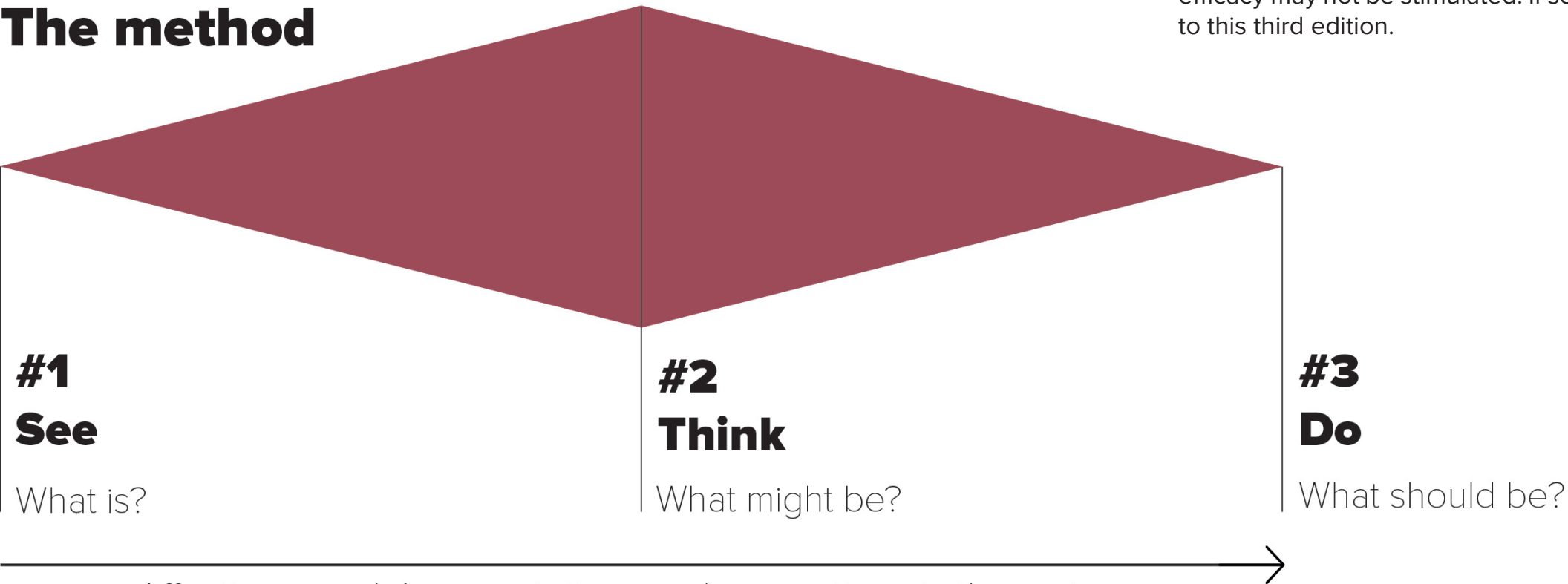
To transform the concept of De Nacht Club into a clear ‘product’, it uses a three-fold structured approach. This is the method of De Nacht Club. It affects people’s expectations and perceptions in three editions. Each edition of De Nacht Club takes place on a different day (evening). These editions have different themes but the purpose is the same: using the power of encounters to affect people’s expectations and perceptions.

A diverse group of neighbourhood stakeholders comes together in a public space in the neighbourhood three times. The group consists for instance of local inhabitants, local officials and professionals, a local policeman and a member of a housing cooperation. Each edition is designed and hosted to ensure the power of genuine encounters. Criteria that further define how these editions must be designed and hosted are presented in the next paragraph of this chapter. First, the three steps of the method are explained.

Before the process, preparation and assessment are needed. A neighbourhood is assessed for the need for De Nacht Club. For the requirements for this see the first criteria in the next paragraph. Also, creating a network and recruiting attendees takes place in this phase. This is a time-intensive phase.

Figure 13: De Nacht Club method.

