Vibrantspace/Problemspace

Improvement of public spaces in Dutch underprivileged housing areas to increase social cohesion and safety.
Colophon

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Improvement of public spaces in Dutch underprivileged housing areas to increase social cohesion and safety.

AR4U010 Thesis

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In this Thesis the approach for the graduation project Vibrant space / Problem space will be explained.

In the problem statement the reason for the choice of public space in underprivileged housing areas will be given, followed by the relevance. The final goal of the research and design will be made clear in the aims. The research questions will be made explicit, after which the methodology for answering for these research questions will be explained. For this project several theories will be used as background, those will be shown in the theoretical framework. All this will result in a design and research, specified in the expected products section at the end.

The project focuses on public space and the perception of humans of this public space. We are constantly surrounded by public space, it greatly influences us. But when is a public space great, another terrible, or scary? What makes it great, or scary? In this project I hope to find (some) answers for these questions.
When underprivileged neighbourhoods need regeneration the current approach in the Netherlands is to (partly) demolish the buildings, and build new blocks. Or renovate one street and then another one somewhere else in the area. (Stouten, 2010).

The majority of the houses in those areas are owned by housing associations who do not want to take the risk and be the only paying party for the regeneration. This forces municipalities to invest in the regeneration as well. Plus, they will also have to buy the properties which are in private hands, because the owners of those properties are (usually) not at all willing to invest in the plans. (Marlet, Poort, Woerkens, 2010).

Economical and political climate

Because of the economic crisis currently happening in Europe, municipalities in the Netherlands have less funds. And, since they have limited influence on housing associations and owners, and no funds to subsidise the regeneration, they will have to think of other ways to regenerate underprivileged housing areas (NICIS, 2011; KEI kenniscentrum stedelijke vernieuwing, 2011).

Furthermore, a recent study on regeneration in underprivileged neighbourhoods shows that restructuring of a neighbourhood, with mainly demolition and rebuilding or renovation of the buildings, did have a positive effect on the livability in the areas, but that was due to the change in the composition of the inhabitants. Because they increased the value of part of the houses, the people who could not afford to return to the neighbourhood, the least privileged, had to move to another neighbourhood; usually with the same problems as the old one, because that is what they could afford.

The same study also shows that investments in neighbourhood common facilities such as barbecues, playgrounds, neighbourhood coordinators, etcetera, to enhance the social cohesion in the area have no measurable effect on the livability, because of changes in society (Marlet, Poort, Woerkens, 2010). This of course does not mean that these investments should not be done, but they should not be the only, or main investment be in the area.

Socio-spatial

Since several years the Dutch society is very focused on safety and livability. This is shown in the rise of political parties like ‘Leefbaar Rotterdam’
(Livable Rotterdam) and the cry for more police on the streets. People feel unsafe in their own neighbourhoods, and feel that it is degenerating. Newspapers and magazines are regularly placing poll-results, research results and opinion articles on the topics.

One of the more recent articles showed that safety is the second worry of the inhabitants of the Netherlands, before the economic crisis, but after norms and values.

Therefore the societal relevance is looking in on the issues of safety and livability and see how urban design can contribute in addressing the problems.

According to a research done by the Ministry of VROM, Public housing, Spatial planning and Environment (translated by author), from 2004, the inhabitants of an underprivileged street are the least happy with their living environment. They are also the biggest group of inhabitants in a city with an underprivileged housing area, that want to see improvement in their living environment and social safety. The same research shows that in those streets the quality of the public space is the least. Municipalities should therefore focus on improving the public space in these areas, since they are also the only responsible party for the maintenance and improvement of this public space. Public space which the current inhabitants can use, and want to use, in order to break the vicious spiral in which less use leads to more decline, which leads to less use (Carmona, 2010). The main problem this research and design will investigate is that the inhabitants do not feel connected with each other and the neighbourhood, others do not want, or are afraid to go there, because of the bad public space for which nobody feels responsible, and is therefore neglected.

To test the found theories and hypotheses an underprivileged housing area in the Netherlands is chosen. This is the area of the Stationsbuurt and part of the Schilderswijk. They are underprivileged housing areas in Den Haag, with problems typical for an underprivileged housing area in the Netherlands (orange). They have been intensively studied and because of that there is a lot of information available about the areas. Together with the fact that they are next to the vibrant city centre (green), they are therefore chosen as design area for the project.

Academic relevance:
Most urban regeneration plans in the Netherlands are starting with demolition-rebuild or combining demolition-rebuild and public space development when addressing the problems in underprivileged housing areas, and funding festivities and neighbourhood coordinators. But a resent study has shown no measurable effect of the latter and demolition-rebuild does lead to improvement, but at the cost of the inhabitants, therefore moving the problem. (Marlet, Poort, Woerkens, 2010).

“Currently it is estimated that 80 percent of public open space within urban areas is in the form of streets. Yet the fact that streets impinge upon urban life as routes, locations for services, frontages to both residential and business properties and often are the boundary between public and private life is often ignored by professionals, politicians and decision makers.” (Woolley, 2003, p.79)

The academic relevance of the project will be adding to the knowledge of what the possibilities and necessities are when only public space is used to improve social cohesion and safety in underprivileged housing areas, or in any other housing area where the inhabitants are content with their houses but not with the neighbourhood.
Aims

From the problem statement the aim of the project is to reformulate strategies for the public space, conform the changes in society, and given the political-economic alteration to find how public space can be used as an approach to regenerate urban living areas in underprivileged housing areas in the Netherlands. The effect of this approach should generate neighbourhoods where people feel safe and which they find livable. The main concern in this approach are the inhabitants. It is the intention to regenerate areas for the current inhabitants and not to force them to move, or accidentally make them have to move because of changes in the housing stock.

The design of the public space should result in one in which the inhabitants of the neighbourhood feel safe and want to be, but also one in which visitors of the area want to be and feel safe. This will be done not just by applying a lick of paint but by making public spaces that support the needs of the inhabitants for these spaces. This will therefore produce the feeling of connectedness for the inhabitants with the area and with the rest of the city.

The research for this design is focussed on how people use, or would want to use the public space, and how this translates into spatial conditions for the public space in order to increase the social cohesion and safety in the neighbourhood.

Another part of the research of this project is to find out how public spaces can be made easily adaptable for the inhabitants.
The research has two main themes: use of public space and public space in Den Haag. For these two themes there are accompanying research questions and sub questions.

The use of public space in the Netherlands.
1. Which different roles in terms of social cohesion can different types of public spaces have?
   a. What kind of public spaces are there?
   b. What are the spatial conditions for these roles?
2. How can public space be made easily adaptable to the inhabitants, but without great costs for the municipalities?
   a. Which elements of the public space can be easily adapted by inhabitants?
   b. Which elements of the public space will have to be adapted by the municipality?

These research questions will be answered by using literature on topics of social cohesion and its relation with public space and case studies on policies of comparable municipalities regarding the public space in housing areas.

Public space in Den Haag.
1. What are the plans of the municipality for the design area and its surroundings?
   a. How do these plans influence the area?
   b. What has already been executed?
   c. What is lacking in the plans?
2. What is the role of attractors in and near the design area?
   a. What attractors are there in and near the area?
   b. How can these attractors play a positive role in the use of the public space of the area?
   c. What kind of public space is there in the design area?
   d. What is the quality of the public space?
   e. What kind of public space does the area need?

These research questions will be answered by mainly using analysis of the design area and its surroundings, but observations, case studies, policies and literature will also be used.
Methodology

Several methods are used during the research for the project. For each research question one or more methods will be used. The findings from these methods will be used to draw conclusions which in turn will support the design. This is made visible in scheme 1.

