



# **PUBLIC SPACES AS BEHAVIOURAL SETTINGS**

a plaza design for the Spuiplein, the Hague

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# Preface

In front of you lies my master thesis for Landscape Architecture (LAR), called *Behavioural settings as public spaces*. It is the last step in the completion of my master study. This project has let me to meet many interesting people and introduced me into the complex and beautiful field of behavioural science.

The time is come to take back the public space. Slowly, it has become a functional regulated space that repels intense use, instead of encouraging it. In this thesis, the public domain is understood as a space that is ripe to become available in our daily live as an extension to our offices and living rooms. I honestly believe that the understanding of human behaviour can help enrich the public domain and stimulates urban interactions. Meeting others can give us joy, excitement, and let us feel a part of society.

I would like to thank my thesis supervisor Prof. Dr. Jusuck Koh, Prof. Dr. Ir. Alexandra Tisma from Planbureau voor de Leefomgeving, and Ir. Almut Röwekamp, Ir. Arjan Schipper from the Ingenieursbureau Den Haag for their help and input, and all the interviewed people for giving their time. Writing my master thesis was a very turbulent time. I would never made it without the support of my family and friends. Paulisca thank you for being the light at the end of my day. Thank you all!

Hopefully you will experience my passion for this subject throughout this report.

**Sjoerd van Telgen**  
Wageningen, 2011

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# Summary

This thesis report focuses on the urban square, piazza, parade, court, public open space or, as referred in this report, the plaza. They form the activity nodes in the city, the urban theatre.

Due to the rapid urbanizing world, more pressure has been put on the public spaces and the public facilities. In the last decade the critique on plaza has soared, as reaction many Dutch cities have been adapting, redesigning or are planning to improve their main plazas.

Much research and literary discussions has taken place that tries to improve these public spaces. Yet, the practice field points out that the plaza design still fails to create a place that generates an active public life. In this report is stated that the designs often do not succeed in generating an activity node due to the lack in understanding the users. There is a gap of knowledge on the people-environment relation and the application in the design process.

For that reason, this report seeks to explore the human behaviour and perception to propose a new perspective on public space design that enriches public life and to seek an answer to the central question;

**In what way can the understanding of people's behaviour contribute to a public plaza design that enriches and enhances public life?**

## **PART A; THEORETICAL FRAMEWORK**

To overcome confusion and to side step generalisation of what a plaza entails and what the task is of a plaza in the urban fabric, it is of great value to reflect upon the role of a plaza. In this thesis a plaza is understood as a highly accessible public open space, stimulating meetings and experiences between fellow city dwellers from various backgrounds. It is only through these meetings and experiences that it becomes a reflection of the city and a place where social trends become visual. With the exception of being an open or wide place, a plaza should not be restricted to a physical appearance, this is merely the form in which it comes.

This description puts a plaza in the position of being a place for maintaining and establishing new contacts in different degrees, a place where people exchange information, news and life styles. For this, I see it as the role of large scale plazas for building a level of trust between different societal groups by bringing them together and establish social networks in the neighbourhood.

This fundamental role has disappeared over time. The traditional plazas, that functioned as a meeting place for a wide diversity of uses, got mono-functional, privatized and finally invaded with the arrival of cars. This turned the public domain in unsafe and uninteresting space. Slowly, in the last two decades the public space is again reclaimed for pedestrian use. However, people no longer use it as an extension of their living space, which increasingly take place in the private sphere, turning many aesthetically beautiful plazas into empty voids.

Landscape architecture, with its characteristic qualities of structural approach, interdisciplinary and thinking in processes, can help in this issue by considering both the physical, mental and the social landscape of the public domain.

## **PART B; DESIGN FACTORS**

To gain inside in the how public life on plazas can be stimulated several literature sources have been explored that offer the same or a similar view on the role of a plaza. Seven main factors were derived from this study, which includes sub factors with strategies how to optimise the factors.



*Context;*

the physical, visual and symbolic connection with the environment. The plaza needs to be integrated in the urban fabric, connected to people places and be a node in the pedestrian flow.

*Place;*

the sense of the plaza as its own place. The understanding that a plaza is a distinct place by expressing wholeness and identity.

*Orientation;*

the ability for way finding on the plaza and for coming and going, by providing accessible routes with clear entry points.

*Function;*

the facilities that form the essential attraction to the plaza. These need to invite a diversity of people throughout the day.

*Edge;*

the facade which connect the indoors with the plaza. Open edges, that create transition and attract the indoor outward, stimulates the liveliness on the plaza.

*Place to stay;*

the possibility to comfortably settle at the plaza. Sufficient and a mixture of seating and sub places invites people to take place.

*Entertainment;*

the activities and elements which attract people to linger. A diversity of daily and occasional events and activity form a source of amusement and activity on the plaza.

**Case study reflection**

These factors should in theory create an attractive public place. To test the factors and understand how they are met in practice, twelve case study plazas were evaluated based on the factors. The evaluation showed that in both successful and criticised plazas not all factors were fully met. Yet, the successful plazas do partly fulfil each factor. The criticized plazas show a great neglect of the factors 'places to stay' and 'entertainment'. After taking two redesign cases under close examination it showed that these factor still seem difficult to improve, even when the issue is addressed in the analyses of the project. This illustrates that all factors are indeed important, however they do not all have to be fully reached to stimulate public life. Also, there seems to

be difficulty in implementing the two last factors in a design.

Difficulty can be explained by the lack of guidance in the literature. It is understood that the factors are important but not how they should be realised. Understanding human perception and behaviour in the public space can provide grip in the design and bridge the gap between design and use.

**Behavioural factors**

For getting a perspective on human behaviour, both the mental and social perception, I have turned to the theories and researches of the field of Environment Psychology.

Human behaviour is directly related to the process of cognition, the way we acquire, store, organize and recall information. In this process our senses form the bases of our experience. Based on the intensity, the distance, amount of stimulus, and our own focus, environmental information is taken in. It is attempted to influence the perception of the stimulus by reducing the unwanted and optimise the preferred stimulus.

Behavioural mechanisms help to satisfy our environmental needs. Our in built preferences and survival needs impels us to create a safe setting, sheltered from dangers, whilst seeking for further explorations, seeing others and discovering the environment.

Using a mixture of proximity, configurations, prospect view and refuge, the environment and interpersonal contacts are arranged to the preferred (social) setting based on the relation between people, the social role and the activity

In everyday life on the plaza patrons of walking, encounters with others, standing still and settling in, can be discovered in which the sense of safety takes a leading role. Perception of comfort becomes increasingly important when people plan to spent more time on the plaza.

Settings that attract strangers to spent time together in an unforced neutral setting enables interaction. When these activities or elements evokes contact or commenting, interaction is stimulated and triangulation is created.

## **PART C; DESIGN**

The project of Spuiplein in the city of the Hague is used to test how the behavioural understanding can help implementing the design factors in a practical design. The municipality of the Hague seeks to improve this plaza by combining it with two adjacent public spaces, the Nieuwe Kerk Garden and the Rabbijn Maarsenplein. The plaza needs to become a large scale and connected cultural heart that unites the city and becomes a place for gathering and exchange.

### ***Analyses***

The plaza is analysed based on the function of the seven design factors using both the design literature and the behavioural understanding to comprehend how they function, what shows potential and what needs improvement. To get a clear insight of the plaza, long and short term observations were, made as well as several interview were taken with the users, designers and the plaza manager.

The analyses showed many points of improvement among which the connection of the plazas with the city and in between, the orientation and the facades of the facilities. Yet, like most plaza redesign cases it shows a great lacking in places to stay and forms of entertainment.

### ***Vision***

To transform the plaza into a public node for meeting and experiencing others, it is important to create a place where people feel at ease. The design is there based on establishing safe zones of various spatial qualities to increase comfort, providing the opportunity to see, hear and encounter others, and providing catalysts for simulating activities and events that stimulate informal interactions.

### ***Design***

In the design of the new Spuiplein with the Nieuwe Kerk Garden and the Rabbijn Maarseplein, four separate public places where created conform to the human scale and distance of recognition and perception of others. Each of the sub plazas are designed as an interactive setting with safe sub places at the edge zone and an open inner plaza, facilitating activities. For example, the Spuiplein has gotten a slightly sunken inner plaza, open and

equipped for a range of activities, e.g. skating, ice-skating, play, chess, performance, exploration, making music. Surrounding the inner plaza are safe zones or sub places for stay, with diversity of spatial qualities to offer a sense of safety and control for different users. The possibility of unplanned interactions is made possible with warranting the same eye level between people sitting and people passing by, pedestrian flows are merged and intersection of flows have spaces that invite for stopping.

Public space design benefits from the understanding of human behaviour. It makes the use and behaviour on an existing public space more comprehensible and makes predictions of the effect of the design more reliable. Yet, it is not used separately from the design. It is an integrated process, a constant reflection that brings the design and the use closer together.

This project was an explorative research in the use of behavioural understanding in a plaza design. Further research is needed to find out more about the different forms of triangulation and the effect it brings about. Also, more investigation is acquired to create a link between different types of uses or users of the plaza and the spatial qualities.



# 1. Introduction

**‘The time may soon come when planners, designers, developers, and others will recognize and act on the simple notion that the space between buildings are as important to the life of the urban man as the buildings themselves.’**

**Chermayeff & Alexander (1963: 66)**

Public open spaces - with streets, plazas and parks as the classic elements of the public domain - structure the urban landscape. They are places for unexpected encounters and public discourse as well as for relaxation and passage Carr et al., 1992; Melik, 2008). These urban places are deeply integrated in our daily life. Everyday we pass through them, take our breaks in the outdoor and enjoy the view of the liveliness in the city. This thesis focuses on one element of the urban public domain in specific, the large scale plazas or metropolitan square. Plazas can be seen as the ‘activity nodes in the city and therefore form to be the urban theatre’ (Hajer & Reijndorp, 2001: 11).



*figure 1.1 Cities with redesign project(s) for plazas in the last decade (based on; Melik, 2008).*

### 1.1 Research choice

The world is rapidly urbanizing. In 2008, the UN announced that over half the world population lives in urbanized areas. According to the CBS (2009) 81% of the Dutch population lives in a city. People spending their time and arranging their lives in the urban network. This is putting enormous pressure on the public open spaces and the public facilities. People have become more critical on their living environment. This discontent can be traced back in the media. Complaints are made in the lines of it being ugly, uncomfortable, draughty, uninviting square (Lenzholzer, 2008).

According to Koerse (in; Veenendaal, 2003), we base much of cities identity on the experience gained in important public places such as plazas. Therefore a great deal of effort, time, and money is spent by the cities to create solid public places that attract businesses, visitors and festivals to a city. However, still many plazas suffer from under use. In the last decennium over fifty large scale plazas have been renovated and redesigned in the top fifty cities of the Netherlands (Melik, 2008). Some of these plazas have just been realised in the last ten years and were already not working according to expectations.

### 1.2 Problem statement

Incredible amounts have been written and researched about the design and functioning of the inner city plazas - and the whole urban public space for that matter. The research philosophy and approaches vary greatly, from the community-based approaches in planning of Jane Jacobs to the observational explorations of William H. Whyte. All with the aim to find out how public space could be made into a place for public life.

Many of the researches conclude with a number of factors, guidelines or principles to improve the cities public life. These are partly overlapping, yet their different focuses let them to reveal other factors. These are however often generic factors. Useful for understanding an existing plaza, but in a design this still seems to result in a place that lacks use or public life. Architects of the public space miss the insight in how their design is being perceived by the users or

are too little aware of this in the design process. In other words, there is a gap between knowledge on the people-environment relation and application in the design process.

### 1.3 Goal

The objective of this thesis is to propose a new perspective on the design of urban plazas that enriches the public domain and enhances public life. To explore into the field of human behaviour and perception as a way to assist in small scale design of public places.

Other goals that addressed in this research are;

- To bring the scientific understanding of social behaviour in practice.
- To clarify how this understanding can be implemented
- Provide a way to gain insight in the social life in a public space
- To emphasise the importance of local social awareness.

### 1.4 World view

This thesis takes landscape architecture as a basis. However to understand the public domain from a behavioural point of view, an exploration on perception is also made.

For this thesis project a social constructivist world view has been taken up. This view entails that 'individuals seek understanding of the world in which they live and work' (Creswell, 2008: 8). This thesis attempts to explore how people act and perceive the public open spaces to understand experience of their environment and to adjust the public space to the requirements of the right behavioural setting.

## 1.5 Research questions

In what way can the understanding of people's behaviour contribute to a public plaza design that enriches and enhances public life?

Sub Questions;

1. What is the role of the contemporary urban plaza, and how is the public domain experienced?
2. What design factors on public spaces are addressed in the literature?
3. How do these factors reflect in practice? What issues and potential do example plazas illustrate?
4. How do people perceive and behave in the public domain according to behavioural sciences? What environmental aspects effect the social dimension of space?
5. How can behavioural understanding be integrated in a plaza design that evokes public life?

## 1.6 Hypotheses

A more detailed understanding of people's behaviour toward others and toward their environment can help to develop a space that meets the desires and triggers to use the public space as an extension of their own life. In addition, it could contribute to the field of landscape architecture as it helps to anticipate on future use of a design and provides ways to provoke social interaction.

## 1.7 Methodology

Different research methods were used during this project to answer the research questions.

The first two questions about the role and the design factors of plazas are mainly answered through a literature study and with information gained from an interview with H. Karssenbergh - expert on public space.

To reflect upon the practical field several example cases have been visited and analysed. Also, interviews are taken with project specialists of the case studies.

More literature study has been undertaken to find the answer of the fourth question. This time the literature was derived from the field of environmental psychology.

For the final question an example project has been made to show how behavioural knowledge can contribute in the design. For this part multiple research methods were used. The example project was intensively analysed with the use of short and long term observations, interviews with landscape architect A. Schipper - one of the involved designer for the original design, landscape architect A. Röwekamp - currently involved in the redesign and R. Tonkes - manager of maintenance and events. With the help of mapping, photographing, information is gained. With the help from informal interviews with stakeholders, and my personal inside as a student of landscape architecture a design is made. This design is an example that illustrates my ideas to take into account behavioural aspects.

## 1.8 Outline

After this introduction, the report is set out into three parts, the theoretical framework, the factors and finally the design. The report will end by concluding and reflecting upon the findings.

In the framework, the role of the modern day plaza is investigated. What is a plaza? What is its role in the 21st century? The term plaza is defined and by reflecting upon the historical development of the design profession and the Dutch public space, the common role of the plaza is found. Looking into the potentials of the public realm and the current developments helps to understand the contemporary role.

In the second part, the factors for a successful plaza found in the literature on public places design has been summarized into an overview. With the help from a case study on several existing plaza is clarified how this factor works in practice. What elements can be found back? What is lacking? This forms the knowledge gap for the designers. With the help from behavioural science, principles are filtrated that help to overcome these gaps.

The final part demonstrates how the new acquired insight in the public realm can be put to practice. For this part we turn to the design case of the Spuiplein. The plaza Spuiplein in The Hague is a part of a large urban development in the neighbourhood the Turfmarkt. As the final stages of this project the Spuiplein, together with two other public spaces, will be redesigned into the Cultuurforum.

To figure out how the plaza is operating an analyses is made. What are the problems and potentials? How is it used? Based upon the ideas of the municipality and the earlier established role of the plaza the vision is discussed and finally come to the design for the new Spuiplein.