The method



In the first edition, the focus is on the social environment in the neighbourhood. The public familiarity in particular. The attendees are new to each other and therefore this edition offers a safe space to meet new people and perspectives. Naturally, this takes time. Partly for this reason, De Nacht Club is not a single step intervention. The first edition is named ‘see’ based on the typical thought process of people: see, think, do. In this edition, the hosts have the initiative to start and guide the conversations and encounters in De Nacht Club. An appropriate theme and metaphors can be designed (see criteria) to stimulate active and open (group) conversations about the neighbourhood and the attendees themselves.

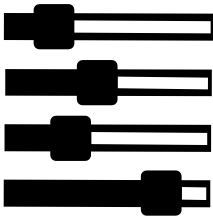
The second edition – think – is more focused on the social environment in general. After getting acquainted in the first edition, in this edition, the initiative shifts to the group as a whole. The hosts can guide or stimulate the conversations when needed. But the dynamic of the group decides what happens, just like a ‘real’ nightclub. If group conversation fragments into a couple of dialogues or subgroups that is fine. As long as there is a central opening and closing of the evening.

In the last edition – do – the initiative is entirely with the group. The focus of this edition is on the collective efficacy of the neighbourhood. In the previous two editions, low-threshold initiatives that came up or plans that were discussed are to be executed during this edition. There may be no clear initiative or the collective efficacy may not be stimulated. If so, the following example can provide substance to this third edition.

Example #3

This particular edition was a night’s walk through the neighbourhood. It was an idea that came from the group. It did not take place in the same public space the complete evening. As a group, public spaces were visited at night. Places that are not self-evident to go to at night or when someone is alone. Through the places and stories of people, both new social and physical environments were explored. The group decided where to go to.

5.5 The criteria



The purpose of the criteria is to provide generic guidelines for the application of De Nacht Club in a certain neighbourhood or area. Each edition must be self-contained and designed uniquely for a particular neighbourhood. The following criteria serve as a framework in which an edition must fit in order to ensure the value of - the encounters in - De Nacht Club. First, the understanding of an ‘encounter’ is defined in the context of De Nacht Club. Next, the criteria are discussed. The criteria are divided into six categories (see figure 14). In the next chapter, these criteria are validated. See appendix II for the final version of the criteria.



Figure 14: De Nacht Club criteria (first version).

5.5.1 De Nacht Club encounter

The value of encounters lies in the ability to affect and shape people’s expectations and perceptions. But only if it concerns a genuine encounter that meets the following requirements. De Nacht Club considers an encounter valuable if it is:

Mutual.
An encounter must come from both sides.

Profound, intimate and genuine.

Equal.
In De Nacht Club everyone is equal and everyone is themselves in the first place. Any function or duties they fulfil come second.

Causing something.
Like a collision or a kiss. For example, if a new opinion or perspective is gained.

Exciting and challenging.
Nobody knows exactly where an encounter will lead to.

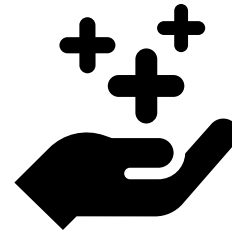
Open and respectful.

5.5.2 De Nacht Club criteria

On the left, an overview is given of the six categories of criteria that were used for validation (the first version). The categories concern: the preparation (de voorbereiding), the area/space (de omgeving), de host (de eigenaar), the door policy (het deurbeleid), the guests (de gasten) and the closing (de afsluiting).

In the next chapter, these criteria are validated and adjusted. On page 67 (figure 15), the final version of the criteria - after validation - is given. In figure 16, the validated content of the first category is given. For the full content of the final version of these criteria see appendix II.

5.5 The value



To ensure the value of the encounters in De Nacht Club, the criteria are designed. This enables De Nacht Club to be applied in other neighbourhoods and to be multiplicable in the future. Another aspect, however, is to communicate the value of De Nacht Club. De Nacht Club aims for social effect. It has no commercial purpose and is therefore dependent on the financing of third parties. Thus, the existence of De Nacht Club needs to measure its impact and communicate its value. However, measuring (societal) value is a common problem in the field of social design. Tromp and Vial (2021) point this out as well. They state that it is important to connect the long-term goal to a shorter-term value. They also describe five fields of social design. De Nacht Club would address two of these fields which are the newest and highly complex. These fields are: design for 'social capital' and design for 'resilience' (Tromp & Vial, 2021). It is important to understand in what field and for what value De Nacht Club aims, to be able to communicate this.