The different methods used are:
- Literature; in the form of books, articles, surveys, government reports and papers. The literature research done for the use and safety of public space will result in the Theory paper, which is a part of the graduation track of the MSc Urbanism. The findings from the literature research on the design area and the city of Den Haag will produce facts about the history of the city and the area, and what plans there already are.
- Case studies; compare streets or areas which have one or more comparable element or desirable element for the design area. Looked for in case studies are answers for the research questions on the topic of the use of public space: What is different, what is the same? Which elements can be implemented in the design area? Which are not suitable in the design area? The Via del Corso in Roma, the Gerard Doustraat and the Gerard Douplein in Amsterdam will be used as case studies. The Via del Corso because it is a historical line in the street pattern of Roma and one of the main shopping streets and well used. The Gerard Doustraat and Gerard Douplein are used as case study because they are not in the main shopping or catering area, but they are still very popular. The findings from the case studies will be part of the theory on which the design will be based. Case studies also include observations and site analysis of Den Haag. Observations; photo’s and mapping of the current state of the public space in the area will provide the most up to date information on the public space in Den Haag. Looked at will be: What types of public space are there? How do the inhabitants use the public space? Which public spaces are not being used? These facts will complete the analysis of the area.
- Site analysis; this will be done in the form of mapping, and drawings. From the analysis facts about the design area will be discovered. These facts will be in the nature of the location of amenities, like playgrounds, shops and cafés, and find the strong and weak spots in the area.
As mentioned before the research results in facts and theories which are useful for the design. The Oxford Dictionary (2011) defines facts as: “a thing that is known or proved to be true.” Facts in this case are the height of the buildings, location of the neighbourhood centre, etcetera. These facts can be translated in spatial factors which influence the design possibilities.

For theory the Oxford Dictionary (2011) gives the definition: “a supposition or a system of ideas intended to explain something, especially one based on general principles independent of the thing to be explained.” The system of ideas resulting from the research will have topics such as how people use public space. These theories can be converted into spatial conditions needed to improve the area. These are generic elements of theories and will be used in the specific design case of this graduation project. This specific design case might produce generic elements that could be used in other design cases.

Thirdly, testing and experimenting of designs within the defined framework of spatial factors and conditions provide possibilities to create alternatives for the design. Each alternative has to be checked with the theory and facts, and sometimes new problems will arise, because the factors and condition are in conflict. The alternatives will be constantly verified until the moment comes when the design has the least possible conflicts; this alternative will be used to produce the final product. This process can be seen in scheme 2.
The design and research process evolves around creating a better solution for the stated problems, where the research fuels the alternative and discussion making process for the solution. This can be seen in the research and design spiral in scheme 3. At the start of the project more research on the social aspects of the subject is done (purple), and near the end of the year, the spatial aspects and the design (blue) are more prominent. At the points where they cross, the design and research influence each other. The research leads to a design solution, or the design raises more questions, for which more research is needed to produce an answer.
As in scheme 3, scheme 4 shows that research is being done right from the start, and is the main focus. As the fourth midterm presentation, P4, nears, the research is less and less the focus, and the design more and more the main subject of activity. Some methods are sooner finished, for instance the observations and site analysis, then others. Case studies for example can help find solutions for conflicts found while designing, thus this method of research is used longer in the design and research process.

Designing starts as soon as some research results are found. Even with minimal results, ideas for the design area can be formed, and the then formed design might help to find other underlying problems and conflicts between spatial factors and desired conditions, which then can be studied, and can help focus the research questions.

The designing by forming alternatives continues until shortly before the P4. Then the decision has to be made on what the final design is going to be in order to be able to produce the proper products to show at the fourth midterm and eventually the final, P5, presentation.
Expected products

The expected products will be:
1. A theoretic reviewpaper about how people in general experience public spaces in terms of safety and use. It also reviews wether people of other ethincity use public space in a different way, in order to find the spatial conditions that are needed for the design area of which the majority of inhabitants are immigrants.
2. A report in which the research results on the topics of the use of public space and the public space in Den Haag will be described.
3. A design intervention in the chosen area where the findings of the research will be implemented in order to achieve the regeneration of the area.
Research
The theoretical framework on social safety for this project consists of several aspects: human needs, placelessness, and livability. These aspects will play a large role in the project and influence each other, and have a connection with public space.

The public space used in the project is best defined by Carmona:
“Public space (narrowly defined) relates to all those parts of the built environment where the public has free access. It encompasses: all the streets, squares and other rights of way, whether predominantly in residential, commercial or community civic uses; the open spaces and parks; and the public/private spaces where people access is unrestricted (at least during daylight hours). It includes the interfaces with key internal and external and private spaces to which the public normally has free access.” (Carmona, Magalhães, Hammond, 2008, p.5) thus the project will not include public spaces that are not always accessible, for instance restaurants, musea, etcetera.

Human needs
At the widest end of the pyramid is the most wanted of the human needs. At the highest end, the need with the least importance is located. Basic human needs are ordered in hierarchy according to personal (cultural) factors. This means that the hierarchy in the pyramid can assume a different order for different people and/or in different circumstances (Maslow, 1970).
Two out of the five needs in the Pyramid of human needs are influenced by the living environment: safety and security needs, and affiliation needs (Carmona, 2010).
Affiliation needs in this project consists of having a sense of place, or negating placelessness, and have great influence on the livability. Both the needs are underrepresented in underprivileged housing areas, and are therefore main themes when improving the housing area and its public space.
Placelessness

Placelessness means a lack of place distinctiveness or the absence of environments that people care about. Crang (Carmona, 2010) argues that fewer cultures are ‘place bound’ because of the increase of communication and transportation methods. Placelessness is therefore not a problem any more, having a place is not needed. But in underprivileged housing areas, inhabitants have very little money, and therefore less possibilities for communication and transportation to people and goods not available in their direct vicinity. They are, because of this shortage, involuntary very placebound. Therefore it is important to create places which they actually care about, create a sense of place.

“(…) without conscious concern for urban design as a process of restoring or giving qualities of coherence and continuity to individual, (…) overall place quality is inevitably neglected.”

Carmona 2010, p 14
Livability

“Livability refers to the quality of the interaction between people and surroundings. The apparent livability focuses the attention on this interaction, the perceived livability approaches this interaction from the point of the people and the supposed livability approaches this interaction from the point of the surroundings.” (Dorst, 2005, p. 81)

Since in the Netherlands the practice is to focus on the perceived and the supposed livability (Dorst, 2005), the focus of the project will be on the apparent livability, and enhancing the livability in the neighbourhood with the apparent livability as approach.
Social cohesion and safety

In ancient times the use of the local public realm was associated with participation in public life. The market square and the church used to be places in the city with a social function, and it was there that social life of the community took place (Aalst and Ennen, 2002). Nowadays people do not need to go to the market square for public life; internet and other multimedia provide the locale for many in which their social life happens, and the car and internet make distances less important: the community is where one chooses it to be (Mitchell, 1995 in Carmona, 2010).

But it is still important to have a sense of community, social cohesion, in the neighbourhood to feel safe (Luten, 2008). Casual interaction in the neighbourhood through sitting-out areas, residential squares, or journeys on foot to school strengthens the sense of belonging to a community (Blokland, 2008; Cattell et al., 2008).

These kind of outdoor activities can be divided in three types: necessary, optional and social activities (Gehl, 2001).

