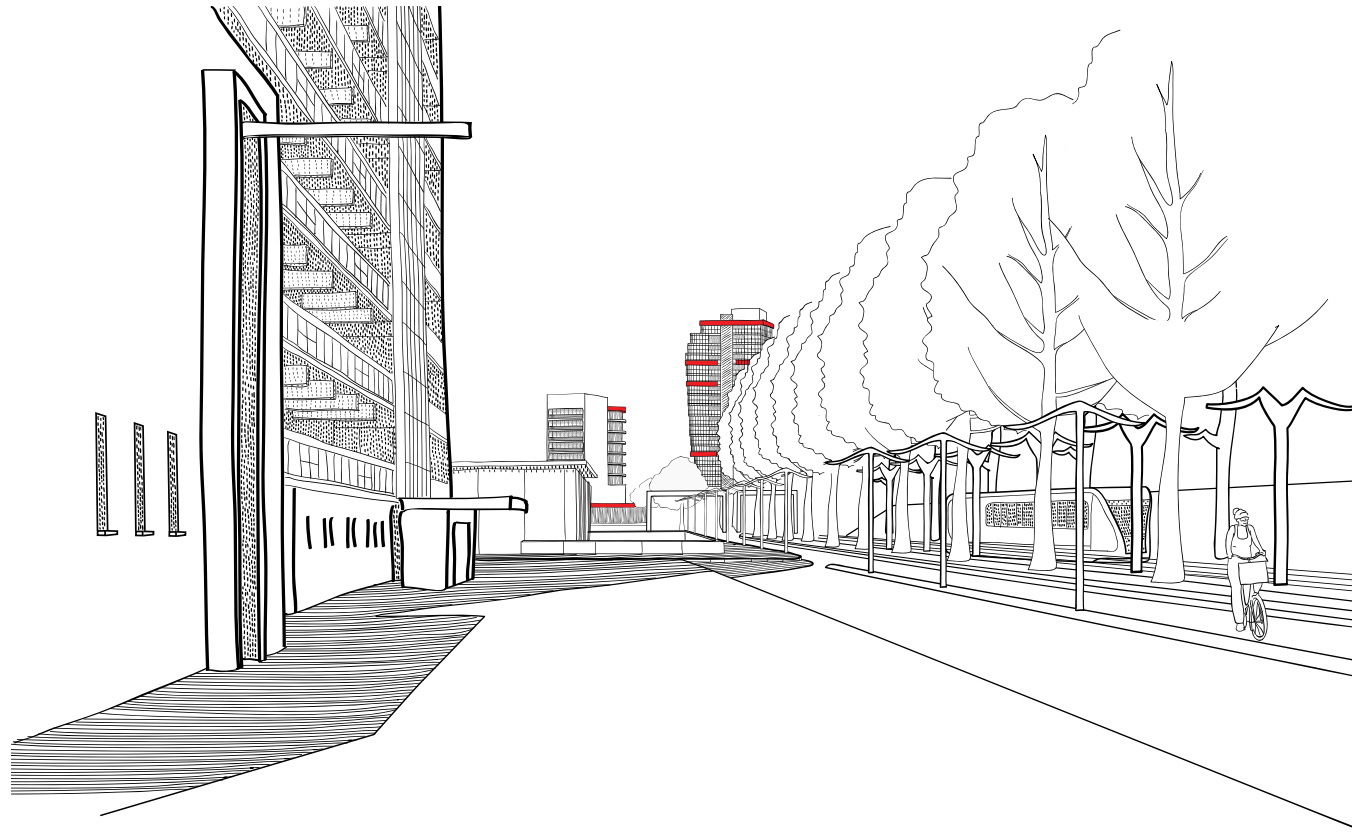


The experience of public space

Applying theories of Kevin Lynch (1960) and Gordon Cullen (1961) to establish an urban design for The Hague South East



Cobien Bruggeling

Colofon

The experience of public space

Applying theories of Kevin Lynch (1960) and Gordon Cullen
(1961)

Date: 4 April 2013

Delft University of Technology
Faculty of Architecture

Dual program: Architecture and Urbanism
Graduation studio: The Renewal of the Urban Renewal

Mentoren:

- Ir. M.G.A.D Hartevelde *Urban Design*
- Dr. ir. M.J. van Dorst *Environmental Design*

Auteur:

Cobien Rosa Bruggeling
1314173

c.bruggeling@outlook.com

Preface

This booklet studies the possibilities of the design of public spaces, in the light of two influential theories by Kevin Lynch and Gordon Cullen, published in the beginning of the 1960's. They focus on the design of the public space in relation to the experience of the city users. Yet again and again these theories are referred to, even in present time, 50 years later. A literature studies first explores their theoretical relevance. It addresses both its reasons, its social implication and its intended effect, based on environmental psychology.

Afterwards the practical relevance of these theories are examined to find out whether or not the proposed strategy is still applicable to today's cities. And what results could be achieved when such a strategy is incorporated in solving present urban design issues. This is done in an area in the Hague, parts of which had just been completed in the 60ies. At the same time close by other parts were part of the urban renewal process. Due to relocating industry the area has partially become vacant, a present issue more Dutch cities are dealing with at the moment. Furthermore fragmentation prevents it to fully function as part of the urban fabric. Links are missing, especially for pedestrians and cyclists.

The hypothesis is that although emphasizes have changed the relevance of theories remain intact. Therefore they still provide a useful starting point from which present urban issues can be solved.

This project tries to use design as an instrument to influence the experience of people of public space. Next to an urban design, an architectural design will show a concrete case how this strategy can be transformed into actual spaces.

TABLE OF CONTENTS

Theory: The quality of connecting public spaces	9	Urban Design: Routes	31
• <i>Beginning</i>	10	• <i>New connections</i>	32
• <i>Changes</i>	11	• <i>Blue route</i>	34
• <i>The threat of the car</i>	12	• <i>Purple route</i>	38
• <i>Cyclist and pedestrian connections</i>	13	• <i>Orange route</i>	40
• <i>Public realm</i>	13	• <i>Green route</i>	37
• <i>Activities of public space</i>	14	• <i>Concluding</i>	42
• <i>Experience of the city</i>	15	Architecture: The experience of a landmark	49
• <i>Use of public space</i>	17	• <i>The experience of architecture</i>	50
• <i>Concluding</i>	18	• <i>Typology</i>	51
The Hague: Analysis of urban design challenges	21	• <i>Situation</i>	52
• <i>Site selection</i>	22	• <i>Construction</i>	53
• <i>The Hague</i>	23	• <i>Programme</i>	53
• <i>De Kern Gezond</i>	25	• <i>Facade</i>	56
• <i>The Hague South East</i>	26	Conclusion: Adding four paths and a landmark	61
• <i>Concluding</i>	28	Reflection: The use of Lynch and Cullen	65
		• <i>Results</i>	66
		• <i>Notes</i>	67
		• <i>Urban process reflection</i>	67
		• <i>Architectural process reflection</i>	68
		Literature	71

Problem statement

After a century in which new forms of transport played a dominant role in the design of spaces within the city, now it becomes clear this has had a negative effect on the living quality of the city. Especially public spaces have been affected by the general use of the car. This while originally public spaces have been a unique attribute of living in a city.

Summary

To live in a city has originally been a way to be part of a society, where means and facilities are somehow shared to generate a surplus. Public space has been one essential aspect of these sharing grounds. It has not only been a functional attribute of getting from a to be but it does also provide room for its residents to undertake economic, social and recreative activities. But changes in society has altered the organisation of public space. The possibility to act out a wide range of activities in public space has become limited. The physical properties of space can stimulate or obstruct behaviour. Environmental psychology tells us that the cognition of the objects in the space influences the actions people will undertake. A designer could therefore use knowledge of the cognitive system to promote the possibilities of spaces by its physical form. Especially when orientating in a city people use their cognitive system. Familiar elements are used as guiding elements indicating the route that has to be followed to reach a certain destination.

The Hague has a grid structure with a dominant direction parallel to the coast. Disturbances in the grid make the use of landmarks indispensable when orientating yourself within the city. But in The Hague South East barriers have caused connections to be lacking in order to make one's way through the city. Especially for pedestrians and cyclist who are dependent on the frequency of connections.

Creating new routes consisting of pleasant public spaces can overcome the existing barriers and bring the area closer together. A landmark will give an image to these interventions, seen from every route. Upclose the landmark can add to the quality of the surrounding public space.

THEORY

The use of public space

In this chapter public space is discussed, in particular in its relation to the city, and how it provides a place for gathering a society. It is perceived as the common denominator of a community. Furthermore those transformations are discussed which are causing public space to change, not just in its physical attributes but also its role in society. From here an image is depicted on how urban designers could create better public spaces by taking interest in the way people perceive and recognize their surroundings.

Beginning

For centuries, people are moving towards the city. With the transition of our civilizations from rural to industrial in the last century, this process only accelerated. Thus the percentage of people living in a city has shifted completely. A hundred years ago only 2 out of 10 people lived in the city, now more than half of peoples population resides in the city. So cities have grown immensely and will continue to do so in the next few decades. (World Health Organisation, 2012)

Why do people want to live in the cities? According to Leo Lucassen, a Dutch historian, there are three main reasons; a wide variety of jobs in the city, a wide range of cultural activities and a large selection of different subcultures (2009). These are the advantages to be gained from gathering together of people to form a town explained by Gordon Cullen at the start of his book 'Townscape' (1961, p.7). *"A single family living in the country can scarcely hope to drop into a theatre, have a meal out or browse in a library, whereas the same family living in a town can enjoy these amenities. The little money that one family can afford is multiplied by thousands and so a collective amenity is made possible. A city is more than the sum of its inhabitants. It has the power to generate a surplus of amenities, which is one reason why people like to live in communities rather than in isolation."*

This gathering of people formed communities sharing their habitat. In this habitat certain rules and liberties were agreed upon. These rules and liberties could differ per city. Every city therefore attracted the people who wanted to belong to that specific community. Living close together enabled city dwellers to share and combine their knowledge, which allowed the community to advance. In this community a culture and traditions could flourish. Next to the gathering of people also a gathering of buildings had a distinguishing effect. A single building is just a single building, but if you gather buildings, in a certain way, the space in between can form a street or a square. This street or square is not merely a space in between buildings but it becomes a common ground for people to meet fellow city dwellers. Therefore this public space formed a place where the arisen culture

and traditions could be brought to expression. Next to that it is generally accepted that this gathering place had economic value. Bringing together sellers and potential buyers is an essential core of trading. So one could say that the public space actually is the key collective amenity of the city. Therefore public space has to be handled with great care. In the last century the city has been subject to mayor changes, in which the functioning of the public space has been compromised. In the following chapters some of these changes are discussed in order to be able to argue why parts of the city of today, with in particular public spaces, are still in need of reviewing.

Changes

During history, the way public spaces were created has changed, from being formed organically to being planned and designed. The essay 'The City and the landscape' written in 2011 by the author describes the growth of the city. Roughly following Waldheim (2008) the growth of the city could be simplified in three stages. At first the city was structured like a hard boiled egg, with city walls retaining expansion, which forced cities to densify. The city only grew one, or a few, buildings at a time, streets were the spaces where trading occurred. After the removal of the walls the city had room to expand, which mainly occurred along infrastructural lines, which made the city resemble a fried-egg. Having enough space to build, the expansions became more and more planned, first by private developers, later on more controlled by governments. Planners and designers translated their own visions on society into plans for the urban environment. Today the city is gradually becoming a sort of scrambled egg, being a bundling of divided pieces of city, each constructed by different visions.

Some urban designs turned out to be well-functioning new parts of the city but others failed to function as well as planned. A successful example is Plan Zuid (Plan South) in Amsterdam designed by Berlage in 1917. In his double role of being urban designer as well as an architect Berlage could establish a very consistent plan, designed onto the last detail (Curtis, 1982, p. 245-246). Another well-known

city design is the grid structure, famous examples being the plan of Manhattan in New York City of 1811 and the plan for Barcelona by Cerdà made in 1859. Although both have become very thriving cities the grid plan has been subject to criticism as well, for example because of its lack of distinction between arterial roads and residential streets. (Mumford, 1961)

One of the urban layouts that differs most from the historic city centre is the plan developed according to the modernist movement. This new type of city layout emerged out of a revolt for the bad hygienic circumstances in the overcrowded industrial cities of the 1900s and the rise of the machine, adding new buildings materials and new modes of transportation. In particular the insertion of the car stimulated designers to come up with new ideas to structure the city. Additionally light and air were made available for the working class man by constructing high-rise buildings in green open spaces. The rise and principles of the modernist movement in urban design are more elaborately addressed in the history thesis, named the devaluation and rediscovery of the street during the 20th century, also included in this booklet as an attachment. In the utopian ideas on which the modern layout was based, the urban life which previously had taken place on the street, could now flourish on the elevated decks, as well as on the outstretched green spaces surrounding the high-rise blocks. But in practice this was not the case. Instead the green spaces and elevated decks felt anonymous and turned out to be unattractive for urban life. Therefore soon after the first realisation of these types of modern extensions, people started to criticize them. The person that was very influential in this protest, was Jane Jacobs, a New York journalist, who saw this new modernist movement as anti-urban. In her book 'The Death and Life of Great American Cities' (1961) she compels urban designers and planners to look at the urban life on the streets. Although her book was merely on great American cities, she triggered people from all over the world to rediscover the street. Today many of modern planned neighbourhoods have been redeveloped, bringing back single family housing and shops to make active use of the ground surface.



Il. 2 Cedric Price : "Three Eggs Diagram"

source: Waldheim, 2006

The threat of the car

Modern planned neighbourhoods were not the only ones greatly impacted by the introduction of the car. Existing neighbourhoods, including historic city centres also had to make room for car traffic. It had an impact on the entire structure of the city, as well as on society. The car changed the way people moved through the city, therefore it also changed the use of the city. With the arrival of the car people were not forced anymore to live close together. Instead cities could spread outwards, scattered, eating up the landscape. Although the horror stories of a car-dependent monotonous urban sprawl are especially North American examples, the phenomena is also very prominent in Europe (EEA, 2006). Particularly in the Netherlands, as a small heavily populated country, the threat of losing our out-stretched polder landscapes to dreary business and residential areas is very evident. Therefore different policies have tried to turn the tide but still there is a clear trend of residents and businesses moving to the edges of the city. (Planbureau voor de Leefomgeving, 2011) Apparently living in a place where it is easy to get on the highway outweighs the proximity to a vibrant city centre.

easy way in which people can walk and cycle through the city, because you have to stop and wait for the traffic light to turn green. Due to this the city has become divided in different segments.

In the medieval city staying and moving could take place in the same space, but in today's cities they have to be separated. This has affected the way the streets and other public spaces function as a social gathering place. In their article 'The city and the car' Sheller and Urry (2000, p 6) quote from the book of Habermas published in 1992: *"The meaningful ordering of the city as a whole ... has been overtaken, to mention just one factor, by changes in function of streets and squares due to the technical requirements of the traffic flow. The resulting configuration does not afford a spatially protected private sphere, nor does it create free space for public contacts and communications that could bring private people together to form a public."* The car has occupied space where previously the urban life took place, not only by roads but also with parking spaces.

In the same article Sheller and Urry also quote Lefebvre saying that *"city life is subtly but profoundly changed, sacrificed to that abstract space where cars circulate like so many atomic particles.... The driver is concerned only with steering himself to his destination, and in looking about sees only what he needs to see for that purpose; he thus perceives only his route, which has been materialized, mechanized and technicized, and he sees it from one angle only – that of its functionality: speed, readability, facility."* That is also why Richard Rogers (2010) is not a fan of cars, because they discourage people to meet each other. When driving in a car, you only interact with the people in the car, who probably you already know, but you are not confronted with new people. While to Richard Rogers the beauty of a city is that you are not able to hide for the good nor the bad. In this regard the car works against the core qualities of the city.

Together with other merely functional new industrial components, like industrial grounds, railroads and harbours the introduction of the car has led to the emergence of empty spaces in the city. In his book 'Finding Lost Spaces' published



Il. 3 Industrial waterfront jammed up with highways

Source: Roger Trancik, *Finding lost spaces*, 1986 p. 2

A second argument to counteract this tendency of car-dependency is the environmental one. With destinations spreading further apart the cars will exhaust more and more toxic gasses into our atmosphere. Although the car industry attempts to sell cleaner alternatives still there is no good exhaust free replacement just yet. Apart from the presence of cars in our cities being unhealthy and environmentally harming, they also do not benefit the pleasantness of a specific place. Francis Tibbalds (1992) describes the negative effect of the car to its surroundings quite vividly when he tried to give an overview of current urban areas: *"The whole urban area is beset with dirty, noisy traffic congestion and quite probably is cut through with crude urban motorways, which have had a devastating impact on the local environment through which they pass."* Here Tibbalds also indicates the spatial impact of the car. The arrival of the car did not only make it less pleasant to be in the city, it made it also harder to use the city for staying and moving. The car obstructs the

in 1986, Roger Trancik quantifies the problem of lost space; 'that in most major American cities hundreds of acres are vacant and unused within the city boundaries. During the fifties and sixties suburbia drew people and industry to the periphery, causing viable downtown land to become vacant.' Continuous changes in the industries demand further exacerbated the problems, leaving major gaps along highways, railroad lines and waterfronts. These gaps disrupt the overall continuity of the city form.' *"Pedestrian links between important destinations are often broken, and walking is frequently a disjointed, disorientated experience."* (p. 2) Trancik's proposition is to identify these gaps and fill them with a framework of buildings and interconnected open-space that will generate new investments. Although Trancik said this 30 years ago about American cities, still at present times many of these lost places can also be identified in European Cities .

Cyclist and pedestrian connections

Arguments to encourage walking and cycling are mostly to counteract the above mentioned disadvantages of the car. Every time one person will choose to go by foot or by bike instead of by car means one car less causing congestion in city centres, less exhausts in the air, less smells on the adjacent side walk, less noise for the adjacent housing, one car less parked in valuable public space and a shorter waiting time for pedestrians to cross the street. But an important argument for the use of the bike or going walking has not yet been listed; the exercise. Going walking or by bike will exercise your body, adding to your health and preventing obesity. Furthermore people walking and cycling will add to urban life on the streets which contributes to feeling of safety, which will be explained in a later chapter.

The arrival of the car has put pressure on the public space, and this while public space is essential for life in cities. After so many years of the car prevailing in the planning of cities, a balance should be sought where the car can be part of the public space without disabling it. In search of this balance new types of street forms have been introduced in the last 50 years (Jan Gehl, 2010 p. 91,92). In

new planned neighbourhoods in the Netherlands, called VINEX neighbourhoods, this balance is found by introducing distinctive bicycle routes, and 'woonerven'. Woonerven are streets where the car can only drive 30 km/h and every other mode of transport has priority. This is done on the scale of the neighbourhood. But in between the neighbourhoods still this balance is missing. Especially at the gaps, mentioned before by a quote of Trancik, former industrial areas, where functionality and accessibility prevailed in the layout, there is a lack of space for people to move and stay. That is a pity because a lot can be gained when improving the experience of staying and moving in the city. To Jan Gehl four desirable objectives ; lively, healthy, sustainable and safe cities can be achieved by increasing the concern for pedestrians, cyclists and city life in general (2010). To him the 'human dimension has been overlooked for decades, while planners were busy with accommodating the car in the urban network.'

Public realm

This document is not only a plea for better foot and cyclist connections, but also for the qualities of public space in general. Living in the city should become attractive again. People should therefore realise again why cities are so exciting. Being able to get your bread at the corner of your street, to walk to a bar or theatre to meet friends, having discussions with total strangers while waiting for the bus etc. The thing is that society has changed, instead of being proud of what you have established as a city as one community, today one tends to hide behind the curtains. The book of Maarten Hajer (1994) attempts to summarize the vision of Richard Sennet, published in *'The fall of public man'* elaborating on the destruction of the public realm. Individualization made people search more for their own personality, losing sight of communal codes. Sennet calls this the tyranny of intimacy. The urge for intimacy has caused citizens to see urban diversity and complexity as an urban illness instead of a quality. When we are so focused with ourselves we cannot cope anymore with others being different. This tendency is a problem because we do live together and need each other for society to function. When you are treated by a nurse, or when your garden is watered



Il. 4 Woonerven

source: <http://ucdesustainability.blogspot.nl/2011/07/wonderful-world-of-woonerfs.html>

by a gardener we do not complain, but when the same person smokes a cigarette or talks loud in a train we rather go by car.

Hajer suggests three views to deal with this fear of others. First you could choose for spatial segregation to avoid confrontations between groups. Modern planned neighbourhoods were assembled in such a way but they did not turn out to be very successful. Secondly you could see it as urban disturbances, unwanted, which the government should manage and reduce. Then the street is primarily seen as a 'control problem' at the same time discharging every last piece of individual responsibility for the street. But you could also approach these urban confrontations and encounters as an essential part of a modern and lively environment and try to design the urban space in such a way that it is not considered as a threat. Here you accept that social conflicts are sometimes inherent to the current urban environment. In the cases where it does not lead to a conflict, these encounters can lead to understanding. *"Knowledge, even if only superficial, of each other and one others subculture and customs often helps to accept differences."* (p. 49)

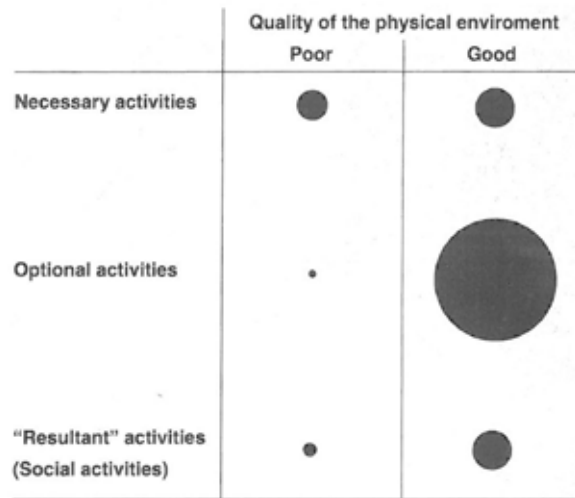
But new encounters are not generally described as a goal on its own. Instead people should have an alibi to be present in a public space, without being recognisable as seeking for contact. Therefore the public space could be arranged in such a way that you have a reason to stay or move there. An alibi could be to wait for a bus to arrive, walk the dog or feed the ducks. An urban design may give reason for such behaviour. More direct ways are achieved by inserting program, maybe a small café or a supermarket. Somewhere people might go to on a more regular basis so that you might recognise them on their fourth or fifth visit. If this program has to work as a social contributor the program has to attract a wide range of different social groups. This does not mean that every program should attract as much social groups as possible. Sometimes creating spaces where people do feel more among their own social group will give a reason to feel more part of a community instead of an individual.

Especially near the place where you live or work knowing

or recognizing people contributes to feel more at home in your surrounding living environment. One clear alibi to meet the community you are part of is given during celebrations. For example on Queens day in the Netherlands everybody celebrates on the streets, turning them orange. On that day one really experiences the public space as the link to each other. What group you will relate to can differ though, when celebrating on the local square you may feel part of the district, when celebrating in the municipal park you may feel more part of the city.

Activities in public space

In the book *'Life between buildings'* Jan Gehl tries to categorize the activities people conduct in a public space and to figure out which physical conditions are related to these outdoor activities. To him the outdoor activities can be split up into three groups: necessary activities, optional activities and social activities. Necessary activities, those that are more or less compulsory like going to school and shopping, will take place under nearly all conditions. Therefore, Gehl notes, they are more or less independent of the exterior environment. "Participants have no choice" (Gehl, 1980 p. 11) Optional activities on the other hand are undertaken when there is a wish to do so, as recreation. "This category includes such activities as taking a walk to get a breath of fresh air, standing around enjoying life, or sitting and sunbathing." (p.13) These activities will not occur on all conditions, but only when exterior conditions are attractive and comfortable, thus when weather and place invite them to. Social activities are all the activities that are related to the presence of others in a public space. Not only direct contact, like conversation and greetings, but also passive contact, simply seeing and hearing other people. When they occur spontaneously they will occur while people are engaging in one of the former two categories of activities. Therefore Jan Gehl suggest they might also be termed 'resultant' activities. Because of this relation one can assume that when conditions are better for necessary or optional activities, social activities are indirectly supported. Here also the frequency of the forms of conducted social contact is related to the context they occur in. In residential streets



Graphical representation of the relationship between the quality of outdoor spaces and the rate of occurrence of outdoor activities.

Source: Jan Gehl, 1980, p. 13

more greeting and conversations may be instigated while in urban plazas passive superficial contact will arise more often. As designer himself Gehl noticed that although the physical framework may not have direct influence on the quality, content and intensity of social contacts, possibilities for meeting, seeing and hearing people can be enhanced.