For De Nacht Club the long-term goal is improving the perceived safety in neighbourhoods. The short term value concerning the field of social capital is [1] increasing the capacity of trust in neighbourhoods. In the field of resilience, the value is [2] increasing the capacity for adaptation and transformation of the system of neighbourhoods in society. In both values, the social environment is a key factor. In particular the public familiarity (value [1]) and the collective efficacy (value [2]). Here, the term system describes all actors and stakeholders – including the municipality - that influence this system.

But how does one 'measure' these values for society, let alone the impact De Nacht Club has? Moll (2021) suggests the approach of [1] specification, [2] evidence and [3] justification. She puts forward that a 'zero measurement' should be used in social design more often. For this reason, the first draft of validation for De Nacht Club is proposed. The next two questions (below) are to be answered by the attendees of De Nacht Club, before the first edition. After the three editions, these questions are answered again to measure the change and 'validate the impact'. The first question refers to the social capital value of trust. The other question focuses on the perceived environment in the neighbourhood. Both questions can be rated on a scale from one to ten. This quantitative measurement enables to measure the subjective value before and after De Nacht Club.

To what extent do you trust the people you meet in Reyerwaard? (1-10)

Dutch: In welke mate vertrouw jij de mensen die je tegen komt in Reyerwaard? (1-10)

To what extent do you enjoy being outside in Reyerwaard? (1-10)

Dutch: In welke mate vind je het fijn om in Reyerwaard buiten te zijn? (1-10)

Chapter 6

The validation

6. THE VALIDATION

6.1 The refined criteria

In the previous chapter, the first version of the criteria is shown. In this chapter, these criteria are detailed and verified based on expert validation. As a result of this, the final validated set of criteria is shown in appendix II. It was important to validate the criteria with experts to verify the accuracy and correctness of the content. The set of criteria was validated with two (experience) experts and an external local official. The experience experts were highly involved in the project, being the external (company) coaches of this project. The local official had attended a De Nacht Club edition before and therefore understood the context. As a part of the interviews, the strategy and research were briefly presented as well.

The final version of the criteria is shown in figure 15. A major adjustment after validation was a new category: the process. Based on input from the expert interviews, it became clear that the process itself needed elaboration. The background, the narrative and the frame should be explained. Especially for people that are (or will be) not highly involved in De Nacht Club. The two categories ‘de gasten’ (the guests) and ‘het deurbeleid’ (the door policy) are combined into one category. ‘The guests are part of the door policy’ of De Nacht Club was rightly noticed by an interviewee. Another suggestion was the use of the term ‘aanleiding’ (the motive) instead of ‘voorbereiding’ (preparation). The expert interviews also offered a better description for the surrounding: ‘de plek’ (the place/space). This term includes the whole (theatrical) setting of De Nacht Club and not just the physical location or surroundings.

As to the criteria itself, several adjustments were made and some criteria were added or detailed. For instance, in the first category (de aanleiding) the degree of approachability of institutions is included. Another adjustment was the use of language. A more neutral and generic way of describing them was used. As an example, a ‘low involvement’ is now described as ‘the extent to which ... is involved’.