Necessary activities are those like going to work or waiting for the bus, in short all everyday tasks and pastimes. They will occur in all circumstances and are more or less independent of the surroundings, and since the majority of the activities is linked to walking, they do provide some social control (Gehl, 2001). But in bad public spaces people will try to avoid being in them as much as possible, sometimes even taking a detour to not have to go through that scary place (Loukaitou-Sideris, 2009).

Optional activities include those for which there is opportunity, and a wish to do so, like taking a stroll. These activities will only occur when the surroundings are appropriate and the weather is good. These activities are highly influenced by the physical qualities of the public space. Public spaces of very low quality will have little to no people using it for optional activities. Public spaces with a high quality will attract a wide variation of optional activities, and will make people who are coming there for necessary activities spend more time (Gehl, 2001).

Social activities are varied; they include things like children playing, simply greeting people, or just passively seeing or hearing other people. Because of this wide spread variety they can occur on many different places like gardens, public buildings, or at work. Social activities are also linked to necessary and optional activities, they occur because people are in the same place, they are dependent on the other two types of activities. Therefore when necessary and optional activities are better supported, more social activities will happen (Gehl, 2001).

Good public space is where people mix and encounter, it thrives on density and diversity (Stevens, 2007). This density and diversity is obtained through the creation of multifunctional spaces, that meet the needs of several groups (Aalst and Ennen, 2002). But people use spaces in ways as they see fit, which means that sometimes uses will overlap. Planters, or steps in front of buildings will often be used by people to sit on and look at others (Stevens, 2007). The result of these various uses can be that they are in the way of others, for instance people having to use the steps to go into a building. This can be avoided by taking these several kinds of uses of the same feature in consideration when designing and making the feature more robust or more spacious (Luten, 2008).

The use of public space and safety are connected. A large part of feeling safe has to do with whether there are people in the public space (Gehl, 2001). But not knowing what others are doing, not recognising other customs, creates uncertainty and in the worst case, fear. Leisure activities in the public space offer the possibility to getting to know, and to a certain degree respect, the behaviour of others (Jókövi, 2000).

Social safety is part of livability, or the relation between a subject, person, and its surroundings (Dorst, 2005). It means protection against human caused threats and criminality, like violence, graffiti, robbery, vandalism, and pollution. There are two kinds of safety: objective and subjective safety. Objective safety means that surroundings are free of above mentioned threats and criminality. Subjective safety means whether or not a person is feeling safe (Luten, 2008; Voordt...
Fear of being a victim causes exclusion from the public realm. Certain settings in this public realm cause more exclusion than others, like a dark alley, wrong crowd, or too little people (Carmona, 2010).

Social safety can be influenced by the design of the public space. This design has to integrate a combination of four guidelines: accessibility, attractiveness, legibility and visibility (Luten, 2008).

Accessibility
Accessibility means that the public space has to be designed in such a way that the intended users, but also emergency services can access it, but if needed are inaccessible for unwanted and unintended use (Luten, 2008).

Physically excluding certain groups by the use of gates is sometimes preferred at communal gardens. But exclusion because of old age, handicaps, people with pushchairs, etcetera should of course be avoided. This means designing places where there are no slippery surfaces, that provide enough room to manoeuvre and where low physical effort is needed (Carmona, 2010).

Attractiveness
Aesthetic qualities
There are some things that are very personal or culturally related when talking about aesthetic qualities. But large-scale surroundings like La Defence in Paris can make people feel puny, and because of that unsafe (Luten, 2008).

How we arrive defines how we perceive a public space; wide urban squares feel even wider when arriving through a narrow street. (Carmona, 2010).

Function offer
People need a reason to go to a certain public space. It can be something formal like an appointment, or the presence of a public building, or just being able to look at other people (Luten, 2008).

Good public spaces offer various possibilities and functions, like walking, sitting, standing/staying, see, hear/talk, play/unfolding activities which also provide the possibility to experience the positive aspects of the climate: sun/shade, warmth/cool, breeze/wind protection (Carmona, 2010).

Creating the possibility to meet and observe others is creating multi-functional spaces, that meet the needs of several groups. But it is important to keep in mind that function is not so much the central issue, as is the experience and perception of the activities and areas (Aalst and Ennen, 2002).

Maintenance and management
Clean and intact is more attractive than filthy and broken. Unclean leads to unused, a no-man’s-land, used for unwanted activities. But lively and loved places have a certain messiness about them, and are subject to a lot of wear and tear (Luten, 2008).

Proper maintenance shows people care about a place (Carmona, 2010). In some municipalities some parts of the public space have been “adopted” by the inhabitants of the street or neighbourhood, in which they are responsible for the maintenance and care (Gemeente Zoetermeer, 2008).

Aesthetic sustainability
Making places too fashionable leads to aging of aesthetics. It is important to make public spaces adaptable to new demands, therefore reducing costs (Luten, 2008). Carmona (2008) adds distinctiveness to this. He pleads for preservation and enhancing of what is special about places and avoiding homogenization and standardisation. This creates a sense of place, making it meaningful, and therefore better used.

Technical sustainability
In short technical sustainability means using the right materials in the right place. This involves making objects weather and vandalism proof, especially in busy public spaces, although there are claims that beautiful design and subtle use of materials discourages vandalism (Luten, 2008).

Social sustainability
Feeling safe is greatly linked to social cohesion in a neighbourhood. Whether your neighbours are willing to help each other, know each other or do things together enhances the feeling of cohesion. Even loose contact is enough to create a feeling of safety, people just need to know they have neighbours that will support them (Luten, 2008).

This means that the public realm should provide space in which neighbours can engage with each other, either through sharing a cup of tea on the doorstep, working in the same garden or walking
the dog (Blokkland, 2008; Cattell et al., 2008).

**Legibility**

One part of legibility is that it is clear for users and inhabitants what is private, semi-private, semi-public or public space. Clear definition of the space means that people can ‘understand’ the space. This in turn avoids no-man’s-land for which no one feels responsible (Luten, 2008). Actual physical borders can even offer a clear structure in social relations (Stevens, 2007).

But it is important to avoid a hard transition; not all private activities are so private that nobody else is allowed to see it. Creating transition zones, like verandas or front gardens for houses, and cafés with terraces are such transitions (Carmona, 2010; Dorst, 2005).

The other part of legibility is that the function of the public space should be clear as well. For instance, no benches in walking routes, or making busy traffic routes in places which should be for sojourning. Clear routes with orientation points, especially for new visitors, makes sure people do not feel lost and insecure. It also creates a joining of pedestrian streams, which creates more people in one place, increasing the feeling of safety (Luten, 2008).

**Visibility**

Visibility revolves around seeing and being seen. Lighting is an important aspect of visibility. Most places marked as unsafe are badly lightened. But burglars are also more disabled when there is good lighting, and the risk to be seen higher, thus making their job harder (Voordt and Wegen, 1990).

Semblance of safety is to be avoided. A very well lit park might seem safe, but that does not have to be true. Without something like social control, lighting alone is not adequate to ensure social safety, and subjective safety might be secured but objective safety is not.

This social control can be gained by creating places where there are enough people, or social eyes, to be seen, but also to be heard by creating multifunctional spaces in which the chance to meet people on multiple times of the day will be bigger, or where there are a lot of houses and/or shops looking on the public space (Luten, 2008).

There are three types of social control (Carmona, 2010; Luten, 2008; Voordt and Wegen, 1990):
- Formal, by means of a security guard or police officer.
- Semi-formal, by means of a train ticket collector or caretaker.
- Informal, by means of inhabitants or passers-by.