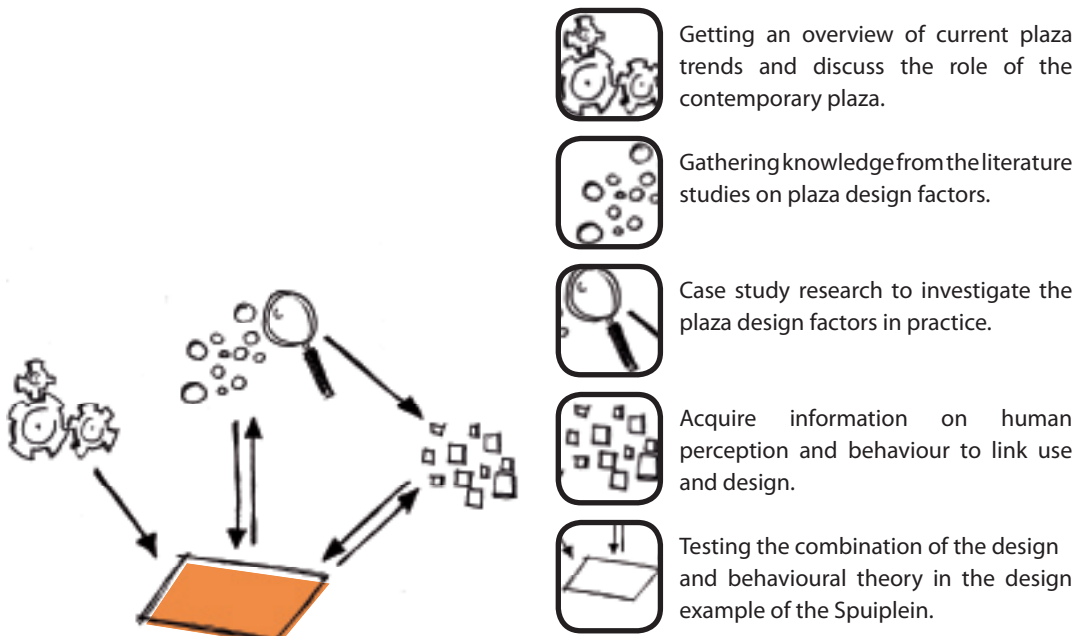


figure 1.2 Sketch of the working process.


## 1.9 Reflection

This thesis report should be understood as an introduction. A first step to incorporate more of the knowledge of environmental psychology to design. I am aware that this research could have been much more exhaustive and detailed. I could have included more aspects dealing with the public domain, like economic or cultural values. Also, the knowledge used from behavioural research is just a blade of grass in the endless field of perceptual and behavioural sciences. However, I have chosen to focus on perception that influences interaction and use of public space and to go into depth with them. Also, this research - like all - was subjective to the element of time. For that reason concessions had to be made.

I could have used more periods of observations, counted pedestrian streams or used structural interviews with the citizens at the place. As it can be argued that this better reflects the use of the plaza. However, this master thesis does not seek to be a scientifically proved report, yet it is preformed systematically. This thesis is more like an eye opening and explorative into using behavioural theories in the field of urban landscape. The benefit of the long research period is that I investigated the use during the Summer and the Winter. This made it possible to find out the use under favourable conditions and during cold and drizzling days.

This project is not using public participation. It does not involve the current users during the design process. In a practical design this is essential. However, this project emphasizes on the psychological needs and preferences. These are aspects we are less aware of in our every day live. Also, in the case of the Spuiplein the lack of users, time and the rapidly changing neighbourhood would not have given inaccurate results and would not have been realistic.



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- \_CARR, S., FRANCIS, M., RIVLIN, L.G., & STONE, A.M. (1992) Public space. Cambridge: Cambridge University Press.
- \_CENTRAAL BUREAU voor de STATESTIEK (2011) [www.cbs.statline.nl](http://www.cbs.statline.nl) , Den Haag, Heerlen.
- \_CHERMAYEFF, S. & ALEXANDER, C. (1963) Community and privacy; toward a new architecture of humanism. New York: Doubleday.
- \_CRESWELL, J.W. (2008) Research design: qualitative, quantitative, and mixed method approaches, Boston, University of Massachusetts.
- \_HAJER, M. & REIJNDORP, A. (2001) In search of new public domain; analysis and strategy. Rotterdam: NAI Publishers.
- \_KOERSE (2003) Pleingedachte. In: K.Veenendaal, ed., Pleinenboek. Utrecht: Hogeschool voor de Kunsten.
- \_LENZHOLZER, S. (2008) A city is not a building- architectural concepts for public square design in Dutch urban climate contexts. Wageningen: Journal of Landscape Architecture (1).
- \_MELIK, R. van (2008) Changing public space; the recent redevelopment of Dutch city squares. Utrecht, KNAG/Faculty of Geosciences Utrecht University.
- \_UN NEWS CENTRE (2008) Half of global population will live in cities by end of this year, predicts UN. Available at: [www.un.org/apps/news/story.asp?NewsID=25762](http://www.un.org/apps/news/story.asp?NewsID=25762).



**PART A.**  
**THEORETICAL**  
**FRAMEWORK**



The first step toward improving the public space is to comprehend what a plaza is. What do we expect from a plaza? What tasks should it carry out in the future? To answer this we are looking to define the role of modern day plaza. Using definitions from literature and by reflecting on the historic development of public spaces helps to find the essential tasks. To get a firm grip on the contemporary tasks that a plaza should carry out we reflect on the development of Landscape Architecture as a design profession and urban societal trends.

## 2. Defining the urban plaza

**'There are cities that show their character on a plaza. Along the streets you find not much more than a dog sleeping on met its snout on the roadway or a half painted window shutter. At the central square is a kiosk where tickets are sold, a tree and a circular bench. There is a cafe bar with a terrace on the balcony. On this plaza, the children play. The women sit on the bench and reach objects that are approved with their hands. The men stand in groups talking. During one day you have an idea of most people. If you stay there one week, you experienced a party on the plaza.**

**These plazas can hardly be found in the Netherlands.'**

**Lindner (in Veenendaal, 2003: 105)**

This quotation of Lindner (2003) immediately brings to light what is criticised in the thesis report. A public plaza should be an extend of people living environment. It reflects the cities identity through activity and use. Without public life, a mere empty void in the city is all that is left.

But what is the role of the plaza? In this chapter different definitions on public space.

In the reflection of this chapter a thesis definition on plazas is concluded.

## 2.1 Definition of public space

This report is dedicated to one specific public space; the plaza. However, it is one of the many types of public spaces in an urban environment. Streets, boulevards, sidewalks, parks, etc. together form the public realm of the city (Carr et al., 1992).

The Van Dale dictionary defines *public* as being 'accessible for all' (Vroom, 2005: 263). That makes *public space*; 'in essence a space that is freely accessible for everyone: public is the opposite of private' (Hajer & Reijndorp, 2001: 11).

This is, however, very much a juridical approach to understanding public space. Vroom (2005) states the term is more gradient. Based on who owns the space, who can use it and at what time, a space can be considered public, private or even semi-public. For example, a park can be closed at night, or a store is privately owned but (in essence) accessible for all. Spaces can also deny access for certain groups or exist for a certain user group (Melik, 2008). This can be legally, physically, as well as socially expressed. For that reason Madanipour (in; Melik, 2008: 18) states that 'using the criteria of access, agency and interest, a space can be considered public if it is controlled by the public authorities, concerns the people as a whole, is open or available to them, and is used or shared by all members of a community'. This is a truly public space and can both including outdoor and indoor spaces.

## 2.2 Defining the urban plaza

The square, piazza, parade, court or public open space. There are many names for this one spatial element. In this report it will be referred to it as a *plaza*. There are many definitions for a plaza. These often reflect upon the values, activities and physical form of the space.

Lynch (1981: 443) states 'the plaza is intended as an activity focus, at the heart of some intensive urban area. Typically it will be paved, enclosed by high-density structure, and surrounded by streets, or in contact with them. It contains features meant to attract groups of people and to facilitate meetings'

A plaza's physical form is often understood as 'a hard-surfaced outdoor public space, which is meant only for pedestrians' (Cooper Marcus & Francis, 1997: 14). Often these are 'areas visually enclosed by surrounding buildings but functionally open from all sides' (Tisma, 2007: 49). Van Dale Dictionary calls it a 'open, empty space, near or in between constructions, esplanade' (Vroom, 2005: 229). However, it can be argued that this is merely the physical form in which it often appears. Vroom even states that there are plaza that are unpaved or half-paved. The Museumplein (literally Museum Plaza) in Amsterdam for instance is mainly unpaved. Also, plazas can be loosely enclosed or indoors (Meyer, De Josselin de Jong, & Hoekstra, 2006). The physical form of a plaza can differ quite. Yet, Gehl (1978) explains that a plaza is experienced as being very special and liberating space. Unlike the rest of the city pedestrians and cyclists are free to choose the way to cross the space and are not bound to existing paths.

Defining a plaza to its physical form still leaves us in the dark as to what a plaza is, aside from an open space. Appleyard and Jacobs (1987: 104-105) focus more on the functionalistic view, 'the square is defined as an outdoor environment, where people come and go from any direction. They bring people together and through that promote public interaction'. The definition of Appleyard and Jacobs emphasizes that a plaza on the one hand incorporates movement and a place for meeting. Also, French (1983) explains that a plaza can be understood as a widened street. Like the street it is meant for traffic, yet it also provides a meeting place. Unlike a sidewalk it is a place in its own right (Cooper Marcus & Francis, 1997).

These meeting places are crucial for the public realm as most people have a need and desire to maintain links with the rest of the world (Carr et al. 1992). Whyte (1988) researches open spaces in the city. He does not give a clear description on what a plaza entails, but he researches where people like to stay, where interaction takes place. Therefore, his understanding of good plazas are places where public interaction takes place.

Philosopher M. Walzer categorizes plazas as 'open-minded spaces' (Melik, 2005). The core function of these specific public spaces can be described as meeting places in which people are open to unfamiliar people and experiences. This in contrast to 'single-minded spaces', which are designed to only serve a single purpose. Streets, for instance, are merely designed to efficiently and safely move from one place to another.

### 2.3 Plazas as a meeting space

Plazas facilitates in social contacts between different people and groups in the city (Gehl, 1978; Whyte, 1988). Social contact is a very broad definition and includes a variety of forms and intensities. Contacts can be as meaningful as a good friendship or takes form in the way of a in-depth conversation. In contrast, it can go to light forms, such as casually greeting a neighbour, or experiencing others around. Gehl (1978) discusses the advantages of a lively public space for the users.

**Experiencing people;** Experiencing others can satisfy our need for contact. Maslow's famous theory on human needs sees social contact as one of the basic needs. It gives us a sense of belonging, participation and reduces the feeling of isolation.

**Bases for new relations;** Repetitive light forms of contact with people (e.g. casual greeting, or small talk) is a basic step to a more deeper relationship, such as acquaintances or friends.

**Maintain contact;** Someone can maintain a relation better with daily encounters. It is much easier to 'stay in touch' or to 'drop on by' when people meet each other in a casual way.

**Information concerning the neighbourhood;** A quick chat with the postman or hearing the latest gossip while waiting in line for the cashier are ways to be kept up to date from the local community. While this might not be as spectacular news as seen on television, it does help to get to know the neighbourhood and

lets people to come in contact with different world views and opinions.

**Getting inspired from others;** Being amongst the people is a form of getting new ideas. By observing the way others do things differently people can learn from each other on how to cope with certain situations.

**A special attraction;** People are attracted by people. This is one of those statement that is been used by many and it is true. People form an interesting attraction and public life is a lasting form of entertainment. Where there are people more people will come. This is a view with very much harmless unpredictably and change. However it works the other way as well, where little people are less will come.

Besides these individual benefits, social contact contributes to us as a society as well.

**Build a level of trust;** Through repeated short-term contacts, people grow to trust their fellow city dwellers, who may otherwise be total strangers (Jacobs, 2009). Plazas can bring people together that otherwise would have no contact with each other. Seeing people with other cultural or social background reveals their daily lives and can shed a different light on those who we would normally only experience second hand via stories, news and gossip.

**Creating a social network;** Public contact is the support for establishing a sense of community (Jacobs, 2009). When meeting the same people day in and day out, we come to know the people we life with. Contacts between the users of our environment gives us a sense of community. It makes people feel more at home and gives a sense of belonging. For the case of a well operating metropolitan plaza, this is a sense of belonging in the city.

## 2.4 Reflection

In this chapter, the core role of the plaza has been established. In this report, a plaza are considered; **'a highly accessible public open space, stimulating meetings and experiences between fellow city dwellers'.**

With this definition we leave behind generalisations of physical appearances or temporal functions. However, interactions between people do not happen out of the blue. Contemporary functions on a plaza attracts people. For that reason the design and facilities on a plaza has changed throughout the years. A plaza is 'not only a node where the community comes together, but with this also a place where trends from the society become visual' (Melik, 2005: 9). For that reason a next step in defining this public space is to find out what current functional use is needed to become a social node.

- \_APPLEYARD, D. & JACOBS, A. B. (1987) Towards an urban design manifesto. New York: Journal of the American Planning Association (53).
- \_CARR, S., FRANCIS, M., RIVLIN, L. G., & STONE, A. M. (1992) Public space. Cambridge: Cambridge University Press.
- \_COOPER MARCUS, C., & FRANCIS, C. (1997) People places: design guidelines for urban open space, 2nd ed. John Wiley & Sons, Inc.
- \_FRENCH, J. S. (1983). Urban space; a brief history of the city square. Dubuque: Kendall/Hunt.
- \_GEHL, J. (1978) Leven tussen huizen. Translated by J. van Beusekom. Zutphen: De Walburg Pers.
- \_HAJER, M. & REIJNDORP, A. (2001) In search of new public domain; analysis and strategy. Rotterdam: NAI Publishers.
- \_JACOBS (2009) Dood en leven van grote Amerikaanse steden. Translated by M. Polman, 1961. SUN Trancity.
- \_LINDNER, E. (2003) Een plein waar niets verder gaat. In: K.Veenendaal, ed., Pleinenboek. Utrecht: Hogeschool voor de Kunsten.
- \_LYNCH, K. (1981) The image of the city. Cambridge: MIT Press.
- \_MELIK, R. van, WEESEP, J. van & AALST, I. van (2005) Spiegels van de samenleving; Pleinen door de eeuwen heen. In: BMC, ed., Pleinenboek. Leusden; BMC.
- \_MELIK, R. van (2008) Changing public space; the recent redevelopment of Dutch city squares. Utrecht: Knag/Faculteit Geowetenschappen Universiteit Utrecht.
- \_MEYER, H., JOSSELIIN de JONG, F. de & HOEKSTRA, M. (2006) Het ontwerp van de openbare ruimte. Amsterdam: Uitgeverij SUN
- \_TISMA, A. & JÓKÖVI, M. (2007) The new Dutch parks; relation between form and use. Journal of Landscape Architecture (autumn).
- \_VROOM, M. J. (2005) Lexicon van de tuin- en landschapsarchitectuur. Wageningen: Uitgeverij Blauwdruk.
- \_WHYTE, W. H. & Underhill, P. (1988) City; rediscovering the center. New York: Doubleday.

### 3. History of the Dutch plaza

**'Although the pattern of usage has varied in the course of history, despite differences, subtle and otherwise, public space has always served as meeting place, marketplace and traffic space'**

**Gehl & Gemzøe (2008: 13)**

This chapter provides a historical overview of the many usages the plaza took on throughout time. The public space has changed from places to debate social issues and to exchange communities to venues for political demonstrations. This overview will give away how the function and design has evolved. The central question for this chapter is to find out what the contemporary role and usage is of the plaza. By reflecting on the past and current societal trends, it becomes clear how the current state of plazas came to be and what way public space design is heading.



### 3.1 Towards the Netherlands

One of the most commonly used origins of the plaza is the ancient Greek *agora* around 500 BC. This space developed due to a need for common space and facilities (Webb, 1990; Melik, 2008) 'This may be explained sociologically: only within a civilization where the anonymous human being had become a 'citizen', where democracy had unfolded to some extent, could the gathering place become important enough to take on a specific space' (Zucker, 1970: 19). Therefore the first plazas can be understood as a symbol of democracy where people came together to discuss issues of the urban community (Webb, 1990; Melik, 2008). They functioned as an assembly or classroom with a mix of civil, commercial and religious facilities. Agora's were organically formed at the heart city or near a harbour. Its irregular shape was formed by each individual building.



figure 3.1 Greek agora in Athens

These ancient agora got a planned form by the hands of the Roman Empire, creating the *forum*. While the forum kept its mixed functionality, the layout became uniform rectangle spaces at the centres of the city where the axial main roads intersected (Webb, 1990). This form of city planning helped to improve control over the city. It spread along the empire, reaching the south of the Netherlands. However, examples of the forum in the Netherlands have been lost over time (Melik, 2003).

### 3.2 Medieval

Through time, settlements grew and roads developed between cities. This made the medieval cities into transport junctions where trade became

possible. Trade was done in public spaces as private places where scarce and expensive. Most of the historic Dutch plazas derive from this period, like (Meyer et al., 2006). On places where goods were distributed or where transferred onto other forms of transportation plazas developed. De Vries (1990) gives an elaborate overview of the many typologies of market squares formed out of road junctions, often at save high ground in the heart of a town, or near waterways. The public spaces for trade attracted facilities with related functions, like weighing posts and storages houses.