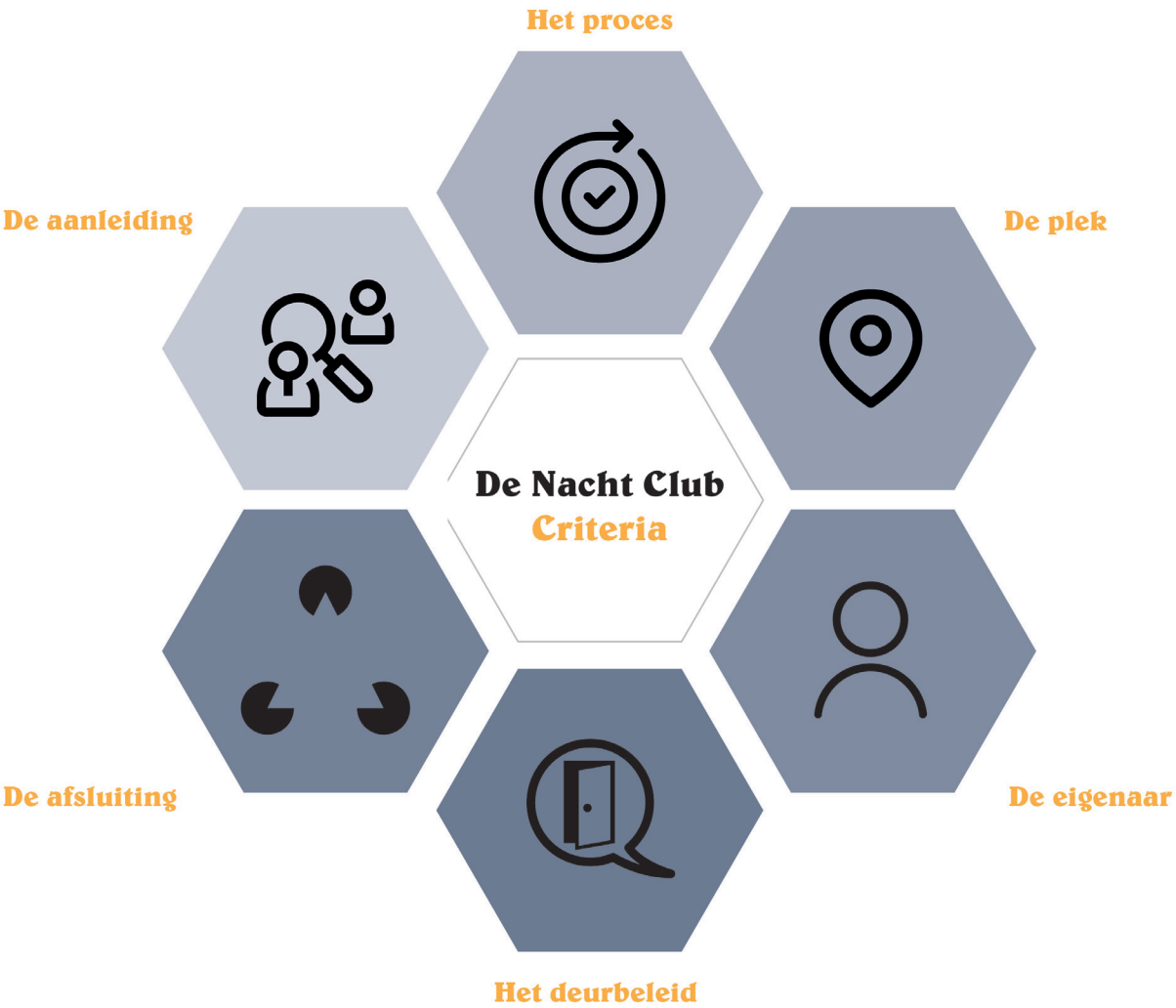


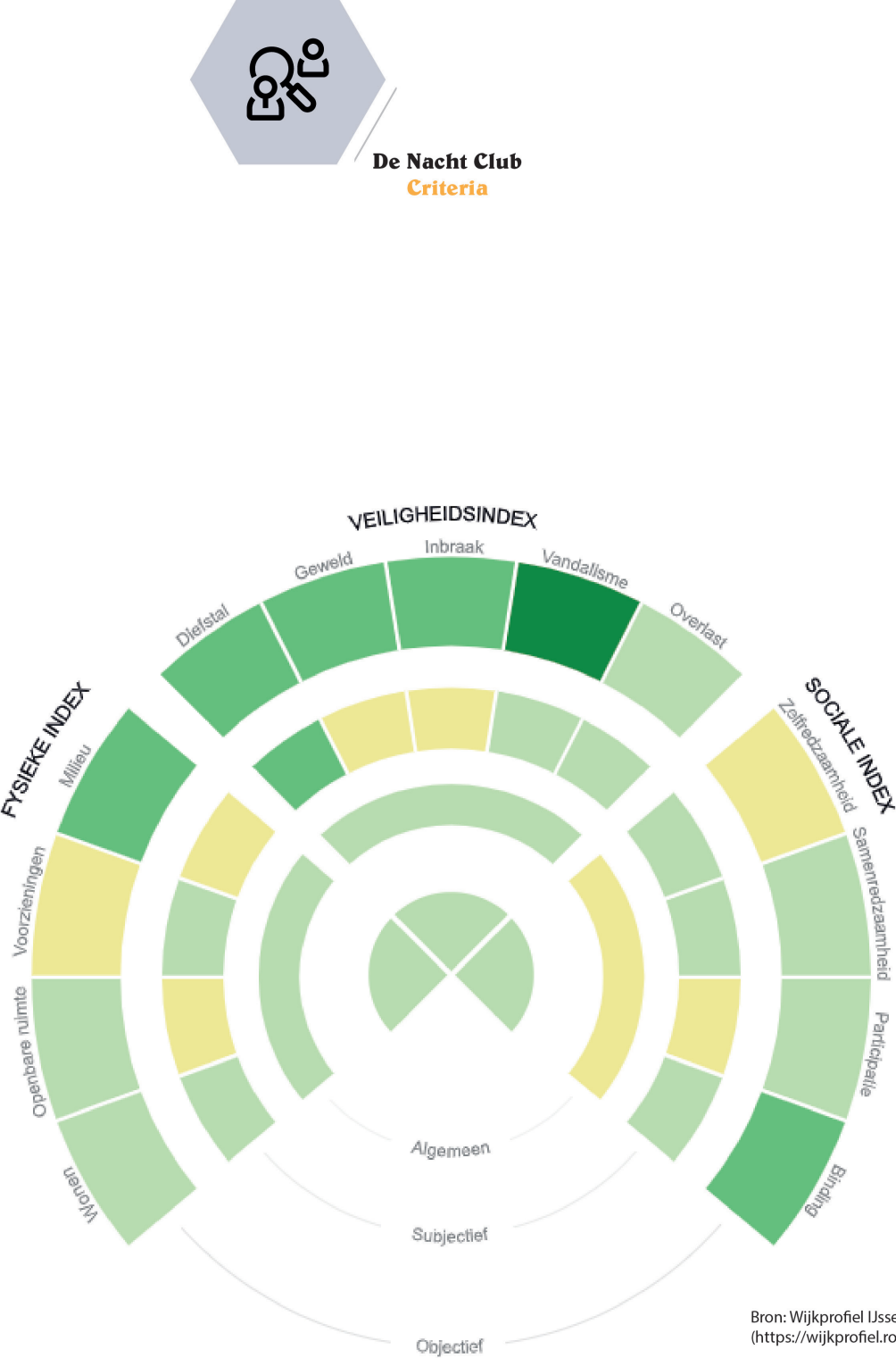
Figure 15: De Nacht Club criteria (final version).

In the last category (the closing/’de afsluiting’) a valuable insight from a local official is added. She positively agreed on the simplicity and value of the two validation questions for the attendees of De Nacht Club (see also page 62). She suggested another question based on (the trust in) the future of the people. Therefore, a third validation question is added: to what extent do you have trust in your future in Reyerood? (1-10). She pleaded for the value for the municipality of this question. The insecure future in some neighbourhoods partly caused by the national energy transition plays a role in this she argued.

Lastly, an important insight from the expert interviews was that new – more detailed - questions were raised due to the criteria. For instance: ‘what happens if a person gets hostile or even aggressive during an edition?’ This was an issue that came up due to the criteria. They caused discussion and new thoughts on possible situations in and for De Nacht Club. The criteria make the actions in De Nacht Club concrete. They offered reflection and evaluation of De Nacht Club.

On the next page (figure 16), the content of the first category (de aanleiding) is shown. For the full content of each of the categories see appendix II.

De aanleiding



De Nacht Club

Een veilige plek voor onveilige onderwerpen

In **de aanleiding** wordt beoordeeld in hoeverre De Nacht Club effect kan hebben in een specifieke omgeving. En op welke manier.

Het criterium hiervoor bestaat uit meerdere aspecten. Wijkprofielen of kwalitatieve interviews kunnen worden gebruikt om een inschatting van het nut van De Nacht Club in een omgeving te maken.

Criterium

De omgeving biedt gelegenheid voor de verbetering van de omgevingsbeleving.