For informal control, the most preferred form of control, it is important to have public spaces in which inhabitants and passers-by feel comfortable. If people feel unsafe, fear, they will avoid being there, which results in less people in that place, and more perceived danger (Loukaitou-Sideris, 2009).

Luten (2008) describes for these four guidelines which possible measurements can be taken. They can be found in the last pages of the book “Handleiding veilig beheer en ontwerp”
As concluded in the previous section, it is important to increase the use of the public space by inhabitants and visitors of the area. Visitors play a role in the observation of group activity; they provide vital stimulation, especially if there is a good mix of local inhabitants and visitors of the area (Jacobs, 1995). Visitors (sub)consciously choose a route through an area to go from one point to another destination, or when they are simple walking around for recreation (Carmona, 2010). Through this movement they experience the city, and these sequences of pictures give a vital impression of an area. The kind of impression people receive varies with the speed with which they go through the area (Jacobs, 1995). At the heart of the public space is pedestrian movement, and it is therefore important to enhance and support this movement (Salingaros, 2005).

To guide people through the area a route can be helpful; it also provides understanding of the area (Carmona, 2010).

In this route it is important to maintain a smooth line, without blocks. But a straight line is not necessary, clearly having to go around or through a partial block can even add interest. It provides variety and rhythm (Jacobs, 1995; Luten, 2008). Because of the possible danger, dominant noise and motion, traffic is the main concern of pedestrians. It can even prevent other observations and obstruct people from noticing the, possible, delightful surroundings. But complete segregation creates a lack of contact, orientation and stimulus, and makes people feel isolated. A possible solution for this problem is creating a route with alternately mixed and segregated networks and cores (Jacobs, 1995).
Typologies and qualities of public space

There are two typologies of publicness in public space: urban publicness and neighbourhood publicness. Urban publicness is attractive because of the anonymity it offers. This means that you are less, and in some cases, not, restricted in your movements and the people you meet, than in public spaces in the neighbourhood. But because of its anonymity you will not meet somebody particular. In the neighbourhood the public space offers room for certain groups to meet, and has therefore a different atmosphere: it is clearly public space for the inhabitants and has restricted use (Duyvendak and Boonstra, 2002).

This publicness has three qualities: ownership, access and use. Ownership depends whether public space is public or private, and whether it is neutral ground or not. Access defines whether everyone can enter, in the sense of if people have to pay a fee, e.g. a museum. But it also is about whether handicapped or elderly can enter the public space. Use is the measure on how actively used it is by different individuals or groups. Sometimes more publicness is desired and sometimes less publicness is desired. This depends on the location and the function of the public space (Carmona, 2010).

The level of publicness can vary in different situations; sometimes a semi-public space for an individual can be a private area of a group of inhabitants. This semi-public space can then be the private space of the neighbourhood. This way a system of lodged areas is developed (Dorst, 2005).

In this system it is important to arrange functions in a logical way and to make it possible that some areas can be closed down in the night. This will ensure clarity in ownership, and improves the feeling of safety (VROM, 2005).

There is a large transition from the private residence to a public outdoor area. This transition can be softened by a hybrid zone, which will prevent a sudden transition, and ensure that the inhabitant can feel safe. This zone can be a frontgarden, or even a height difference in the pavement. It is also a means for the inhabitants to display their identity, and a buffer against people looking in, but also ensures openness to make informal social control from the residence possible (Dorst, 2005).

The hierarchical position of a street in the network of the city and the neighbourhood defines the level of publicness and use. The street is the front space of a building. For a shop it is the space where one can display and invite people to enter; this kind of street has a high level of publicness. For a house it is where the inhabitant can display the house by placing benches or flowerpots; here it shows the closed character and cohesion in a neighbourhood, and has therefore a low level of publicness (Meyer, 2009).
Main issue in the project is the social cohesion in the neighbourhood and the perceived safety of the people on the street. Scheme five shows how the several theories relate to and influence each other.

There are two groups of people in this project, the inhabitants and the visitors of the neighbourhood. For the inhabitants the perceived safety will be achieved through social cohesion in the neighbourhood. For the visitors the perceived safety is achieved through the legibility of the public space in the neighbourhood.

Legibility of a public space is indirectly connected to the social cohesion of a neighbourhood.

In order to improve the legibility, the difference in levels of publicness in the neighbourhood will be enhanced. For the inhabitants this means creating more enclosed, collective spaces where they can actively influence the appearance of the space. This, in turn, will enhance the social cohesion as well.

The visitors on the other hand also need to be able to use certain parts of the public space, because of the proximity of the neighbourhood to the station and the other amenities in and around it.
History of Den Haag, the Stationsbuurt and Schilderswijk

The oldest part of Den Haag was built on the higher beach barriers which run parallel to the coast. Because the city was the most important residence of the ruling, and future royal, family of the Netherlands, it attracted the nobility and the rich bourgeoisie. The lower parts were where the first working-class areas were built, because there the soil was less suitable for building as it is peaty. This difference in soil produced the spatial division in higher and lower-class residential areas (Meyer, 2009).

With the instalment of Willem I as king in 1815, and with the arrival of industries and the opening of the Hollandsche IJzeren Spoorweg Maatschappij station, currently Hollands Spoor, in 1843, the population experienced a rapid growth (Erfgoedhuis-ZH, 2010). The city itself, however, did not expand, which meant that the population density went from 220 to 500 people per hectare. Hygienic conditions worsened, which was not beneficial for the living conditions; the canals were highly polluted and slow-moving, the stench must have been unbearable and diseases spread easily. The result was that from 1825 and onwards multiple canals were closed up. But it did not stop the rich moving away from the city centre, and living in the much more representative northern part of the town (Gemeente Den Haag, 2011). This part was again on a beach barrier; the bigger expansions were mainly in the peaty soil and destined for the working class (Meyer, 2009).

The building of the station also lead to the exchange of ownership of the grounds between the Hoefkade and Laak from Rijswijk to Den Haag. This went without any quarrel since the lands were mainly pastures, in fact nearly all the lands around the Hoefkade were. This situation remained until well into the 19th century.

The initiative to build a neighbourhood was taken by the municipality in 1862. A square with a public garden, surrounded by stately houses was build, the Oranjeplein. The rest of the new area was build by private initiative, which lead to speculative building. Even though the Oranjeplein was meant for the well-to-do, the lower classes settled in the streets around it. The formal building style only continued in one part of the Van Limburg Strumstraat. In another part close by 112 working class houses in blocks of four were build from 1863 to 1866 and again 56 from 1868 to 1869. This typology was nationally and internationally renowned for its economical use of space, while every house still had two façades with windows. More and more working class houses were build, which lead to the decrease of appeal of the Oranjeplein for the well-to-do. The
The municipality only interfered with the houses along the main street, but what happened on the grounds behind the first row of buildings was of no concern, leading to the build of many courts of almshouses. Only after 1892 it became prohibited to build this type of housing, but by then the larger part of the neighbourhood was already build. Still the aim of the private investors was to make the most profit, so the available space in between or behind the houses was used to develop extensions or industrial buildings.

Apart from private investments, council housing was also constructed, for example the Van Ostadehouses and the Fort in the Jacob van Campenstraat. These houses were relatively favourable in quality and rental price compared to the rest of the area.

The living conditions in the area were also bad because of the lack of green space; only the Oranjeplein had public gardens. Still the municipality did not develop any in the beginning of the twentieth century. This meant that as soon as people could afford it, they left the area and it turned more and more into a working class neighbourhood, leading to vacancy in the 1930s.