During the Golden Age trade really expanded quickly in the Netherlands. So much so, that new public spaces were needed. In many regions the marsh soil was unfit. As a result demolition became a valid option. Cemeteries near churches were sacrificed for new public squares. Webb (1990) states the market square was both the trade and social centre of the cities during the Middle Ages.



figure 3.2 Vismarkt in Utrecht

### 3.3 Renaissance and Baroque

After the medieval times a trend of humanism in arts came to the Netherlands. Again this life view originated from Southern Europe. Plazas from this period in time show regularity, spatial unity, and enclosure (Melik, 2008). These plazas functioned as a social meeting point and a symbol of the governing power. Both the design and the activities in these plazas are orderly. In contrast to countries like France and Belgium, the influence of this style was little in Netherlands. Karssenbergh (2010) argues that the absence of representative public plazas is caused

by the early urbanization and the lack of a strong and wealthy central authority. Nobilities formed the regime in the Netherlands. However, they were unable to not effort the high construction costs of the representative plazas and benefitted from the public place as a trading space.



figure 3.3 Place the Voges in Paris.

### 3.4 18th and 19th century

At the end of the 18th century, technical advancement resulted in industrial revolution. The growing industry and increasing job opportunities let many people to migrate from the countryside to city. The urban population rapidly increased and more space was needed for housing. As a result, there was less space for plazas, but also the need for these spaces decreased (Melik, 2008). 'The public demanded not squares, but parks to escape from the urban jungle' (Webb, 1990: 125). Much of the urban expansion was developed from the private sector. With the mind set on making a profit, investors created monotone districts with cheap housing from low quality (Vries, 1990). The few developed plazas were often small remainders of unusable space and the only sizable public spaces in these dense settings. Clear functions was lacking in these places, therefore it turned into an escape place with a few green elements, playgrounds and benches (Melik, 2008).

During the 19th century the Dutch cities started growing. Water transport as main way of transportation fell in competition with the arrival of the train and, later on, the automobile (Meyer et al. 2006). At this point train stations developed just outside the city. The stations became the new



figure 3.4 Mathenesserplein in Rotterdam.

gateways to the city and the adjacent the rectangle plazas where used as main market spaces. As goods arrived more by train, trading places moved away from the city centre to the vicinity of the station (French, 1983). After the city expanded the plaza became part of the city.



figure 3.5 Central station in Amsterdam.

### 3.5 20th century

The 20th century had major influences on the usage of the public space. The increase of mobility demanded more space in the city. But, 'heavy car traffic does not coexist peacefully alongside the uses of the city as a meeting place and a marketplace.' (Gehl & Gemzøe, 2008: 13). Train stations lost their market functions and transformed into large-scale traffic nodes (Melik, 2008). Other plazas were used as parking lots in the second half of the century. This transformation was strongly influenced by the modernist philosophy of Congrès Internationaux d'Architecture Moderne (CIAM). According to the CIAM, social encounters should happen indoors, at specific community centres, not in public. They advocated the idea that the key functions in the city (e.g. living, working, traffic and recreation) should

be separated and the creation of functional space. The purpose of the public space was to get from one point to another as quickly as possible (Hajer & Reijndorp, 2001).



figure 3.6 Plein 1953 in Rotterdam.

After the Second World War, development focused on the reconstruction. Public space was therefore not a priority. During this period there was an exponential growth of cars. This increased the need for parking spaces.

It was only in the 70's and 80's, after the economy became stable and unemployment decreased, that the quality of the public space was again discussed (Hajer & Reijndorp, 2001; Melik, 2008). Criticism came about that the public space has become fragmented due to the traffic (Hajer & Reijndorp, 2001). The government acted on this and cars were gradually banished from the surface of the city to parking garages.

### 3.6 Until now

'By the turn of the century, the square has regained its function as a meeting point and has transformed into a place where consumption and leisure have become the dominant factors' (Melik, 2008: 38). Many of the re-conquered public places were deeply influenced by and inspired on foreign trends. Specifically architects from Barcelona came to play a major role in the design of Dutch plazas (Gehl & Gemzøe, 2008; Lenzholzer, 2008). This approach uses architectural, often minimalist design of plazas frequently features an open spatial layout, hard and smooth materialization, cool and bright colours, and refined furniture. Lenzholzer (2008) argues that

these South European approaches do not work, as a result of the different climate and culture. Others criticize the trend of leisure plazas as it transforms it into merely entertainment centres (Momaas, in; Veenendaal, 2003). Much attention goes to create a space for leisure and cultural facilities, where temporal events can take place.



figure 3.7 Grote Markt in Almere Stad

The increase in mobility, mass consumption, and recreation, has resulted in new plazas (RPB, in; Melik, 2008). These are formed on places with good accessibility, like along the highway or at the edge of the city. These spaces are perceived as plaza, but are not created for that purpose. These spaces have a strong commercial foundation, like shopping plazas, amusement parks and halls of airports. These places are made for short stays for consumers. This trend has evoked reactions that this might compete with the city centre.

### 3.7 Dynamics

This public space is also influenced by a number of societal trends that results in (subtle) changes in the design and the usage of the public space. These trends are caused by a combination of technical, social, and cultural developments.

#### Safety

Safety has become an important issue in the design and management of public space (Hajer & Reijndorp, 2001; Melik, 2008). People have become more aware of their personal safety. Cybriwsky (in: Melik, 2008) explains that increased fear of crime is the result of a rise in the perception of crime rather than in actual crime rates. Not actual crime rates has gone up, but

people are more exposed to negative news due to the expansion of new forms of communication and media. This exposure to abnormal and extreme news events gives an incomplete picture and can lead to stereotypes and a risen sense of fear (Hajer and Reijndorp, 2001).

**'It seems like we become more scared of the public space when it is not regulated in some way.'**

**Boutellier (2010: 7)**

As a response, people become more selective in their living environment (Melik, 2008). They exchange their public lives for (semi-)private places, like homes, malls and theme parks. These places offer a sense of regulation and control and keep undesired people out. According to Hajer and Reijndorp (2001) people prefer places with people that are like themselves. For this reason increasingly more of our daily life takes place in private spheres (Gehl & Gemzøe, 2008).

'The control over people and unsafe situations in public space has become a major subject within the general debate on public space in the Netherlands' (Melik, 2008: 51). To compete with these secured private spaces and to create a safer living environment, many public spaces have undergone alterations. A wide range of tactics have been deployed to make the public space more defensive. These include more surveillance in the form of cameras, police and safety guards. Fences, walls, and gates are used to form an obstruction and give the ability to lock the place during the evening. On plazas, specific behaviour is discouraged by removing furniture or adjusting it so sitting, lying or skating is no longer possible (Whyte, 2001, Melik, 2008). Also, strict regulation is used as a form to prevent certain activities, like 'no smoking', 'no eating or drinking' (Melik, 2008; Boutellier, 2010). 'The exclusion of the dangers and irritations of urban life goes hand in hand with the eradication of the unexpected and the spontaneous, which are just as characteristic a feature of urban life' (Hajer & Reijndorp, 2001: 45).

### **Communication**

New communication techniques, e.g. the internet



*figure 3.8 Defensive measures of control in the public realm.*

and mobile phones, have grown expansively (Van den Broek, 2004). This development has given the ability to connect and exchange information regardless of the geographical location. In his report, Van de Broek et al. (2004) shows that most of the Dutch population use these forms of media to maintain contacts. It can be argued that this competes with the public space as a meeting space, or even makes it redundant. 'But although we may have regular contact with friends who live thousands of miles away, we can also easily communicate with large numbers of local contacts' (Thompson, 2002: 68). The new communication technologies allow groups to plan and arrange events and meet ups in the open space much more readily than ever before. In that sense, these 'indirect' forms of communication can provide more use of the public space as a place for 'real' contact and casual interactions. Therefore, 'the opportunity for people to use their senses and interact directly with their surroundings is becoming extremely attractive' (Gehl & Gemzøe, 2008: 20).

This development also made people more mobile and flexible in their daily lives (Van der Wouden, 1999). The Netherlands have a relative high number of people working mobile outside the office (Van den Broek et al., 2004). It has become easier to work in the public space.

### Leisure

The growing prosperity let many people to spend more on leisure and on travel for leisure (Tisma, 2007). This has fast expanded the leisure industry. Over the last ten years the number of golf courses, riding stables, hotel and catering establishments, go-kart tracks, cinemas and amusement parks has increased appreciably (Jong et al., 2008). The changes of our leisure behaviour are largely influenced by our increasingly busy lifestyle. There is more to do in less time (Asbeek Brusse, 2002). As a result, people are choosing to do more diverse activities, but each less frequently (van den Broek et al., In; Tisma, 2007). It also has triggered people to integrate leisure into everyday life, e.g. working from a terrace (Karssenber, 2010). This behaviour has led to the rise of the 'experience economy', in which an experience has become the consumable product.

Currently, many Dutch cities have responded to this development. Plazas are increasingly used as a stage for large events. These events, in contrast with more traditionally venues of entertainment, are often planned from the top (Melik, 2008). Lafaille (in; Jong et al., 2008: 36) sees that the experience economy 'has mainly been seen as turning into an unbridled fun industry'. He therefore claims designers should get involved as the emotion market is a part of our time and in the public space 'the importance of emotion and the idea that everything that needs to be done to achieve our happiness can in fact be done, is capable of being realised'.

### 3.8 Criticism

Dutch plazas have undergone a fundamental change in usage and in form over the time. Many of functions have disappeared over time from the public space to the private realm. Trade went from open booths to small shops along the streets to increasingly large stores, supermarkets and malls, usually away from the heart of the city (Gehl & Gemzøe, 2008). Other facilities became redundant over time, like public water well or the town criers (Karssenber, 2010). Boomkens (1998) points out there are a pessimistic and an optimistic view of looking at the development of the public space.



figure 3.9 Evolution of Het Plein in the Hague

The pessimistic view is worried that the societal change of increased mobility, flexibility, and new communication will lead to the 'end of the city'. While the optimistic view (Hajer & Reijndorp, 2001; Karssenber, 2010) belief there is always a change in use. New utilities will appear as well. Yet, the plaza has become more specified throughout time. Through separating of functions plazas have become mono-functional (Hajer & Reijndorp, 2001 Plazas are specifically designed as residential plazas, corporate plazas, cultural plazas, etc. (Cooper Marcus & Francis, 1997).

Gehl claims there are three roles a plaza fulfils; a meeting place, a marketplace and traffic. In the traditional cities these three were in balances and occurred in the same space side by side. However, over time this balance was disturbed by a number of factors, especially the growth of car traffic. The city got invaded leaving little space for pedestrians. Social and recreational activities disappear leaving behind only the most utilitarian and necessary pedestrian activities. In the last decade, Dutch planners have successfully attempted to keep out cars from the public space (Karssenber, 2010). This resulted in an abandoned public space with open hard-paved

places, where public life has disappeared (Gehl & Gemzøe, 2008). Now, it is time to find new social and cultural filling on these plazas (Karssenber, 2010) and reclaim the city.

**'In a society in which increasingly more of daily life takes place in the private sphere – in private homes, at private computers, in private cars, at private workplaces and in strictly controlled and privatised shopping centres – there are clear signs that the city and city spaces have been given a new influential role as public space and forum.'**

**Gehl & Gemzøe (2008: 20)**



figure 3.10 Evolution of the urban plaza (Gehl, Public spaces and public life)

### 3.9 Reflection

In this chapter, focussed on the evolution of the plaza and the current developments to find out to what changes in usage the plaza is subdued. The contemporary use should ideally help to transform the plaza into a place of meeting and exchange in the daily life.

It can be concluded that the imbalance between safety and experience, mono-functionality and privatization has turned the public space into a void depleted from public life. 'Many traditional daily rituals that enhanced community have been discarded and replaced by modern conveniences whose developers never considered the consequences such as loss of shared experiences' (Hester, 2006).

After being cars have been moves, the Dutch plaza is now an empty space, or the abandoned city. The highly controlled and regulated space has prevented the public space to be reclaimed. It is lacking in diversity and the ability to freely use the space.

Plazas should draw out the privatised lives into the open. Karszenberg (2010) highlights that this is not only a consumption space, but also production by creativity and knowledge exchange. Gehl & Gemzøe (2008) and Hajer & Reijndorp (2001) plead for plazas to become social nodes for new experiences, a place where multiple meanings are represented.

The next chapter will focus on how the environment is experienced. We will zoom in on how Mankind and the profession of landscape architecture have dealt with the landscape.

- \_ASBEEK BRUSSE, W., DALEN, H. van & WISSINK, B. (2002) Stad en land in een nieuwe geografie; maatschappelijke veranderingen en ruimtelijke dynamiek. Den Haag: Sdu Uitgevers.
- \_BOOMKENS, R. (1998) Een drempelwereld; moderne ervaring en stedelijke openbaarheid. Rotterdam: NAI Uitgevers.
- \_BOUTELIER, H. (2010) Nederland lijdt hoe langer hoe meer aan collectieve pleinvrees. NRC Handelsblad, January 12.
- \_COOPER MARCUS, C. & FRANCIS, C. (1997) People places: design guidelines for urban open space, 2nd ed. John
- \_FRENCH, J. S. (1983). Urban space; a brief history of the city square. Dubuque: Kendall/Hunt.
- \_GEHL, J. & GEMZØE, L. (2008) New city spaces. Copenhagen : Danish Architectural Press.
- \_HAJER, M. & REIJNDORP, A. (2001) In search of new public domain; analysis and strategy. Rotterdam: NAI Publishers.
- \_HESTER, R. T. (2006) Design for ecological democracy. Cambridge: the MIT Press.
- \_JONG, E. de, LAFAILLE, M. & BERTRAM, C. (2008) Landschappen van verbeelding; vormgeven aan de Europese traditie van de tuin- en landschapsarchitectuur 1600-2000. Rotterdam: NAI Publishers.
- \_LENZHOLZER, S. (2008) A city is not a building- architectural concepts for public square design in Dutch urban climate contexts. Wageningen: Journal of Landscape Architecture (1).
- \_MELIK, R. van (2008) Changing public space; the recent redevelopment of Dutch city squares. Utrecht: Knag/Faculteit Geowetenschappen Universiteit Utrecht.
- \_MEYER, H., JOSSELIEN de JONG, F. de & HOEKSTRA, M. (2006) Het ontwerp van de openbare ruimte. Amsterdam: Uitgeverij SUN
- \_THOMPSON, C. W. (2002) Urban open space in the 21st century. Landscape and Urban Planning (60).
- \_VRIES, B. de (1990) Pleinen van Nederland; een typologische analyse van het Nederlandse stadsplein. Utrecht : Stichting Matrijts.
- \_WEBB, M. (1990) The city square; a historical evolution. New York; Whitney Library of Design.
- \_WHYTE, W. H. (2001) The social life of small urban spaces. New York: Project for Public Spaces.
- \_WOUDEN, R. van der (1999) De stad op straat. Den Haag : Sociaal en Cultureel Planbureau.
- \_ZUCKER, P. (1970) Town and square; from the agora to the village green. Cambridge: MIT Press.

## 4. The human-environment relationship

Plazas should draw out the privatised lives into the open. Karszenberg (2010) highlights that this is not only a consumption space, but also production by creativity and knowledge exchange. Gehl & Gemzøe (2008) and Hajer & Reijndorp (2001) plead for plazas to become social nodes for new experiences, a place where multiple meanings are represented.

The next chapter will focus on how the environment is experienced. We will zoom in on how Mankind and the profession of landscape architecture have dealt with the landscape.



#### 4.1 The human-environmental relation

The concept of the human-environmental relation attempts to clarify how we see ourselves in relation to our surroundings. 'Two major streams of thought in European tradition –two world views fighting for dominance- have come to force and become apparent in today's design world' (Jong et al., 2008: 33). The first view, 'man has been allotted a subordinate role'. Landscape is considered something that is outside us and yet gives us meaning. It speaks to us emotionally and spiritually (Thwaites et al., 2007). 'For example, the religious feeling we experience in a dark forest' (Jong et al., 2008: 34). In this, the natural landscape is experienced in an organic relationship, in which it is more important to understand the meaning of things, rather than the prediction and control of it (Lovejoy, 1974). This can be called the social constructivist world view, in which 'individuals develop subjective meanings of their experiences, meanings directed toward certain objects or things' (Cresswell, 2009: 8).