Toelichting

- Hoe kan de omgevingsbeleving worden beoordeeld?
- In de **sociale omgeving** dient gekeken te worden naar:
- De mate van sociale interactie tussen de gebruikers van die omgeving.
 - De aanwezigheid van korte-termijn bewoners (tijdelijke bewoners/huurders).
 - Een 'kloof' in de omgeving (bijvoorbeeld een generatie of etnische kloof).
 - De mate van betrokkenheid in/van de omgeving (activiteiten, (buurt)initiatieven).
- In de **fysieke omgeving** dient gekeken te worden naar:
- De mate van vervuiling in de omgeving (schoonbeleving).
 - De mate van fysieke aantrekkelijkheid (verouderd, verwaarloosd).
 - De mate van achterstallige inrichting van de publieke ruimte (verlichting, faciliteiten, overzichtelijkheid).
 - De ratio van privé en bedrijfsgebouwen (overwegend woonhuizen/kantoren)
- In de **institutionele omgeving** dient gekeken te worden naar:
- De mate van betrokkenheid van de instituties (gemeente, politie)
 - De mate van opmerikbaarheid van de (aanwezigheid van) lokale instituties.
 - De mate van benaderbaarheid (laagdrempeligheid) tussen leef en systeemwereld (relaties tussen instituties en bewoners).
- In de **criminele omgeving** dient gekeken te worden naar:
- De kwantiteit van meldingen van criminaliteit (inbraak, overlast)
 - De aanwezigheid van ondermijnende activiteiten (druggebruik, dienstverlening aan het criminele circuit).

Figure 16: De Nacht Club criteria: 'de aanleiding' (the motive) (Dutch).

DISCUSSION

The result of this thesis project is a generic approach in the shape of design criteria for De Nacht Club. This set of criteria is part of a broader strategy to translate De Nacht Club from an experimental concept into a multiplicable product to improve the perceived safety in neighbourhoods in the Netherlands. In this discussion, the limitations of the project and several suggestions for future research are stated.

First of all, there is the set of design criteria (see appendix II). This set of criteria is designed to create a generic approach for the mechanism for encounters which is De Nacht Club. These criteria are designed based on the knowledge and experience of the neighbourhood Reyerwaard, Rotterdam, where perceived safety has proven to be an issue. The design criteria are generic and meant to make De Nacht Club applicable to other neighbourhoods. However, when the criteria are applied and used in other environments, or by other 'hosts', they can likely be iterated and improved based on new knowledge. Also, the term 'criteria' is the preferred term for this project because the set contains certain norms and standards to design an edition of De Nacht Club. But the set may be interpreted differently in the future because the set also represents a certain process or journey. The six categories can then be seen as six steps in this journey.

Then there is the validation issue of the impact of the process. As stated before, this impact measurement of designing for societal value is a trending topic in the relatively new field of social design. A draft is proposed in this project in the shape of three validation questions that are included in the process of De Nacht Club. This incentive for validation of the impact of De Nacht Club is an interesting field for future research.

Another direction for future research and practice of De Nacht Club is the selection of potential areas and neighbourhoods to apply De Nacht Club process. Some implications came forward in this project and during a validation interview with a local official. She mentioned a neighbourhood in the south of Rotterdam like Bloemhof, Feyenoord, where a municipal approach like Reyerwaard+ is initiated in 2021. Or Prins-Alexander in the East of Rotterdam, a neighbourhood that was founded around the same time as Reyerwaard. This neighbourhood environment has similar physical characteristics as Reyerwaard and potentially also similar social characteristics according to the local official. These are interesting areas to explore in future research and practice of De Nacht Club.

Lastly, a social design project in times of social distancing is challenging as one can imagine. Certain limitations in this project were encountered due to the forced online contact as a result of the global Covid-19 pandemic. Examples are the limited insights of the validation phase and the difficulties in concretizing or practicing certain steps in this project. The personal reflection elaborates on the personal consequences of this.

Personal reflection

The master thesis project is an individual process of six months at the end of a two-year master. In itself, the process has its ups and downs which is nothing new. During a global pandemic where the world is forced to work from home, with as little social contact as possible, these ups and especially downs are more intense to my experience. I am proud that I started and finished a project in the field of social design, which is my field of interest within design. Maybe some other project directions or options would have been an easier way, especially during Covid-19. Therefore I am proud of this project and the results that I have delivered.