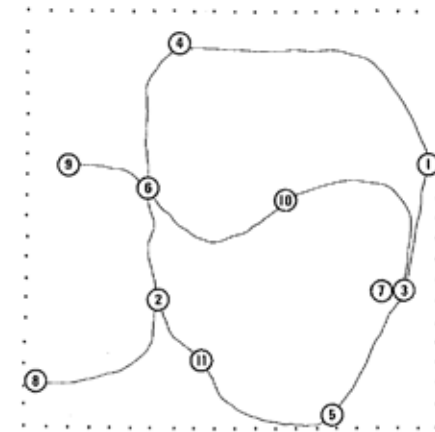
The book *'Life Between Buildings'* continues to emphasize the importance of social activities, but the significance of people engaging in optional activities is far more than just its attribute of enabling social activities. In today's society with increasing claims on the performance of the brain, optional activities are useful to restore and let your mind wander of a bit. Let our fascination take control. Public space may contribute to the triggering of this fascination. One aspect which can be implemented in public space that has demonstrated to be beneficial in this restorative process, is nature. Stephen Kaplan conducted a comparative study, published in the journal of environmental psychology in 1995, on the beneficial influence of nature onto the recovery of directed attention fatigue. The study showed that natural environments turned out to be particularly rich in the characteristics necessary for restoring from such fatigue. Kaplan mentions four characteristics to be recognized in natural environment: Being away, the feeling of being in a different context than your normal environment; Fascination, nature is full of fascinating objects which holds your attention; Extent, nature is normally not totally enclosed into defined walls like a street but more open and flowing; Compatibility, being in nature connects to humans original habitat. In addition natural environments do help to mitigate stress, something that's also very common in today's society. Next to the restorative qualities of nature people often prefer natural environments instead of urban ones. In earlier study of Kaplan referred to in *"Aesthetics, affects and Cognition: Environmental preference from an evolutionary perspective"* (1987 p. 7) the reactions where compared when people are shown images of natural or urban scenes. With an overwhelming result it turned out that natural scenes were so uniformly preferred over scenes of the built environment, that the lowest rated natural scene was as preferred as the highest rated urban scene. In the city parks may provide

the demand for these natural environments, to engage into optional activities, which then as a bonus may also result into passive or active social contact.

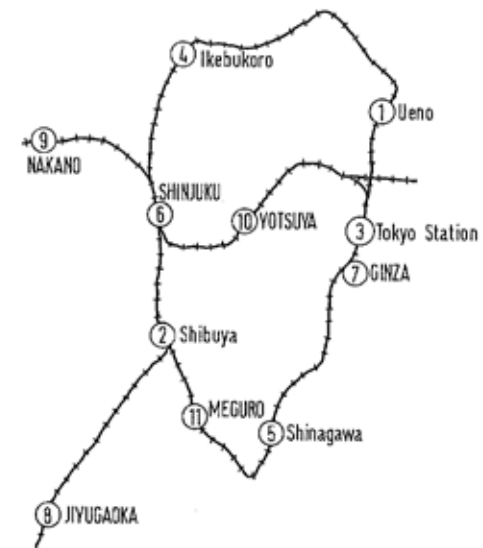
Experience of the city

As shown in the former example of Kaplan environmental psychology can show preferences of people for the spaces they are confronted with. Furthermore it can indicate which characteristics may contribute to prefer certain environments, so to determine how the space is perceived. The next step is to find out how people will act as a result of this perception. Here fore the cognition of people has to be studied. The difference between perception and cognition is described by the environmental psychologist David Canter in his book *"Psychology of place"* published in 1977. While perception is just becoming aware of stimuli, cognition is processing this information by categorizing, distinguishing and recognizing it so that action can follow. Thus by studying the cognitive system of people we may get a clue how people act when exposed to certain environments. How do they recognise and categorize the elements in their environment to come to certain actions. This is interesting when designing that environment. In essence this is the core of the issue, a space with quality people will experience to be as comfortable possibility to serve the purpose they need them for. As mentioned before people do not only need public space for functional behaviour of going from A to B but just as much for social and recreative behaviour.

The increase of infrastructure did also change the cognitive image of cities. Places which have a great actual distance may seem close when using a fast or direct form of transport, while places only a short crow-flight distance apart might seem far away when barriers are preventing an easy connection (Canter, 1977). This impact can be seen on the small scale for pedestrians in the time it takes to cross a road but also the ease with which cyclists can reach the city centre. The cognitive image of people does not always correspond directly to the actual situation. Much more we structure the places in our head according to the way we use them.

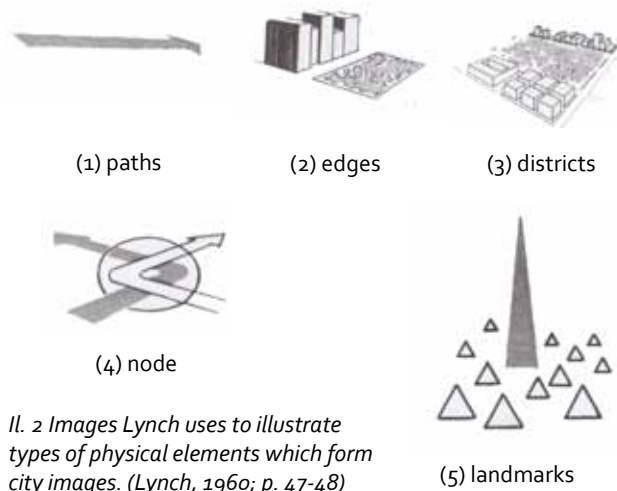


5.1 A map of Tokyo derived from distance estimations

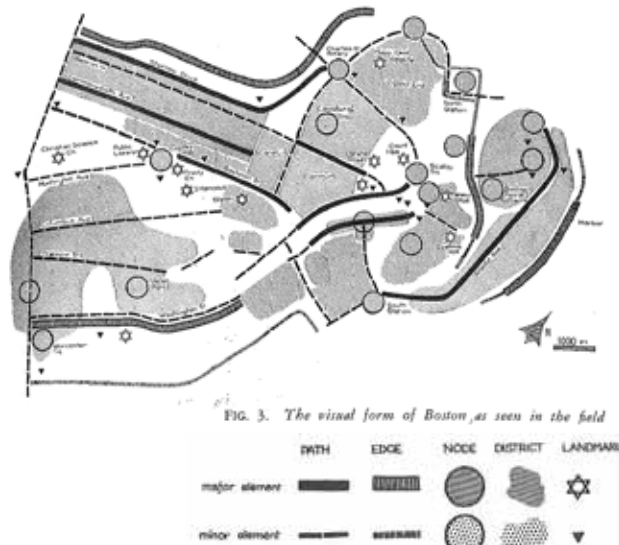


5.2 A geographical map of Tokyo (simplified)

Architecture student in Tokyo estimated larger distances than actually the case when places did not have a straight connection of the metro system
source: David Canter, 1977, p. 81



Il. 2 Images Lynch uses to illustrate types of physical elements which form city images. (Lynch, 1960; p. 47-48)



Il. 2 Map made by Lynch indicating the elements which contribute to the cities legibility (Lynch, 1960; p. 19)

A person that has become very influential in the study of the experience of a city for planners and designers is Kevin Lynch. His book *"The image of the city"* presents the result of a research he did on the mental images people have of a city. These mental images relate to the way they choose their routes through the city, their orientation, by a sequence of elements stored in the cognitive system of their brain. *"This image is the product both of immediate sensation and of memory of past experience, and is used to interpret information and to guide action."* (Lynch, 1960, p. 4) The ease with which people can form this image by recognizing the elements of the city scape and organise them into a coherent pattern Lynch calls the legibility of a city. (Lynch, 1960, p. 2) This legibility is very important to know how comfortable it is to use the city, to find you way around the city. Feeling lost and not knowing which direction to go, gives anxiety or even fear, maybe even more freighting than feeling unsafe. This shows how primarily the need is for us, human beings. In his book Lynch makes the pertinent point that the word "lost" itself, means more in our language than just geographical uncertainty, but implies utter disaster (Lynch, 1960, p. 4).

In his research Lynch found that although every person has a different mental image of a city, related to their personal experiences, the overlap of these individual images does form a public image. In these public images, or city images, Lynch classified five elements which are related to the physical form of the city. These elements reappeared in many types of these environmental images. The exact description of these elements will be quoted from Lynches to make the nuances clear because they will be referred to later on in this booklet;

"(1) Paths: Paths are the channels along which the observer customarily, occasionally, or potentially moves. They may be streets, walkways, transit lines, canals and railroads. For many people, these are the predominant elements in their image. People observe the city while moving through it, and along these paths the other environmental elements are arranged and related.

(2) Edges: Edges are the linear elements not used or considered as paths by the observer. They are the boundaries between two phrases, linear breaks in continuity: shores, railroad cuts, edges of development, walls. They are lateral references rather than coordinate axes. Such edges may be barriers, more or less penetrable, which close one region off from another; or they may be seams, lines along which two regions are related and joined together. These edge elements, although probably not as dominant as paths, are for many people important organizing features, particularly in the role of holding together generalized areas, as in the outline of a city by water or wall.

(3) Districts: Districts are the medium-to-large sections of the city, conceived of as having two dimensional extent, which the observer mentally enters "inside off," and which are recognizable as having some common, identifying character. Always identifiable from the outside. Most people structure their city to some extent in this way, with individual differences as to whether paths or districts are the dominant elements. It seems to depend not only upon the individual but also upon the given city.

(4) Nodes: Nodes are points, the strategic spots in a city into which an observer can enter, and which are the intensive foci to and from which he is travelling. They may be primarily junctions, places of a break in transportation, a crossing or convergence of paths, moments of shift from one structure to another. Or the nodes may be simple concentrations of some use or physical character, as a street-corner hangout or an enclosed square. Some of these concentration nodes are the focus and epitome of a district, over which their influence radiates and of which they stand as a symbol. They may be called cores. Many nodes, of course, partake of the nature of both junctions and concentrations. The concept of node is related to the concept of path, since junctions are typically the convergence of paths, events on the journey. It is similarly related to the concept of district, since cores are typically the intensive foci of districts, their polarizing center. In any events, some nodal points are to be found in almost every image, and in certain cases they may be the dominant feature.

(5) Landmarks: Landmarks are another type of point-

reference, but in this case the observer does not enter within them, they are external. They are usually a rather simple defined physical object: building, sign, store or mountain. Their use involves the singling out of one element from a host of possibilities. Some landmarks are distant ones, typically seen from many angles and distances, over the tops of smaller elements, and used as radial references. They may be within the city or at such a distance that for all practical purposes they symbolize a constant direction. Such are isolated towers, golden domes, great hills. Even a mobile point, like the sun, whose notion is sufficiently slow and regular, may be employed. Other landmarks are primarily local, being visible only in restricted localities and from certain approaches. These are the innumerable signs, store fronts, trees, doorknobs, and other urban detail, which fill in the image of most observers. They are frequently used clues of identity and even structure, and seem to be increasingly relied upon as a journey becomes more and more familiar.

* The image of a given physical reality may occasionally shift its type with different circumstances of viewing. Thus an expressway may be a path for the driver, and an edge for the pedestrian...None of the element types isolated above exist in isolation by the real case. Districts are structured with nodes, defined by edges, penetrated by paths, and sprinkled with landmarks." (Lynch, 1960, p. 47-48)

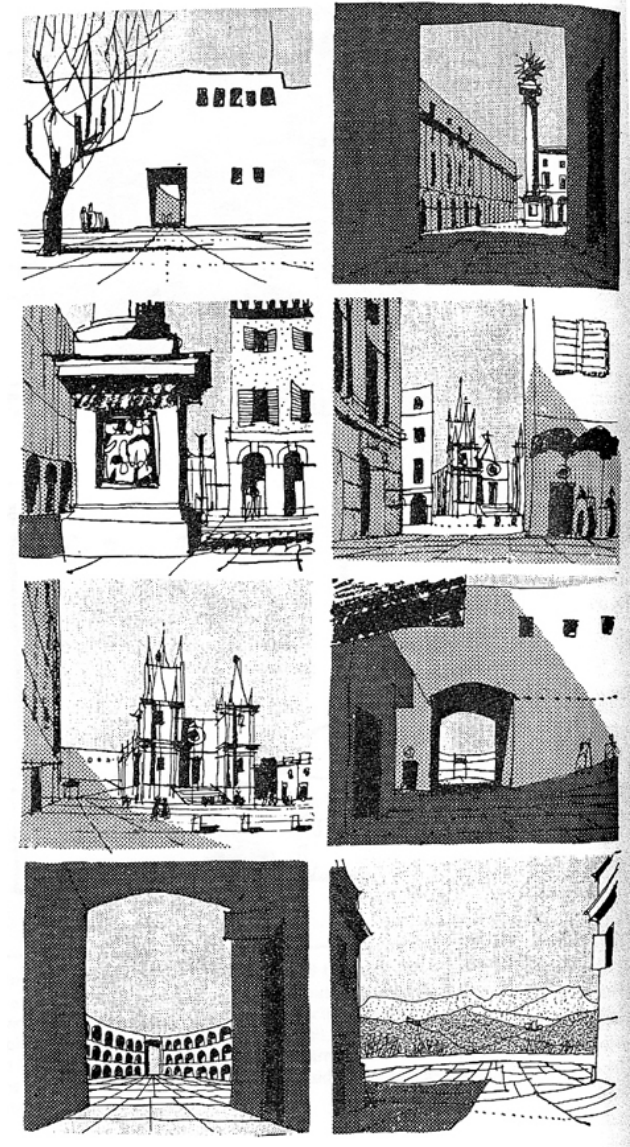
But Lynch was not the only one who tried to way finding to the physical form. In the theory paper "Pedestrian orientated design – the strength of a readable city" written by the author in 2011, Lynch's book is compared to the book of Gordon Cullen, published one year later in 1961, and two publications from recent years, by Van de Spek (2008) and Gehl (2010) in an attempt to extract some general notions still applicable for current times. Cullen, already quoted in the very beginning of this booklet, focussed on the excitement that can be achieved when buildings are arranged in such a way that they arouse an emotional reaction when walking through them. They can achieve this by the relation and contrast between them; for instance big and small, narrow and wide and dark and light etc. This emotional reaction can trigger us to act a certain way. An archway might trigger

the curiosity to see what is inside. Here the emphasis is not on the cognitive system but on the intuitive reactions of people. When you do not know your environment, so you do not have a mental image, how does the physical form of the environmental still evoke certain actions. But also in an unknown environments elements of the physical attributes can be recognised to be part of a bigger structure. For example "One of the most powerful agents for unifying and joining a town is the floor" (Cullen, 1961, p. 53) The presence of a clear pedestrian network can also links place to place to bring together the town in a viable pattern. "The traffic routes sweep along impersonally but the tenacious and light-hearted pedestrian network creates the human town." Instead of researching people Cullen just gives images describing what kind of reaction they might evoke assuming that the image will evoke the same reaction in the readers as it does to him.

Use of public space

The way in which people find their way is not the only part of the use of public space that has been studied. The urban designer William H. Whyte (1988) has undertaken extensive studies into the use of public squares in the city of New York. He observed that small elements can determine the use of public squares. A small ledge might entice people to have a seat, especially if is located in the sun. Furthermore he found that people eventually attract more people. If a few people start sitting on a ledge, more people will do the same. Apparently we recognize the potential of certain elements by the behaviour of others. Presumably studying other is in our nature, because also having a view on other people is preferred when choosing sitting location. Other things that have preference are wide views, over landscapes or urban sceneries, as long as there is something interesting to see.

In addition Whyte "underscores an elemental point about good urban spaces: supply created demand. A good new space builds a new constituency. It stimulates people into new habits and provides new paths to and from work, new places to pause." (Whyte, 1980)



Il. 2 Serial vision Gordon Cullen, 1961, p. 7

Christopher Alexander (1977) pointed out the need for people to have a view into a larger space, but did also add a second aspect. Namely a place where people feel comfortable is when their backs are protected. "*Outdoors, people always try to find a spot where they can have their backs protected, looking out toward some larger opening, beyond the space immediately in front of them*" (p. 558)

In the more recently published book of Jan Gehl (2010) "*Cities for people*" a study is mentioned of the behaviour of people at receptions to substantiate the same point. The studies showed that "*particularly early arrivals, spontaneously seek out places to stand along the walls*" But in addition people will try to find furniture, corners or columns "*to provide support for staying and help to define the space as a specially well-defined place rather than just a place along the wall*" Gehl calls the first one the edge-effect and the second one the piano-effect. (p. 139) The book includes more observations, done somewhat similarly to the studies of Whyte. For example a study was done in the centre of Stockholm. Next to the edge-effect also the good view showed again to be decisive in choosing seating. (p. 140)

Concluding

Public space is one of the added values a city has to offer its inhabitants. It does not only connect locations and facilities but also offers a place for optional and social activities to occur, giving a view on the community it serves. But the public space has been subject to change over the last century. Vigorously trying to make room for new forms of infrastructure such as the train and the car, we may seem to have forgotten this important role public space has for the space. This while slow traffic suffers most when public space is not comfortable for its use, and therefore will benefit the most when public space has a certain quality in its design. What is important to consider in this aspect is not just the way people perceive the public space but how they will translate this experience into actions. Environmental psychology teaches us that people will create a mental image to structure places. This mental image is composed of, for the user, familiar elements arranged according to their interconnections. When part of these elements in a city are shared by a large number of people they can be notes as having a more general structuring purpose. Understanding these structuring elements gives the opportunity to anticipate to its capability to influence peoples mental image. One can make use of this when aiming to improve the legibility of a city but also when wanting to promote social or recreational activities.

THE HAGUE

Analysis of urban design challenges

This chapter analyses the general issues the municipality of The Hague is dealing with in the design of public spaces. Then it will continue to zoom into the area of The Hague South East, studying its fragmentation. Specifically the analysis is studying the effects this fragmentation has on the way the area can be understood by the cognitive system of its users.

Site selection

But as designers, we are not merely interested in theoretical knowledge, but also its gives reason for design. In a current urban assignment the relevance of the theories can be tested.

The renewed attention to the city public spaces can give reason for this. The project is therefore part of an studio studying a Renewal of Urban Renewal areas in three big cities in the Netherlands. This studio is aiming to find ways how urban renewal areas could improve by strategic interventions. These neighbourhoods, usually built around the 1900s, have been renewed during the 60's and 70's to better their housing conditions. But that was the time when the functionality predominated the building practise. Not only influenced by the ideal world sketched by Le Corbusier, but also due to a great housing shortage, cheap and standardized housing were being built. Although in the renewal areas no total new functionalistic urban structure were realised, still the housing and the exterior spaces had some of the same sober looks as the modernist extensions of that time. To KEI, the institute documenting urban renewal processes, this was one of the causes why the Urban Renewal of the 60 and 70's did not manage to improve the neighbourhoods as a whole. The sober way in which interventions were implemented ignored the appearance and the experience of the public space. Therefore an strategic intervention of this studio could beheld the improvement of this appearance and experience. A study on what does affect the appearance and experience according to theory could therefore help to support the creation of a strategic intervention.

An initial study on the experience of the city put forward the subject of legibility. Introduced by Kevin Lynch legibility contributes to the ease in which people are able to orientate themselves in the city. The Hague presented itself as a good test case to apply this theory, because although The Hague has a grid pattern, there are elements which disturb this orthogonal structure. An example is the Parallelweg, which is curved because it used to be a train track. 'These

disturbances, diagonals or curved roads make orientating in directions, normally the case in grid cities, harder. This is why for recognition you are much more dependent on guiding elements.' (Bruyne & Vlot, 1989)

The Hague

The Hague grew in a longitudinal direction guided by the sandy belts along the coast. Only one or two connections to the coast and the inner land were formed perpendicular to this direction. This linear structure is still visible in the current structure of the Hague, having continuous roads in the same direction as dunes, where as the perpendicular connections are more curvy following canals to the sea. Actually urban structure of The Hague partially consists of the outgrow of a few original small settlements, like Voorburg, Loosduinen, Scheveningen and Rijswijk. Some have kept its autonomous status while others have been annexed to The Hague.

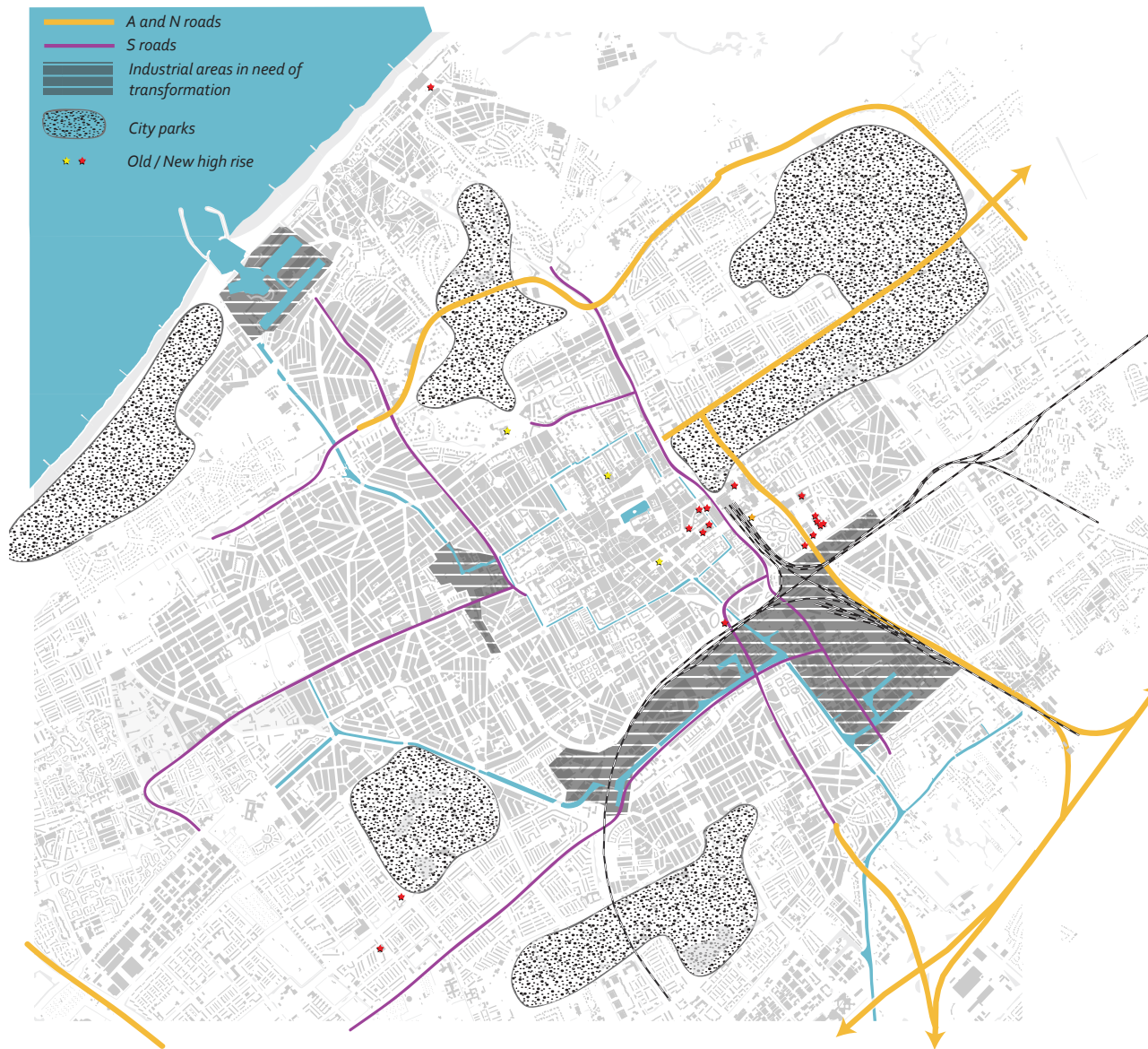
In 1843 establishing continuous lines to the south east became more difficult due to the construction of the railway. Therefore only the connection along the canal running to Delft is still an original line. The rest of the area positioned to the south of the railway was built later on, first for economic purposes with the construction of an inland harbour and several markets for trading goods, followed by a new living quarter according to the plans of Berlage.

The dunes did not only direct the city growth, they also allegedly divided its inhabitants, between the people who could afford to live on the sand and people who had to live on the moistly peat grounds. Therefore people could know from the neighbourhood one lived in if a family had money or not. This may also have caused the distinction people still know between Hagenaren en Hagenezen. Originally this difference was that Hagenaren lived on the sand and Hagenezen lived on the peat. But more often now the difference is used to distinct people originally born and raised in The Hague and speaking folk dialect Haags as being Hagenees, while other inhabitants are called Hagenaren.

The linear structure in The Hague is also visible in its accessibility to motorways. While Rotterdam and Amsterdam have a ringroad, to make every part easy accessible, in the Hague two separate motorways, on each side of the city provide its accessibility. Consequence is that a web of



Map illustrating original elements in present structure and their relation to the sandy belts



Map showing several characteristics of the city.

bigger roads are necessary to facilitate the traffic. These bigger roads form potentials threats for fragmentation as mentioned before in the first theoretical part of this booklet.