The second view adopts the idea that man is capable to completely control the world and can shape nature in any way (Jong et al., 2008). The environment is understood as an entity that can and should be 'objectively' described and 'scientifically' evaluated (Koh, 1982). With a rational and instrumental attitude the environment can be redesigned to better fit man's needs. This view also builds upon the idea that 'human well-being and behaviour can be improved and modified directly by changes in the physical environment, independent of free will and users' motivation, subjective perceptions and experiences' (Koh, 1982: 77). The world views reveal the difference of nature and culture and the different ways men deals with them. For a long time, this functionalistic view has been overshadowing the sensor relationship (Thwaites et al., 2007). This has resulted in an approach with 'technical, mathematical and scientific detail' (Thwaites et al., 2007) ignoring the experience and emotional dimension. It therefore rejected a humanistic and socially inclusive approach. This dualistic approach to the human-environmental relation has let to fragmented thinking and the separation of 'mankind' (culture) and 'environment' (nature).

**'We men are accustomed think of many things as either nature or culture, while in fact the two can equally well come together and go together'**

**Jong, et al. (2008:34 )**

Many theorists addressed this and called for a holistic approach on environmental design (Koh, 1982; Thompson, 2002; Hester, 2006; Thwaites et al., 2007) in which the human environmental relation is active. It is a continuous exchange, a subconscious dialogue of cues or an interrelationship (Koh, 1982). Therefore, the environment is not an external container, but a means of expression (Thwaites et al., 2007). Without it, people lose the possibility to culturally define themselves. This instantly reveals that a democratic space is not static or something imposed upon man, like a design is imposed upon the users. It, however, leaves space for adaption and interpretation. One way of achieving this is by using 'open-ended design' (Corner, 1999) or 'loose-fit places' (Thompson, 2002). In the contemporary understanding of our environment 'the concern is not so much the design of environment as the design of the human-environment system and the human experience of it' (Koh, 1982: 79). This asks for a better understanding of the natural and social processes.

#### 4.2 The production of space

In 'The production of space', Lefèbvre (1991) argues that all forms of social and emotional experience are constituted in and through space (the landscape). Space is here considered a socially constructed product and not a physical place alone. He identifies three aspects of the experience of space;

- Representation of space (Conceived Space);  
This type is the abstract space that is physically present. The space in which architecture, planners, and engineers work and that is most dominant in any society.
- Representational space (Lived Space);  
Representational space refers to the way that the inhabitants use and life the space. This space are the social codes and includes symbolic references and signs. It is the hidden layer in a social live.

- Spatial practice (Perceived Space);  
Spatial practices focuses on the way an individual sees or reads the landscape. The senses of a person are its medium. It understands the space by looking to its context and coherence. It can only be evaluated empirically.

These aspects form the triad model that embraces the idea that the relation between man and the environment is interrelated. Lefèbvre's model extends beyond materialist environment and emphasize the importance of 'the perception and constitution of meaning to the definition of what space is' (Stevens, 2007: 6).

**'The city must be a place of waste, for one wastes space and time; everything mustn't be foreseen and functional . . . the most beautiful cities were those where festivals were not planned in advance, but there was a space where they could unfold.'**

**Lefèbvre (1991: 36)**

### 4.3 Landscape architecture

After understanding that our environment and the design of the public space demands an integrated approach of the functional program and the emotional experiences, the question remains how landscape architecture can contribute. There often is some confusion about landscape architecture. Stigmas of garden design or regional planning spring to mind.

The profession of Landscape architecture concentrates on the design and planning of future landscapes. Unlike other forms of architecture, the object of design cannot clearly be farmable. The Van Dale dictionary (in; Vroom, 2005: 195) describes a landscape as 'the rural environment as far as one could oversee in one glance, as she shows herself in coherence'. The word 'rural' in this description establish a contrast between the countryside and the city. However, physiologically speaking, a landscape is a large space through which one can look or move (Jong et al., 2008). A landscape does not have to be limited by boundaries of a city. A city can be considered (a part of) a landscape.

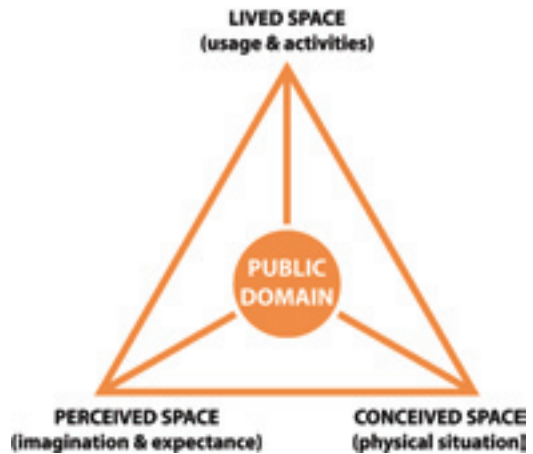


figure 4.1 Dimensions of space

A landscape knows no boundaries, as its scale can vary between the huge and the very intimate (Jong et al., 2008). Even for focuses of landscapes that can be limited to spatial boundaries, the landscape architect reflects both on the influences and effects from inside and beyond.

The landscape, regardless of size, involves change over time. A landscape is dynamic due to changing seasons, natural and cultural processes. So, to understand and design for landscapes is to consider time (Vroom, 2005). The profession works in this regard with elements that develop over time and growth. A design in most cases has not reached its high point after being realized, but will age well.

The architecture of landscapes can be a very widely divined profession with its fluent boundaries and scale, and respectful consideration of processes and continuity. This forms one of the strengths of the profession. The open attitude and attempt to an understanding of the landscape as a whole avoids fragmented thinking. It aims to integrate all the different factors of the landscape in such a way it improves the quality of life. 'Landscape architects have the skills to approach the urban public space from a spatial and systematic way of thinking' (Kamphuis, 2006: 46).

#### 4.4 Reflection

In the time that calls for an alternative approach to the design of the urban landscape, landscape architecture can come to aid. The public space has unconsciously become a space that is only considered in terms of functionality. This resulted in a place design that prescribed use and is unconsidered to emotional and social experiences.

Landscape architecture, with its characteristic qualities of structural approach, interdisciplinary and thinking in processes, form a very prominent link to include a human experiential consideration to the development of the public space. This consideration can result into a design that both serve functionalism and experience in the design. It lies as a new task to landscape architecture to explore this field more profoundly and find a fitting systematic approach to it.

- \_CORNER, J. (1999) *Recovering landscape: essays in contemporary landscape architecture*. New York: Princeton Architectural Press.
- \_CRESWELL, J.W. (2008) *Research design: qualitative, quantitative, and mixed method approaches*, Boston, University of Massachusetts.
- \_HESTER, R.T. (2006) *Design for ecological democracy*. Cambridge, London: MIT Press.
- \_JONG, E. de, LAFAILLE, M. & BERTRAM, C. (2008) *Landschappen van verbeelding; vormgeven aan de Europese traditie van de tuin- en landschapsarchitectuur 1600-2000*. Rotterdam: NAI Publishers.
- \_KAMPHUIS, M. (2006) *De landschapsarchitecten zijn te beleefd en te bescheiden*. Blauwe kamer (2).
- \_KOH, J. (1982) *Ecological design; a post-modern design paradigm of holistic philosophy and evolutionary ethic*. *Landscape Journal* (Fall, vol. 1).
- \_LEFÈBVRE, H.(1991) *The production of space*. Translated by D. Nickelson-Smith. Victoria: Blackwell Publishing Ltd.
- \_LOVEJOY, A. (1974) *The great chain of being*. Cambridge: Harvard University Press.
- \_STEVENS, Q. (2007) *The ludic city; exploring the potential of public spaces*. London, New York: Routledge.
- \_THOMPSON, C. W. (2002) *Urban open space in the 21st century*. *Landscape and Urban Planning* (60).
- \_THWAITES, K., PORTA, S., ROMICE, O. & GREAVES, M. (2007) *Urban sustainability through environmental design; approaches to time-people-place responsive urban spaces*. Abingdon, New York: Routledge.





# PART B. DESIGN FACTORS

In this part, I have created a bases of factors essential in plaza design that stimulates public life. Many pioneers on place making and public life have already explored and discussed this idea. Therefore some prominent writings have been researched and are summarized in the next chapter. This is reflected on several case studies to determine how these factors are practically articulated and which need more specification. The final chapter in this part approaches these factors from a alternative viewpoint. It is not attempted to result into a clear set of ready-to-apply design guidelines, yet more important is to gain an intensive, more complete understanding.

# 5. Design Factors

**'It is difficult to design a space that will not attract people. What is remarkable is how often this has been accomplished.'**

**Whyte (in; Francis, 2003)**

Designing plazas means designing for people and public life. But what turns an open space in the urban fabric into a lively node where people come together and share their experiences? To find out more on the design of the plazas, I selected theorists who have looked at the link between plaza design and public life. The public space, however, is a very popular topic. For the benefit of this study, I have only chosen the theorists that have adopted a similar view on the public space as described in the previous part.

From the theory, I found that there are several important factors that together form the backbone in the development of people places. The chapter will discuss these factors individually and accompany it with means to improve these factors. To illustrate the determined factors, I have included my sketches that hopefully make it easier to capture the idea of what they entail.

The factors discuss physical connections, functional motivation or psychological understanding. The factors are in order of the sequential order of approaching the plaza.

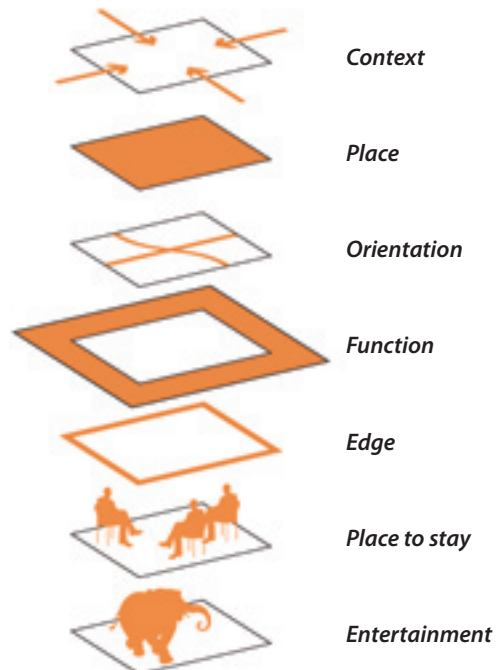


figure 5.1 Design Factors

## 5.1 Selecting sources

For the literature research, the most influential sources on place making have been selected (Francis, 2003; PPS, 2011). All of these sources are from foreign descent. It can be argued that this might result into an understanding that does not work for Dutch public spaces due to climatic and cultural differences. After all, there is not a long and successful history of plaza design as a meeting space in the Netherlands (Melik et al., 2005). Therefore, an interview with a Dutch specialist on plaza design, H. Karssenbergh (2010), is included to reflect on the theory.

Even though all the theorists see the public space must go hand in hand with public life, they all have their own angle of approaching and researching it. This has resulted into partly overlapping theories and differently formulated

In *LIFE BETWEEN BUILDINGS (1978)* and *NEW CITY LIFE (2006)*, Gehl is reflecting upon their research and analyses of the urban space. Gehl's publications make recommendations for design techniques that encourage active use of outdoor space. It provides a different way of looking at public space by using human perception to understand activities and behaviour and reflecting this to large scale data research and interviews. He advocates to win back the public space for pedestrians.

*PEOPLE PLACES: DESIGN GUIDELINES FOR URBAN OPEN SPACE* by C. Cooper Marcus and C. Francis (1997) presents guidelines for the design of public spaces and provides researched information about the motivations, needs, and behaviours of people who use public spaces. Cooper Marcus argues for a context-sensitive design as a way to understand what specific people and communities need psychologically, rather than asking people to choose between a set of designs.

*THE SOCIAL LIFE OF SMALL URBAN SPACES* by W. H. Whyte (2001) and *CITY: REDISCOVERING THE CENTRE* by W. H. Whyte and P. Underhill (2009) form Whyte's classical study of New York Plazas. Through close observation of patterns of use and examining the everyday use Whyte has filtered out the essence of public spaces through human activity. These

findings are set out guidelines for a more sustainable urban life. The approach is from an individual perspective. Whyte claimed that 'we (as planners and designers) have a moral responsibility to create physical places that facilitate civic engagement and community interaction'.

*PUBLIC PLACES, URBAN SPACES* by M. Carmona, T. Heath, T. Oc and S. Tiesdell (2003) provides an exposition of related dimensions of the public space, including the morphological, perceptual, social, visual, functional and temporal dimension. Carmona's main concern is that urban design is in danger of prioritizing one dimension above the other. This is results to 'functionalism' and is in contrast with the holistic nature of public space.

*DESIGN FOR ECOLOGICAL DEMOCRACY* by R. T. Hester (2006) puts the environment and people's well-being central to the design task. Centres are seen as a crucial place for economic complexity, local identity and rootedness. Hester combines sociality to the design of landscapes and cities. He talks about urban design with the focus on architectural composition.

*THE DEATH AND LIFE OF GREAT AMERICAN CITIES* by J. Jacobs (2009) is probably one of the most influential books in the field of urban planning and city renewal. In her work she is advocating community based planning, mixed-used development and the importance of a community as a social safety network. Jacobs theory directs it focus toward the urban planning and city renewal. To understand how the city works she reflects upon urban development and relates them to her own experiences of living in a city.

H. Karssenbergh (2010) gave me more inside of the practical field of plaza design during an interview. Karssenbergh is project leader for bureau of STIPO. He works in the field of urban planning, were he plays an advisable role toward various municipalities. Karssenbergh emphasizes the importance to combine the knowledge from various related disciplines and stakeholders. He sees the public open space has changed to a productive-interaction environment, a place where people work and meet.

## 5.2 Context

The urban fabric and the way it is structured define how a city is understood. We orientate ourselves based on the streets and open spaces inside. The location and connection inside the urban fabric defines the usage pattern and the reason why people come to the place (Gehl et al. 2006). It might be that one needs to pass it, one may come to the plaza when taking a recreational stroll, or the plaza is a target on its own because of its function. The best uses centres are located on habitual routes, from home to a primary place (Hester, 2006).

Good plazas are connected to the environment and are integrated parts of a general pedestrian network. The Project Public Space (in; Karssenberg 2010) calls the streets going out, 'the tentacles of an octopus extending into the surrounding neighbourhood'. They draw people (pedestrians and via modes of transport) to come to the place and they can merge the traffic flow onto the plaza by linking in to the pedestrian network. This makes the plaza function as an intersection of pedestrians passing by.

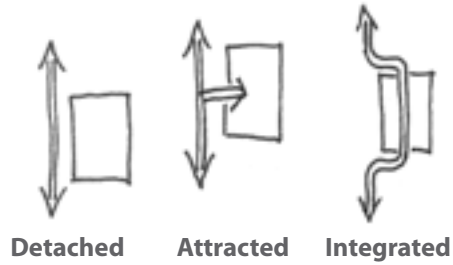
To establish a connection between the plaza and its environment access has to be created on three levels (Carr, in Carmona et al., 2003);

- Visual access (visibility of the place, know that it is out there)
- Physical access (possibility to enter, know how to get there)
- Symbolic access (mentally inviting, know that you are welcome)

### How can we connect to the city?

Promote distant *visibility* of the place and the location. 'Sight lines are important if people do not see a space they will not use it' (Whyte, 2001: 129).

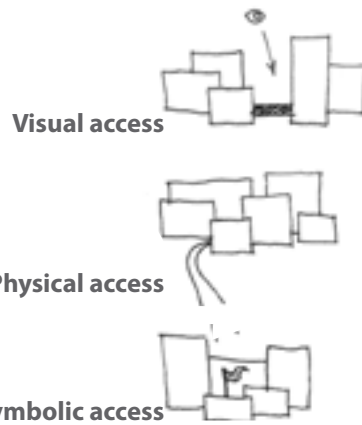
- Minimize visual boundaries between possible users and the plaza, e.g. structures, walls, vegetation (Whyte, 2001).
- Avoid the plaza to be sunken when there is no direct reason for it. People feel watched and enclosed (Cooper Marcus, 1997; Whyte, 2001).
- Mark the plaza with a distant focus, e.g. high public sculpture, banner, or a distinct building (Cooper Marcus & Francis, 1997).



CONNECTEDNESS



OCTAPUS WITH TENTACLES



ACCESSIBILITY



Provide clear *physical* connections to other people places and pedestrian streams, e.g. parks, other plazas, busy pedestrian districts, malls or large offices (Cooper Marcus, 1997; Whyte, 2001; Karssenberg, 2010).