In terms of personal growth, I gained quite some practical knowledge in the 'non-academic' world. During the project, it was not always easy to combine the academic requirements of my TU Delft coaches with the more practical demands of my external coaches. I knew that this would be a challenge at the start of the project for this was one of my personal learning objectives. Another learning objective, which focuses on my interest in what motivates (groups of) people and what brings them together, has broadened. First, there is my research into how the perception – of safety - of people works and how it originates. Secondly, there is the practical experience of two editions of De Nacht Club during my project. The way in which these editions are designed and the different people and opinions that others and myself encountered during these editions broadened my perspective. I have always enjoyed these moments of encountering new people and new perspectives. This is partly the reason why I believe in the power of encounters, the power to shape peoples perspectives and expectations. The 'Midzomernacht Club' which was a special edition of De Nacht Club close to the end of my project was a motivating experience. I realized that all the theoretical work and effort is eventually meant to improve the perceived safety and wellbeing of people. When - in that edition - I am a part of making this happen this makes me happy.

CONCLUSION

The motive of this project was to translate De Nacht Club into a product that is applicable and replicable in other neighbourhoods to improve the perceived safety. This project builds upon the work of MV Design and Matching Futures in the neighbourhood Reyeroord, Rotterdam.

A strategy – including a set of generic criteria for De Nacht Club – is proposed to approach other neighbourhoods to increase the perceived safety. The perceived social and physical environment prove to be major influencers of the perceived safety. Therefore, this strategy consists of the mission to increase people's perceived safety by affecting the expectations and perceptions of their environments. The purpose of De Nacht Club is to use the power of encounters to affect these expectations and perceptions that people have of their environment. A three-step method for such an intervention is proposed.

As a result, a generic approach in the shape of a six-piece set of criteria enables De Nacht Club to be multiplicable to other neighbourhoods or environments. This approach includes a start to validate the impact of De Nacht Club to measure its (societal) value.

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REFERENCES

- B** Baraka, M. el, *Collectieve zelfredzaamheid: wanneer burgers samen redzaam worden*. Masterthesis, Erasmus Universiteit Rotterdam, 2016.
- Beenackers, M.A., Kamphuis, C.B., Burdorf, A., Mackenbach, J. P., Van Lenthe, F. J., *Sports participation, perceived neighborhood safety, and individual cognitions: how do they interact?*, Int J Behav Nutr Phys Act 8, 76, 2011.
- Biocca, F., Harms, C., Burgoon, J., *Towards a more robust theory and measure of social presence: Review and suggested criteria*, Presence, 12 (5), pp. 456-480, 2003.
- Bitner, M. J., Faranda, W. T., Hubbert, A. R., & Zeithaml, V. A., *Customer contributions and roles in service delivery*, International Journal of Service Industry Management, 8(3),193-205, 1997.
- Blokland, T, Nast, J., *From Public Familiarity to Comfort Zone: The Relevance of Absent Ties for Belonging in Berlin's Mixed Neighbourhoods*, Vol. 28, Issue 4, pages 1142-11 59, July 2014, <https://doi.org/10.1111/1468-2427.12126>.
- Boelens, M., *Waarom is de definitie ondermijning zo populair?*, Twynstra Gudde, 2020.
- Borgman, K., *Aardgasvrij Reyerood, plan van aanpak*, Gemeente Rotterdam, 2019.
- D** De Rooij, L., Van Nes, A., *The perceived safety and spatial behaviour in three different neighbourhoods in Rotterdam*, Space Syntax Symposium, 2015.
- E** Eysink Smeets, M., *Veiligheidsbeleving in Rotterdam*, Hogeschool Inholland, 2016, via (PDF) Veiligheidsbeleving in Rotterdam (researchgate.net).
- G** Gemeente Rotterdam, *Verkenning omgevingsvisie Rotterdam*, Gemeente Rotterdam, 2018, <https://rotterdam.notubiz.nl/document/7429255/1/19bb438>.
- Gemeente Rotterdam, *Wijkprofiel Rotterdam*, 2020, via Wijkprofiel Rotterdam.
- H** Helbich, M., Hagenauer, J., Roberts, H., *Relative importance of perceived physical and social neighborhood characteristics for depression: a machine learning approach*. Soc Psychiatry Psychiatr Epidemiol 55, 599–610, 2020.
- J** Jin Choi, Y. J., Matz-Costa, C., *Perceived Neighborhood Safety, Social Cohesion, and Psychological Health of Older Adults*, The Gerontologist, Volume 58, Issue 1, February 2018, Pages 196–206, via <https://doi.org/10.1093/geront/gnw187>.
- Jones, P., *Systemic Design Toolkit*, 2021, via Systemic Design Toolkit.
- K** Koekoek, C., *Response-ability: building together as performative political practice*, Master Thesis, 2019, via <http://resolver.tudelft.nl/uuid:9cdf4cf2-4713-4038-aac8-44b6ff3c765b>.
- L** Loewen, L.J., Steel, G. D., Suedfeld, P., *Perceived safety from crime in the urban environment*, Journal of Environmental Psychology, Volume 13, Issue 4, Pages 323-331, ISSN 0272-4944, 1993, [https://doi.org/10.1016/S0272-4944\(05\)80254-3](https://doi.org/10.1016/S0272-4944(05)80254-3).
- M** Maslow, A. H., *Motivation and personality*, New York: Harper & Row, 1970. Moll, A., *Validation of Design for Value in Social Design Projects*, Master thesis, 2021, via <http://resolver.tudelft.nl/uuid:7b76ebec-b962-4942-b6dd-24ee34609a12>.