In contrary to many other cities in the Netherlands, The Hague never got city privileges. You could argue that The Hague still has some village like character even though it has more than 500.000 inhabitants. Especially the majority low-rise housing near the centre would let people believe such a thing. But in the last 15 years this has changed somewhat while high-rise after high-rise has been built near the Central Station. With stimulating high rise near its incoming infrastructure the city hopes to generate a recognizable skyline, a welcoming image, and at the same time densify its core. At the evenly important Station Hollands Spoor a single high rise marks it location. As discussed in the theoretical part of this booklet high rises can potentially become landmarks in peoples mental image of the city. The fact that the majority of the buildings in the city do not rise above three stories can only contribute to this because it will be easier to see the few high rises from a far.

The Hague has several big green structures within its municipal boundaries, consisting of smaller interconnected parks. Presumably this adds to the general notion of The Hague being regarded as green. Joan Busquets notes that the identity of The Hague is formed by its green character, and can potentially play an important role in the city's future. (Jansen & Ridderhof, 2004) The municipality is aware of this strong feature. In its report on the future vision of The Hague "Structuurvisie 2020" it confirms that this green character needs to be fostered and strengthened. Investing in its living environments the municipality sees as a vital aspect to encourage all kinds of activities. (Municipality of The Hague, 2005).

In the Hague the lost spaces described by Trancik mentioned in the former part, can be recognized as well. Especially spaces along the water, which where formerly exploited by industrial activities are now in need of transformation, indicated by the municipality. Although there are many ideas for these areas, due to a lack of investors or public

funding in the last few years, these spaces for the most parts remain untouched.

De kern gezond

In the late 80's the Municipality announced new plans for improvements of its city centre named *De Kern Gezond* (In English: The Core Healthy). The plans aimed to improve the design of the public space and thereby equipping it for the future. The plans involved reducing traffic in the narrow streets of the city centre to create pleasant environments for pedestrians and cyclists. The plans took over twenty years to become realised. Now the municipality continues the work by addressing the surrounding neighbourhoods.

The plans of *De Kern Gezond* presented six lines along which the centre should have to be refurbished. Five of these lines ran in the east-west direction parallel to the direction of the sand dunes. Only one line, called the 'core line' breaks with this dominate direction, crossing the other lines.

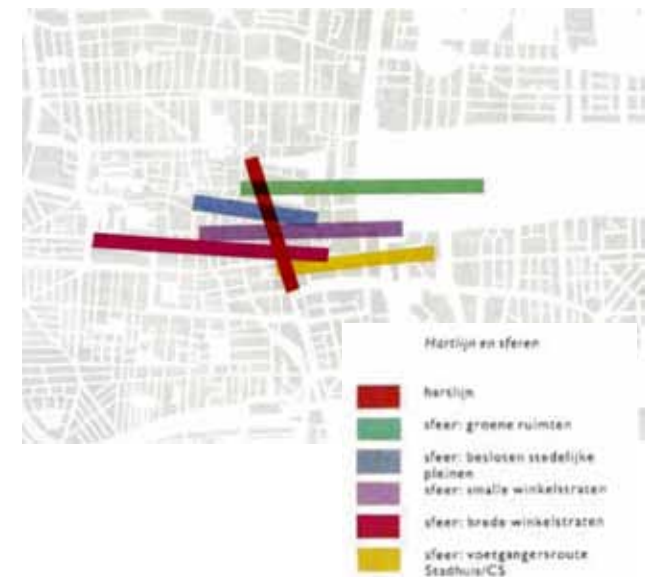
The strategy in designing these lines was to emphasize the unique qualities of specific places while at the same time created a consistency along a line, to ensure the place being recognisable as being part of a bigger structure. Together these different lines had to contribute to let the innercity to function more as a whole, thus become one area or district. In the design of the public space therefore the focus should be on creating a logical and clear structure in order to enable pedestrians to orientate themselves in the city. The number of barriers should be reduced to a bare minimum. (Municipality of The Hague, 1988) The use of greenery contributes to creating a pleasant experience as well as connecting different public spaces. Other pillars in the strategy were multiple use of space, lighting and economic attractiveness.

The strategy of *De Kern Gezond*, drawn up during the 80's, has many similarities to the approach formulated in the theoretical section of this booklet. Mainly in its choice to prioritize pedestrians and herein allocate orientation as

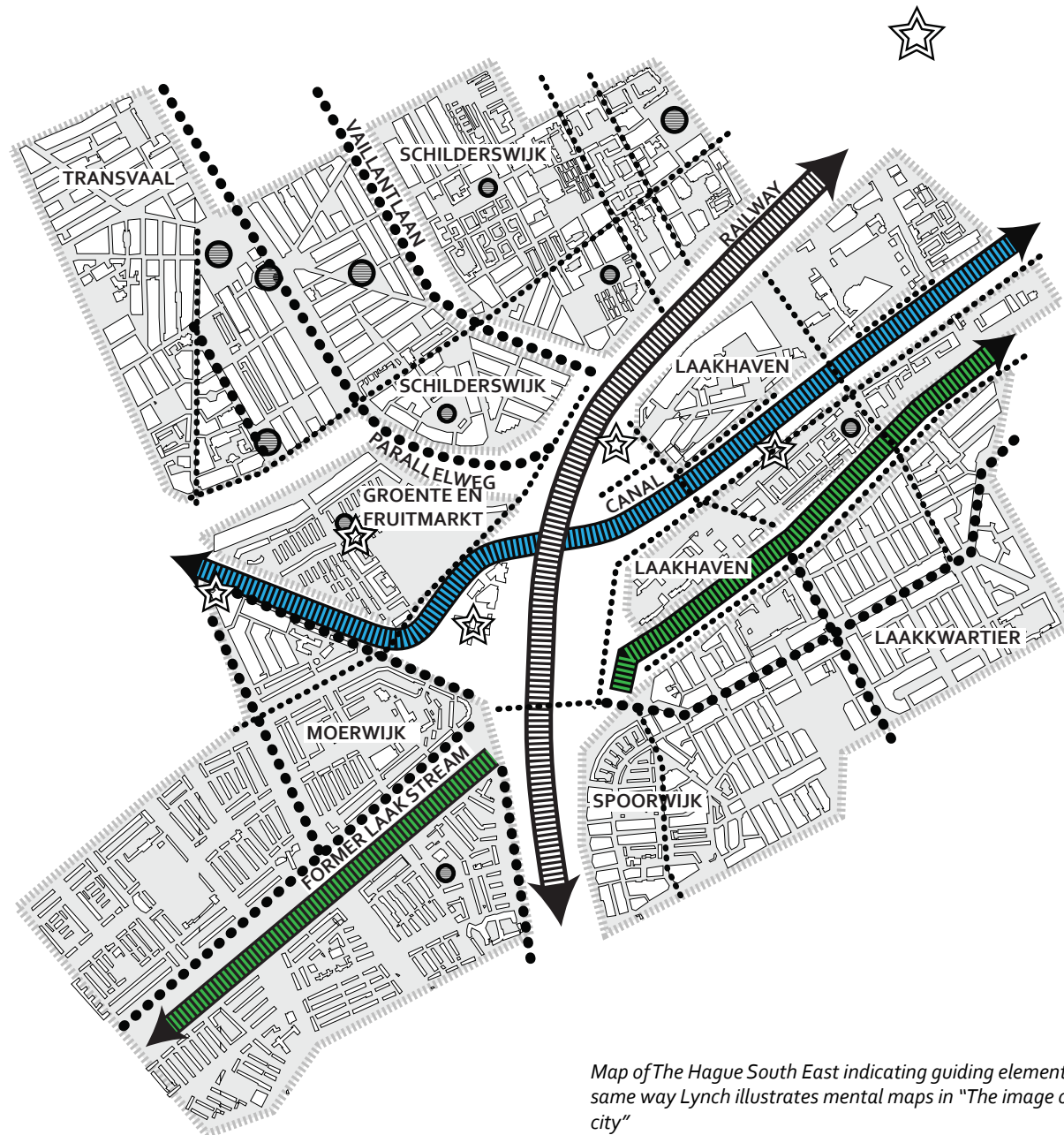
an important factor. But also the importance of green in public space is already noted in through studies of Kaplan. The Hague has responded to the issues Jane Jacobs and Kevin Lynch put forward during the 60's by choosing to carry out the plans of *De Kern Gezond*. With this, they have shown awareness of the communal benefits of investing in the experience of public space. And they were not wrong, after the execution of the plans the public space got a clear image; *"very much determined by the restraint in paving materials, limited almost everywhere to 'one chic, dark, so-called manganese clinker, the restraint in the details and in the drastic limitation of street furniture. Just like with the most convincing redevelopments in other Randstad cities the image became first of all much calm and surveyable than before, when 'profiles applications, viaducts, traffic lights, signs, poles and fences made a passive and fragmented city spaces with a large complexity out of it."* Trees, not implemented abundantly but in strategic locations has proved to be a powerful tool to clarify the characteristic differences between spaces in relation to each other and a number of effective details were introduced to indicate differences in use. (Bekkering, 2005 p. 74)

And still they are working to find ways to hereby improve their city. This speaks out of the intention to, now the plans of *De Kern Gezond* are realised, continue the refurbishment of the city in the adjacent neighbourhoods. (Municipality of The Hague, 2009) Especially the approach of making a integral design for multiple public spaces can be applicable for other parts of the city as well as for the city as a whole. (Bekkering, 2005, p.77)

But how should The Hague start this? Which places would benefit if they were to be included in such an integral design? Which links are missing and which public spaces are in need of improving in order to serve the needs of the pedestrian and cyclist better? In this booklet, these questions are answered for the area south of the city centre. This allows us to test the approach, put forward in the theory part, for its practical use in current day urban design challenges, thus testing its current relevance.



The Hague South East

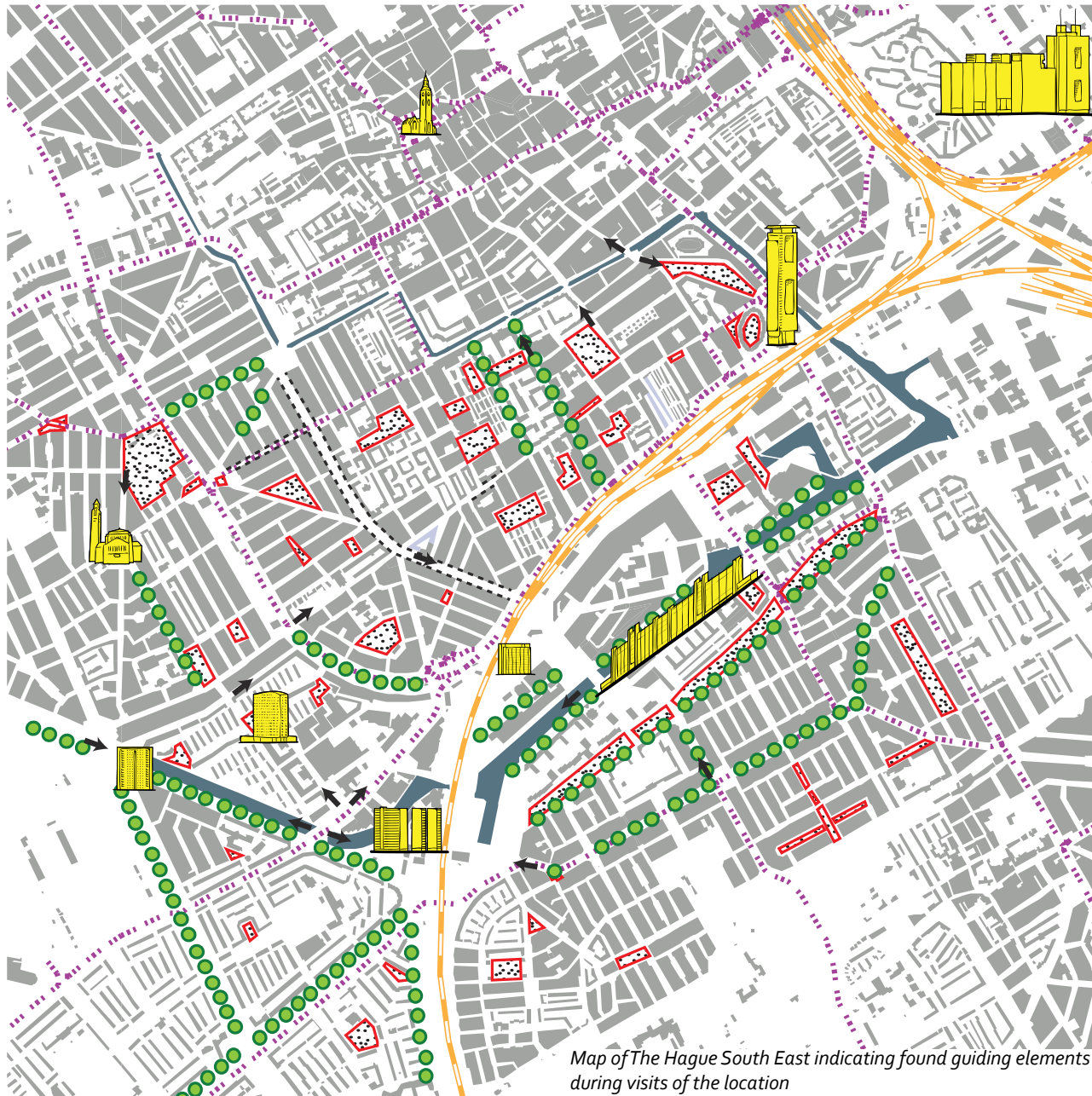


Map of The Hague South East indicating guiding elements in the same way Lynch illustrates mental maps in "The image of the city"

To discover the structure of the area and find potential missing links, an analysis is carried out according to Lynch's guiding elements. The five elements, paths, edges, districts, nodes and landmarks where distinguished and indicated on a map. What becomes very clear is that the physical barriers in the area, do also function as mental borders. This is because they are not easy to cross. Here we primarily mean the canal and the railway, but to a lesser degree, the green strip of the former Laak stream. Strong paths coming from the north, the Parallelweg and the Vaillantlaan as well as smaller paths in the Schilderswijk break up when reaching the railway, and do not have a continuation on the other side. There is a clear distinction between separate small districts not only because they are divided by barriers, but also due to their different architectural styles and date of construction. The Laakhaven area is divided into two parts by the canal but also due to a differentiation in use, the northern part being a commercial industrial area, the southern part housing. The Groente en Fruit Markt has been transformed most recently and has adopted the orientation of the Schilderswijk, but due to the width of the Parallelweg and tram tracks there are no easy connections between the districts. The middle of area does not belong to a specific district, it could be indicated as lost spaces, being vacant or filled with scruffy buildings. The only exceptions are different landmarks, the three high rise at the eastern part of the train tracks and a small characteristic office building with a suitable name *De Pionier* (The Pioneer).

But does the approach of Lynch actually apply to the Dutch situation or are there differences in these guiding elements in comparison to the American cities Lynch has analysed in his book? Therefore a second analysis has been carried out, now studying which elements could be identified as guiding in this specific location. Here four types of guiding elements could be distinguished.

1) *The high buildings*; equivalent to landmarks of Lynch, can be spotted on some crucial points. Such an image can then be decisive when choosing a route.



1.	High buildings
Icon on map:	Example:
Illustrating image:	
	<p>➔ Point where high building in the distance is guiding</p>
2.	Repetition
Icon on map:	Example:
Illustrating images:	
3.	Open spaces
Icon on map:	Example:
Illustrating image:	
4.	Infrastructure
Icon on map:	Example:
Illustrating image:	

Concluding

The Hague has an outstretched grid structure, due to its position on several sand layers that run almost parallel to the coast. Hence the lines running parallel to the coast originally being much stronger than those in perpendicular direction.

Its green village-like character makes it an attractive city to live in. To orientate in the city one is partially dependent on high buildings, especially when disturbances locally are present in the grid-structure.

Since the 80's planners and designers in The Hague are specifically looking at the physical properties of the city's public spaces, to better fit their use. Additionally the relation between different public space is more clearly defined to create cohesion. After extensive and detailed transformation of the city centre, this approach could now be applied to other parts of the city.

One of the areas that is in need of such transformation is the area located to the south side of the city centre, The Hague south east. The area is fragmented and barriers are preventing any distinctive connections. In addition at many important junctions the car dominates, forcing pedestrians and cyclists to make their way from traffic light to traffic light.

2) *Repetition*, vertical repetition along the sides or one side of the street gives the sensation of being on an ongoing route. A particular example of this type is the Vaillantlaan, having such a strong image, that it is immediately recognisable.

3) *Open spaces*, if spotted from a distance open spaces indicate 'something going on' activities, or maybe even a node such as Lynch describes. Therefore also a sight of an opening in the urban structure could attract people, especially when it also has some significant qualities.

4) *Infrastructure*, indicates first and foremost a connection between places thus also an ongoing route. In addition infrastructure has physical characters that force people to walk along it for a while, just to reach a point where there is a possibility to cross it.

From this analysis many of the same lines, as the Lynch analysis, can be distinguished. The former Laak stream is not just a barrier anymore but also a structuring element, with sequence public spaces and flanked by a tree line. Also the scattering of public spaces stands out; them not having any structure or connection to each other but only serving its nearby residents.

Both analysis show that the area is very fragmented, barriers are not overcome and lines do not continue. New links should be established to let the area function as one district hence improving its connection to the city centre. Especially for pedestrians and cyclists the number of connections are important, because it takes them more time to make any detours.

When visiting the joints where paths intersect, it seems they do not function as nodes. They do not have their own image or qualities. Instead existing nodes are hidden away from the general public. This does not promote the urbanity nor the legibility of the area. Here too it appears that these joints also do not meet the needs of the pedestrians nor cyclists. Cars are dominating in the majority of them.

Present situation on joint Parallelweg and Fruitweg



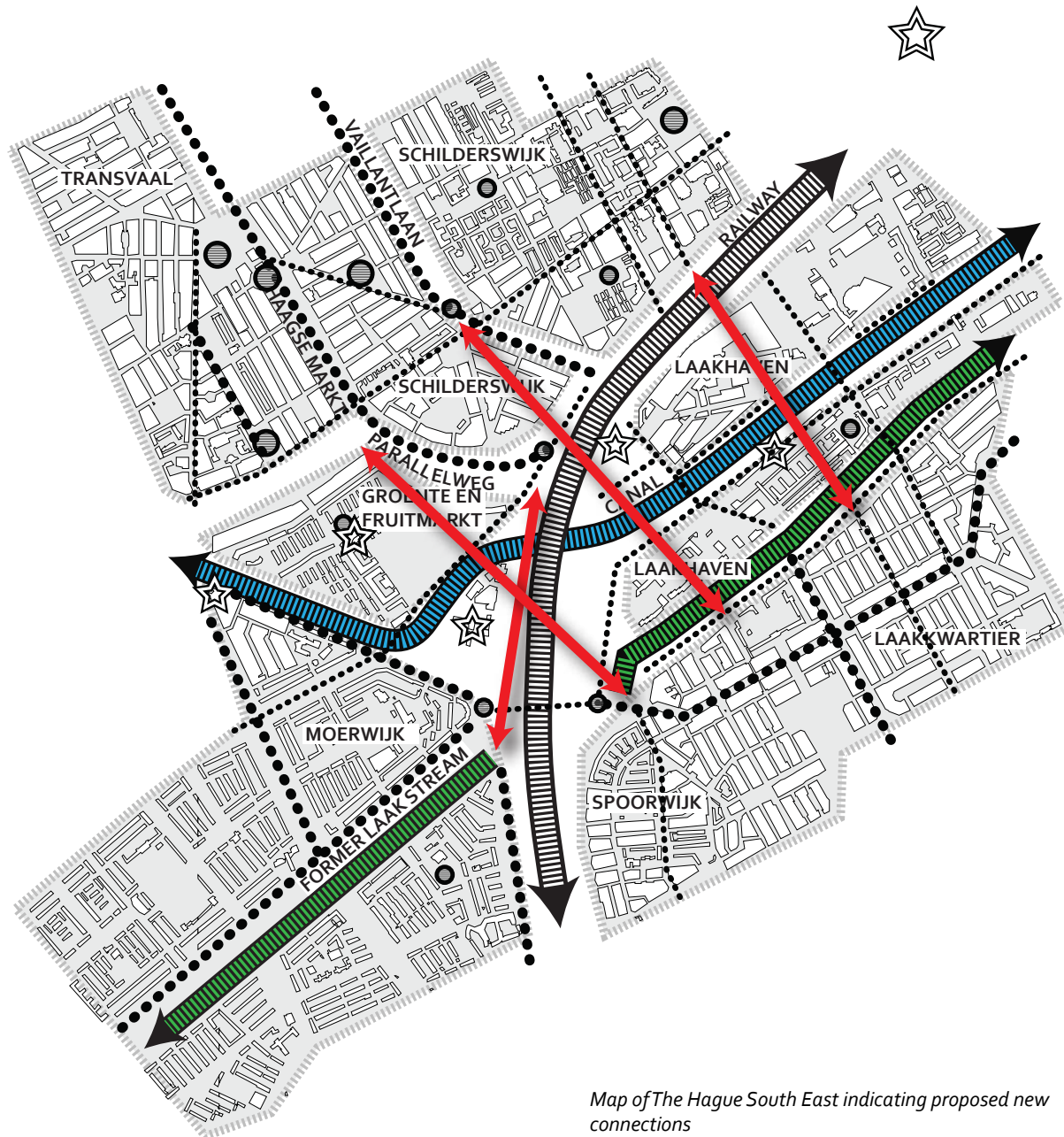
Present situation on joint near Moerwijk station



URBAN DESIGN

Routes

This chapter describes the proposal to create different new pedestrian and cyclists routes overcoming the barriers in the area of The Hague South East. The routes are enforced by the use of existing and proposed new guiding elements. Every routes has its specific aims and characteristics. Together they will provide a pedestrian network adding to the existing connections.



Map of The Hague South East indicating proposed new connections

New connections

The design proposes four new connections, specifically designed for pedestrians and/or cyclists. In this way city dwellers can easily move around through the area, without having to make extensive detours. This allows the different fragments in the area, now functioning separately, to operate more as one district, sharing facilities. The proposal connects joints in the Lynch map, while overcoming one, two or even three of the barriers currently in the area.

The focus is on creating northwest-southeast connections, to comply with the grid structure of the city. While the south east-north west direction has always been dominant in the structure of The Hague, often proper northwest-southeast connections is lacking. Especially in this area, where barriers have made it more laborious to construct such connections. Which is a shame because precisely these connections can connect the area better to the city centre as well as to other city amenities such as the hospital and the market. One exception in direction, is made along the train tracks to connect two points which have the potential to be important nodes in an improved regional public transport network.

These connections are created in the form of clearly defined pedestrian and/ or cyclists routes, consisting of a sequence of different public spaces, similar to the lines of *De Kern Gezond*. Difference is that due to the difference in direction in comparison to *De Kern Gezond*, they also will be less straight forward. Instead they will meander through existing structures. Elements shown to have the ability of being guiding, found in the theory part as well as in the analysis, will therefore be used to strengthen the connection.