- Connect to main pedestrian nodes in a half a kilometre radius (Hester, 2006).
- Clear physical obstruction, e.g. structures, steps, fences (Cooper Marcus, 1997; Karssenberg, 2010).
- Give pedestrians priority in crossings (Gehl, 1978; Jacobs, 2009; Carmona, 2003).
- Make the plaza reachable to all forms of transport. Provide a good connection between parking spaces, bus stops, etc. (Hester, 2006).

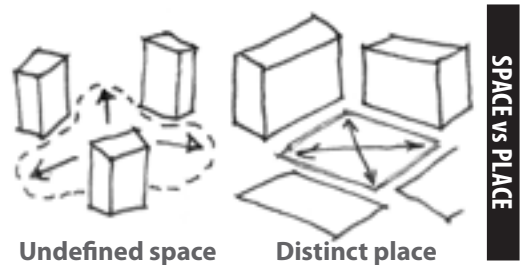
Transform the streets leading to the plaza into attractive and *welcoming* paths (Whyte, 2001; Karssenberg, 2010).

- Provide an open and active street façade, e.g. shops, displays, and terraces (Gehl, 1978; Karssenberg, 2010).
- Extend the elements on the plaza, e.g. planting, into the streets (Cooper Marcus & Francis, 1997).

### 5.3 Place

The success of a public place is dependent on the possibility for people to relate to the place or have a 'sense of place'. The concept based on the theory of E. Relph. 'For Relph, places were essentially centres of meaning constructed out of life-experiences' (Carmona, 2003: 120). 'Place' stands in contrast to 'space', which is an environment in which a person doesn't relate. A plaza that is considered a space remains a void. People might come across it, yet they might not even have noticed it. Uniqueness and human attachment is what makes a plaza a distinct place.

On the one hand, this depends on the possibility to understand the place. The shape and size influences people's decision to pass it or 'settle in' (Gehl et al., 2006). A space that has a clear boundary and unity is such a place. On the other hand the place needs to express its identity (Karssenberg, 2010). A place needs to have a way that distinguishes itself and express locality.



### How can we create a place in its own right?

Provide in a sense of *wholeness* to the place (Carmona et al., 2003; Hester, 2006).

- The surrounding buildings should enclose or 'frame' the plaza (Hester, 2006; Jacobs 2009).
- The floor pavement can provide a harmonious and integrated whole (Carmona et al., 2003).
- Emphasise the edge of the plaza, e.g. using objects, pillars or trees (Carmona et al., 2003).



UNITY, WHOLENESS

Express the plaza's distinct *identity* (Carmona et al., 2003; Hester, 2006; Karssenber, 2010)

- Emphasise elements that holds historical meaning and incorporate traditions of local users (Karssenber, 2010).

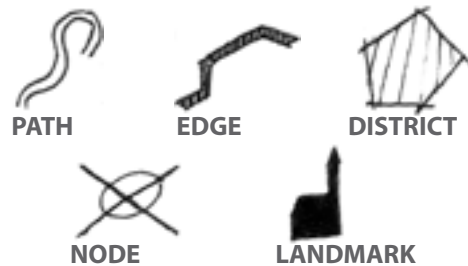
### 5.4 Orientation

'Good centres provide a sense of orientation for coming and going and for inside and outside' (Hester, 2006: 27). On different levels people uses physical forms to orientate themselves. Lynch (in; Carmona et al. 2003) defines five type of elements people use to orientate themselves and to find their way;

- Paths; Optional walking channels to potential move across.
- Edges; Linear object that are perceived as boundaries between two or more spaces.
- Districts; Two-dimensional spaces that have some common, identifying character.
- Nodes; Strategic spots in transportation, intersections or breaks in travelling.
- Landmark; External reference points (or stepping stones), highly visible and distinctive from its environment.



IN & OUT ORIENTATION



ELEMENTS OF LYNCH

An important aspect in orientation is the gateway toward the plaza (Whyte, 2001). The plaza is less bound by paths as they often offer the freedom to go where one pleases. Gateways are the transition from the pedestrian street or sidewalk to the open space. It is here where we pause to find our way. Sudden transitions or changes make us conscious of our orientation (Cooper Marcus & Francis, 1997; Carmona et al., 2003).



REDUNDANCE OF PATHS

### How can we create an accessible plaza with clear orientation?

Provide *accessible routing* (Cooper Marcus & Francis, 1997; Carmona et al., 2003; Hester, 2006).

- Make the place accessible at anytime (Whyte, 2009)
- Avoid slippery or rough surfaces, e.g. gravel, sand (Carmona et al., 2003).
- Create resting points along the main routes about every 100 meter (Gehl, 1978).
- If necessary, guide pedestrians with barriers, e.g. walls, planters, bollards or distinct, or changes in levels or textures (Cooper Marcus & Francis, 1997; Carmona et al., 2003).
- Make the plaza accessible for disabled, elderly or parents with strollers e.g. avoid steps and level change, provide ramps (Cooper Marcus & Francis, 1997; Carmona et al., 2003; Whyte, 2009).

Create clear *gateways* toward the plaza (Hester, 2006).

- Change pavement to mark a transitional space (Cooper Marcus & Francis, 1997).
- Use street furniture to make the gateway into a distinct place where people pause (Whyte, 2001).

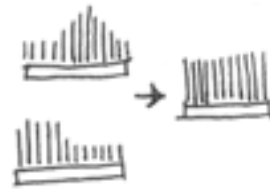
## 5.5 Function

The facilities in and around the plaza are without a doubt very important to the public life on the plaza. There are basically three activities that lead people to a plaza (Gehl, 1978); necessary, optional and social activities. The first take place regardless the physical environment and the climate, like people walking to work. Optional activities depend on what the place has to offer. The quantity of the place affects the number and length of the optional activities, like shopping or taking lunch. Social activities are the result of the quality of the other types of activities. This includes greetings and conversations.

Plazas need to be “intense concentrations of different uses -commercial, civic, residential, recreational, transportation, religious, and educational- that attract people from different income levels, gender groups, and life-cycle stages’ (Hester, 2006: 23). Plazas are often designed to serve and emphasise



one distinct large function. The lack in variety of functions around a plaza, e.g. caused by large scale functions, can shut down the open space (Gehl et al., 2006). Single functions often have limited opening hours and attract only specific users groups often with comparable schedules (Jacobs, 2009). This will provide a plaza that is only used during a short period of the day. A mixture of uses is therefore crucial. It attracts a diverse public during a wide period of time.



### How can we create a diversity of uses?

Provide a high concentrated *cluster of diverse facilities* (Gehl, 1978; Hester, 2006; Jacobs, 2009)

- Create functions for both optional activities, e.g. cultural, commercial and recreational activities, as necessary functions, e.g. civic, residential and labour facilities (Gehl, 1978).
- Serve multiple user groups at the same time, preferably with shared facilities (Jacobs, 2009).
- Develop facilities that the district needs and supports, preferably daily (Hester, 2006; Karssenberg, 2010).
- Stimulate the development of multiple smaller functions above a few large facilities, to become resistant to vacancy and lack of use (Carmona, 2003; Jacobs, 2009).

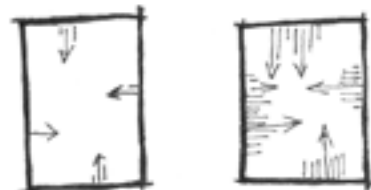
Create a *time spread* between the facilities, e.g. include facilities with various opening hours or peak hours (Gehl et al., 2006).

## 5.6 Edge

Edge

Design of the edge is, however, the most important element for a successful urban place (Carmona, 2003). It discusses how the surrounding functions are connected to the open space. A poorly designed edge can easily make a plaza useless. Functions with a proper edge can, however, support public life and stimulates the use of the open centre of the plaza (Gehl, 1978). Generally the occupation starts at the edge near the activity point and moves onto the centre of the space. This is called the edge effect.

Besides an active life the edge can also provide in safety. One of the major issues in view of Jacobs



(2009) is to stimulate what she calls 'eyes on the street'. A safe place is created by intensive use instead of a hardened or controlled environment (Cooper Marcus & Francis, 1997). Real people that keep an eye out on what happens. On the one hand, this is created by busy streets. However, a more consistent social surveillance comes from the surrounding buildings. Windows make it possible for people inside to watch over the public realm or suggest that this place.

'In the recent decades, ground-floor design has suffered a setback in the form of large units, many closed façades, blind windows, and lack of detail' (Gehl, 2006: 242). These closed façades or blank walls send out a sense of intimidation and distrust (Whyte, 2001: 2009). It becomes a deaden part of the street.

#### How can we create a transitional edge?

Create an *open attractive edge* to stimulate visual interaction between the inside and the outside (Jacobs, 2009).

- Provide many large, untainted windows and doors in the buildings (Gehl, 1978; Whyte, 2001; Jacobs, 2009).
- Create an attractive ground floor façade, e.g. small diverse units with store windows, building details (Carmona et al., 2003; Jacobs, 2009; Karssenberg, 2010).
- Reduce blind walls lacking in detail, e.g. applying artwork, vegetation (Gehl, 1978; Whyte, 2001: 2009).
- Provide relief, e.g. nooks, corners, alcoves, small setbacks, steps and ledges in the façade (Carmona, et al., 2003).

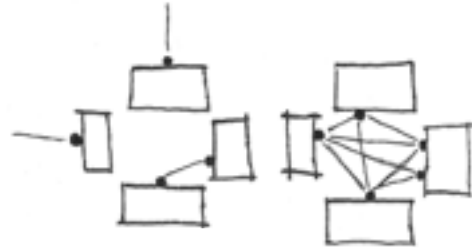
Transform the edge into an *active transition zone* between the public outdoor and the private indoor (Cooper Marcus & Francis, 1997). 'Building facades should be designed so buildings reach out to the street and offer active frontage onto public space', e.g. (Carmona et al., 2003: 173-174).

- Articulate a transitional space to mediate between the open outdoors and the close indoors, e.g. human scaled with trees or distinct pavement (Cooper Marcus & Francis, 1997; Carmona et al., 2003).



- Extend the inside outward, e.g. pavement or building structure (Carmona, et al., 2003).
- Pull the facility outdoor, e.g. terraces, good stalls or displays (Karssenberg, 2010).

Create a visual interaction between the entrances of various functions. Position the facility entrances toward the plaza and opposite of each other to create a 'triangle of activity openings' (Hester, 2006).



ENTRANCE INTERACTION

### 5.7 Places to stay

The functions surrounding a plaza are what drive people to come to the plaza. It brings about the people with an end goal (see 5.2). However, a plaza should offer the opportunity to stay. Any great plaza has a variety of sub-places within it to appeal to different people (Cooper Marcus & Francis, 1997). These sub space offer a visual cue to passersby that use of the plaza is encouraged. These places should provide for formal and informal interactions, for private and public affairs, with a focus on shared activities (Hester, 2006). Designing spaces to stay is to design comfort. There are many forms of comfort.



MIXED SETTINGS

The places people tend to sit are greatly affected by the microclimate. Climatic comfort is influenced by temperature, sun light, wind fall and parasitisation. These external influences must however be taken into account (Karssenberg, 2010).



CLIMATIC PROTECTION

Sensorial comfort is gained by softly stimulants of our senses. Overwhelming influences causes discomfort or even pain. For that reason, people avoid places with too much traffic noise, air pollution or places that are too bright.



SCALE, ENCLOSURE

Cooper Marcus & Francis (1997) and Whyte (2001) distinguish primary, secondary and movable sitting. Primary sittings are often fixed to the ground are designed with the sole function to sit on, like benches. Secondary or 'integral' sitting space is already an existing element of the public space or building, like steps and ledges surrounding a fountain or a planter. Movable sitting is not fixed. This enables the user to position it to optimise the comfort. Secondary and movable seating convey

choice. Movable chairs offer a flexible counterpart to steps, and they won't get stolen if they are cheap enough and locked up at night (Whyte, 2001). Bistros, restaurants and pubs can contribute greatly to the amount of (movable) seats outside. Yet, they have lost their public function and are often only available to customers.

#### How can we create a comfortable place to stay?

Create a great *diversity of sub places* (Cooper Marcus & Francis, 1997; Carmona et al., 2003; Hester, 2006).

- Divide the large open space into sub spaces, e.g. by change of level, pavement, planting (Cooper Marcus & Francis, 1997).
- Create variety of sitting spaces, e.g. primary, secondary and movable, linear and circular.

Make the sub places climatically, sensorial and socially *comfortable* (Cooper Marcus & Francis, 1997; Whyte, 2001).

- Make the seats comfortable, e.g. the right height and width, warm and smooth materials (Cooper Marcus & Francis, 1997).
- Create both sun lit and shaded spaces, e.g. umbrellas, overhanging canopies of trees and plants, arcades, or roof structures (Gehl, 1978; Cooper Marcus & Francis, 1997; Whyte, 2001; Jacobs, 2009).
- Use light reflectance at permanently shaded spaces, e.g. mirror walls, glass and stainless steel (Whyte, 2001).
- Block uncomfortable winds, e.g. shelter belts, trees, hedges, walls, fences (Gehl, 1978; Cooper Marcus & Francis, 1997).
- Make places to shelter from the rain, e.g. overhanging buildings, shed (Cooper Marcus & Francis, 1997)
- Make the plaza also comfortable during winter and in the evening, e.g. illumination, heaters, heated benches (Gehl & Gemzøe, 1996; Whyte, 2001)
- Provide vegetation to filter traffic polluted air (Carmona et al., 2003; Karssenber, 2010).
- Reduce noise disturbance by masking it with pleasurable sounds, e.g. fountain, or by blocking it, e.g. trees, walls (Whyte, 2001; Karssenber, 2010).

## 5.8 Entertainment

A plaza without something nice to do or see is hardly worth to stay around in. Therefore, this last factor, concerns how people find a way to be entertain when they are on the plaza.

The plaza is place where you can find all kinds of activities, like people chatting, having a snack, listening to some music, reading a book, play some soccer. This can be seen as the secondary functions on the plaza. These secondary functions are often combined with one of the primary functions (see 5.5) (Carmona et al., 2003). The Project for Public Spaces states, as a rule of thumb, 'a great destination has at least 10 places within it, each with 10 things to do' (in; Karssenber, 2010).

To make an interesting plaza, it must include a level of visual complexity (Cooper Marcus, & Francis, 1997). A variety of forms, colours, textures and details that makes the place more inspiring. Yet, even a place that articulates a high level of visual complexity loses its interest after a while. A beautiful sculpture can be very surprising at first. It will not be the second time. For that reason, it is important for a good plaza reflects and enhances visual changes. Moving water and natural elements offer some variation. The main stimulant for an interesting environment is created by something else.

**'What attracts most people, it would appear, are other people.'**

(Whyte, 2001: 10)

View people passing by or actively busy is a very attractive sight. Long time cycles and changes in the plaza can be used to ensure people will come back later. The difference between night and day, seasons and growth of vegetation are a view of the elements that can be observed over time.

One way of attracting people is by providing a venue. Events, like exhibitions, theatres, concerts, festivals, book market, farmers markets or parades, is a mean to attract and entertain people. Many of these events are planned by governments or by the surrounding facilities. According to Karssenber



PEOPLE WATCHING



ANNUAL CHANGE



MARCH OF CHANGE



(2010) it is difficult to define what activities are carried by the public and are just in need of stimulants to take place and what 'artificial' events, lacking in authenticity are. Unfitted events can disrupt the daily life of the plaza. While planned events can be very beneficial to a place, it must be kept in mind that this only provides entertainment for a short period of time.

Spontaneous happenings or rituals, e.g. music performances, sport activities, neighbourhood barbecues, are less predictable, but they are supported by the users or local community. Unplanned activities require local commitment (Hester, 2006). In a design these activities cannot be created, yet they can be stimulated by providing various activities with the right setting and amenities.

#### How can we provide in an interesting place?

Enable *events* and *activities* to take place throughout the year (Whyte, 2001; Karssenber, 2010).

- Make the environment adaptable for various activities and events by providing needed amenities, e.g. stage, food vendors, kiosk, play ground (Cooper Marcus & Francis, 1997; Carmona et al., 2001; Karssenber, 2010).
- Locate events not to interrupt the normal circulation flow (Cooper Marcus & Francis, 1997).
- Link an event program to the users or to the surrounding facilities (Hester, 2006).
- Invite local commitment, e.g. maintaining the public space, symbolic ownership (Hester, 2006)

Create *change* in views and experiences (Cooper Marcus & Francis, 1997).