It took until 1924 before the municipality started to reorganised the centre, choosing the slum area to be replaced by a new route to give room for the increased traffic movement (Gemeente Den Haag, 2011). Despite the spacious layout of Den Haag, which already existed since the beginning because it was never fortified, the city centre lacked a lot of appeal in the seventies of the twentieth century. This was because of overdue maintenance and the increasing presence of the car, which formed a barrier for the shopping audience. Therefor the municipality made an integrated plan, ‘De Kern Gezond’ (The Heart Healthy, translated by author), to address the problems and set standards for the public space in 1988. This plan is still the guiding theme when the municipality needs to revitalise an area in the centre, and was expanded even outside the main shopping district (Meyer, 2009).

In the Stationsbuurt and Schilderswijk the situation
of vacancy changed due to the housing shortage in and after the Second World War, which meant that even the worst houses became occupied again. The large scale lack of maintenance on the houses that were all ready of bad quality eventually led to clearance and redevelopment from the 1980s and onwards (Gemeente Den Haag, 2010; 2011).

‘De Kern Gezond’ developed even further into the ‘Ruimte voor Kwaliteit’ (Space for Quality, translated by author) memorandum, with a latest version of 2004, which includes plans for the whole city (Gemeente Den Haag, 2004).

A policy issued in 2007 from the government concerns neighbourhoods in which problems like living, working, learning, growing up, integration and safety are very large and need extra attention from the government. This policy concerns 40 neighbourhoods, called the ‘Krachtwijken’, in The Netherlands, from which four are in Den Haag: Transvaal, Schilderswijk, Zuidwest and the Stationsbuurt/Rivierenbuurt (Rijksoverheid, n.d.). In this thesis these neighbourhoods will be addressed as underprivileged housing areas, where underprivileged means: not enjoying the same standard of living or rights as the majority of people in a society (Oxford Dictionary, 2011).
Two of the four underprivileged housing areas of Den Haag are next to the city centre, they are the Stationsbuurt and Schilderswijk. The centre has good public spaces, which are much used. The underprivileged housing areas have bad public spaces. This is a shame because for most of the inhabitants in this neighbourhood, their life plays on the street. They want to use the public space as an extension of their home. Some of the public spaces in the area have been used for criminal activities, but with the instalment of cameras on several locations, this changed positively. The area has very little tramps; there is one boardinghouse, but the tramps that stay there are not causing any trouble. The overall reputation of the area also plays a role in the perception of the public space and unknown behaviour by immigrants leads to a negative judgement by the indigenous. Immigrants and the older inhabitants of the neighbourhood stay separate from each other, they each have their own meeting places (Nus, 2012, pers. comm).
Analysis neighbourhood and area
Public amenities

Next to the underprivileged housing area is the station Den Haag Hollands Spoor. This is one of the stations used by people to reach the city centre (C). This means that many people, bicyclists and pedestrians, move through, visit, the area, and in that way make a claim on the use of the public space.

This claim is reinforced by other public amenities in the area. Close by are several shopping streets: Hobbemastraat (1), Paul Krugerlaan (2), and more local stores in the Hoefkade (3) and Koningstraat (4). Bigger shopping centres that also attract people that are not from the area are Bazaar shopping centre (5) with some cafés and the Haagse Markt (6).
Parks and squares

The majority of public spaces in and around the area are small parks and play areas. There are only three squares and those are located along the Hoefkade.
Plans from the Municipality

The municipality has a number of plans in and around the area that are in line with the ‘Ruimte voor Kwaliteit’ and the ‘Krachtwijken’ policies. There is a Masterplan Lijn 11-zone, Gebiedsvisie Holland Spoor en omgeving, Structuurvisie Den Haag 2020, Parkeren in de Haagse Binnenstad and a bicycle research and planning memorandum of 2009. These plans combined with the already executed plans, give an impression of what and where the improvements will be. For the Stationsbuurt it means that some small streets in the area, the Stationsplein and the Stationsstraat/Wagenstraat the public space will be improved, together with the plan to make the Hoefkade more bicycle friendly. But most of the improvements are mainly on the edge of the area.

The Masterplan Lijn 11-zone is now on hold due to the financial crisis. The municipality also developed plans for inside the design area, in which they want to demolish and rebuild parts of the neighbourhood, but for these plans as well counts that they cannot be executed because of the financial crisis. All plans work with the same way of financing: by the municipality. But the political-economical situation has changed, and demands a different approach.
The majority of the destinations and plans are at the edge or outside of the area. Inside the area there are a lot of small parks and play areas, but very few squares.
The rest of the neighbourhood is a living area with public spaces mainly intended for the inhabitants. Because the main user will be the inhabitant, the typology of the public space will be neighbourhood publicness. The design of the public space has its basis in the Shared Space theory, thus creating a more intimate atmosphere.

The Hoefkade will be the introduction of the neighbourhood to the visitors. On this axis the inhabitants and the visitors will see each other, which will ensure indirect contact. This indirect contact is important for the visitor to understand what kind of area it is and who lives in the area. There are a lot of small parks, public greens and play areas in the area, therefore the squares along the Hoefkade will function as neighbourhood squares. The axis will have a more city centre public space atmosphere, and is more anonymous. The typology the axis will have is urban publicness.

Currently there are two axes going along sides of the area. This is the axis going form the station to the city centre on the east, and the axis following the line 11 on the west. These axes are highly used and have a lot of amenities.

The area itself does not have a clear axis. Because the Hoefkade runs from the station to the Haagse Markt, and the fact that there are already some amenities and squares, it lends itself to become the axis of the neighbourhood. The aim of this axis is to create a link between the neighbourhood and the visitors and connect the area into the network of the city.

The visitor moves in the public space, but is not welcome all the time and everywhere in the neighbourhood; it should therefore be clear for inhabitants and visitors of the area what is more public, and what is more private.

Strategy on management of the public space
Until 1995 the general management of the public space in the Netherlands had very little interaction with its citizens, it was defensive and introverted due to cutbacks. It mostly focussed on the settlement of complaints.

The new form of management is aimed at stimulating involvement of the citizens and making processes more transparent to enhance support. This means more involvement in the organisational and financial structure, through interactive design, neighbourhood/area orientated management with fitting budgets where users take part in the decision making process. But it also means involving users though adoption contracts, cleanup campaigns, public inquiry evenings and plan formation (CROW, 2002).

One of the municipalities that used the adoption contracts is Zoetermeer. The aim was to stimulate the people involved to help think and participate in the public space. This was done by having a street or neighbourhood adopt a public park where they will be responsible for the maintenance. Companies were also asked to contribute in the costs, in exchange of more input in the plan making and realisation. But places that are much used or have other values e.g. environmental, have other qualities and are therefore managed by the municipality itself (Gemeente Zoetermeer, 2008).

In Enschede the municipality issued the management of the grounds of one project, including the wadies. These wadies are essential elements in the water management, but the municipality now lacks the possibility to preserve the system. This is an example where the municipality went a bit too far with participation of the inhabitants. It is essential for these types of infrastructure to keep the management in the hands of municipalities (VROM, 2005).

An example where maintenance was easily transferred to the inhabitants is in Rotterdam in the borough Feijenoord. There the municipality let part of the sidewalks be removed in order to create façade gardens. The inhabitants where from then the ones responsible for the maintenance of these strips. In another part of the neighbourhood a neighbourhood garden was realised (KEI, n.d.).

In Amsterdam two housing associations gave away the ‘decorative greenery’ between three buildings for inhabitants to start a kitchen garden. The kitchen garden was the project of an artist and aimed to create better social cohesion in the neighbourhood. In the kitchen garden, produce is cultivated of which half is for the inhabitant and the other half for communal use in a festival, run by themselves (Boeijenga, et al., 2010).