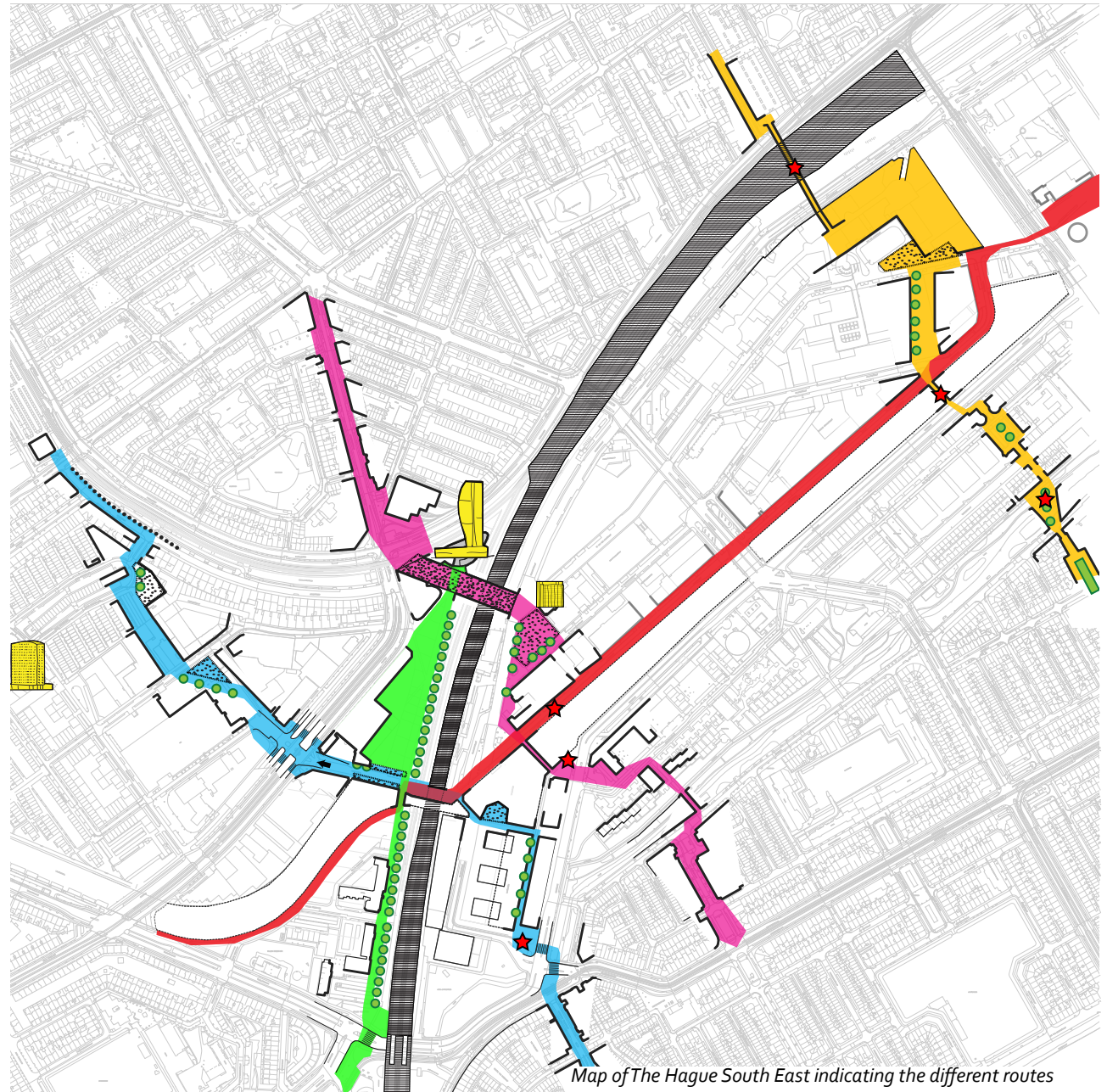
Every route has been assigned its own character next to having its own aims. One route has not yet been mentioned but which also plays a role in uniting the area, is an existing connection. It is the north quay of the canal, already forming a physical east-west connection, but having no apparent quality for pedestrians or cyclists. When upgraded and redesigned this connection can bind up the new routes for them to form a network. As quoted in the theory part, Gordon

Cullen (1961) suggests that such a pedestrian network could then bring together a town or in this case an area.

For the ease of explaining the different routes, they have been assigned their own colour, similar to the plan of *De Kern Gezond*. So you have the green, blue, purple and orange route forming the 4 new connections and the red being the existing quay.

Since Lynch establishes his mental maps considering the city from above, the operation of every routes is explained firstly by a diagrammatic top view indicating the inserted guiding elements on the left of the page, joined by an axonometric image to indicate the height of the elements.

Two routes, the green route and the blue route, are further elaborated with the views of Cullen, approaching the city from eye level. While guiding elements of Lynch will give reasons to the bigger lines in the route, Cullen give more detailed advise on the design of every street corner. To demonstrate how, the first route will be explained by means of steps using the visions of Cullen.



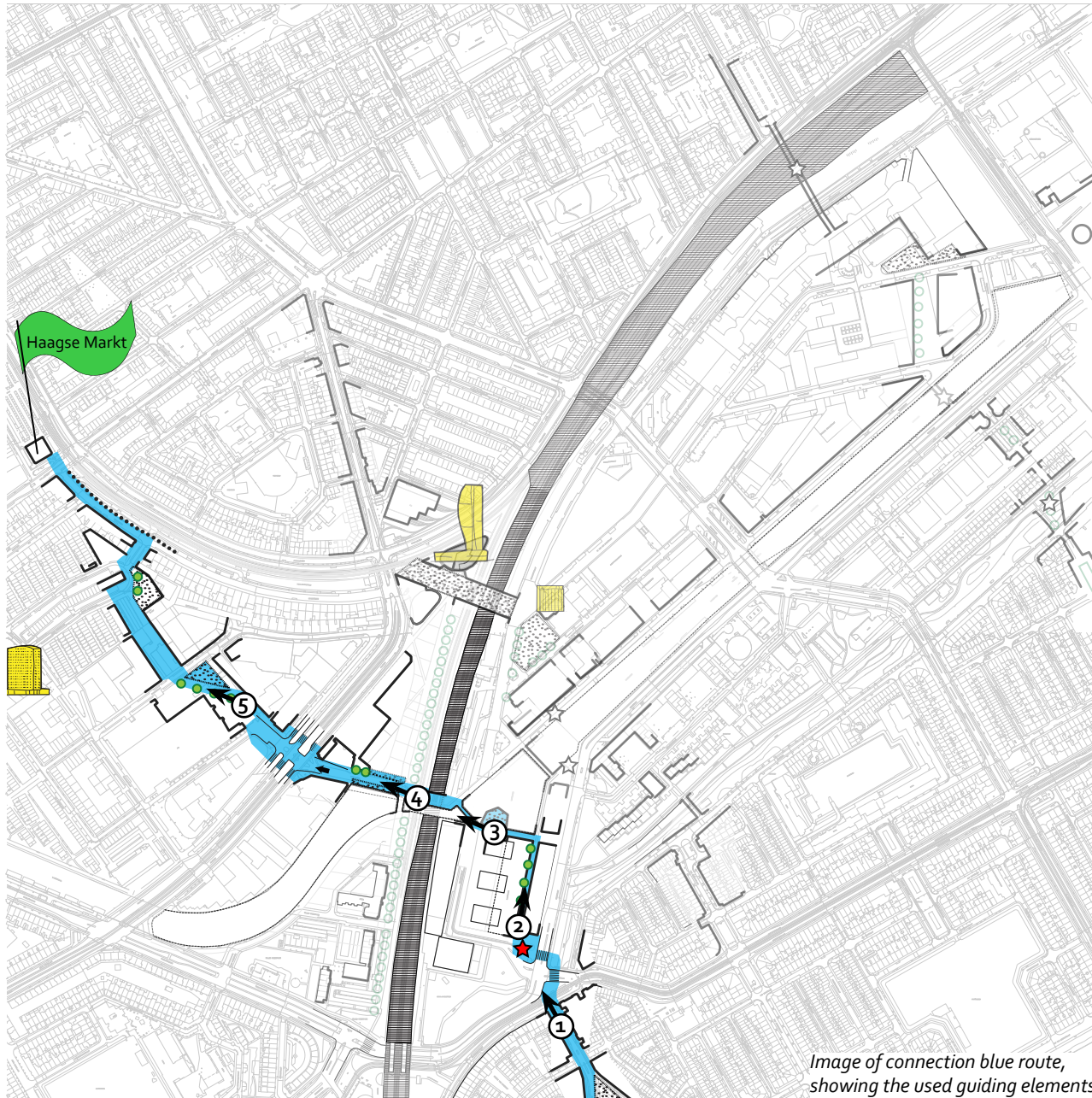


Image of connection blue route, showing the used guiding elements

Blue route

Aim: The blue route serves another regional aim, that of the cyclists. The Haagse Markt is a great market, its fame extending its own city boundaries. The proposed road links a direct cyclists connection running from Rijswijk and Delft to the Haagse Markt. Of course also residents of the Laakkwartier can make use of this connection. The route meanders to its destination, making use of existing qualities such as the water and existing landmarks such as the high-rise located at the Anna Blamanplein. But these are also some new breakthroughs necessary to establish such a connection, which gives occasion for new urban developments. This allows the realisation of new residential environments. In this route urban and regional movements are deliberately brought into peoples living environments, to create a type of urban living. This to complement the living environments currently available in the vicinity, being more inwards and intimately organised. This route is an urban shortcut route, which offers qualities for residents but invites passers-by to enjoy these as well.

Means: To establish this connection a number of interventions should take place. Two small bridges replace the currently bulky bridge over the canal (3). The underpass of the train tracks is already present but has to be made attractive for pedestrian and cyclists use. The waterfronts of the small inner harbour have to be built upon to generated a pleasant environment (2).

In the Groente and Fruitmarkt some business premisses have to be demolished and replaced with a more pleasant residential environment. In other parts of this district this type of redevelopment did already take place. A local patch of public green can form the heart of this development (5).

Some smaller interventions are the improvement of the Hildebrandtplein, for the comfort of cyclists and pedestrians. A striking element should seduce them to cross the busy traffic to reach the water (1).

Character: The character of the blue route is versatile,

consisting of a succession of different environments. Therefore no single character can be defined. Instead the characteristics of the different places are accentuated.

Design: As this route has a meandering character, it will not be recognized so much from the top, as the approach of Lynch does, but more as a sequence of decisions, as described by Cullen.

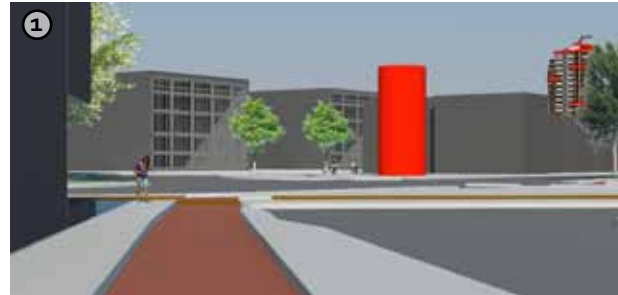
In his book Cullen describes the principles of possession, which contributes to the forming of a recognisable place. He explains two forms of possession; the static possession, the colonisation of people using the space for all kinds of staying activities for example for social and business purposes and the possession of movement; as natural way in which movement can be a natural part of peoples environment. (Cullen, 1961: pg.23-24)

1. A small landmark at the other side of the road makes people coming from the South to cross the busy road. In Cullen's words his landmark can be describes as a focal point. (Cullen, 1961: pg. 26)

2. The path along the water is strengthened by a tree line and enhancing the possession of movement while at the other hand some houses retreated from this straight line forming niches which can convey forms of static possession.

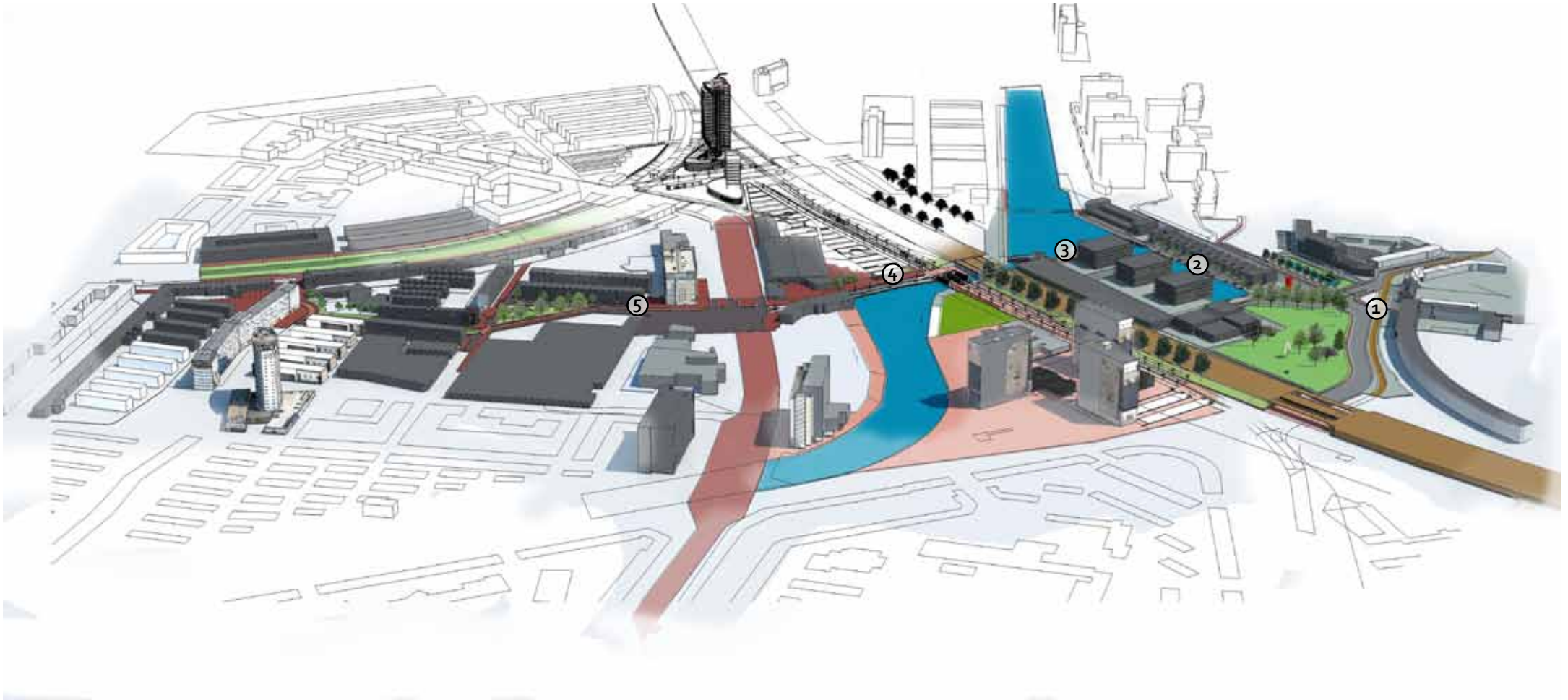
3. On the bridge there is already a glimpse revealed of the world at the other side of the viaduct where it is light and sunny, while here it is mostly shadow, creating a Here and a There as Cullen describes in his book. (Cullen, 1961: pg. 35, 183)

4. The high rise at the Anna Blamanplein comes into sight when one moves away from the underpass, working as a landmark. (Lynch) At your right hand an canopy defines a space bordering the park, while at the left a space created by the lowering of the surface towards the water. Cullen describes both these principles as ways to define a space. (Cullen, 1961: pg. 32)

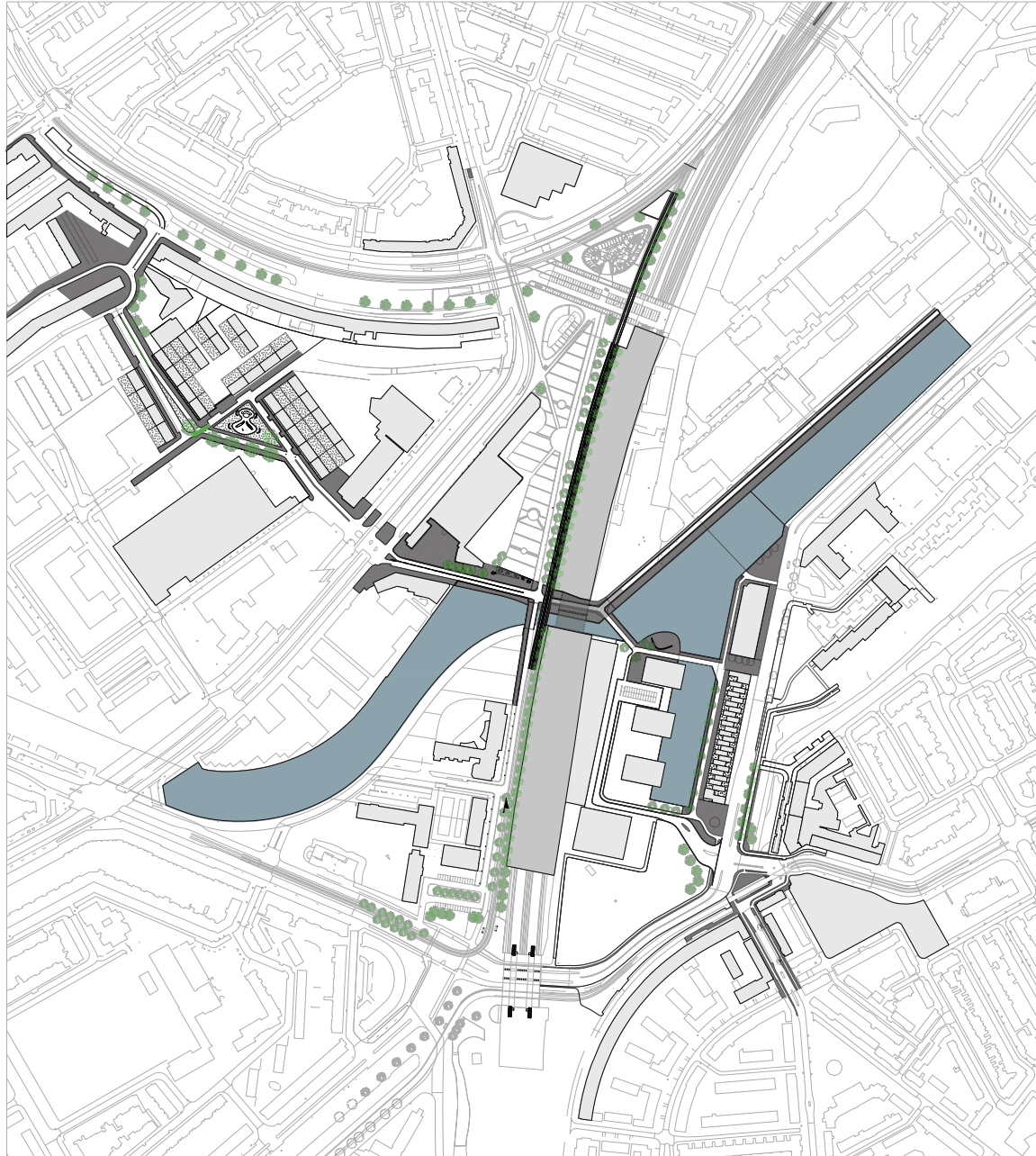


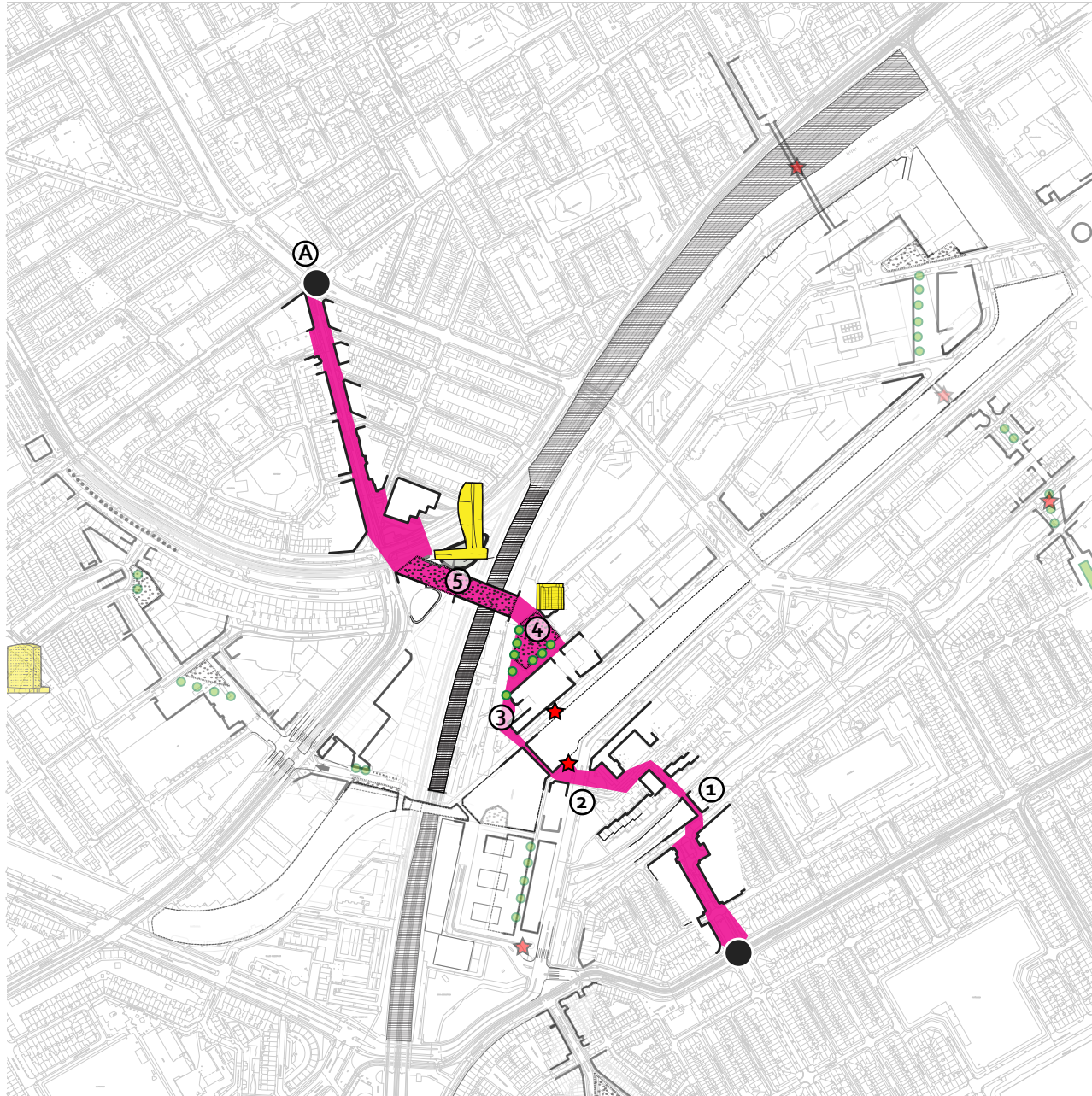
5. A widening of a space can be used to indicate a change in the route, here used to indicate a change of direction. (Cullen: pg. 109)





Isometrical overview route, numbers refer to numbers steps previous page.





Purple route

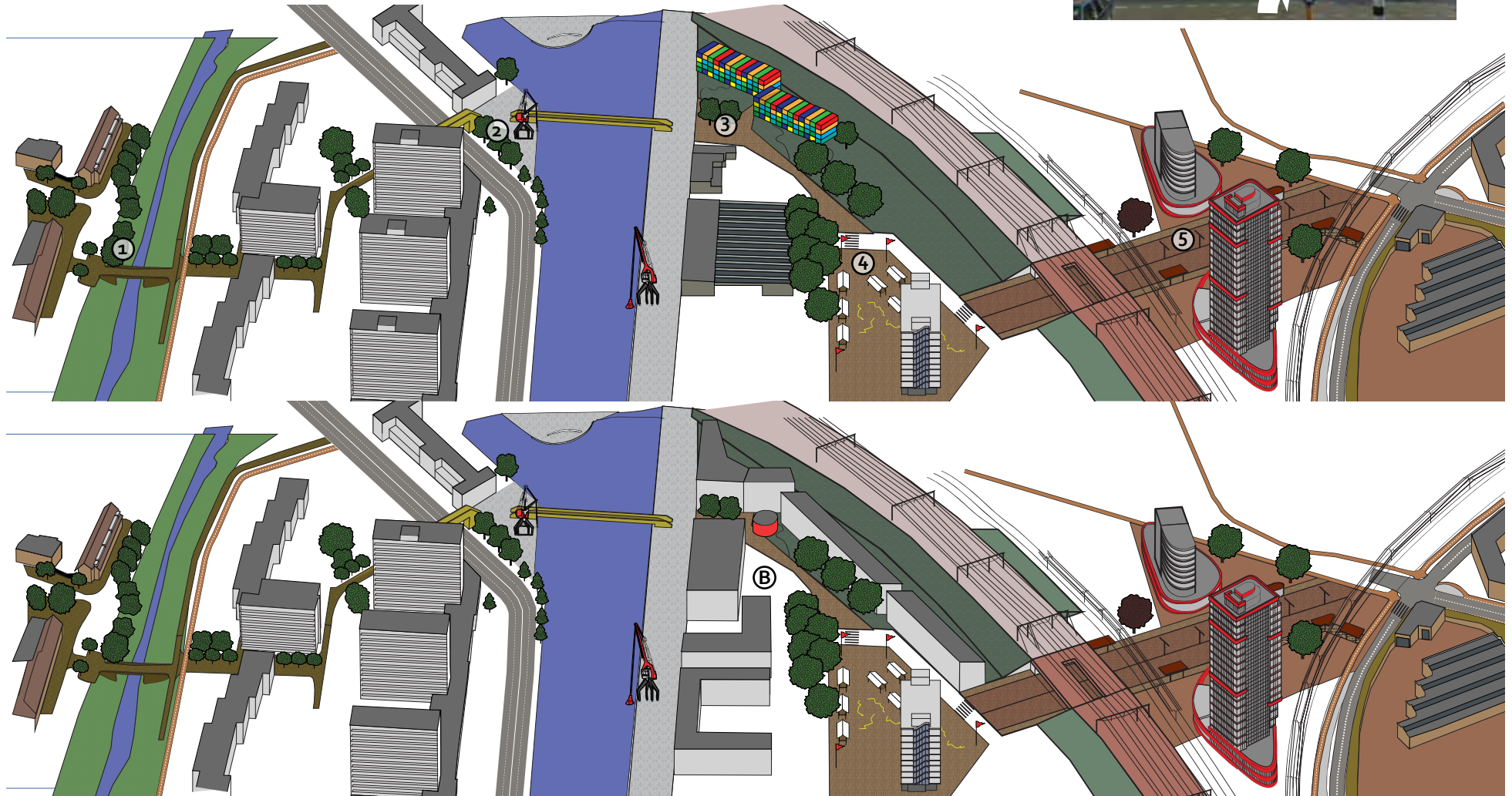
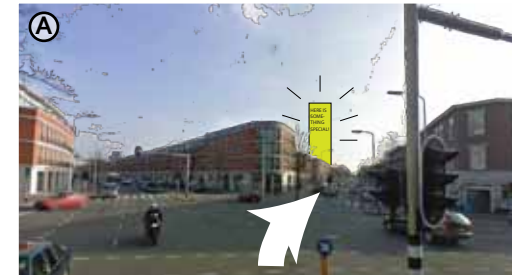
Aim: The purple route connects two important joints in the heart of two different neighbourhoods towards a shared facility. It is a public building where people can make use of all kinds of multimedia devices not normally affordable for everyone. When sharing this facility people might also get into contact with each other, stimulating mutual understanding.