- Provide views on the distant landscape, e.g. panoramic view on the city skyline (Cooper Marcus & Francis, 1997).
- Ensure a view on a fountain, vegetation or active people (Cooper Marcus & Francis, 1997; Whyte, 2001).
- Set out adaptable or changing public art near paths and at highly visible locations (Cooper Marcus & Francis, 1997).

## 5.9 Reflection

The previous factors are all of important for the design of a lively plaza. The table underneath shows the main goals and elements that are gathered to this point. This provides a theoretical overview on the design of a well-operating plaza that stimulates public life.

It was very well possible to combine these different sources, as they were very complementary of each other. As expected, certain sources had a different focus than others. This has resulted that some parts of a source were told in great detail, while other aspects stayed very abstract. I used and compared the sources to catch the main train of thoughts. In the end, this provided me with a comprehensive understanding of the factors and a base for plaza design.

Some of these ideas on public spaces have existed long. Yet many public places have not turned into the live node, but have taken a turn to become an ignored space. Why is this so? Can these factors be found in contemporary plazas? What factors are lacking? How are current redesign projects improving their plazas? It is important to reflect the factors onto a number of cases. This will clarify which factors find their way into practice and how they function.

Aspect	Aim	Sub factor (how can realize the aim?)
Context	To connect to the city	<ul style="list-style-type: none"> <li>• Visible access (see the place)</li> <li>• Physical access (find a way to the plaza)</li> <li>• Symbolic access (feel invited)</li> </ul>
Place	To become a 'place'	<ul style="list-style-type: none"> <li>• Sense of wholeness (in shape, scale or material)</li> <li>• Identity of the place (uniqueness, locality)</li> </ul>
Orientation	To provide way finding	<ul style="list-style-type: none"> <li>• Clear routing (save, accessible, understandable)</li> <li>• Gateway (mark entrances and exits)</li> </ul>
Function	To gain meaning and attraction	<ul style="list-style-type: none"> <li>• Diverse facilities (various uses, users, small grain)</li> <li>• Time spread</li> </ul>
Edge	To connect with the functions	<ul style="list-style-type: none"> <li>• Attractive edge (detailed, open)</li> <li>• Transition between public and private</li> <li>• Entrance interaction</li> </ul>
Place to stay	To offer a place to rest	<ul style="list-style-type: none"> <li>• Variety of sub spaces</li> <li>• Comfort (climatic, sensorial, social)</li> </ul>
Entertainment	To provide amusement	<ul style="list-style-type: none"> <li>• Events and activities (planned, spontaneous)</li> <li>• Changing view and experiences (day rhythm, seasons, development)</li> </ul>

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- \_ CARMONA, M., HEATH, T., OC, T. & TIESDELL, S. (2003) Public places, urban spaces. Oxford: Elsevier Ltd.
- \_ COOPER MARCUS, C. & FRANCIS, C. (1997) People places; design guidelines for urban open space. New York, John Wiley & Sons inc.
- \_ FRANCIS, M. (2003) Urban open space; designing for user needs. Washington: Island Press.
- \_ GEHL, J. (1978) Leven tussen huizen. Translated by J. van Beusekom. Zutphen: De Walburg Pers.
- \_ GEHL, J., GEMZØE, L. & KIRKNÆS, S. & SØNDERGAARD, B. S. (2006) New city life. Copenhagen: Danish Architectural Press.
- \_ HESTER, R. T. (2006) Design for ecological democracy. Cambridge: the MIT Press.
- \_ JACOBS, J. (2009) Dood en leven van grote Amerikaanse steden. Translated by M. Polman. Amsterdam, SUN Trancity.
- \_ KARSSENBERG, H. (2010) Discussion on plaza design in the Netherlands (Interview, 9 November, 2010). Amsterdam: STIPO Amsterdam.
- \_ MELIK, R. van, WEESEP, J. van & AALST, I. van (2005) Spiegels van de samenleving; Pleinen door de eeuwen heen. In: BMC, ed., Pleinenboek. Leusden; BMC.
- \_ PROJECT FOR PUBLIC SPACES (2011) Placemaker profiles articles. Available at: [www.pps.org/placemaking/articles/placemaker-profiles/](http://www.pps.org/placemaking/articles/placemaker-profiles/)
- \_ WHYTE, W. H. (2001) The social life of small urban spaces. New York: Project for Public Spaces.
- \_ WHYTE, W. H. & UNDERHILL, P. (2009) City; rediscovering the centre.

## 6. Case studies

The previous part, the design factors, is written based on theories and research literature. This chapter an analysis is done on the design of various plazas to get reflect the theory onto the practical field. The project analyses will provide a thorough research on the way the design factors are used. This analysis consists out of two parts.

The first part critically reviews twelve plazas based on the theory from the previous chapter. The plazas are compared on its functioning to find out what aspects seem to give problems and whether example cases demonstrate the presence of these theoretical factors.

Secondly, two specific cases are discussed in more detail to describe what factors a new project take into account and how the former plaza is attempted to be improved. These cases are plazas that are currently in the process of redesign and are comparable to the final example design (see part 3).

In the end, this reflection of theoretical factors on the plaza cases show the perspective of plaza design in practice. It will conclude with a reflection that will reveal the main challenging fields of plaza design.

## 6.1 Plaza comparison

### 6.1.1 Selection

For the case study analysis, twelve plazas have been selected that have, more or less, recently been designed and are intended to operate on a large scale by serving the city or a large district. The cases all are design to operate as meeting places. This excludes places like parks, traffic nodes or parking areas as their intention is to serve as restorative spaces or to optimise the traffic flow.

As stated there are many plazas that have or will be redesigned. I have selected eight plazas that still need to be adjusted, and especially seem to have gotten a lot of negative critique from the users (Veenendaal, 2003; de Jong, in: Harsema et al., 2004, Lenzholzer, 2008; van Melik, 2008; Witman & de Haan, 2010).

Furthermore, four cases were selected that are generally considered as very attractive and lively plazas. For these example cases three Dutch plazas and one plaza from abroad have been included. These are examples that have gotten much praise and demonstrate a sustainable public life (Gehl & Gemzøe, 2001; Gatje, 2010; Witman & de Haan, 2010; Project for Public Spaces, 2011).

### 6.1.2 Method

Each plaza analyses consist out of a descriptive part and a critical evaluation. The description is objective and provides a general explanation of the various plazas. Based on collected data the description provides; the name, city, location, year, designer(s), function(s), nearby main facilities, the designers philosophy and a short description of the design. This establishes a grasp of what the design entails. The after the description, the plaza examined on the factors from the previous chapter; context, place, orientation, function, edge, place to stay, and entertainment. For each of the plazas the factors are shortly discussed. This criticism will provide a base as to what elements are met and which are not considered in the design. In the appendix both the descriptive part and the criticism for each project are given in an overview.

### 6.1.3 Outcome

The evaluation of the cases is visualized in the graphical image on the right. Each column is an evaluation of a plaza. Every time a plaza has included the sub factor sufficiently, based on my insight as a landscape architecture student and the theoretical understanding, it gains a cube for that sub factor.

There is a left and right side to the sub factors. The left side are the praised plazas and the right side represent the plazas that will soon be redesigned. When these sides are compared, it becomes clear that indeed the more liked plazas have included much more of the sub factors. In most cases a few of the elements are of very high quality. The right side shows much more holes in the tapestry. It can therefore be stated that there is a strong correlation between the factors and the success of a plaza.

The image also makes clear that some aspects are more outspoken than others. The factors of connecting the plaza and creating a sense of place are often considered. The factors of creating a place to stay and for entertainment are not adequately reached. The latter is partly due to the fact that in the evaluation not only the temporal events and activities were taken into account, but also the stimulants and forms of amusement that are present on an average day. Many plazas have markets or annual events, yet aside from this it lacks in normal things to do. Both stay and entertainment are factors of concern.

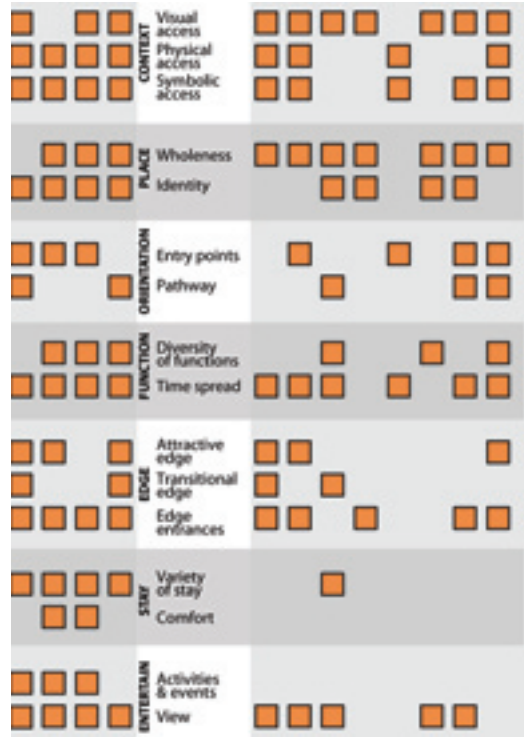


figure 6.1 Case study comparison



## 6.2 A closer look

This part takes a second look at two redesign projects in specific, the Museumplein in Amsterdam and the Schouwburgplein in Rotterdam. Both, like the Spuiplein, can be characterized as cultural plazas. The cities of these cases are in the phase of finalising their plans for the redesign. With this revisit, I hope to find clarity on the issues that the plazas are dealing with. Do the designers ascertain the same points of improvement as the theoretical factors? How are they including the factors in the new design?

For both cases the current design, use and the redesign plan will be discussed. The pictures will illustrate the positive and negative aspects of the site.

### MUSEUMPLEIN

#### Amsterdam

Size; 56.000m<sup>2</sup>  
Length; 405m  
Width; 150m

#### Last design

By; Sven Ingvar  
Andersson  
Year; 1999

#### Redesign

By; Michael van Gessel  
& Ton Schaap  
Est. yr.; 2018

#### Main facilities

National museum  
City Museum  
Van Gogh Museum  
Concert hall  
Underground parking garage

#### Origin plaza

The World Fair of 1883.

### SCHOUWBURGPLEIN

#### Rotterdam

Size; 13.000m<sup>2</sup>  
Length; 165m  
Width; 115m

#### Last design

By; West 8  
Year; 1996

#### Redesign

By; West 8  
Est. yr.; 2012

#### Main facilities

Concert hall De Doelen  
Cinema Pathé  
City theater  
Underground parking garage

#### Origin plaza

The 1940 bombing.

### SPIUIPLEIN\*

#### The Hague

Size; 4.850m<sup>2</sup>  
Length; 250m  
Width; 63m

#### Last design

By; Joan Busquets & Den  
Haag Municipality  
Year; 1995

#### Redesign

By; -  
Est. yr.; 2017

#### Main facilities

Muziek- en Danscenter  
Theater aan het Spui  
City Hall  
City Library  
Event building  
Underground parking garage

#### Origin plaza

Removal of the harbour in 1904.

*\* Including the Nieuwe  
Kerk Garden and Rabbijn  
Maarsenplein*





Population  
1457  
**AMSTERDAM**

Population  
1457  
**THE HAGUE**

Population  
1457  
**ROTTERDAM**

### 6.2.1 Museumplein, Amsterdam

The Museumplein is one of the most famous Dutch plazas. It lies in a high class district Oud Zuid, south of the city centre. As the name already gives away, the plaza is surrounded by many cultural institutes of national importance, as the Van Gogh museum, the Stedelijk museum, the Rijksmuseum, and the Dutch orchestra building. It is from a walking distance of the Vondelpark and some major shopping streets.

#### History

The Museumplein is located in a district that developed as a city expansion in 1872. For a long time it was thought to be completely build. For that reason, the cultural institutions were established without any spatial relation between each other. This is the main reason for the plaza's asymmetrical shape. The public space was used for many events, like the World Exhibition in 1883, and it was seen as a 'green central meeting place for large events'.

#### Original design

Sven-Ingvar Andersson has made the current design for the plaza in 1999 and described the place as 'the eye of a raging tornado; a place of silence' (Maarschalkerwaard, in; Veenendaal, 2003: 101). Museumplein is seen as an open space where people could experience the 'endless plain' and the 'imposing sky above the Dutch landscape' (Stipo, 2010).

Most of the Museumplein consists out of a lawn. One third of the space, the north part, is paved with gravel. The design has created lines of sight toward the most prominent buildings and is mostly based on the central axis from the Rijksmuseum toward the concert hall a symmetrical system of paths that emphasise the Rijksmuseum in the north. However, the main path is created that is not connected to the buildings. This emphasizes the open field. Also, the secondary paths all end next to the main buildings instead of toward them, with the exception of

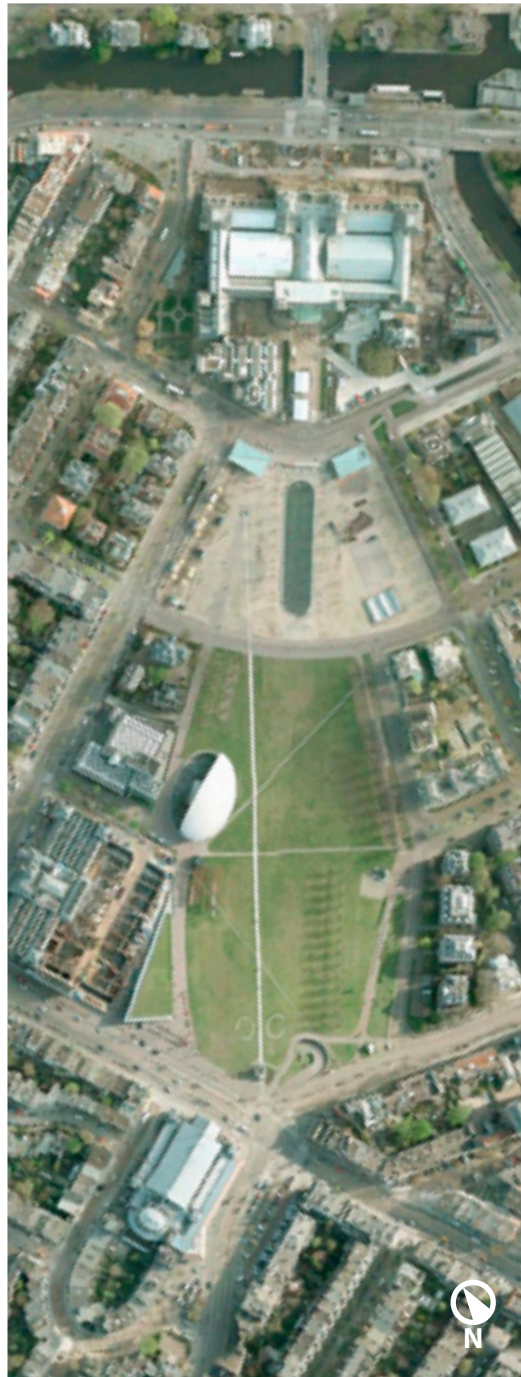


figure 6.1 Aerial view Museumplein (Google Earth, 2011).



the path leading toward the Rijksmuseum. This building is emphasised by a long stretched pond with *Platanus* trees along the sides leading toward the museum. With lanes of trees at the east side and the risen lawn corner in the west (the so called 'ezelsoor') visual boundaries are made that retreats city behind a green curtain. These places are also intended as a place to stay. The risen corner is the roof of a supermarket.

In the cultural historic exploration of Museumplein made by the Municipality (Stuurgroep Museumplein, 2009), Andersson understood that people generally don't like to be in the middle of a plaza. He therefore developed three activity areas. One in between of the Van Gogh museum and the Stedelijk museum, where initially the museum would have its entrance. The second, in front of the concert hall, that was expected to have more facilities and would have been better connected to the plaza. Finally, the gravel area with its pond was already clear to attract people. Here on the two corners of the plaza two pavilions have been situated, one housing a souvenir shop, the other a bistro.

The plaza was intended for pedestrians. Therefore cars and bicycles were discouraged in the design. No roads cross the plaza. The concert hall is still separated from the Museumplein by a road. Underneath the south side of the plaza a parking garage is created. For the bicycles there was one major path across the area situated. This going from east to west, separating the gravel area from the lawn. This two lane tarmac road was later given the nickname of 'the shortest highway of the Netherlands'.

At the east side of the plaza a monument is situated with a small flower garden with stone lines and benches. The lighting in the total plaza has been kept to a minimal, so that one could experience the night sky without obstructions.