R Reijmers, R., GGD Amsterdam, *ZRM-handleiding*, 2017, [200303-ZRM-Huishoudens-2020.pdf](#) (zelfredzaamheidmatrix.nl).

Robert J. Sampson, Stephen W. Raudenbush, *Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy*, Felton Earls Science 15, Vol. 277, Issue 5328, pp. 918-924, 1997, DOI: [10.1126/science.277.5328.918](#).

S Sayin, E., Krishna, A., Ardelet, C., Decré, G. B., Goudey, A., “Sound and safe”: *The effect of ambient sound on the perceived safety of public spaces*, International Journal of Research in Marketing, Volume 32, Issue 4, Pages 343-353, ISSN 0167-8116, 2015, [https://doi.org/10.1016/j.ijresmar.2015.06.002](#).

Shah, J., *Social contagion as a means to transitions*, TU Delft Repositories, 2020.

T Tromp, N., Vial, S., *The five components of social design: a framework for clarifying research and practice*, 2021.

U Uszkai, A., *Spatial Integration and Identity: Cases of Border Regions*, Journal of Global Academic Institute Education and Social Sciences, vol. 1: (2) pp. 1-13, 2015, [jgaieess_vol_1_no_2.pdf](#) (globalacademicinstitute.com).

V Van Buuren, A., Minkman, E., Van Popering-Verkerk, J., Visser, V., *Lerend op weg in de gebiedsaanpakken*, Aardgasvrij Rotterdam, 2020.

Y Yasir Ali H., Fawad Ali H., & Bilal Ahmad, M., *Difference between Expectations and Perceptions of Students regarding Service Quality of Public sector HEIs*, Bulletin of Education and Research, Vol. 41, No. 1 pp. 131-146, April 2019, [EJ1217918.pdf](#) (ed.gov).

Z Zeithaml, V. A. (1988). *Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence*. Journal of Marketing, 52(3), 2–22, 1988, [https://doi.org/10.1177/002224298805200302](#).

Figures/images

Figure 2 (image):

Grant, J., 2021, via A Worthwhile Question to Ponder on your Career Journey – Career Services | University of Pennsylvania (upenn.edu).

Figure 4 (image):

Eysink Smeets, M., *Veiligheidsbeleving* in Rotterdam, Hogeschool Inholland, 2016, via (PDF) *Veiligheidsbeleving* in Rotterdam (researchgate.net).

Figure 5, 6 & 7:

Gemeente Rotterdam, *Wijkprofiel Rotterdam: Groot IJsselmonde-Zuid*, Wijkprofiel Rotterdam, 2020, via [https://wijkprofiel.rotterdam.nl/nl/2020/rotterdam/ijsselmonde/groot-ijsselmonde-zuid](#).

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