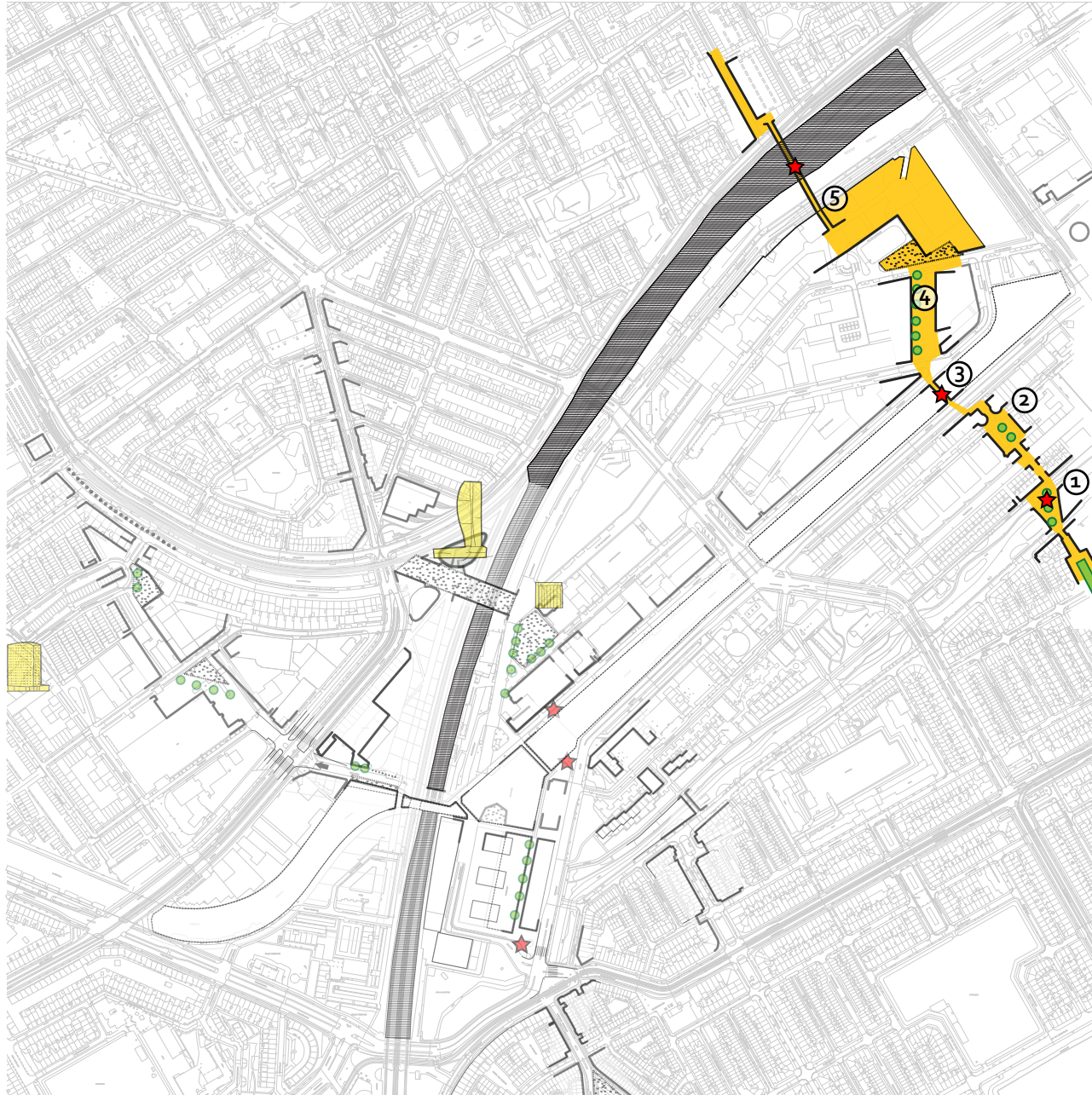
Means (see images to the right): Because of its more local aim, the route is primarily for pedestrians, although it is also accessible for cyclists. From the north the route is very straight forward, the challenge is to lure people into the Wouwermanstraat instead of the continuous Vaillantlaan. To do so, the height of the landmark has selected to be high enough for people to be able to see it, when on the Vaillantlaan. The shape and colour accents of the buildings are chosen in such a way to catch the eye from a distance. (A)

From the south it is somewhat more difficult, other high-rises obstruct the view on the building. Instead smaller interventions, such as a continuous pavements and the right connections can form this connection: Now only a very narrow bridge crosses the water of the green strip barrier of the former Laak stream. A wider, more urban link should enable people to choose this route. (1) Before being able to cross the canal, first a new crossover should allow people to reach the waterside. At the waterfront a restored industrial crane will strike the eye. (2) When arrived at the northern quay of the canal people have to walk around a few buildings, on a wide sidewalk, triggered by the glimpse of a row of trees, suggesting a continuous line. (3) Then people will see the small office building *The Pioneer*. At its feet lies a square where local manifestations could take place, such as street theatre or a car show. (4) At this square the mystery of an wide underpass, might tempt people to take the final step to reach the public building. (5)

Character: The character of this route is more scruffy, not everything already planned out or defined. This leaves room

for flexibility in the infill of the now partly vacant areas of the Laakhaven. The landmark works as a catalyst for this route, so when the building is realised, with the adjoining square, the alibi (Hajer, 1989) is generated for people to use this route. At first this can be done with temporary wooden structures. When the area starts transforming due to the attracted activities, there may be more permanent structures could be part of new developments. (B)





Orange route

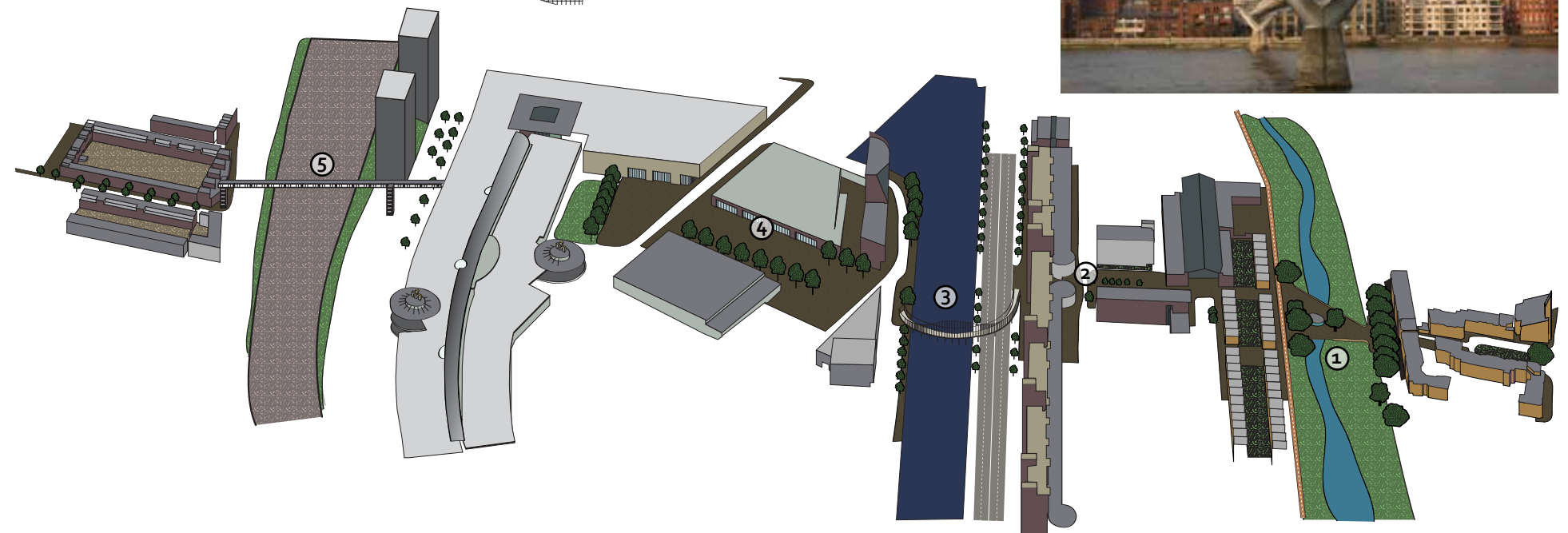
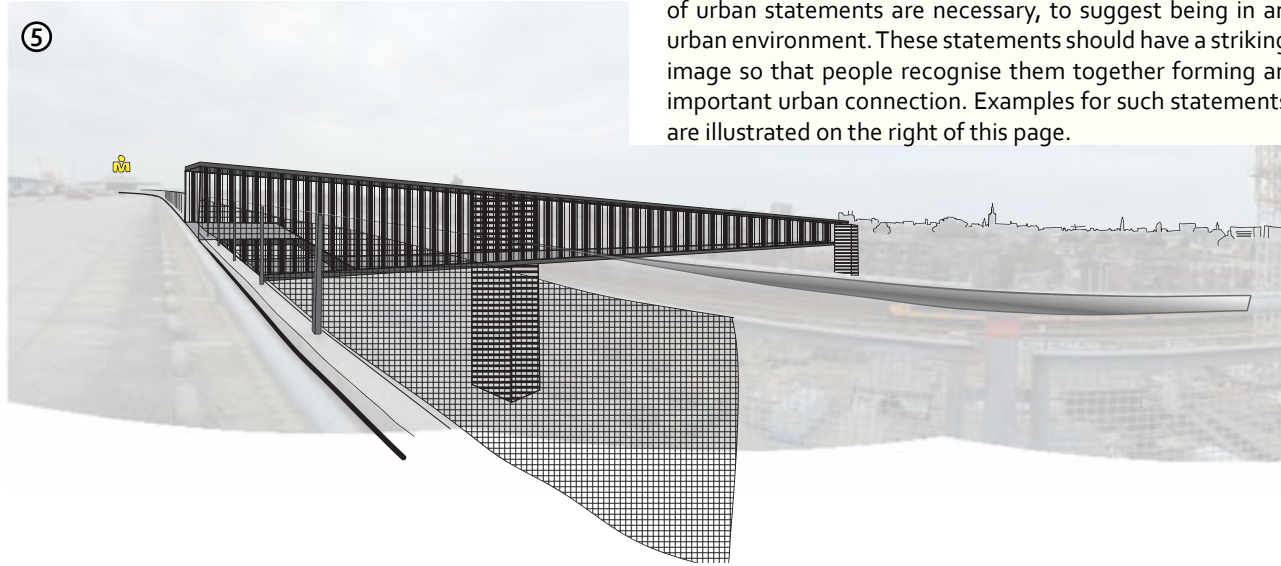
Aim: The aim of this route is to connect a long straight path of the Koningstraat, coming from the city centre to a straight green strip in the urban structure of the Laakkwartier. But southwest-northeast structures form obstacles for this logic connection. Here we do not talk only of the canal, the train tracks and the former laak stream. The Lamel, an architectural statement of Aldo Rossi, forms a wall along the water and the Megastores, a shopping mall completely designed for cars, form barriers as well. Together they affect a potential pedestrian connection. This connection is somewhat utopian in nature, nevertheless when realized it could have numerous positive effects for the area. The route could bring new life into the Megastores, making it equipped for other commercial uses than merely car dependent businesses. Instead it could change into a prelude of the city centre, an attractive place to stay. In addition, the Laakkwartier can become more part of the city centre, a process that already has been initiated with the developments at the south side of Station Hollands Spoor. This connecting to the city centre will make the Laakkwartier more attractive for people to move there. This will also make it more attractive for developers to invest in further redevelopment of the Laakhaven.

Means (see images to the right): The south side of the route can be implemented relatively easily. The link across the green strip of the former Laak has to be redesigned to guide people towards an existing passage crossing the Slaughter house terrain, designed by Rossi. (1) The Lamel can likewise be overcome by making use of an existing passage way, when made comfortable for the use of pedestrians. (2) Arriving near the canal some greater modifications are necessary to cross the busy traffic along the canal and the canal itself. This could be done by a single structure crossing both barriers. (3) At the other side of the canal a breakthrough is needed to reach the existing entrance of the Megastores. (4) When this entrance is made more transparent and friendly the route can logically continue into the Megastores building. From this Megastores a characteristic pedestrian bridge could make the leap to the other side of the train tracks. (5) Coming

from the north, seeing the image of the bridge should give enough motivation for people to follow this route.

Character: This route has a utopian concept of fusing the Laakkwartier with the city centre. To achieve this, a number of urban statements are necessary, to suggest being in an urban environment. These statements should have a striking image so that people recognise them together forming an important urban connection. Examples for such statements are illustrated on the right of this page.

References of Paris, Madrid and London of an iconic bridge





Green route

Aim: The green route connects two points that have the ability to become a strategic node in an improved regional public transport network. The municipality is planning to upgrade the current tramline 11, running from the Hollands spoor via the Wouwermanstraat to the harbour of Scheveningen. When upgraded this line can become part of the Randstadrail system, now already forming a new connection between Rotterdam and The Hague. If these plans will be realized the beach in Scheveningen becomes better connected to more inland situated villages such as Nootdorp, Pijnacker but also Schiedam and Delft. Strengthening regional public transport networks is a necessary step in becoming a proper metropolitan region, following the example of other metropolitan regions in Europe. Part of this trend is to treat nodes in regional transport networks as nodes in urbanity, combining urban development with the infrastructural developments.

Rob van de Bijl is an advocate of upgrading line 11. He sees it as a unique opportunity to combine with urban and green development: *"The Hague is a city at the sea, but at the same time the connection to the coast has to deal with a enormous amount of pressure. The Randstadrail will improve the connection between the city and its hinterland. Therefore it would be logical if this connection would run through to the coast."* He advocates that the implementation of these new infrastructural lines together with already existing lines, for example tram 11, should be linked to the development of green. *The continuous green line is a logical for both a series of final destinations as well as local facilities.* (Van der Bijl, 2004) Two great qualities of The Hague are hereby emphasized, namely its location near the sea and its green character.

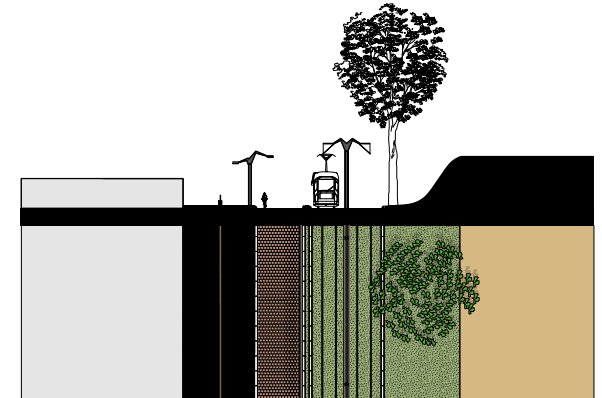
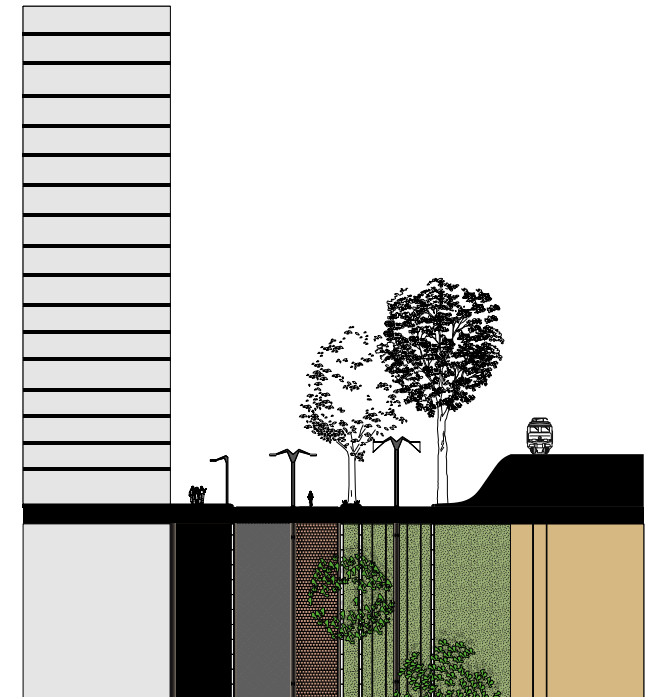
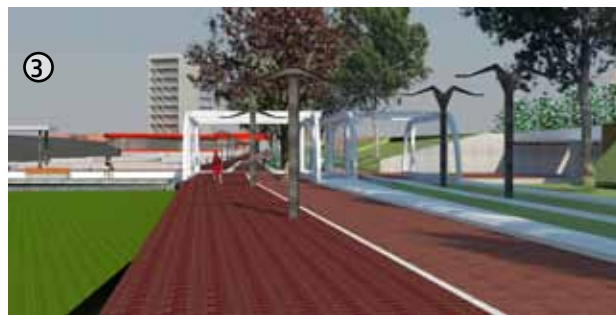
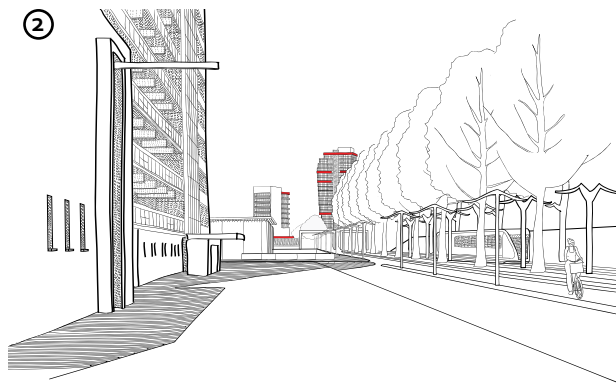
The creation of this route will be accompanied by new green development, to the proposal of Rob van de Bijl. This green structure will offer the feeling of extent, which according to Kaplan (discussed in the theory part of this booklet) is one of the attributes providing relaxation in parks. The parks in the Schilderswijk can not offer this attribute due their small scale and enclosure into a dense urban structure. Especially

the views over the canal can contribute to this attribute. Therefore both waterfront should be cleared of obstacles. The park at the same time contains defined spaces in which different activities could take place.

Means: To achieve the objective of becoming part of the regional network, the tramline g which currently runs along the Fruitweg will be moved towards the train tracks. In that way it is made possible to create a second tram stop at Station Moerwijk. This makes the station integrated stronger into the current tram network, and enables people to take the tram when they need to move along this route. Furthermore this tramline brings activity to the area, and shows its passengers the different features of the park. In this way these features can become part of the mental image the city dwellers have of this area.

The route also includes a cycle and pedestrian route, that will be defined by a continuous row of trees at one side. The bicycle path as well as sidewalk have a width of 4,5 metres so that on both sides cyclists have enough space to overtake one another. Next to the big square serving the tram stops, along the route there are some small places created, in the park and near the water, where one could have a rest and enjoy the surroundings.

Character: The intended character for this route is formal industrial; using dark painted steel and light concrete for street furniture, but small brown bricks as flooring. The formal character uses the slightly curved of the route to create a sort of anticipation. Strengthened by the stately tree line it gives a notion similar to driven up towards a palace. The created expectation is fulfilled by the iconic red building, which reveals herself bit by bit along the route. The lane-like feel to the route also matches the past of The Hague, including many estates. The industrial feel links more to the history of the area itself, being a former harbour area. The tram poles and street lanterns are designed in such a way that they can be recognised as being part of one family, to create more unity.






Trees:

 Poplar
populier



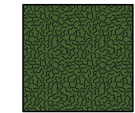
 Norwegian maple
Noorse esdoorn



 Red maple
Rode esdoorn



Vegetation park:

 shrubs
struikgewas



 flowerbed
bloemperk



 grass
gras



 vegetable garden
groentetuin



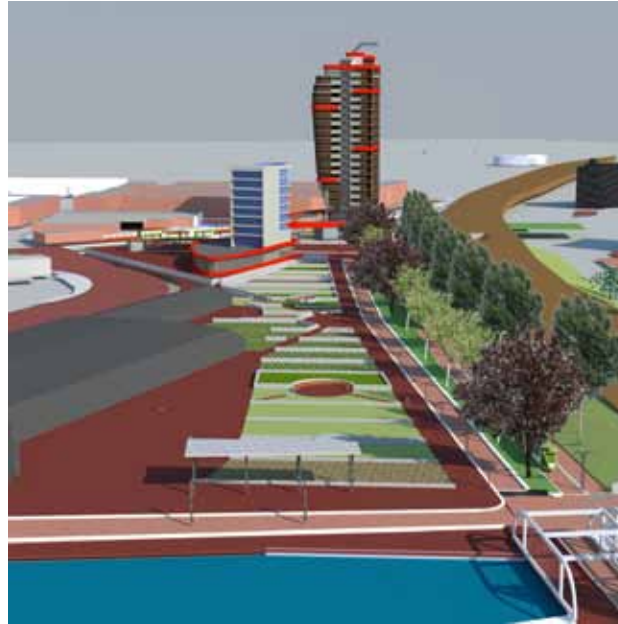


Indoor Skating - Reference Eindhoven, redevelopment Strijp area, former industrial warehouse transformed.

The park

The park positioned along the green route gives the opportunity for people to stay and recreate in. To accommodate these activities the park consist of long lines on with people can act out moving activities, such as riding a bike, running, or walking. Staying activities are accommodated by the areas in between these lines. These area are divided up into smaller sections, by parallel running low concrete walls. The structure of these lines refer to the lineair structure of the Schildersbuurt. In this way, a mediation is reached to deal with the transition from the compact city in the north and the open city along the canal. As the ground cover refers to the compact city, on top single objects are placed marking the beginning of the open city. To react on the differences in height of the terrain sections near the square are rising by steps of half a metre. The sections alternate between four different forms of plantation serving different purposes. Shrubs will be planted when a nearby place for staying needs some sheltering. Flowerbeds are used for give people something to look at and get fascinated about, adding to the restorative qualities of the space (Kaplan, 1995). Grass gives room for people to have

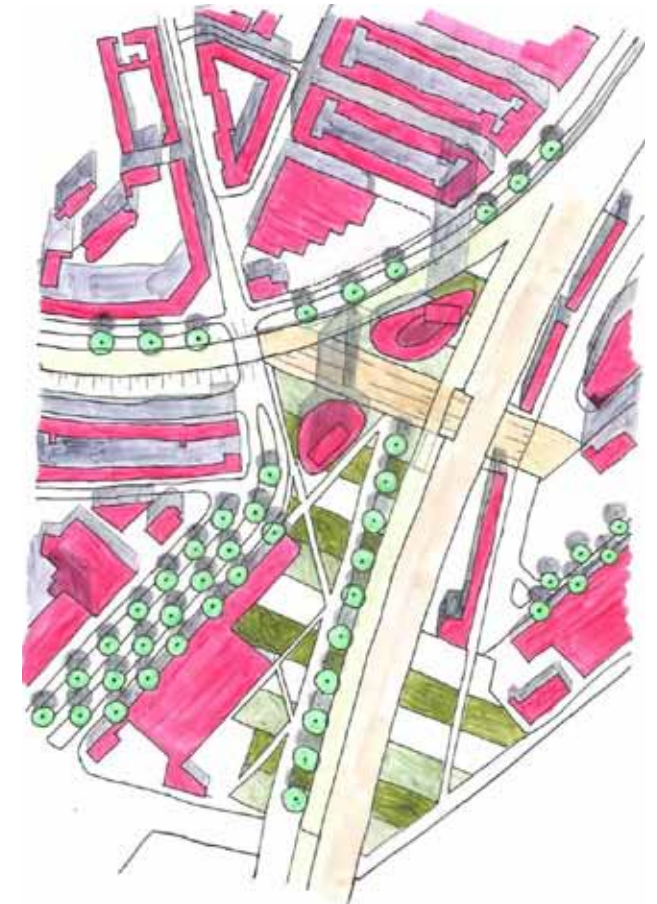
Routes



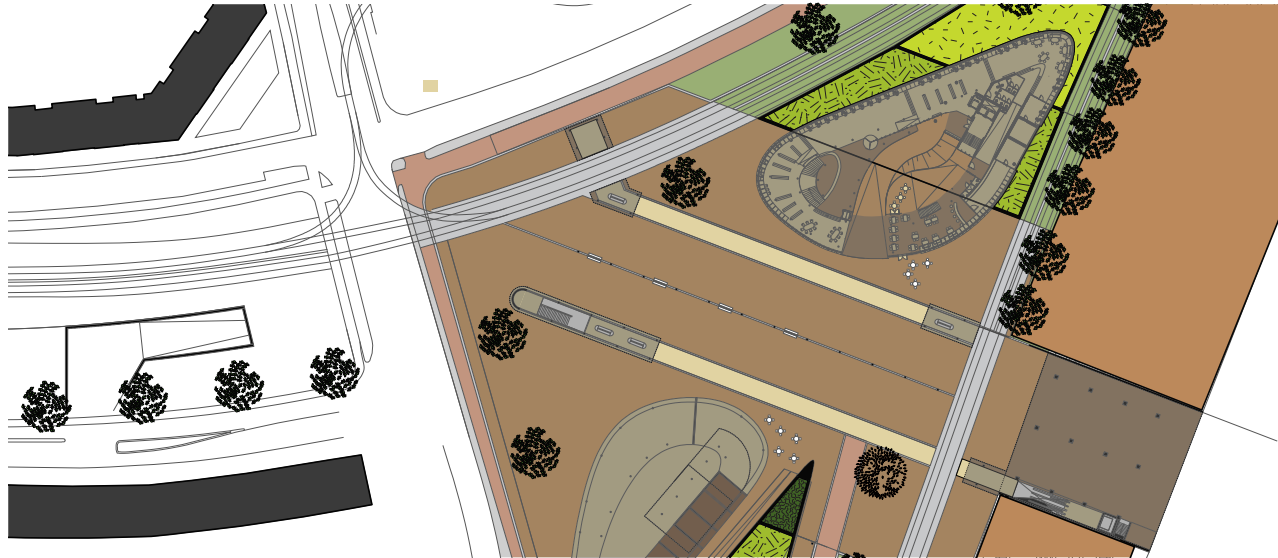
a picknick or play a game. Vegetable gardens provide the possibility for people to get involved adding to appropriation in the park.