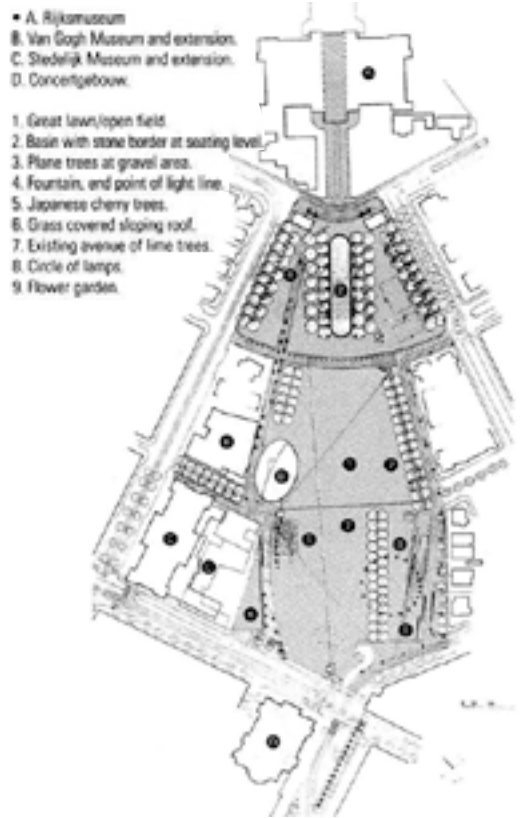


figure 6.2 Plan view Museumplein (courses.umass.edu)



### **Real situation**

Due to financing problems the plan had to face many cutbacks in some parts of the plan. The front of the concert hall was not developed as supposed and the risen corner is smaller as was sketched out. But also the quality had to suffer. In the later stage near the bistro a playground and a half pipe was constructed.

Currently, the area is used by tourists as well as nearby residents. From the three activity areas only the one in the north developed. Many of the users use the 'ezelsoor' or the benches along the main path. The plaza mostly facilitates as an event terrain where a wide variety of activities take place, as demonstrations, sport events, the watching of the World Cup in soccer and celebrating Queens day.

The Rijksmuseum has recently undergone a restoration and the other museums will follow. With the construction of the new North-South metro route, it is expected that more visitors will come to the plaza.

### **Critics**

There are a number of points that need improvement. Based on an interview with Combé & Griffioen (2010) the following were made clear;

- Safety; The emphasis of the traffic lies on the street side of the risen corner. Here public transport, cars, pedestrians and cyclist cross each other. This makes it a dangerous place.
- Access; Museumplein is located near the Vondelpark, some major shopping streets. Yet the people are not aware of the nearby plaza. It is not connected well to the city.
- Uses and activities; The cultural institutes have a close facade and the entries are located on the street side. The backs of the building are facing the plaza. This provides a closed sense. Also, the institutes make little use of the plaza. All activities are indoors. On the east side of the plaza are some embassies, residential houses and small offices. The separation between public and private terrain is abrupt. The lack of connection between buildings



figure 6.3 Positive; the edge stimulates exploration.



figure 6.4 Negative; narrow slippery paths.



figure 6.5 Positive; gathering space



figure 6.6 Negative; unsustainable grass plain.

and the plaza does not stimulate activities. In the evening and during on sunny days there is not much use of the plaza.

- Sustainability; The lawn is not resistant to the intensive urban use and festivals. The loam rich soil makes the grass to swampy and wet. Regularly the fields have to be re-sown. Also, the trees in the gravel areas do not grow as well.
- Comfort and image; Complains are made that the plaza is open empty and in poor shape. The sitting places are lacking in comfortable sitting places.

**‘The place in the city looks a bit trampled!’**  
**(Combé & Griffioen, 2010)**

*Redesign intention*

The new design of the Museumplein was made by landscape architect Michael van Gessel and urban planner Ton Schaap with collaboration of the municipal design bureau. The design was during this research not yet publicly available, therefore a look will be taken on the vision on the plaza and the principles the designers used.

As a first step, the meaning of the plaza was intensively analysed. A square is greatly depended on the context in which it is situated. It is therefore crucial to know how people understand and use the space. The plaza got three major points of attention; metropolitan, cultural, connected.

These aspires are realised by facilitating the edge and the plaza, by stimulating cultural events and by addressing the connection between the plaza and the environment.

The entrances of the museums are changed from the street toward the plaza. This creates activate edges and makes the plaza into the front of the city instead of the backside. Also, more cafes and public facilities are created in the east side of the plaza. On the plaza the food vendors are given proper space in a pavilion. Also, more sitting space will be created, however the lawn is left open.



figure 6.7 Positive; view ([www.worldisround.com](http://www.worldisround.com))



figure 6.8 Positive; different facilities for activities.



figure 6.9 Negative; connection with surrounding



figure 6.10 Negative; closed walls.

Events and programming is arrangement more frequent with the collaboration of the cultural organisations. The events should be cultural and in line with the identity of the plaza for a wide audience. The lawn will be improved. To coop with the heavy urban use the grass has been made more lasting. Also, the conditions for the trees surrounding the pond will be improved.

The success of the plaza depends on the connection with the environment. External connect with the neighbourhood 'de Pijp' and to the north will be made by creating more public facilities and adjusting the profile of the roads. The connective roads creating a livelier ground level in the buildings and replacing car parking spots for more pedestrian space and public amenities. On the plaza the materials and with of the walkways are changed to become less slippery and user friendly.

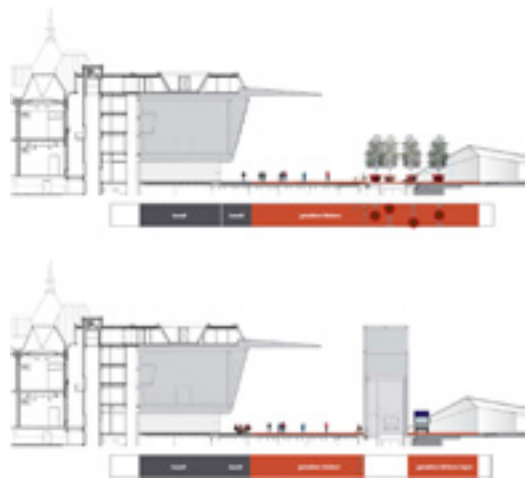


figure 6.11 Cross section of the renovated Stedelijk Museum (Stuurgroep Museumplein, 2009).



figure 6.12 Draft idea of the improvement plan (Stuurgroep Museumplein, 2009).



## 6.2.2 Schouwburgplein, Rotterdam

The Schouwburgplein is situated in the heart of the city of Rotterdam. It is surrounded with some mayor cultural institutions, cafes and apartment buildings. At the north side lays the city concert hall 'De Doelen', at the south the city theatre and at the North West side on the plaza is a large cinema located. Together all the cultural institutes on the plaza can seat about 11.000 people. The plaza forms the roof of an old underground parking garage. The plaza is about 500 meters away from the central train station.

### History

The problems the Schouwburgplein now faces have much to do with its historical development. First off, the plaza was not naturally grown in the urban network. Originally, the area was densely populated. In 1940 the district burned down. During the war a temporal theatre was build in the new open space. This was accompanied by a concert hall at the north side of the plaza in 1962. To coop with the growing vehicular traffic, the first Dutch underground parking garage was build two years later. During the eighties, most of the current plaza was given it current shape. Residential buildings with offices and shops at ground floor were developed on the west side of the plaza and the temporary concert hall was replaced on the south side.

### Design

The plaza is designed as 'an interactive public space, flexible in use, and changing during day and seasons. Its appearance is a reflection the Port of Rotterdam' (West 8, 2009). The plaza itself is raised about half a meter. This evokes the feeling of a 'city's stage'. Surrounded to the raised floor is a sidewalk. Along the edge of the platform there are the occasional ramps and steps made to access the plaza. At the north east corner there is a small ramp bridge, assembling the board walks onto a ship. At the north and south side a road and at the east side a bicycle path.



figure 6.13 Aerial view Schouwburgplein (Google Earth, 2011).





The plaza is made out of materials as epoxy, metal, wood and rubber. Together with the four cranes shaped lamp posts it makes a reference to the harbour of Rotterdam. The 35 meter high red hydraulic cranes can interactively be altered in position. The lamps are therefore functioning as a spot light on the plaza. The materials are carefully positioned on the plaza forming functional zones. The metal pavement forms a place for activities and the sitting zone is made out of wood and rubber.

Behind the cranes there are three large ventilation shafts sticking out of the plaza. In the design there has been clearly chosen to leave these out to see and not hide them in any way. Also at this side of the platform a line of wooden benches are situated. These have been added in a later stage as a reaction to the complaints of the lacking of sitting spaces. The shops at the east side are separated from the plaza by a lane of trees. This is putting even more focus on the plaza as a stage. In between the concert hall and the theatre there was a green lit path, emphasizing the two important facilities. At two points in the plaza a large triangle shoots out of the ground. These are the entrees to the underground parking garage. The south entree comes out into a lane of small water sprouts on the plaza.

### **Real situation**

The main pedestrian stream coming from the central station does not cross the Schouwburgplein, but passes a parallel street. On the plaza the youth are mostly represented. Elderly are often not present and visitors from the cultural institutes often disappear right after the show has ended. This was also represented in a study that showed that the youth are more proud of the plaza. The plaza is most busy during lunchtime. People come to eat, work, walk about and to meet each other. However, hardly ever will a critical mass be reached. People often sit on the edge of the plaza.

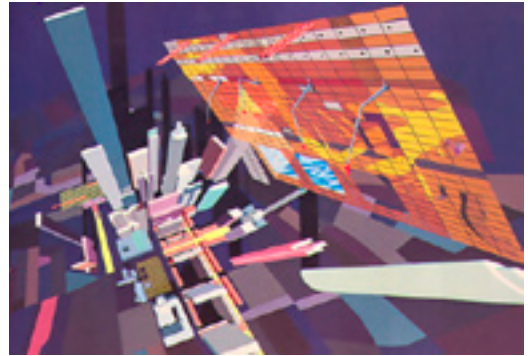


figure 6.14 Design by West 8 ([www.west8.com](http://www.west8.com)).



The Schouwburgplein is most known for the International Film Festival that is held annually. Also, other festivals take place here, like sport events or circuses. Due to the old structure of the underground parking lot, many events are too heavy to take place.

### Critics

Behind every plaza lies a story, as does for this one. Before we move to the issues the plaza has to deal with it is important to realize that it had some difficulties right from the start. The parking garage for one is an old structure that cannot support much weight and had some issues with drainage and cracks in the foundation. West 8, quit brilliantly incorporated some of the solutions into the design. Also, due to some financial issues the plan was never completely realized (Veenendaal, 2003). Now during the last years the municipality noticed a number of problems;

- For the use the plaza's floor is slippery and some parts of the epoxy floor show cracks. The first is especially a problem for the elderly and invalid users.
- The general atmosphere has been described as cold, uncomfortable and not at all cosy. This is largely a result of the lack of activity and the general closed facades of the surrounding buildings.
- There are too few access points onto the plaza. The ones that are present are little noticeable. They are often small steps that can not be seen from far.
- The plaza is infrequently used and often too little people make use of the public space. This is due to the lack of (diverse) activities and because of that a monotone user group. There is too little to do, the plaza is only busy during certain times of the day or week.
- The plaza is not a part of a logical routing and does not obtain a central position in the urban network.

### Improvement

'Last change or occupy it' (Leefbaar Rotterdam, 2008) is the title of the document that gave the push to reconsider the design of the Schouwburgplein. The choice went out to the first. The redesign needs to make it into a 'hospitable, warm and sociable leisure plaza'. The same design will be maintained



figure 6.15 Positive; pavements for various uses.



figure 6.16 Positive; integrated sitting.



figure 6.17 Negative; slippery floors.



figure 6.18 Negative; closed facades.

and improvement will be made to increase the use, the quality of stay and the connection. The new design was also done by West 8.

Also, in this case the main cultural buildings are adjusted to related more to the plaza and to let people stay longer after and before the shows. The concert hall the Doelen wants to attract the facilities in their facade that is more related to their function. The cinema Pathe creates more visual interaction between in- and outside. By enlargement of the entry, creating a more transparent ground floor that shows the foyer more view is given on the activity inside. Also, the building will divide the theatre rooms into multiple smaller rooms. The theatre will merge with the adjacent cafe and share the space.

Environment is linked onto the plaza to attract more passersby and to make the plaza less hidden in the cities fabric. A boardwalk is set up from the central station to the shopping street the 'Koopgoot'. The pedestrian paths in the centre of Rotterdam in unified. Trees are used to emphasize the walking route and to make the stay more pleasant. The plaza will be surrounded by two rows of Platanus trees to soften the facades of the buildings.

The accessibility of the plaza will be improved by creating new entries onto the platform and widen the existing ramps and steps. The gutter line between the theatre and the concert hall will be changed into a red illuminated walkway, which can be use as a red carpet.

At the building at the east side of the plaza, cafes will be created with terraces. These are protected from the wind by the trees. The amenities on the different terraces are going to be the same to stimulate unity.

Informal performances are stimulated by a small organic risen stage on the plaza that can be use as object for play when it is not used. The ventilation shafts are planted at the street side with vertical planting and at the plaza side LED-screens are attached of 8 by 12 meters. This gives the ability to display video clips on the plaza.



figure 6.19 Negative; lack in social settings.



figure 6.20 Negative; connection with e surrounding.



figure 6.21 Negative; not visual ramps.



figure 6.22 Positive; clear identity and focus point.

The current setup of benches has been revised into a setting that composes intimate spaces by putting out new benches rotated with ninety degrees next to the existing. The edge of the platform will be improved to make sitting more comfortable.

The plaza is being fortified to enable to build stages and other heavy settings for events. A plaza manager has been appointed to give shape and provide a program for the plaza by collaboration with cultural institutes.

Also, some basic maintenance will be preformed like fixing the cracks in the pavement and boosting the water feature. This will give it more mass and improves the scale.



figure 6.23 Artist impression 1 (West 8, 2009).



figure 6.24 Artist impression 2 (West 8, 2009).

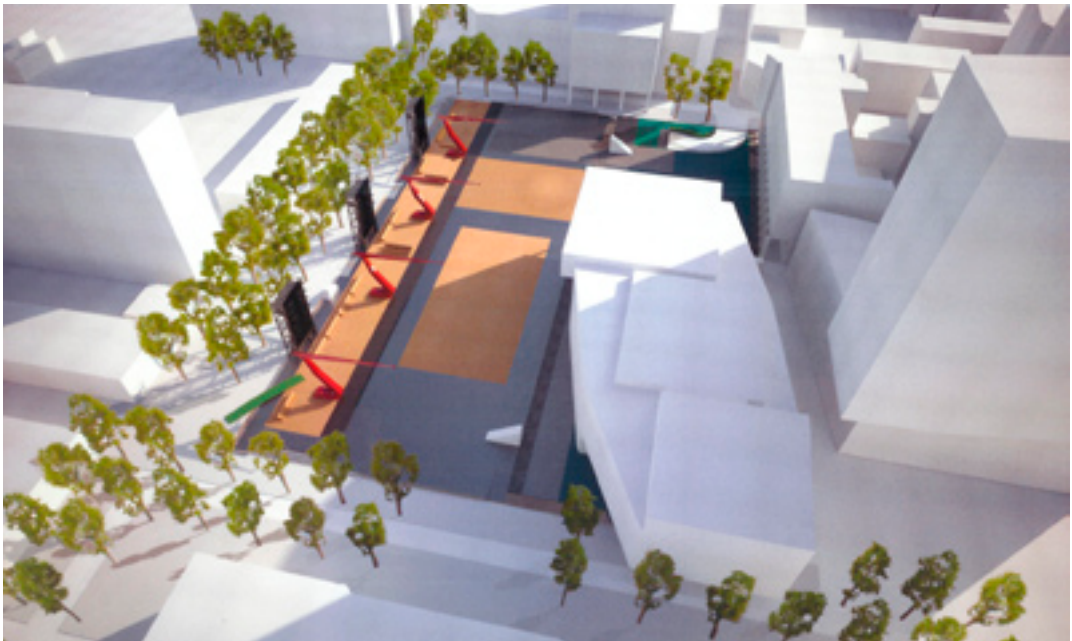


figure 6.25 Improvement plan (West 8, 2009).

### 6.2.3 Outcome

The graphical image on the right again shows how the plazas are performing in reference to the factors. This time it compares the old with the new situation. The black bordered cube indicates that these factors are discussed in the analysis, design vision or the design itself. However, this is not sufficiently met in the design.