In Rotterdam and in Den Haag the municipality is in charge of the management of the public space in the city centre. This ensures that the municipality has full control over the public space, which is important, because the function of this public space is much more formal and representative (Gemeente Den Haag, 2004; VROM, 2005).

Façade gardens in Rotterdam. Image from http://www.creatiefbeheer.nl/cache/600x338_85_site78_f_20110511135752_stil_geveltuintjes.jpg

Kitchen garden project in Amsterdam. Image from http://www.stedelijk-kindestad.nl/projects/in_west/posts/stedelijk_in_west_de_kok_de_kweker_zijn_vrouw_en_hun_buurman
Introducing experiences from inhabitants ensures that changes in use are anticipated. It also leads to more support from inhabitants for plans from the municipality. And it greatly improves the involvement of inhabitants with the neighbourhood and their neighbours (CROW, 2002; VROM, 2005). This involvement enhances the internal social engagement with the neighbours and creates a bond between the inhabitants and the neighbourhood, and therefor increases the social cohesion (Marissing, Bolt and Kempen, 2004).

How much influence can be issued depends on the goal of the participation and the kind of public space. The lowest level is simply handing out information to inhabitants, they are solely receivers. This can be done by information meetings, leaflets or websites. Inhabitants do feel involved, but they do not have any influence.

In the next level inhabitants can also bring in ideas. This will improve plans. The municipalities are free to decide what to do with these ideas, but the aim is to make the management of specific parts of the public space better suited to the needs of the inhabitants.

A further level is when municipalities together with the users make the preconditions and dived the responsibilities. Inhabitants are actively involved in their living environment, which can lead to better use of the public space and improved social safety. The communal aim is most important, and in this aim municipalities can issue some responsibilities to for instance residents’ associations.

The highest level of involvement is when inhabitants themselves take the initiative for development, execution and maintenance. The municipality only offers facilities and sets preconditions on the accessibility of utilities or water management. Handing over the management to the inhabitants is best done in a growth model, where responsibilities and budget can be assessed yearly. For instance, inhabitants can be used as subsidised employee for supervision and maintenance (CROW, 2002; VROM, 2005).

Public spaces have many functions, and those functions require matching management. Therefore it is important to first define the function and then the kind of management. Since the design area has two types of public space there will also be two types of management. In the part where the function of the public space is more formal and should have an urban publicness, the management will be in hands of municipality alone. In the area where the public space will have an atmosphere of neighbourhood publicness it will be important to give a sense of belonging. Therefore the management will be on the level where municipality and the inhabitants make the preconditions and plans together. Some parts may be even on the level that the inhabitants adopt the public space, but that is location specific.
To be able to define which streets can be managed on what level, it is important to define how the public spaces are used and by whom.

The map shows where the passers-by and the inhabitants meet and what the function of the public spaces are.

Two streets in the area are of great importance to the general public, and have potential for high publicness. Streets that have a school in them are of reasonable importance to the general public, because not only inhabitants of the street will use the public space but also passers-by.

One of the football pitches is also used for activities organised by the community centre. This means that a wider range of people will use the space.

One of the parks is in the care of the inhabitants, this means that this park has more importance for the inhabitants of the surrounding building blocks, but it can still be used by others.

Some of these public places are badly used because they are badly, or even, illegible, and it is not clear if the space is intended for inhabitants or passers-by, or both.
Example of a street with possibility of high publicness: Hoevkade

The squares along the Hoevkade are not lively. They do not have a lot of furniture. They do have parts with display windows, but other parts only have entrances for houses. Cars have the tendency to load and unload on the bicycle path, which is in the way of the cyclists. The bus stop is on the bicycle path as well. Some parts feel dark because there can be too much trees, keeping away daylight. Some parts feel neglected because it has a blind wall, with a lot of graffiti.
The Hoekade is a historic line in the street pattern of Den Haag and runs even further on the west and east side. It is the fastest way from the station to the Haagse Markt. The length between these points is about 1600 meters, which will take a pedestrian 26 minutes. This means that pedestrians will be mainly local traffic using shorter pieces of the Hoekade, and bicyclists will be mainly transient, and use longer pieces. Because of its length, and plans from the municipality to make the street more bicycle friendly the design should also take bicyclist in consideration.

The width of the Hoekade varies between 10 to 15 meters, this means that the smaller pieces are one way traffic, and the wider pieces are two way, with even a bus line going through the most western and widest part.

There is one main cluster of shops in the centre of the Hoekade, and one main cluster of catering at the east side. There is also a community centre, a
library and a police station.

A comparison has been made with the Via del Corso in Roma and the Gerard Doustraat in Amsterdam (see appendix 1). The Hoefkade is also a street with some squares, widenings and narrowings like the Via del Corso, but because one block is one building with one façade, it does not have many indents. It also has fewer display windows, but they are clustered. This means that at least part of the Hoefkade can have the same liveliness as the Via del Corso.

The clustering of facilities in the Gerard Doustraat is the same as on the Hoefkade, but this street is smaller and has one way traffic. The squares in this street are popular and well used, because of the catering and shops that are located alongside of them.
Examples of public space where social cohesion could be strengthened

The public space in the neighbourhood is varied in quality and typology. Some are just normal streets, others are squares or public green. In this example (1) of a street there is some public green, which is unused, because it is next to a large play area. It is not clear for whom the green is intended. The same goes for the public green in the second example, but in this place the high and impenetrable fence makes it even more a no-man’s-land, and provides space for criminal activities (Nus, 2012, pers. comm). The square in the third example has no furniture, and is therefore not used, even though there are shops around it. The street directly coming out on the square, in example four, has no windows, and mainly garages. This makes the street very badly overlooked, which creates the feeling of unsafety.

The last example (5) shows a street with a lot of windows looking out on it, but because nobody has a front garden of some kind, nobody feels responsible for the clutter and weeds, which makes it look rundown.

The next page shows more examples of the diverse street scenery in the neighbourhood of varied quality.
Levels of publicness
Current difference in levels of publicness
The publicness of a street depends on the location of the street, and should have appropriate design and furnishings. If a street has a lot of amenities and is used by a lot of people to pass through to go from one point to another destination, it should be visible in the design and furnishings of the street. The row of panels on the left shows the current situation of a street with high publicness and the lack of legibility and usability.

The second row of panels shows a street in which a school is located. This is one of the streets in which an amenity of such kind is located. The publicness of this kind of street is reasonably high, and its publicness should be visible, but it is not. The design and furnishings give no indication that an amenity of this kind is located in the street.

The next row of panels shows a street in which only houses are located. The design and furnishings are the same as the street with high publicness. This makes the legibility in the housing street very bad, and does not give any possibilities for the inhabitants to lay a claim on the public space. The transition from street to home is immediate and therefore not beneficial for the social safety.

Only in some very small parts of the area is the legibility very good. This is in the areas where the inhabitants can lay a large claim on the public space and the publicness is meant to be low because of its location in the neighbourhood. These housing blocks form an assembly, not only through their architecture, but also through the public space.

The streets in these four examples are in four different kinds of location, and should therefore have four different kinds of design and furnishings. Only the last example clearly shows its publicness, the others show very little difference.
Desired difference in levels of publicness

Image from: http://hetonbekendeflorence.blogspot.com/

Image from: Google Streetview

Image from: www.creatieveheer.nl
In the highest level of publicness, adding places to sit is an example of improvement; giving the people on the street the opportunity to see and be seen and thereby increasing the social security.