The square

At the north side of the park a strip is paved to become a square. This square does not only forms a grand entrance to the park, but also by means of an underpass forms a northern connection to the other side of the train tracks. Besides these two reasons, there are more reasons motivating people to use this square as public space. On both sides of the square are tram stops, so that people can use the square to while waiting for their tram or transfer onto another mode of transportation. In this way, the square can play a role in the daily rhythm of city users. To serve these people even better, there are also facilities linked to the square, located in both substructures of the two adjacent buildings. These facilities give users the possibility to combine the use of public transport with other daily activities such as grocery



sketch made of park at architecture p3, structure schildersbuurt adopted in structure park, may 2012



shopping, having coffee while meeting up with friends or colleagues, or fill some time between appointments working on the computer. The position away from the road, and the tremendous amount of space and new connections that are created for cyclists and pedestrians make this new public space, opposed to the current offer of public space, besides functional, attractive and comfortable to use. All these reasons will help ensure that this place will be considered as a node. And as we have learned from William Whyte, people attract people, so that in the end this node will not only attract people for mere functional reasons but also for the place itself. In this way the intervention of adding a park and a square will contribute to the living environment of a large number of people living or working in the city.

Underneath the square is a parking garage which provides parking for the inhabitants of the surrounding area and visitors of the Ideastore. The paviljons forming the pedestrian access points to this parking are designed in the same way as the tramstops. They are aligned along to linear alternation in pavement in with also bicycle stands are incorporated, together framing a rectangular square..



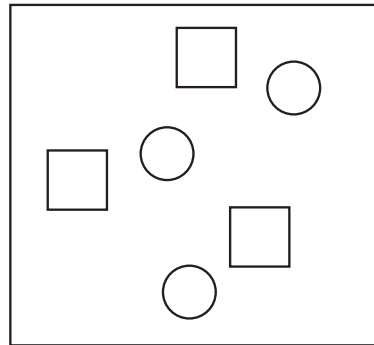
Concluding

Although all these connections have their own aims, together they achieve a general objective counteracting fragmentation in the area. The new connections create a slow traffic network, that connects different parts of the area. The mere existence of the connections and their relation next to each other generate a surplus, similar as a group of buildings being able to form a square, these routes can form a network. The new landmark will supply a public image of this network. From every route at some point this building is clearly visible, although sometimes from a distance.

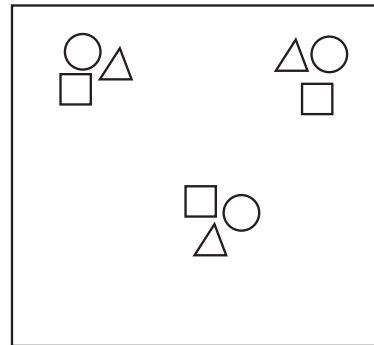
ARCHITECTURE

The experience of a landmark

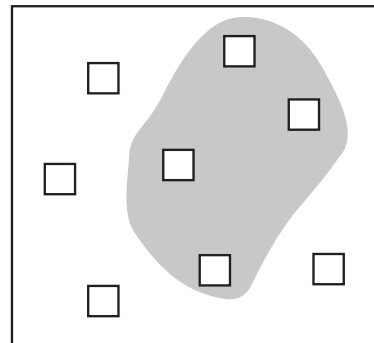
Similarity



Proximity



Common ground



The experience of architecture

Next to an urban design, this project also consists an architectural design. Here a study is done into the design of a landmark. This therefore involves the further research into the practical use of Lynch's theories.

The overlap between the urban and architectural assignment is thus the role the building plays for its surroundings, as an object as well as a public facility within the city. Although both Cullen and Lynch focus on the city, their attention to the cognition of space can also be used in covered public spaces, such as public facilities. The important aspect in this is again cognition of element, by themselves, as well as part of a group or system.

The book of Pierre von Meiss (1992) focuses on and describes this principle. We recognise groups, or order elements, by searching for similarity or repetition. But elements do not always have to look alike to be perceived as a group. For example people also tend to group elements which are close together, their proximity providing their relation. Furthermore elements will appear a group when they are together enclosed into a single structure, such as a room or a type of flooring.

Not only grouping objects will help ordering environments. Also contrasts between elements can indicate a relationship and it leads to mutual enforcement.

Typology

In the urban design part, the implementation of a landmark is mentioned near the tramstop Wouwermanstraat. In two routes this building is actively involved. In the purple route the sight of the building should lure people to turn right at the Vaillantlaan. In the green route the building forms the ending of the route, moving towards the north glimpses of the building reveals themselves, creating anticipation. At the same time the building harbours facilities serving the users of the square near the Wouwermanstraat. As such the building contributes to the experience of this square not only functional but also visual as a part of the framing of the space.

Concluding the urban context sets requirements for the building seen from a distance, and seen up close.

Both requirements can be linked to a building typology:

- Seen from a distance the building should have a tower like typology, slim and catching the eye. Such a slim tower could consist of apartments, surrounding a core (see to the right reference residential tower). Locating housing in the tower has the beneficial property that especially in the evenings lights are coming out of the building, contributing to the prominence of the building in the surroundings.
- Facilities serving the square can be associated with the public building typology. This typology should be not be too high, in order to fit the human scale for people to comfortably use the outdoor space. Spaces should be connected to one another, while a courtyard could provide daylight access. (Alexander, 1987)

This duality in requirements translated into typologies suits to the objectives of the Hybrid building Studio. This specialization of which the renewal of the urban renewal is part, tries to respond to transformations within the city, through generating a architectural solution. This means that multiple functions of the city are brought together in a single building. This could also imply a combination of typologies.

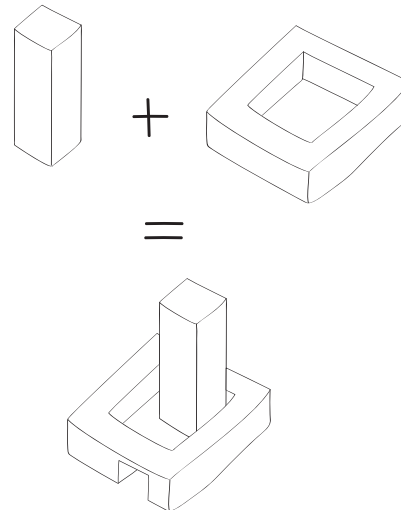
The benefits of placing the tower onto the courtyard of the

The experience of a landmark

public building is that the base of the tower is located in the courtyard, where there is enough social control, to guarantee the social safety of the entrance. In addition the escape routes out of the tower can directly reach the ground surface. For this reason there should also be an opening in the structure of the public building so that the courtyard is directly connected to the surroundings.

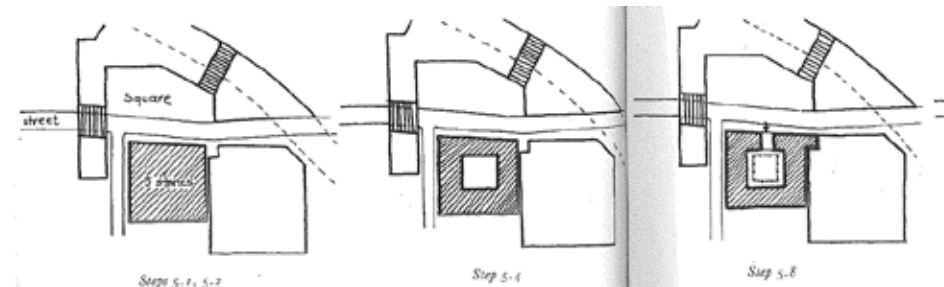
Situation

When placing this typology onto the location it is desirable to have the tower at the north side of the plot, where it *Typology:*



Reference public building:

Steps of forming public building, by Christopher Alexander, 1987



Reference residential tower:

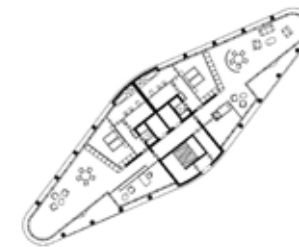
Tower in Berlin Hansaviertel by Hans Schwippert



Apartments around a core

source: Das Hansaviertel. Ikone der Moderne by Stefanie Schulz, 2007.

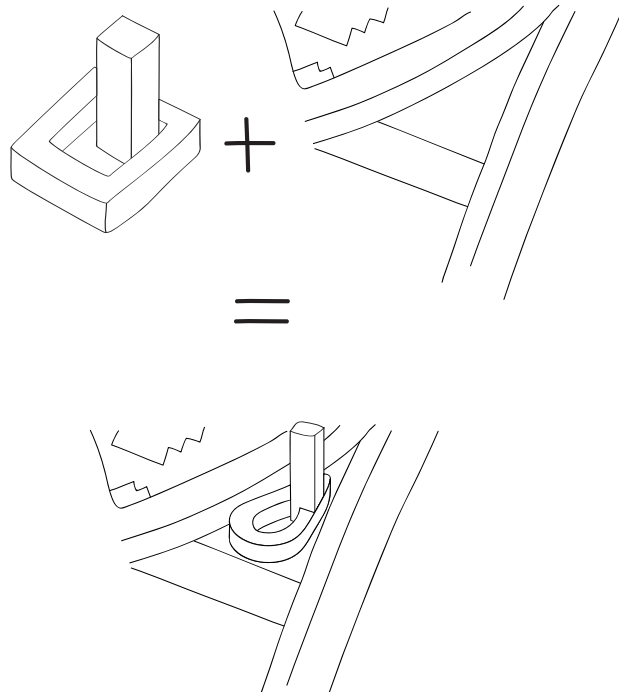
Vesteda Tower in Eindhoven by Jo Coenen



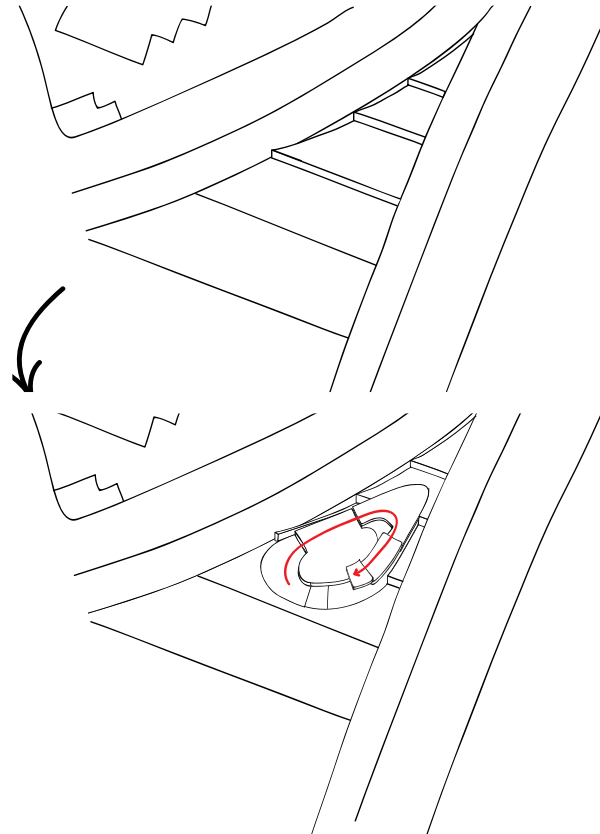
Functions as landmark in the city

source: <http://www.vanstraten.nl/>

Typology & situation



Height differences:



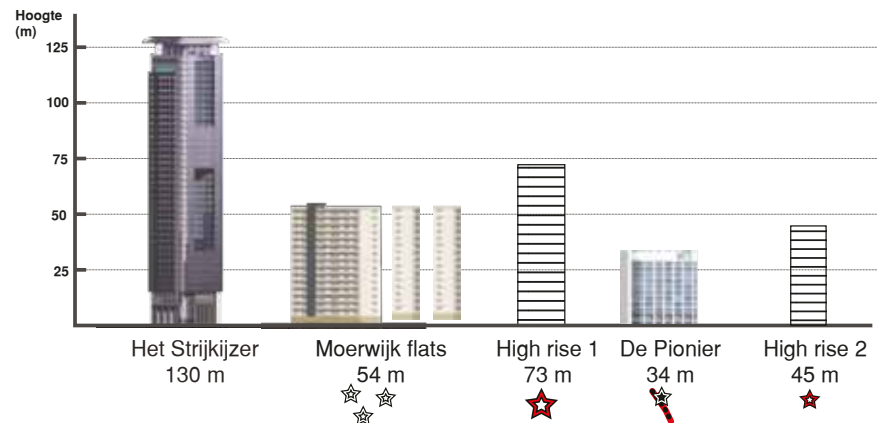
will not cast shadows onto the courtyard. Projecting this combined typology alters the form of the public building. By splitting up the tramlines a triangular plot is left for building. Because the concept of the park was to place objects onto a structured groundfloor, this plot should not be completely built upon. Instead people should experience the park continuing while the building, the object, is placed onto of it. Therefore the building withdraws from the edges of the plot, obtaining an oval shape. Here a contrast is created between the linear structure of the park and the round shape of the building, creating as Meiss puts forward mutual enforcement. This form is beneficial to experiencing the building as a single object, as it does not have a beginning or ending. This property is also used in the next step, where the building has to react on the height differences in the location.

The tram lines are coming from the railway-embankment and at this location they run down towards the ground level. This location is therefore slightly elevated in comparison to the surroundings. Hence the rising of the sections in the park towards the square. At the other side of the square this rising continues, in order to react on the ascending tramtracks.

The building reacts to this height differences, by also rising in sections. But because it has a circular shape this rising can keep continuing. This will create a spiral movement in the floors of the public building, going upwards. Therefore only at the north east side of the building the floors inside and outside correspond. When turning the corner the sections in the building will keep rising while the sections in the park will ascend again.

The height of the tower is determined related to its landmark purpose. Therefore the high rise buildings in the area should be taking into account, fitting the building into existing hierarchy. At the top of the hierarchy is "Het Strijkijzer" serving as a landmark for the entire city. The height of the Moerwijk flats ensures a relation between either sides of the traintrack near Moerwijk Station. The new building, should be placed in between these two, serving either sides of the traintracks but also being visible from inside the Schilderbuurt.

Hierarchy in building heights:



Construction

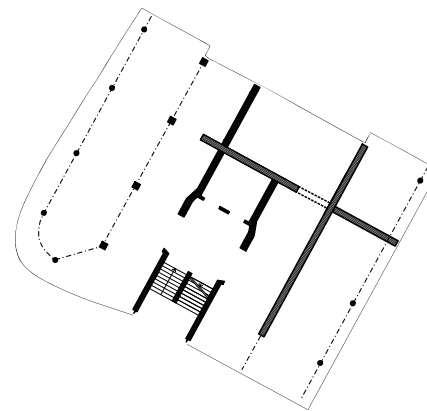
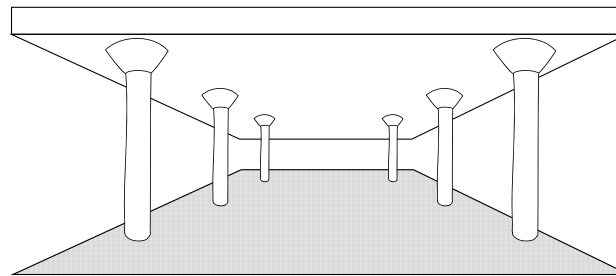
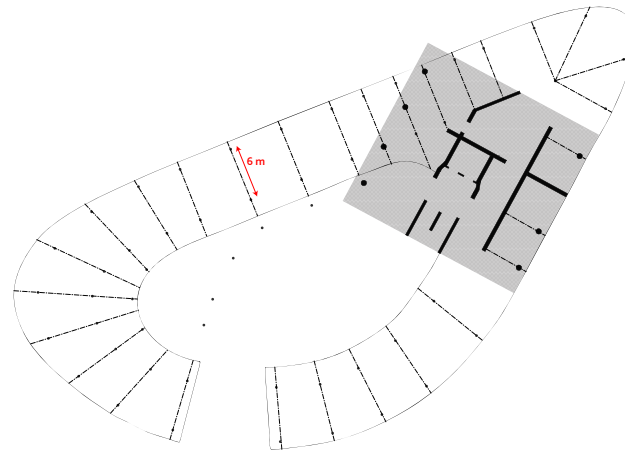
The construction of the public building, or from now on called substructure, consists of columns. The columns are placed in the open space so that they are recognisable as forming the construction of the building. Two columns are placed opposite to each other, together forming portal framing an image. When then one or more portal succeeds the first one, a third dimension is introduced, framing a route (see image to the right). In this way the route spiralling upwards in the building, can be accentuated.

At the point where the two typologies, substructure and superstructure share their construction, a few exceptions are made. The walls providing stability for the tower, are placed in such a way that they partly align with the substructure and partly fill up one of the armpits of the oval shape of the courtyard. At the side where the substructure and superstructure do not align, only four columns transfer the loads to the foundation. This is made possible by a two-storey framework located at the fourth and fifth floor. The four columns are similarly round and concrete as the normal columns in the substructure, so that they can be recognised as part of the same family. But the columns do have a bigger diameter so it remains clear that these columns do have another role in the construction.

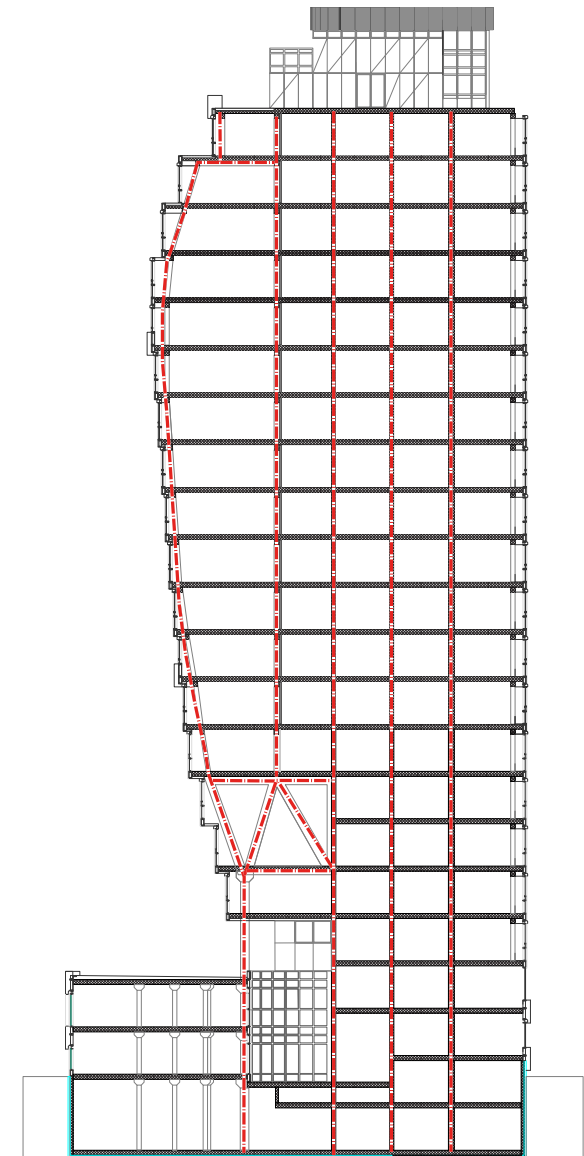
In the superstructure the construction also include some walls, serving stability purposes or provide housing for two elevators and a staircase. The staircase is deliberately placed near the facade, enabling contact with the outdoor air, thus meeting fire safety regulations.

Programme

The programme harboured in the building is determined by the location. Two groups are brought together at this point, people travelling by public transport from all over the city and region, and people from either sides of the train tracks together sharing a facility in the building. Both groups are served by the same programme, an Ideastore. This a concept introduced in London, in a neighbourhood with



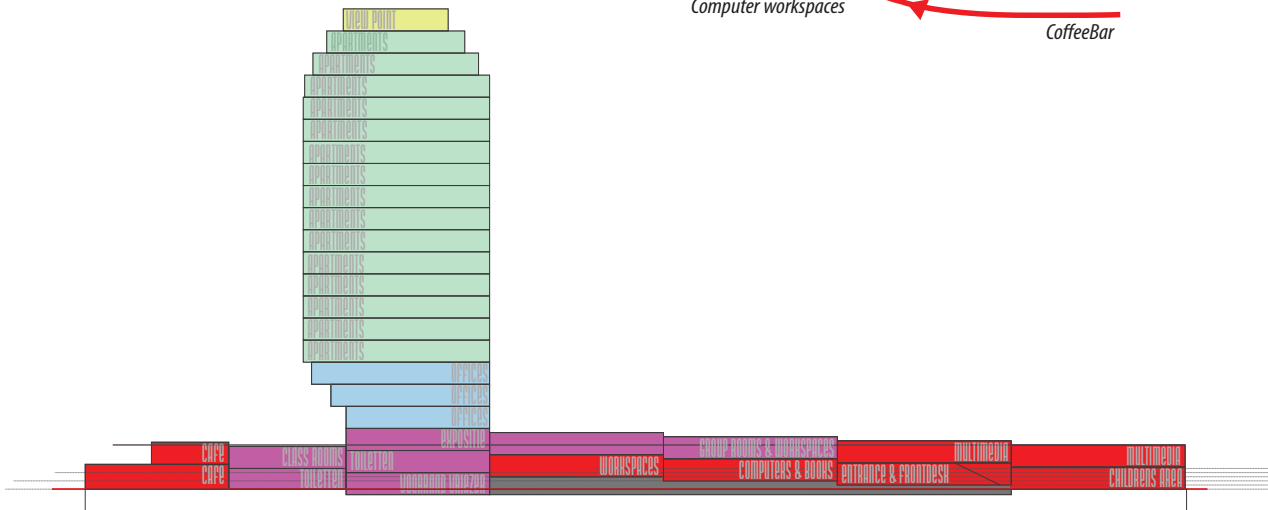
— walls providing stability



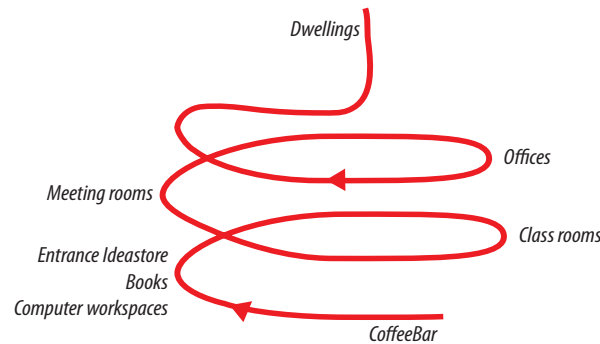


Ideastore in London
designed by Adjaye Associates

Distribution programme in unfolded section



Succession programme on spiral



similar challenges as The Hague South East; a high diversity of ethnic groups, a high level of unemployment and a low educational level. In London an inquiry was executed into the demand of public facilities. This resulted in a concept of a modern library, where a variety of modern media equipment is made available to the public. In London this library program was combined with a supermarket and a nursery, insertion the attainment of knowledge into the daily rhythm of the inhabitants.