One level lower, an example is to slow down the traffic and show that the school is located in this street, will increase the legibility and thereby the social safety.

The next level provides inhabitants to make a small claim on the public space. The streets with this kind of improvement connect the higher levels of publicness with the lowest levels of publicness. Giving inhabitants the possibility to lay some claim on the public space increases the social cohesion between the inhabitants in the street and of the inhabitants with the street they live in.

The lowest level of publicness should be in streets that can form an assembly through their architecture and location in the neighbourhood. In this level, the inhabitants should be stimulated to actively use the public space and claim it. In these kinds of streets, the social cohesion is improved through giving public space to the inhabitants and giving them the say in the design and furnishing of the public space.

The desired situation is one in which the levels of publicness is clearly visible in all the streets. This means adding certain furnishings and providing the possibility for inhabitants to lay a claim on the public space. This depends on the level of publicness of a street.
Comparison current level and desired level

In the current situation the difference between the upper three levels is very low. The amount of streets with the possibility for the inhabitants to lay a claim on the public space is too low, and there are too little assemblies in which the inhabitants can actively use the public space. In the uppermost level of publicness the presence of people on the street is not supported.
In the neighbourhood there are a lot of streets and other types of public space that need redesigning in order to increase the social safety and enhance the social cohesion. Some public spaces need more attention than others, and some need a different kind of intervention.
The overall legibility of the neighbourhood does not stimulate social cohesion and safety. To improve the social cohesion and safety in the area the legible difference in the levels of publicness is to be enhanced.

Two areas in the neighbourhood have a great difference in the desired level of publicness and the current level. These places are illegible. The areas where there is a large difference between the current level of publicness and the desired level are marked in orange. These are also the places which are currently badly legible. The orange areas are the spaces which have little difference between the current and desired level of publicness, but could benefit from some adjustments to improve the legibility. In general, the legible difference between public space with public functions and public space without should be enhanced, the transition from home to street improved, and the possibility for inhabitants to ‘claim’ the public space should be strengthened. What kind of intervention is needed varies per location. Even though the neighbourhood has a bad reputation, there are areas where the public space is legible, and therefore have no difference between the current and the desired level of publicness. These areas need no intervention.
Because of the diversity in the architecture of the buildings and the dimension of the spaces, large variations in solutions are possible which strengthens the possibility to create a sense of place.

This process does not have to start in all streets at once, but can be implemented every time the municipality has to open up the pavement, because of maintenance on sewage, or when a new cable needs to be put in place.

In the next part of this thesis, Design, several examples of interventions on the different types of publicness are shown.
Design
Design for the highest level of publicness

The long line which is the Hoefkade has two basic designs for the street layout, because of the variation in width. Several special points along the street also have a specific design. These are the squares, the shopping cluster, the quiet area around the church and the crossing point with the two axes and the wide street.
Example sections Hoefkade

The Hoefkade should, according to the plans of the municipality be a bicycle friendly street. Currently the cyclists share the space with the car, which in some places creates conflicts with cars trying to park and trucks unloading. In the smaller part of the street the many large trees take away a lot of the light.

To enable cyclists to go through the street a separate lane is introduced. In the smallest part the Hoefkade the lane is on one side of the street, but used in both directions. The needed space is created by removing the parking spaces on one side of the street. In the wider part it is not needed to sacrifice the parking spaces.
Example Hoefkade square 1

At the moment the square does not provide for the desired high level of publicness. The façade of the building is not inactive, but there are only houses, which provide some eyes on the street. The rest of the square is basically empty.
Impressions of the new design
By adding a street theatre a connection with the library (1) and the neighbourhood centre (2) to the square will be established. The neighbourhood centre now uses a schoolyard away from the street, which is suitable for sporting event and such, but some events like singing, dancing or other performances could benefit from a theatre on the main street. Thus giving the possibility to show to the neighbourhood and the passerby what they do. Introducing the small cafeteria (4) with a raised terrace (5) to link the shopping area more to the west, the shopping area in the Koningstraat (6), and the shop on the corner (7). This will give direction and the adding of program will increase the usability of the square.

The east side of the square is designed for the inhabitants. This is an area where they can meet in a more quiet setting (8). This side is greener to form a link with the Oranjeplein, which is a neighbourhood park. The parts of the plantation at the side of the building will be in maintenance and ownership of the inhabitants of the block, to enable them to lay a small claim in this otherwise very public space.

The brick paving (10) is elaborate to compensate for the otherwise uneventful square. Because of this pattern in the pavement, elements lend themselves as features, like a water gutter or a bicycle rack, or an element to sit on.

The municipality is the investor in this square, comparable to the ‘Ruimte voor Kwaliteit’ plans.
Impressions of the model
Example lower scale of publicness

The street in this example is a street with housing and a primary school. The school is separated by a brick wall. Because of this wall the fact that the school is located in the street is very badly visible. Furthermore, the wall is a blind wall, which produces the feeling of unsafety. The housing at the other side has no transition zone, and inhabitants cannot claim the public space.
Because of the security of the school the wall along the street has to remain. But in order to make it legible that there is a school located behind it, a small play area is introduced. This area can be used by the parents that pick up their kids at the end of the day, and the kids can play there when the parents have a little chat with each other.

This play area can also be used by the kids that live in the street in the weekend, or in holidays, because it is not closed off.

In this design the transition zone in front of the houses is formed by a small strip of façade gardens. The inhabitants of the street can give the municipality input on the amount of façade gardens and the type of playground equipment.
Example higher level of claim by inhabitants

In this street there are only houses, but it is not part of an assembly, and it connects a busy street with a small neighbourhood park. In the current design of the street there is no transition zone from the home to the street; there is no place for inhabitants to claim the public space and showcase their house and identity. There is however space for small trees.

In the proposed design for the street, on the opposite page, there is space for façade gardens; because of the width of the streets and the amount of parking space that is probably needed, real front gardens are not possible. This design is a proposed design because the inhabitants should be consulted for their wishes in the design of the street. It could be that they would not mind less parking space, and would prefer more space for plants. In this type of street the municipality and the housing association and inhabitants work together to realise and maintain the plan.
Example highest level of claim by inhabitants

The buildings in this location form an assembly with a lot of space in between them. Currently the street is rather empty, there is no possibility to do anything, it is badly used, and the lack of furniture causes the tree to be used as bicycle stand. The transition from street to home is very hard, there is no zone in between. Also, the possibility for inhabitants to claim the public space is very restricted.
By introducing a play area (1), chess area (2) and a teahouse/folly (3) the leftover space is used to provide the inhabitants the possibility to sit, play and meet with neighbours in their own housing block. Other sitting areas (4) in the middle of the street enable mothers with children, toddlers too small to go to the park, to play outside in a safe environment. Heightened planters (5), cared for by the inhabitants, provide the necessary transition and display zone between the home and the street. Heightened steps (6) create an extra in between zone that can also be used by inhabitants to sit on. The whole of the area is designed with the shared space principle (7); level pavement where the parking spaces and roads are marked by a different stone and not a height difference. In the shared space principle the car is not the main user of the road, the street is designed is such a way that driving fast is not possible, and this enables children to run and play freely. The areas surrounded by the buildings (8), are currently publicly accessible, and used for criminal activities. In the design proposal these areas will be closed of and the maintenance handed over to the inhabitants.

This design is a proposal, the actual design might differ because the inhabitants should be the ones defining how much space for plants is needed and what kind of other furniture is desired. The principle is thus that the inhabitants will play an active role in the designing and management of their public space.
Design for area with mixed publicness

This area is along the Koningstraat, a street with high publicness because local shops and other facilities are located in it.

At a right angle from the shopping street a play area is located which stretches out for approximately 100 meters. Because of this length there is a lack of overview, which is bad for the feeling of security. Also, because a play area is not a high public function, and it is along a road with high publicness, it breaks the line of the shops apart and makes the area illegible. This causes the play the area to be badly used, and a sort of on-man’s land.

Opposite of this area there is a small square. This square has no furniture and therefor does not support the high public function. Because it is opposite of the overly large play, it is also not clear for whom it is intended. Another element which negatively influences the square is the fact that a street with only garage doors runs of it. Because of the garage doors at street level, it is a poorly overlook street, and badly maintained.
Impressions of the new design
In the line of the street an extra block (1) is added to improve the legibility of the public space and strengthen the shopping street. This block should have amenities on the ground floor level, and housing on the levels above. Plus, by closing of the street with the garages for public access (2), and adding a small cafeteria with raised terrace (3), the square now has a clear function, as meeting place along the shopping street.

In order to prevent blind walls, extra housing blocks of two stories high are placed, intended for starters in the housing market. The interior area created by this placement will be private gardens (5) and a communal garden (6). The communal garden is to be used and maintained by the inhabitants of the housing above the shops (1).

The new and surveyable play area (7) will be in the care of the inhabitants of the surrounding, new and existing, housing blocks. For the older kids a football pitch (8) is created.
The closed off street (2) will be covered, which creates outdoor space for the existing flats. By covering the street the social safety for the people living in the building next to it will be improved. The inhabitants of the existing houses along the side street will have the opportunity to create façade gardens (9).
Conclusion

In this project the answer was searched on the research question how the perceived safety in Dutch underprivileged housing areas can be improved through the enlargement of the social cohesion by means of the design of the public space.

In most underprivileged housing areas the socio-spatial problem is that the inhabitants do not feel connected with the neighbourhood and with each other. Furthermore, they are unhappy with their living environment, and in particular the public space. Visitors of the neighbourhood find the public space bad as well, and in some cases do not even dare to go to the housing areas.

Currently the method used by municipalities and housing corporations to tackle the socio-spatial problems of underprivileged housing areas, is to demolish (part of) the housing area, and build new housing blocks. This forces inhabitants to move, and in a lot of cases they will not be able to return to the newly build houses, because they are more expensive. This method has been proven ineffective because it only moves the problem from one area to another. The main problem, inhabitants being unhappy with their living environment, and passers-by sometimes even afraid to go in the housing area, is not addressed with the current inhabitants in mind.

To answer the research question two sub research questions on the use of public space were relevant. The first sub research question on which different roles in terms of social cohesion can different types of public spaces have produced the following answers. In underprivileged housing areas a large part of the leisure time is spent outside, on the street. It is therefore important that the inhabitants have places in the public space where they can meet. Secondly, to increase social safety, it is important for passers-by to understand what kind of neighbourhood they are in, who is living in the neighbourhood. This can be done by providing space in the public realm where indirect contact between passers-by and inhabitants can be established.

But, more importantly, in order to enhance the social cohesion it is important that the inhabitants can actively claim the public space. Laying a claim on the public space can be achieved through having a front garden, or facade garden, but also in communal outdoor areas. This claim can be strengthened by handing over the management of (parts of) the public space to the inhabitants. In some streets, handing over the management is not advisable, because they are also used by other groups than the inhabitants, for shopping, school, or going from one important location to another. In these kinds of streets the management cannot be totally transferred to inhabitants, but letting inhabitants have a say in the design of the public space is already beneficial for the social cohesion. This means that in the neighbourhood the publicness of a street has to be defined according to the presence of public facilities and are therefore of public interest, or whether it is a street in which only inhabitants need to be. This results in a division of four levels of publicness.

The second sub research question, how can public space be made easily adaptable to the users, but without great costs for the municipalities, was inspired by that fact that due to the current economic crisis municipalities and housing corporations have less funds to spend on revitalising urban living areas.

In order to achieve the two goals, adapting the public space to the wishes of the inhabitants and without great costs for municipalities, cooperation with the inhabitants can be used. This cooperation can be in the form of letting inhabitants have a say in the design, which creates better support for the design. Another possibility is to let the inhabitants contribute in the execution of the public space. This can be done in the form of funds, but also, and perhaps more important in underprivileged housing areas where the inhabitants have little money, in the form of labour. When inhabitants have invested in the public space, this creates a bond between inhabitants and the space, and they will take better care of their public space. Therefore not only money in the short-term is saved, but also in the long-term. This also benefits the social cohesion between the inhabitants themselves and between the inhabitants and their living area. The location and the function of the street, the level of publicness, defines how much the inhabitants can
be involved in the management of the public space.

To test the found answers to the research question, the underprivileged housing area of the Schilderswijk and Stationsbuurt has been used. This is a housing area which was from the start build for the working-class. In first instance the building quality was deplorable, and from the eighties onwards many parts have been demolished and rebuild, but without one general plan. This created a living area with many different architectural styles. At the moment the quality of the buildings is adequate, but here as well people are not happy with their living environment.

The neighbourhood has been analysed and the public space defined on its level of publicness, according to its function. For each level of publicness a design was made to show how the public space will look if designed in a manner that improves the social cohesion and the perceived safety.

The combined designs create a network in which streets are legible and support the intended function, thereby increasing the perceived safety of the inhabitants of the neighbourhood and the passers-by.
The studio Urban Regeneration focuses on how to develop urban areas that are in decline. This is also the case in the neighbourhood Schilderswijk-Stationsbuurt in Den Haag, which was chosen as case in this graduation project.

For further research it would be recommended to hold surveys amongst the inhabitants of the neighbourhood about the exact locations of the areas they are unhappy about, find out what their wishes for the public space are, and how much money/time they could invest.

Another angle to research would be to find out how much money would be saved with the proposed method. But, it should be noted that the benefit of great social cohesion and perceived safety are hard to express in terms of money.

It is interesting to see that, although some of the theories and researches used for this project are not very recent, there are still municipalities that use the method of demolition and rebuilding of (parts of) neighbourhoods in need of regeneration. Including the municipality of Den Haag. Further research for the reason(s) why could be done, and the findings used to further improve the possibilities of cooperation between inhabitants and municipalities when addressing problems with the public space.
References


Appendix 1
Comparison Via del Corso, Roma

The Via del Corso is 1625 meters long, and is 11 meters wide. It is a shopping street, nearly all the façades are display windows, which creates a lot of liveliness on the street. It is a small street, with very small sidewalks, and two way traffic, this adds to the liveliness of the street.

The street is not a long line, it has squares, widenings, narrowings and indentations. One building block has multiple properties, and is about five or six floors high. These properties of the street make sure that it is not monotonous.
The Gerard Doustraat is six meters wide on the west side and ten meters wide on the east. The street is 825 meters long, with buildings four or five stories high.

The street has clusters of catering around squares, and most of the shops are in the middle part. The rest of the street has residences.

The clustering of facilities is the same as on the Hoefkade, but this street is smaller and has one way traffic. The squares in this street are popular and well used, because of the catering and shops that are located alongside of them.
Analysis Gerard Douplein, Amsterdam

The Gerard Douplein is a popular square. It has several bars and restaurants, which ensures a lot of liveliness during the whole day. There is some art, which functions as a meeting point. There are places designated to park bicycles, but apparently not enough, because people tend to place them anywhere, which makes the square a bit cluttered. Because the surface is level, the square looks more as a whole.