This program of an Ideastore shows to be very versatile as, when implemented in this location, it will not only serve the local inhabitants, but also the objectives of the square as transportation node. Here it was also desirable to add facilities used in the daily routine. In present times people are no longer confined to the same workplace, due to the internet. People are therefore more flexible. A new trend therefore is to create workspaces at infrastructural nodes, so that people can meet at a convenient location. Or they can use the time between appointments on different locations to have some work done. Both programmes, the Ideastore and the flexible workspaces, largely consist of the same components. Namely a variety of workplaces, with access to a computer, and different sizes of meeting rooms equipped to served different purposes. Larger rooms can be used as class rooms for various courses while smaller rooms can be used for business or group meetings. The Haagse Hogeschool could make use of the available facilities when they need to. Not only can this programme serve different groups of people, these people will then also meet each other here, creating an alibi for new social encounters (Hajer, 1989).

As mentioned before at the typology subchapter, a suitable programme for the tower could be apartments. These apartment will ensure social safety at times when the public facilities are closed.

The opening in the oval shaped substructure divides the building in different parts, differing in opening hours. To the east side of the opening a coffeehouse offers the opportunity to take a break from studying or working. The coffeehouse

can be accessed from either the square or the courtyard and has a wide opening. People attending courses at the first floor can directly reach the coffeehouse.

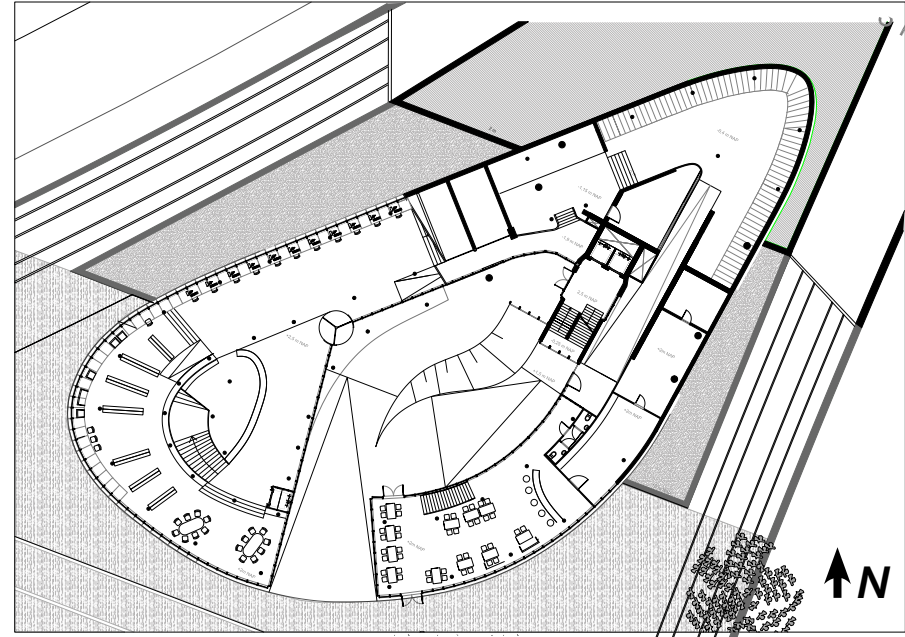
The entrance of library is formed gradually, first by going through the opening to the courtyard, which can be seen as an outdoor room of the building. At the courtyard a rotating door acquires entrance to the inside. Here again the entrance is placed in an armpit of the building, which gives opportunity to create a broader part of the building, a gathering place. Here the front desk of the building is positioned. Behind this desk a semicircular staircase provides access to the first floor.

The programme is distributed in such a way that the most public parts of the programme are near the square, while less public programme is gathered around the north side of the building. People recognise a public programme not only by a sign, but also in its relation to the outdoor space. This is achieved by the openness of the facade and levelling the front sections of the building to the level of the square. Furthermore spaces which are public are larger spaces and more open, what helps them to be recognised as public as well. The most public parts of the building consists of places which succeed each other without any form of division. Through the differences in height between sections, this continuous space can be recognised as consisting of different places. The elements in a section are experienced as one group because they are connected by the same floor as Meiss has suggested in his book.

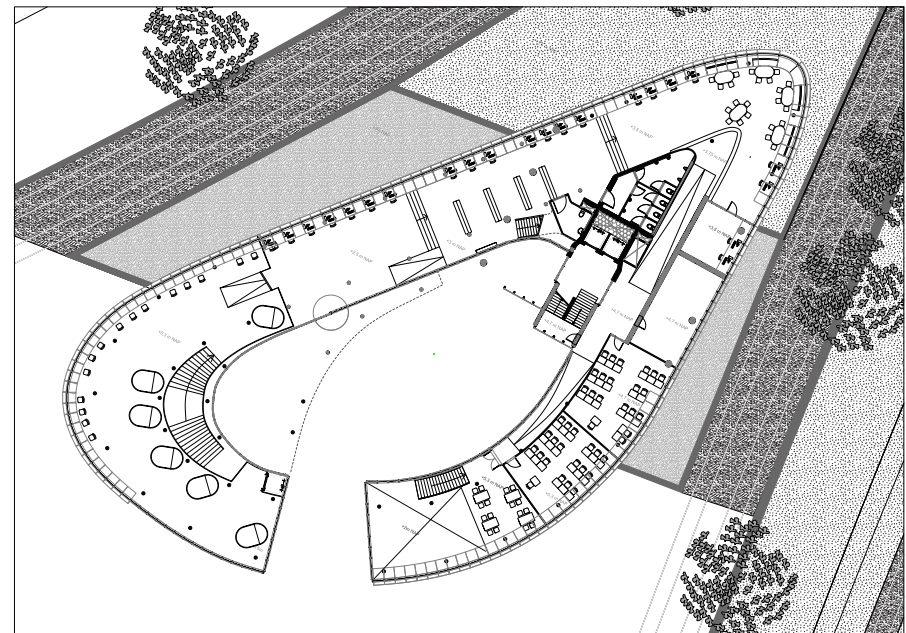
The spiralling upwards movement of different floor sections eventually changes into a vertical movement of the tower. To smoothen the transition between the fully public programme in the substructure and the private programme in the substructure, rentable offices are placed in between.

To establish appropriation of the communal hallway at the apartment floors, the balconies can directly be accessed from the hallway. In this way the balcony can be compared to a backyard, you can access the house or in this case the apartment directly from the street (hallway), but also via a

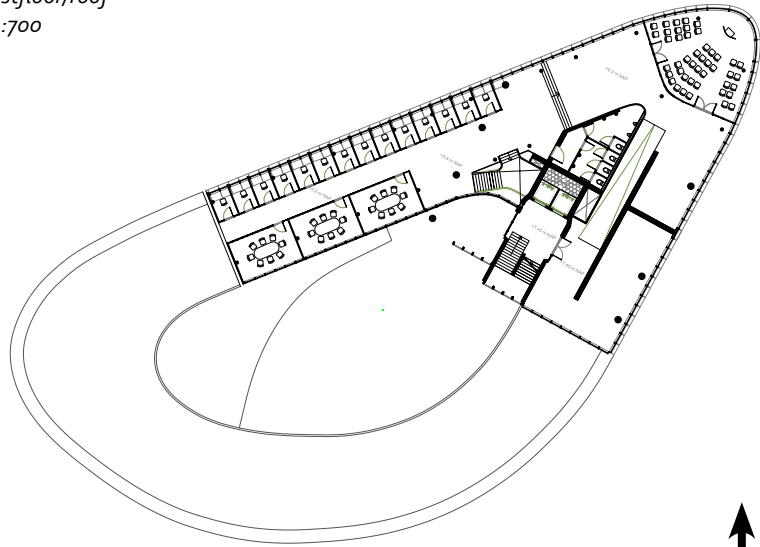
*Floor plan taken at 3 NAP
Groundfloor/Basement
1:700*



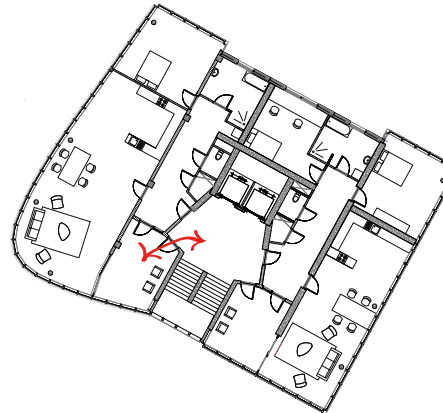
*Floor plan taken at 5,4 NAP
Groundfloor/1st floor
1:700*



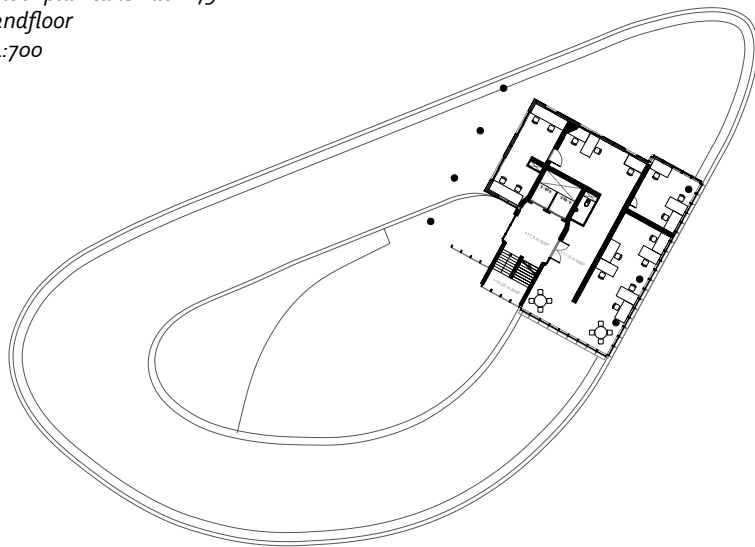
Floor plan taken at 8,7 NAP
1st floor/roof
1:700



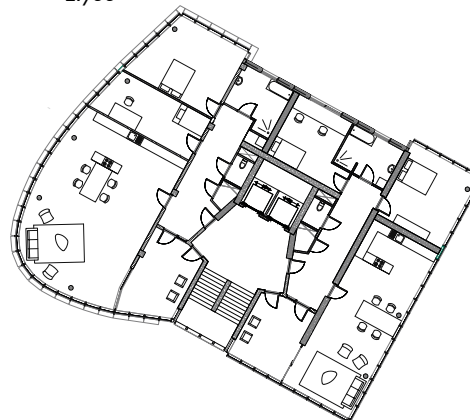
Floor plan
8th floor
1:700



Floor plan taken at 12,9 NAP
2nd floor
1:700



Floor plan
15th floor
1:700



back entrance, through the yard or balcony. Appropriation of the hallway can lead to a better bind with the building as your living environment. (Hertzberger, 1991)

Due to the expansion of the west side of the building upwards, this apartment gets bigger, resulting in the possibility to create a second bedroom.

Facade

The facade forms a visual link between the substructure and the superstructure. Although both have their own form, both share the same facade system. An element facade makes it possible cladding both round and straight areas. The elements all have a width of one metre. In the substructure the height differs according to the varying building height. In the superstructure the elements are all 3,3 meter covering one floor per element.

The repetition of the elements in the facade also gives the observer a idea of scale. While one can get a notion of the scale of a single element, and then see it repeated, to it will also create a notion of the larger whole.

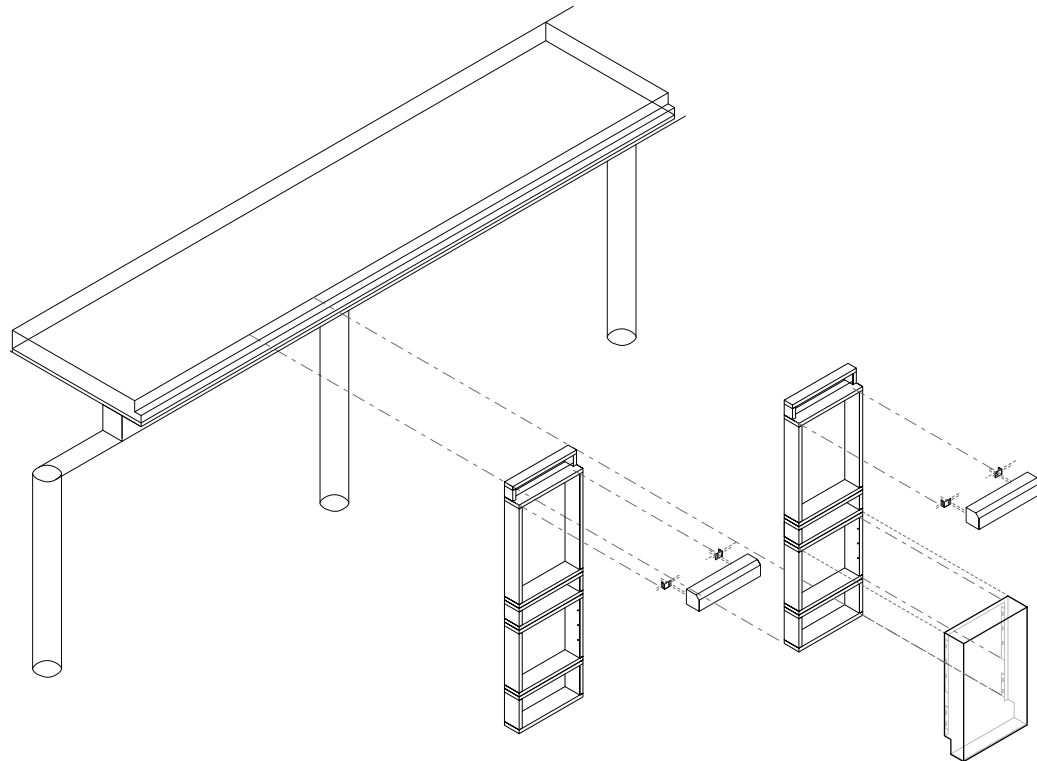
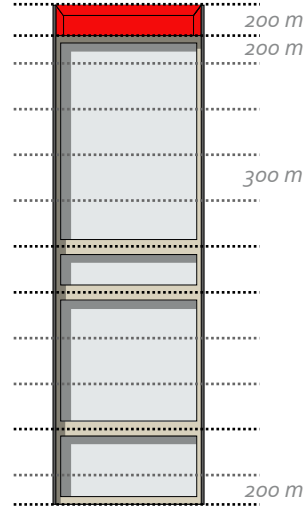
A red ribbon strengthens the connection between the substructure and the superstructure by capturing the spiral of the substructure and continuing in the superstructure. This gives a binding visual effect. The red ribbon repeated at the top of the building ensures that this striking image can also be seen from a distance. In this way the ribbon contributes to the landmark status of the building.

The red ribbon is constructed by aluminium cassettes attached to the element facade. The elements themselves also have a red accent although smaller, being a protruding rectangular aluminium slab behind which the outdoor blind roller are situated. This elements is situated at the height of the floor achieving an indication of each floor in the facade.

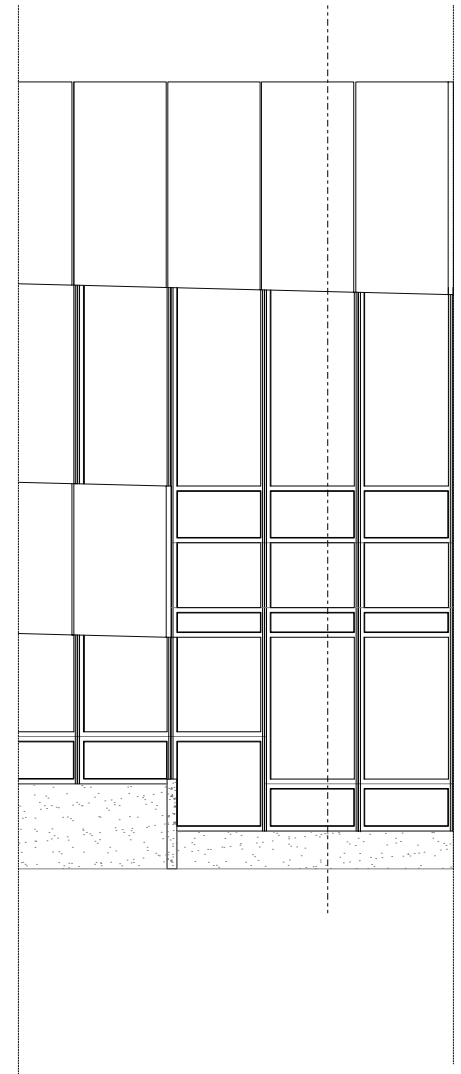
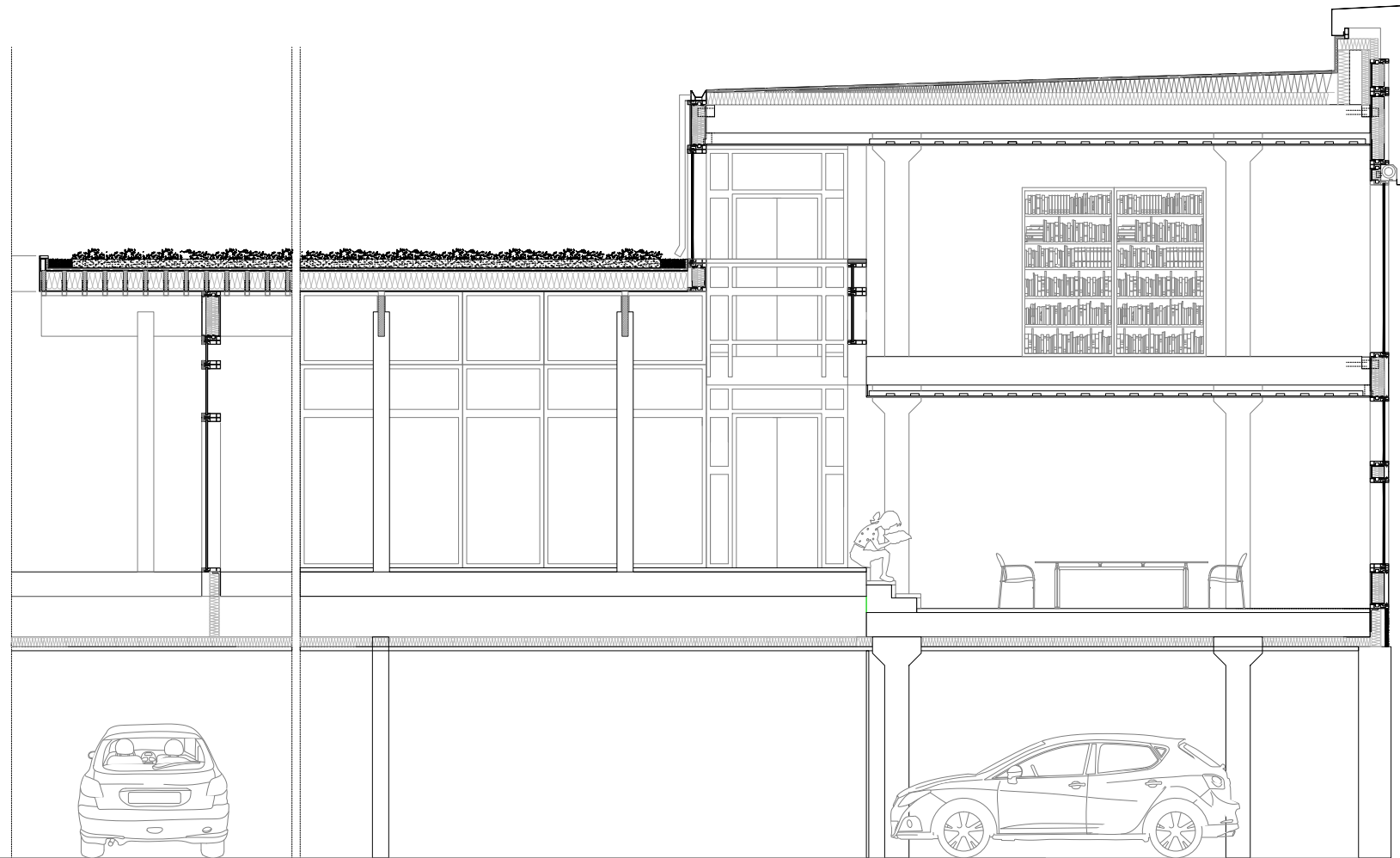
The red ribbon is a statement that works strong from a far. But it also has to be fascinating when approached up close, to give the human scale. Therefore the cassettes are

perforated, which, one does not experience from a distance but will notice when observing them up close.

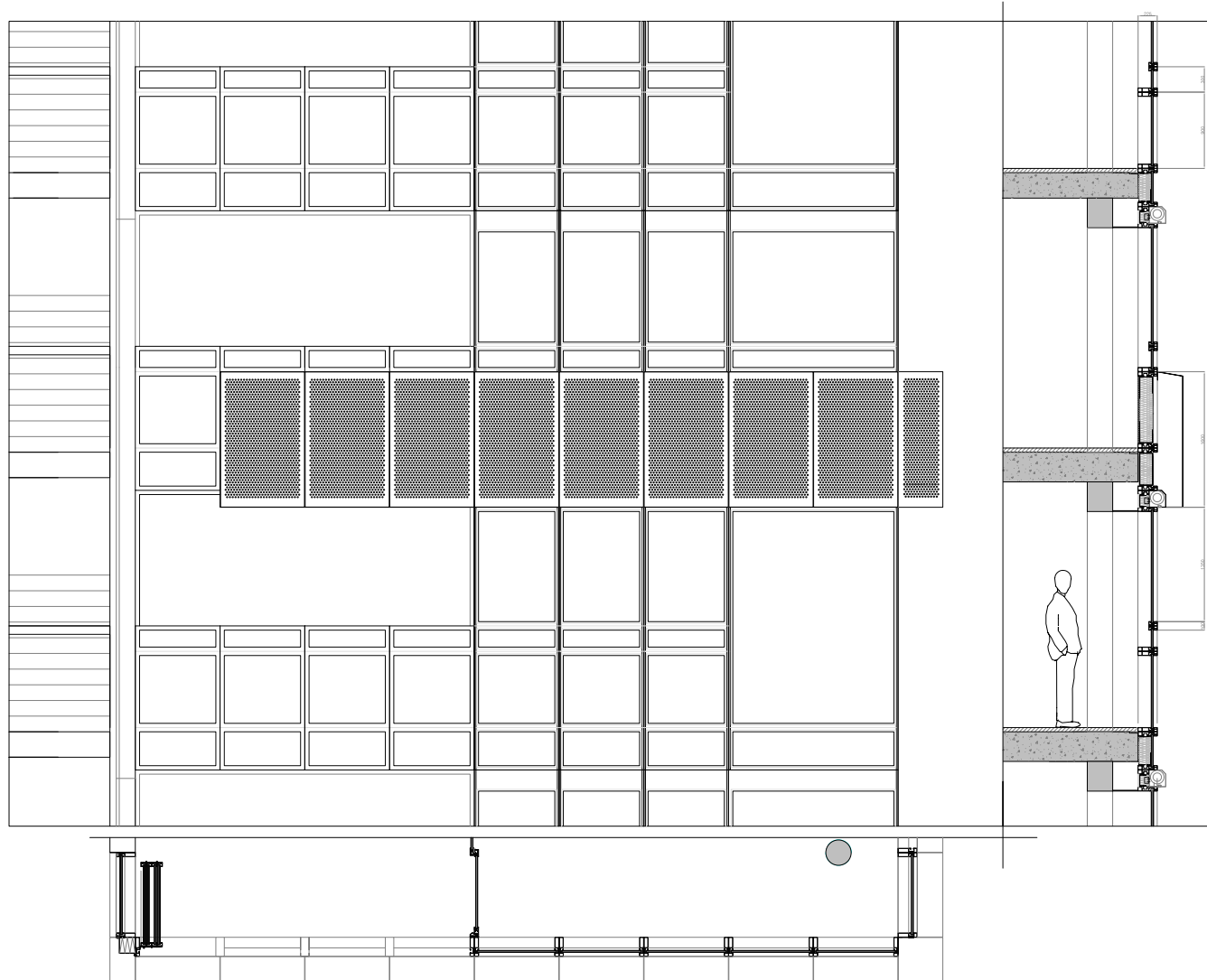
structure elements



Facade section substructure
1:80



Facade section superstructure
1:80

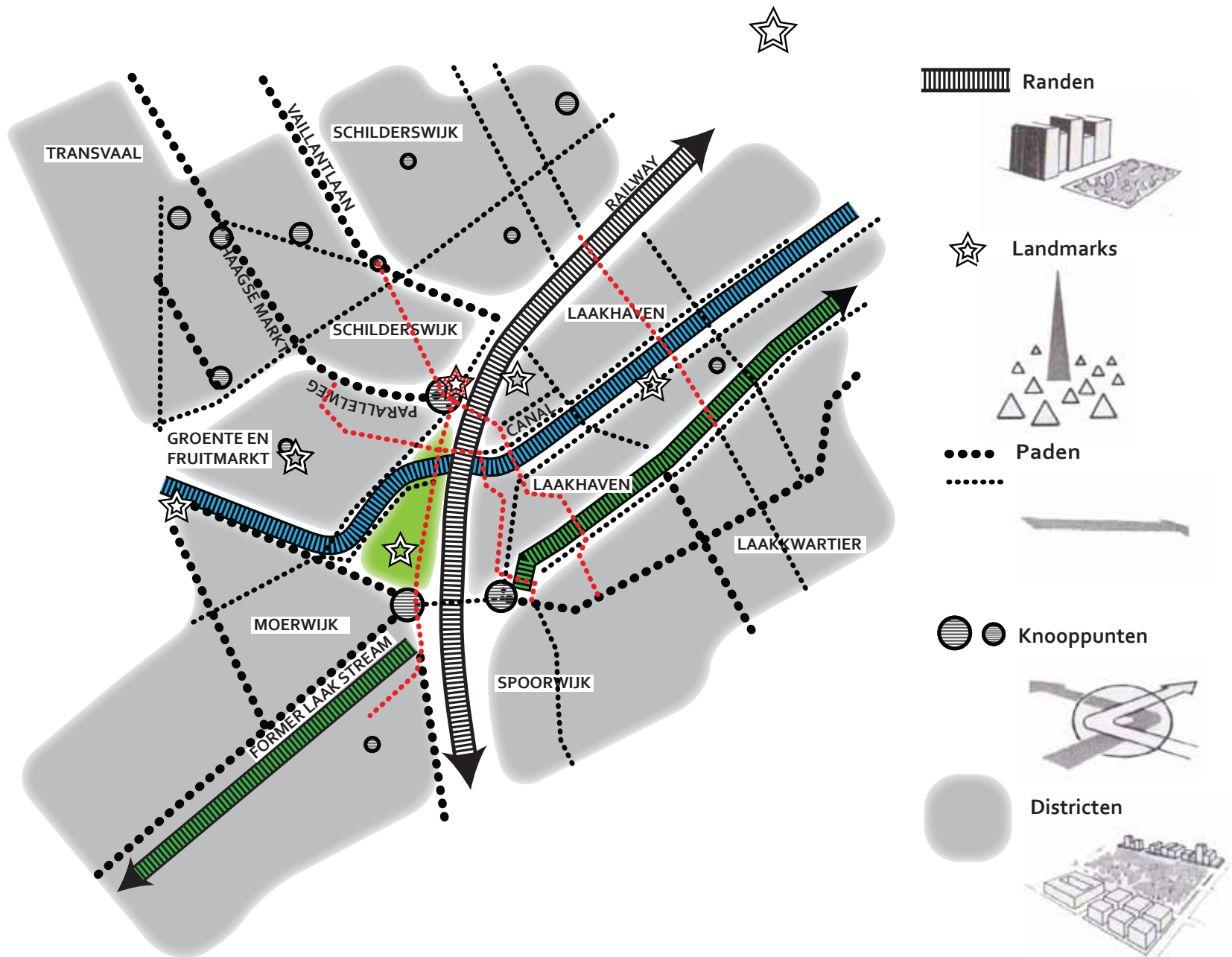


CONCLUSION

Adding four paths and a landmark

Together the urban design and the architectural design, form a plan to add four routes and a landmark to The Hague South East. When implemented consequently the node at the Parallelweg will be more pleasant and therefore recognised as a important node in the area. Together these six new and improved elements of Lynch, will create a new mental map, where barriers are no more preventing people to see and use this as one district. Hereby the former fragmentation will be resolved.

People of all different surrounding neighbourhoods can make use of the new public facilities, such as the park or the Ideastore. This may improve the living environment of these people, giving them a more positive image of their environment.



Adding four paths and a landmark

REFLECTION

The use of Lynch and Cullen

Here the results are summarized of the research to the present relevance of Cullen and Lynch, in literature as well as in design. The process and methods are reflected, in order to account for the results.

Results

Results literature review:

The focus of public space in the city is necessary because:

- Public spaces serve an important role in the formation of communal life in the city. They generate a quality that you cannot get with a single dwelling. This makes them unique features which are essential for the city.
- But in the industrialization process, the unique quality of public space has increasingly become oppressed by the demands for new forms of transportation such as cars. (Tibbalds, 1992; Sheller and Urry, 2000; Trancik, 1986; Jacobs, 1961)
- This means that, besides mandatory activities, the majority of the public space in modern cities do not offer room for any other activities, such as economic, recreative and social activities to occur. (Rogers, 2010; Gehl, 1980; Gehl, 2000)

Present relevance: Severe problems caused by the dominance of the car in many modernistic urban developments have been addressed over the last 50 years. City centres have been freed from the dominance of the car, mainly for economic purposes. In other parts of the city, still public spaces do not offer enough qualities to contribute to the living quality of the city. This while municipalities are eager in attracting people back to its inner circles, to prevent further sprawling. Cities need people to live and work in them!

Focus on the experience of the city can be substantiated by:

- Research done by the field of environmental psychology, showing people having clear preferences for certain environments. (Kaplan 1987, Canter, 1977)
- Research done by urbanists, monitoring the behaviour of people in public spaces. (Whyte 1988, Gehl, 2010)

Present relevance: New researches to record for the preferences of people, for example through GPS tracking, show that the experience of the city is still relevant in the present debate. (Van der Spek, 2008)

Results practical use in urban design:

- The fact that the municipality of The Hague is planning to continue its strategy of "De Kern Gezond" to improve and unify other public spaces in the city, illustrates that there is still demand for such an approach in the present design practice. (Municipality of The Hague, 2009)
- The guiding elements put forward by Lynch (1961) have found to be useful in analysing the defects in the organisation of The Hague South East. Not only the fragmentation became apparent in this approach, also missing connection became clear. At the controlling inquiry similar lines in the map were indicated, even though they had been suggested by differently formulated elements.
- The use of routes can overcome the barriers in the area of The Hague South East and thereby counteract fragmentation and make the area better suitable for pedestrians and cyclists. Bettering the conditions for cyclists and pedestrians can encourage social contact and may in this way contribute to forming a bond with the area. (Hajer, 1994) This bond could then promote the appreciation of the area, making it a desirable place to live in. In addition public spaces enabling recreational activities will improve the competitive position of inner city living in comparison to the suburbs. Triggering fascination and the experience of extent will contribute to the relaxing power of these routes (Kaplan, 1995).
- Implementing the routes can be combined with other objectives of the municipality that allow a further integration of the city, such as the enhancement of the green character of the city and the improvement of the public transport network aiming to strengthen the metropolitan attributes of the region. Adding a landmark containing a public program will emphasize the aim of the created pedestrian network. That is to bring the different districts closer together to form a contiguous urban structure. In addition the landmark is one of the guiding elements, engaged in providing

the intuitive manner in which people are guided along the routes, relying on the cognitive system of its users. (Lynch, 1961)

- Side note: The approach to create separate route together forming a network, not defining the infill, gives the opportunity to slowly transform the area, whereby investors will be drawn by the qualities introduced by the routes. This is in line with the present uncertain economic times, which have made master planning less feasible.

Results practical use in urban design:

- To get a grip on the experience of a building more sources are needed than just Cullen and Lynch. But the approach of identifying recognisable elements can be helpful in describing the intended effect of architecture. Hereby the book of Pierre von Meiss is useful.

Notes:

There are some notes to be made on the correlation of theory and design.

- For example on the use of environmental psychology for urban design. Although research tries to generate knowledge for the preferences of 'the general public', actually they do not exist. Every public consists of individuals having their own preferences depending on their character and personal experiences. Despite of the scientific substantiation giving motivation for design, still practice has to show if the design could achieve its intended goals.
- Next to the physical form of their surroundings and personal preferences there are enough other factors that influence people's behaviour, such as weather conditions, cultural background, state of health, social conditions etc. Therefore it is unrealistic to assume that as a designer you determine the way

spaces are used. Instead the design should facilitated behaviour, so that, at the right circumstances they may occur.

- There is not a 1 to 1 relation between theory and design in this research. Instead theory gives occasion to reason a certain way to come to a design. In this the experiences of people are put first. This does not mean that every point is designed in the way the theory might suggested, but is created in an intuitive way through the imagination of pleasant situations.

Urban process reflection:

This research is part of a dual graduation lab of architecture and urbanism. Due to this fact the design location was determined in a very early stage. This was done with the aid of a general analysis, executed in groups, of the three locations chosen by the studio. My personal fascination for routing and the experience of places, instigated in previous projects, had a decisive impact in this choice. In The Hague I saw the opportunity to combine the objectives of the studio, the needs of the area and my personal preferences for routes, places and spatial views

I have put The "*Renewal of the Urban renewal*" theme of the studio in a larger context by interpreting it as a general renewed interest in the living qualities of cities. The fact that KEI has stated that the urban renewal has failed to unify the neighbourhood by the design of public spaces fits into this larger context. The need of the area I therefore understood as being much larger than just the urban renewal area. Instead my response to the studio was to contribute to the living qualities of the Schilderswijk by adding developments at it borders. The vacant areas at the South side of the Schilderwijk gave the opportunity to do so, but then the barrier of the traintracks in between had to be overcome. By bridging the barriers in the area, I saw the opportunity to install a larger unity, a new city district.

Although with still limited knowledge of the underlying

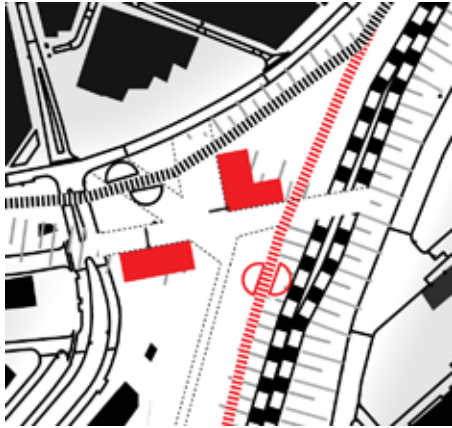
theories, immediately an investigation was initiated into the structure of the area. The reason for rushing into design was that at P2 the urban as well as the architectural assignment had to be clear. Therefore the literature references at P2 remained limited to the texts of Lynch and Cullen. Hence these texts having a guiding role in the literature study, eventually clarified after the completion of the architectural part. They were already built into the base of the plan. Looking back, this may have created some limitations in the design. This is also the reason why the literature review has become a separate part, supplying arguments and reflections to the chosen approach.

The studio advocates the use of strategic interventions. The insertion of the different slow traffic routes, in my opinion, can be regarded as such a strategic intervention. Separately the routes are created to serve specific aims, which allows them to use of specific local attributes. Together they form an intertwined network serving greater aims such as unity and connectivity. And they still offer the opportunity for the area to change, to work together with the architectural intervention as a catalyst for redevelopments.

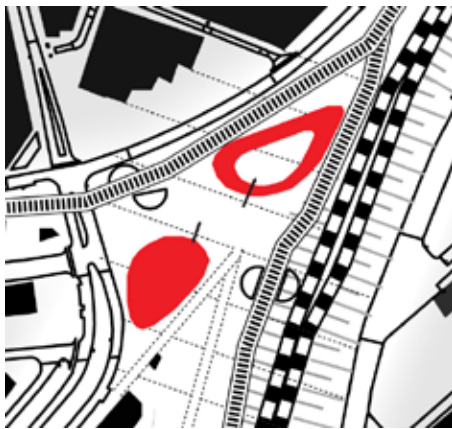
Methods:

The dual graduation studio focuses on urban design and the ability of design to generate knowledge, research by design as it is called. Until the P2 and also a period afterwards this was also the main focus of this project. But after the P3 it became clear that the project also required to have strong theoretical underpinnings. This was needed to justify the strong commitment to the specific approach of Lynch and Cullen. Particularly the current relevance of more than 50 years old theories had to be clarified. For this an extensive literature research has been undertaken, which was not limited to the field of urbanism alone, but also occasionally wandered of towards the fields of social geography, sociology and psychology. In this literature study the theoretical framework was found for the applied urban approach.

Embedding building in context



Proposal at P2



Proposal at P3

Searching for structuring apartments



Architectural process reflection:

My approach to construct a tower to form a landmark for the surrounding context was initiated for the scale of the neighbourhood. But the struggle with high rise buildings is how they connect to the ground surface. Especially in an hybrid studio this requires main focus. The immediate context of the chosen location was very unstructured so direct relations to the surroundings were hard to make. On the location the compact city stops and the object city begins. To form a relation to the surroundings I therefore had to establish a transition between these different urban forms.

The direct relation of a high rise with its surrounding is its entrance. Also this was a challenge to determine since the building is compassed by tram and traintracks. Therefore new attractive public space was needed. At P2 this was proposed by making three public strips all making different connections, but this caused a lot of left over space. Therefore a combination of the three lines was made into one public square which adopts the linear orientation of the streets behind the former tramdepot. By using this orientation for overcoming of the different height levels and structuring the park, the compact city can be reflected on the ground surface. On top the object city begins. (See figure above right)

By building a high rise building many people are clustered on a small area. This allows the rest of the park to remain open space while still having enough people and things going on to make the public space safe and attractive. Furthermore it gives the opportunity to place different programs on top of each other, making it a hybrid building.

Methods:

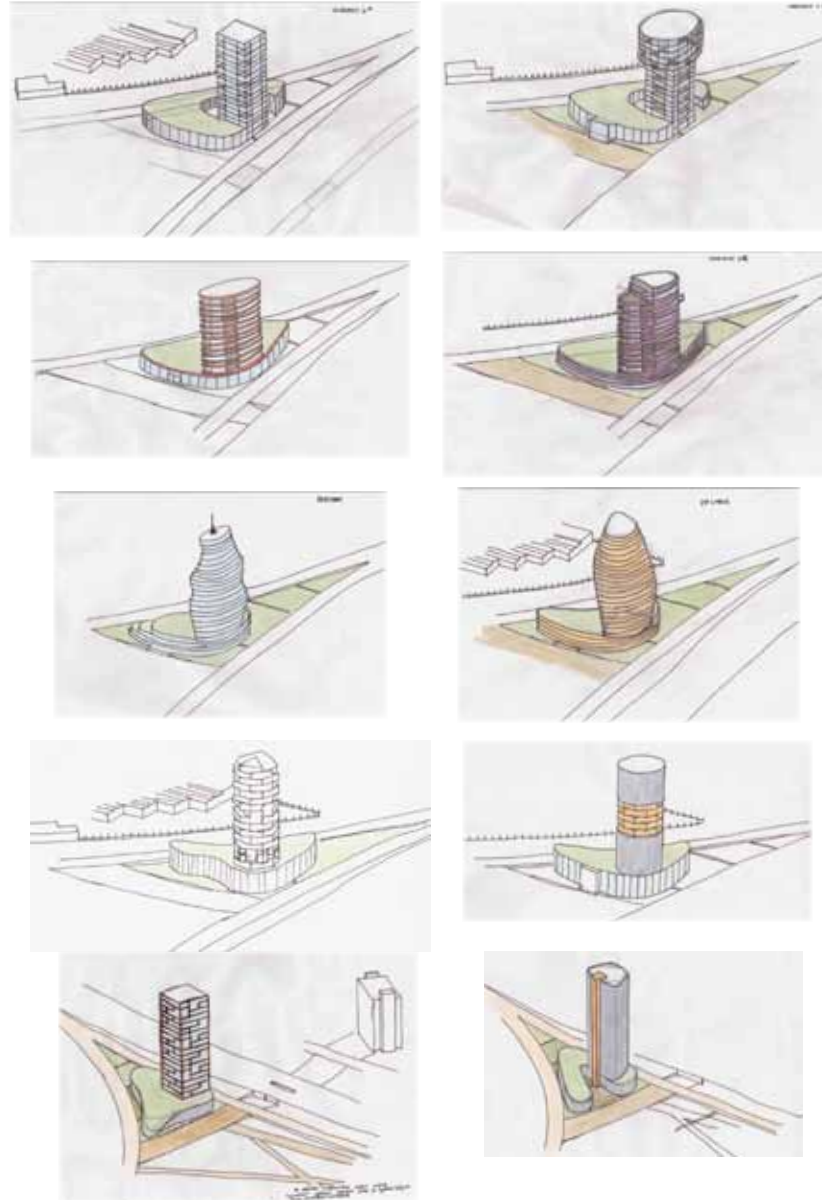
Because of the height differences in the current situation but also the height differences formed by a tower, designing in 3D was very important. Different models,

on the computer were needed to get some clarity on the different challenges that had to be tackled. On the first hand this was important to see ratio in size between the substructure and the superstructure. Because the location is relatively small, and oddly shaped, the proportions of the substructure were limited. The proportions of the superstructure therefore had to be adjusted to the substructure. To research the relationship between sub and superstructure, also precedent studies were very helpful. Further relations between sub and superstructure were also investigated by 3D sketching, trying to create different variants, with different images (see figure 6 at the next page). An example of such a variant study is illustrated on the next page. Also this is helpful to determine the placement of the tower on the substructure.

When designing a high rise not only determining the image is challenging. A high rise also has to comply to many technical conditions. That is why also a precedent study was necessary to how other have designed a residential high rise. Due to the fact the proportional study gave restrictions to the size of the plans it was a puzzle to fit two comfortable dwellings together with vertical circulation space on one floor.

As described in the urban process reflection, at first a research was done by designing. To reflect on the results of this research, the theories of von Meiss have helped to describe the design decisions made in during the designing process.

Searching for the right image

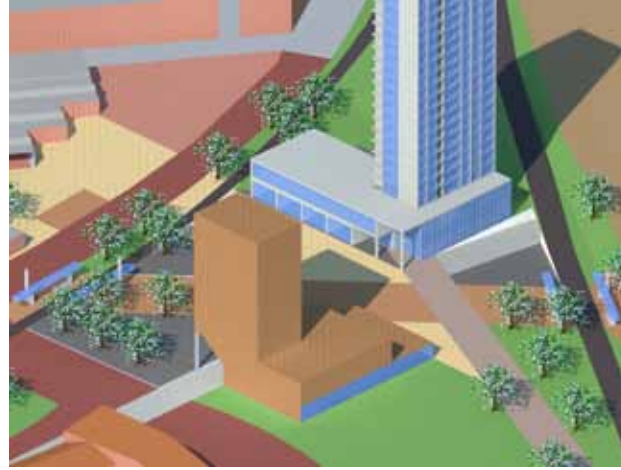




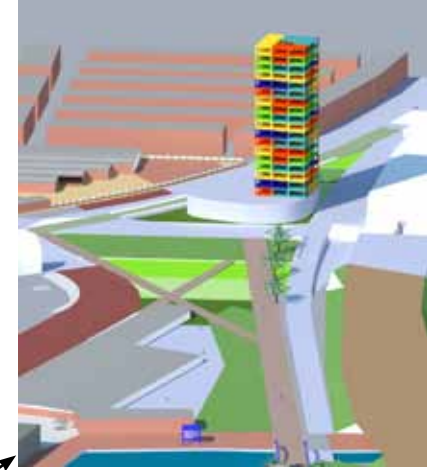
December 2012



January 2012



February 2012



March 2012



March 2012

September 2012



June 2012



May 2012



April 2012



LITERATURE

- ALEXANDER, C. Neis, H. Anninou, A. King, I., 1987. *A new theory of urban design*. New York, Oxford University Press, the seven detailed rules of growth, rules 5.1 t/m 5.8
- BEKKERING, H. 2005. Werken aan de stad vanuit de openbare ruimte: Den Haag 1985-2005. In: H. Meyer & L. Burg, van der, eds. 2010. *In dienst van de stad. 25 jaar werk van de stedenbouwkundige diensten van: Amsterdam, Den Haag, Rotterdam*. Amsterdam: Uitgeverij SUN pp. 73-79.
- BRUYNE, D. and VLOT, G. Studie schilderswijk west. In: R. Geurtsen, P. Verschuren, G. Kwakkenbos, ed 1989. *Stadsontwerp in 's-Gravenhage*. Delft: Faculteit der Bouwkunde, p. 172
- CANTER, D., 1977 *The psychology of place*. London: The Architectural Press
- CARMONA, M., Tiesdell, S., Heath, T., Oc, T., 2010. *Public places, urban spaces*. New York: Architectural Press
- CULLEN, G., 1961. *Concise Townscape*, Reed, Educational and professional publishing l
- CURTIS, W.J.R., 1982. *Modern Architecture since 1900*, third edition 1996, London: Phaidon Press Limited
- EEA (European Environment Agency) 2006 *Urban Sprawl – a European challenge*. Copenhagen
- GEHL, J., 1980. *Life between buildings*. Translated from Danish by J. Koch., 1987. New York: Van Nostrand Reinhold Company Inc.
- HAJER, M.A. 1989 *De stad als publiek domein*. Amsterdam: Wiardi Beckman Stichting
- GEHL, J., 2010. *Cities for people*. Washington, Island Press
- HERTZBERGER, H., 1991. *Lessons for students in Architecture*. Rotterdam: 010 Publishers
- JANSEN, B. & Ridderhof, R. 2004. *Den Haag in 7 lijnen*. Den Haag: Gemeente Den Haag
- KAPLAN, S., 1987 Aesthetics, affect and cognition: Environmental preferences from an evolutionary perspective, *Environment & Behaviour* 19:1, p.3
- KAPLAN, S., 1995 The restorative benefits of nature: toward an integrative framework, *Journal of environmental psychology* 15 pp. 169-182
- LUCASSEN, L. & Willems, W., 2009. *Waarom mensen in de stad willen wonen*. Amsterdam: Uitgeverij Bert Bakker
- LYNCH, K., 1960. *The image of the city*, Cambridge, MIT Press (MA)
- MEISS, P. 1990. *Elements of architecture, from form to place*. Translated from French: De la Forme au Lieu, 1986. London: E&FN Spon
- MUNICIPALITY OF THE HAGUE, 1988. *Nota De Kern Gezond. Plan voor de herinrichting van de openbare ruimte in de Haagse binnenstad*
- BIJL, R., van de. 2004. Rob van de Bijl in MUNICIPALITY OF THE HAGUE, 2004. *6&1 Den Haag 7 lijnen*. The Hague
- MUNICIPALITY OF THE HAGUE, 2005. *Wereldstad aan Zee. Structuurvisie Den Haag 2020*
- MUNICIPALITY OF THE HAGUE, 2009. *De Kern Gezond*. [online] Available at <http://www.denhaag.nl/home/bewoners/to/De-Kern-Gezond.htm> [Accessed on 18th of February 2013]
- MUNICIPALITY OF THE HAGUE, 2009. *Uitgangspunten De Kern Gezond*. [online] Available at <http://www.denhaag.nl/home/bewoners/to/Uitgangspunten-De-Kern-Gezond.htm> [Accessed on 18th of February 2013]
- MUMFORD, L. 1961. *The City in History: Its Origins, Its Transformations, and Its Prospects*. New York, NY: Harcourt Brace Jovanovich, p48
- PRICE, C., *Three eggs diagram* consulted in an article of Shane, Graham published in a book of Waldheim, Charles, 2006 *The Landscape Urbanism Reader*
- ROGERS, R. 2010. *Architecture and the Compact City*. [online] Lecture giving at the University of New South Wales in Sydney. Available at http://www.youtube.com/watch?v=u_VN3FWIKIU [Accessed on the 4th of December 2013]
- SHELLER, M. Urry, J. The city and the car in *International Journal of Urban and Regional Research* Volume 24, Issue 4, Article first published online: 16 DEC 2002
- SPEK, van der S.C., 2008, Spatial metro tracking pedestrians in historic city centres. In: HOEVEN, van der F.D., Schaick, J. van, SPEK, van der S.C., SMIT, M.G.J., ed. 2008. *Urbanism on track, vol 1*. Delft, Delft University Press.
- TIBBALDS, F., 1992. *Making people friendly towns: improving the public environment in towns and cities*, Longman: Harlow
- TRANCIK, R., 1986 *Finding lost space: theories of urban design*. Van Nostrand Reinhold: New York
- Whyte, W.H., 1988 *The social life of small urban spaces*. [online] small fragment of movie. Available at <http://vimeo.com/6821934> [Accessed on 18th of February 2013]
- Whyte, W.H. 1980 *The social life of small urban spaces*. In: D. Watson, A. Plattus, R. Shibley eds. 2004. *Time-saver standards for urban design*. downloaded from Digital Engineering Library www.digitalengineeringlibrary.com