Both plazas show great improvement in the future design. The Museumplein puts a lot of emphasis on the connection of the plaza with the city and the surrounding buildings. The Schouwburgplein focuses predominately on accessibility. Yet still, the last factors were still not expressively present in the new design. A lot of effort is put into attracting and arranging new event into the plaza. With the help of new event managers, ideas for events, and an improved physical quality (e.g. strengthening the carrying capacity of the Schouwburgplein or the improvement of drainage of the Museumplein lawn), the plans clearly focus on creating a higher intensity of events. Hajer & Reijndorp (2001) call these plazas 'fruitopians'; spaces that are created around festivals and markets.

Whether or not these improvement will be enough to form the desired social node, only time will tell.

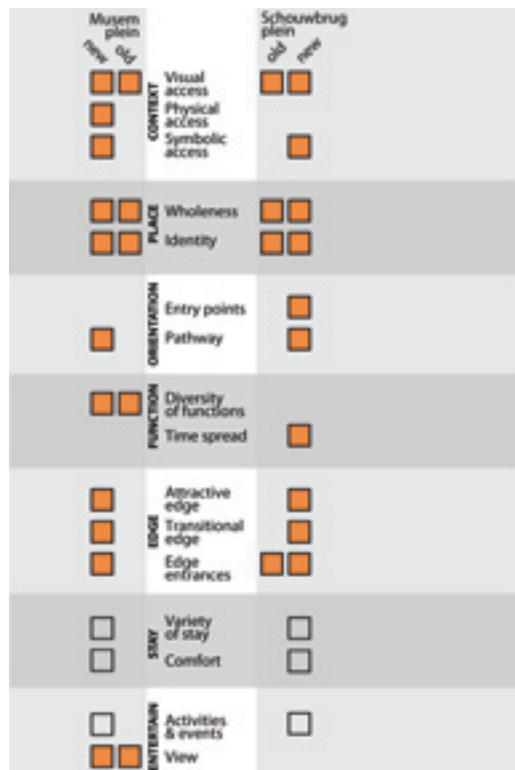


figure 6.26 Revised case study comparison.

### 6.3 Reflection

In this chapter, we have come to know that the factors derived from literature are indeed of curtail importance in practice. Even though none of the cases display all factors, every single one does increase the potential of a lively plaza. Designing for a 'place to stay' and 'entertainment' seem to be the factors that are most problematic. Even in the redesign of the Museumplein and the Schouwburgplein, while discussed in the plans, these seems to be least ensured in the new design.

It also was noticeable that, most plazas are designed as a 'void', leaving the centre open and concentrating the objects to the edge. This could be due to the fact that plazas are programmed to offer markets or staged events (Koerse, in; Veenendaal, 2003). Plaza that are designed as flexible space where all sorts of activities and events can take place without being obstructed. Herein lays the contradiction of the urban void. It is designed for temporal activities that attract people, temporarily. Settings and elements that are so key in providing for a public life, e.g. a comfortable place to sit or activity settings, are pushed of the plaza. The Project for Public Spaces (2011) elaborates that '[their] work on squares emphatically shows that the design needs to first work without any programming. A place works best if it draws a regular clientele who stay even when nothing is being programmed. Then, with a solid foundation to build on, programming can draw different types of activity such as markets, cultural events and performances'.

So there seems to be a wide gap between the perception of the public and the urban designers or planners. Lenzholzer (2008) already remarked that the plazas people disliked where often valued by architecture, urban design and landscape architecture professionals. Also the architecture critics Witman & de Haan (2010) found out that the plazas they preferred were not the ones the public liked. Pallasmaa (2005) states that architects base too much of their designs on the visual effect, neglecting other senses and basic physiological needs. This gap can be overcome by understanding how people perceive their environment and how they act in it. This nature of experience is complex

as it partly takes place unconscious, yet some literature on human perception or public behaviour is available in the field of landscape architecture and urban planning (Whyte, 2001; Dee, 2003). A more extensive and detailed understanding can be gained from the field Environmental Psychology.



- \_COMBÉ, C. & GRIFFIOEN, M. (2010) Discussion on the new design of the Museumplein (Interview, 14 October, 2010). Amsterdam: DRO office.
- \_DUTRIEUX, R. (2010) Discussion on the new design of the Schouwburgplein (Interview, 9 May, 2010) Rotterdam: DSV office. KARSSENBERG, H. (2010) Discussion on plaza design in the Netherlands (Interview, 9 November, 2010). Amsterdam: STIPO Amsterdam.
- \_HAJER, M. & REIJNDORP, A. (2001) In search of new public domain; analysis and strategy. Rotterdam: NAI Publishers.
- \_KROESE, W. (2003). Pleingedachten. In; K. Veenendaal, ed., Pleinenboek. Utrecht: Hogeschool voor de Kunsten. MAARSCHALKERWAART, R. van (2003) Funtionaliteit en inrichting van het plein. In: K. Veenendaal, ed., Pleinenboek. Utrecht: Hogeschool voor de Kunsten.
- \_LEEFBAAR ROTTERDAM (2008) Het Schouwburgplein; laatste kans of volbouwen. Available at; [www.leefbaarrotterdam.nl/newdocs/schouwburgplein.pdf](http://www.leefbaarrotterdam.nl/newdocs/schouwburgplein.pdf) LENZHOLZER, S. (2008) A city is not a building-architectural concepts for public square design in Dutch urban climate contexts. Wageningen: Journal of Landscape Architecture (1).
- \_PALLASMAA, J. (2005) The eyes of the skin; architecture and the senses. Chichester: John Wiley & Sons Ltd.
- \_PRODUCTIETEAM VISIE MUSEUMKWARTIER (2008) Museumplein en omgeving: experts aan het woord. Amsterdam: Dienst Ruimtelijke Ordening.
- \_PROJECT FOR PUBLIC SPACES (2011) Hall of shame; Schouwburgplein. Available at: [www.pps.org/great\\_public\\_spaces/one?public\\_place\\_id=918](http://www.pps.org/great_public_spaces/one?public_place_id=918).
- \_STUURGROEP MUSEUMPLEIN (2008) Visie Museumkwartier; vormgeven aan het culturele hart van Amsterdam. Amsterdam: Dienst Ruimtelijke Ordening.
- \_WERF, J. van der (200) Plein, Park, veld?; een cultuurhistorische verkenning van het Museumplein en omgeving. Amsterdam: Gemeente Amsterdam & Stadsdeel Oud-Zuid.
- \_WEST 8 (2009) Revitalisatie Schouwburgplein. Rotterdam: s.n.

## 7. Behavioural factors

This chapter will try to provide a coherent understanding of human behaviour on plazas. How do people perceive and behave in the public domain according to behavioural sciences? What environmental aspects affect the social dimension of space?

For this, I turned to literature and research from the field of Environmental Psychology. This study tries to understand the dynamic relationship between man and the environment by drawing from the research which demonstrates that the built and natural environment can facilitate, modify or hinder certain human behaviours (Speller, 2006).

The chapter is divided into three parts. The first concerns the general perception of our environment. It clarifies the basic understanding of our cognition process, how we sense our surrounding, and what primitive drives influence our behaviour. The second chapter discusses several behavioural mechanisms and characteristics we have developed to ensure that our primitive needs are met. This results in a predictability of people's actions and likings in the public space. This is discussed at the end.



## 7.1 Human perception

### 7.1.1 Cognition theory

**‘Spatial cognition concerns the way we acquire, store, organize, and recall information about locations, distances and arrangements in buildings, streets and the great outdoors’**

**Gifford (2002: 30)**

This process of cognition is complex. ‘Perception-cognition can be understood as a process by which sensual stimuli become mental constructs’ (Motloch, 2001: 112). It is the way that the environment transforms from being something ‘out there’ to something we understand.

This theory conceptualizes the environment as a source of information (also called stimulus or stimuli). In this our senses are our recipients, the primary indicators in terms of perception. Only the information from the environment that can be picked up by our senses become stimuli, like sounds, light, textures forms (Gifford, 2002).

Thus, the environment provides people with psychological stimulation. However, there is a limitation on the capacity of environmental stimulation that people can process. To avoid an overload of stimulation people have the ability to ignore some features and focus on those that are thought to be of valuable (Bell et al., 1996). This process takes partly place unconsciously. Places with too much stimulus (e.g. crowded or unfamiliar) can lead to decrease in tolerance, frustration and ignorance of others (Lawson, 2001). There are, however, also monotone environments that are stimulus deprived. This leads to boredom and behavioural deficiencies (Bell, et al, 1996; Lawson, 2001).

Bells et al. (1996) explains that the amount of environmental stimulus affects the performance. There is an optimum in this relation, but too much or too little stimulus will reduce the performance.

Focusing on specific stimuli and the amount of stimuli a person can handle is based on the persons experience, personality and culture. It is tiring for

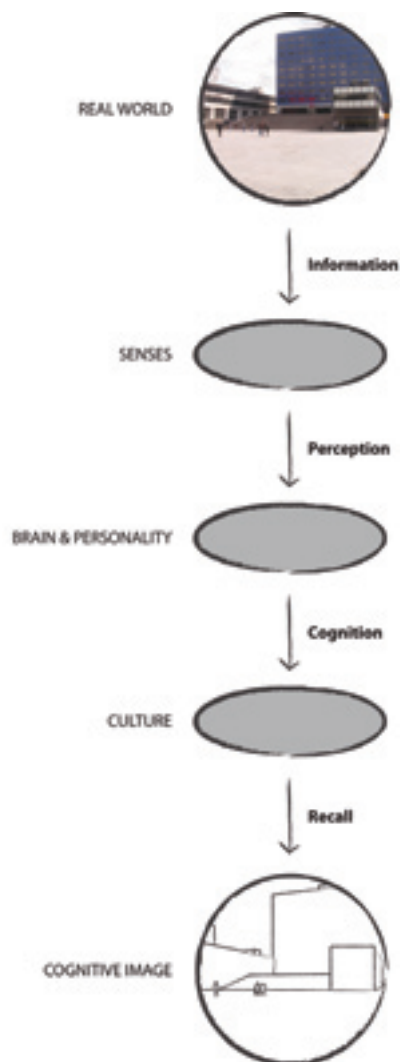


figure 7.1 Brunswick's lens model; 'the environment offers a multitude of [stimulus], the perceiver must make sense out of them' (based on; Knox & Marston, 2009: 204).

a person new to a setting to filter out the right information. This is easier for someone 'familiar' to the place (Knox & Marston, 2009).

### 7.1.2 Senses

In order to understand our relationship with space, we first need to explore how we become aware of it. Each of these senses has its own field of operation and gives us different cues to understand the world around. Our five senses can be divided into two groups (Hall, 1966);

- Senses for direct contact (touch, taste).
- Senses for distance (sight, hearing, and smell).

**'We are more aware of the things we see around us. When we ask ourselves what have we heard today, we find hard to recall!'**  
**Karsenberg (2010)**

Our visual sensation largely dominates our perception. We are unaware our other senses most of the time. Only when the intensity is very high or abnormal, we become more conscious about it (Lawson, 2001). This might very well be cost by the reach of each sense. The general order of sensory distances starts with taste, touch, smell, hearing, and sight. The distances are not abstract since they are related to the strength of the impulse.

#### Taste

The sense of taste is often accompanied by the sense of smell to strengthen the taste. Generally, eighty percent of one's taste is formed on smells. Our taste organ has is capable of detailed sensory of touch. Taste is little used in the understanding of the environment, yet memories are quite commonly connected to certain tastes (Brebner, 1982).

#### Touch

The sense of touch is linked to our entire body. Stevens (2007) describes that two forms of haptic sense are important. 'Tactility', direct touch on our skin, tell us about texture. Inherently we prefer smooth and soft as opposed to rough and spiky materials (Saito, 2008). Thermal perception does not need direct contact. With this we perceive temperature, e.g. climate or body heat.



figure 7.2 Sensory distances.

### Smell

Smell can be considered intimate (Stevens, 2006) and sensitive (Brebner, 1982). It has a great effect on the human behaviour and has the ability to conjure nostalgic memories and reproduce past moods and events (Brebner 1982). It is based on the culture and personality what intensity of smells are acceptable. The sense of smell is not independent of other senses. In fact, sources of unpleasant smells are more often identified visually than by smelling the object in question' (Brebner, 1982).

### Hear

Like all distant senses, hearing is relative to distance. A normal conversation can be heard up to 7 meters, while public speakers, such as lectures, can be understood up to about 35 meters (Lawson, 2001). The noise is unwanted sound (Brebner, 1982; Bell et al., 2001). Cossidy (1997) states there are two reasons for noise to become bothersome. Either it is the physical character of noise (e.g. intensity, frequency) or it is the situation in which it takes place (Bell et al., 2001).

### See

Our final sense, sight, is frontal oriented (Brebner, 1982). Our sight takes part in a corner of 15 degrees wide and 30 degrees vertically (Loidl & Bernard, 2002). In the normal position or view is tilted down. A person can be observed within a clear distance of half a kilometre. An important notion about our sense of sight is that we need time to process. When a person is moving fast less detail is noticed, the focus of the view lies more straight ahead and less attention is given to the environment to the side (Cossidy, 1997).

## 7.2 Behavioural Mechanisms

Lawson (2001) discusses peoples need for safety and stimulants in the public space. It is a desire for new experiences, yet in a safe setting. Kaplan & Kaplan (in; Bell et al., 2001) also stress this in their research on preferred characteristics of environment. They conclude that people prefer a landscape that is both legible and coherent, as well as mystery and complex.

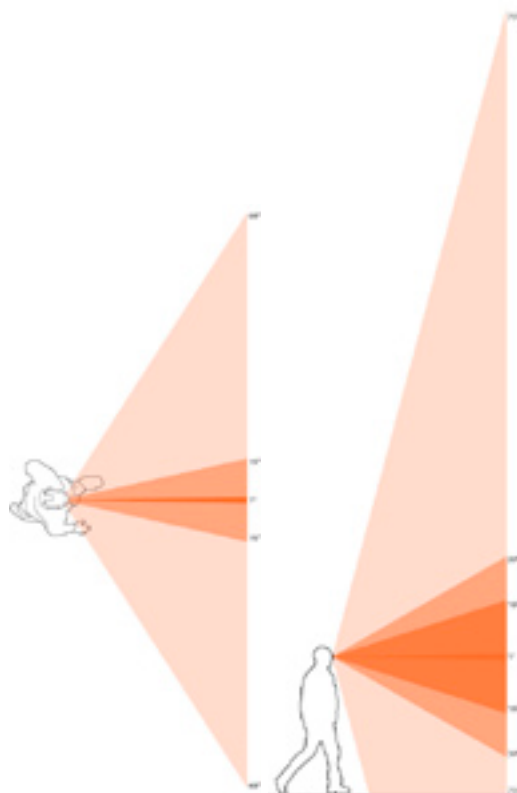


figure 7.3 Human sight (based on; Loidl, 2002).

This contradiction between safe and discovery has let us to develop mechanisms that can be found in our behaviour and our social interaction.

### 7.2.1 Flight vs. fight

In his research, Hall (1966) noticed that animals have a minimum distance in which others are aloud. When this boundary is excited, the animal flees from the area. When that differed specie comes even closer, because the animal is cornered or surprised by the intruder, it does not have the opportunity to escape and starts to defend itself by going up to the intruder. These are respectively called the *flight* and critical or *fight* zone. Humans also create these zones of personal space. When this space is invaded people become stressed and can react fearful or aggressive toward the 'intruder'.



figure 7.4 Fight versus flight.

### 7.2.2 Personal space

Personal space can be defined as 'a portable, invisible boundary surrounding us, into which others may not trespass. It regulates how closely we interact with others, moves with us, and expands and contracts according to the situation in which we find ourselves' (Bell et al., 2001: 253). Hall (1966) defines four scales of spacing between people: intimate, personal, social and public. These scales are determined by the kinds of sensory information people can perceive and transmit about each other.

#### Intimate zone

At the very close range in half a meter around us, we find a zone of close personal contact. This is an area of trust limited to very close friends and lovers. Communication is often done in the form of whispering and touch (Stevens, 2007). This space is related to strong emotional bounds like romance, but also is used for the opposite in fighting.

#### Personal zone

Moving up a zone, we are in a fairly close zone. The range up to 1,2 meters we have reserve for familiar people to have personal conversations and interactions with. We can in this range talk normally to each other but still notice details in facial expression (Lawson, 2001).



figure 7.5 Human proxemics.

### Social zone

In the social distance we have lost all connection of smell and touch. The distance up to 4 meters becomes more impersonal. At the outer side of the distance we have more formal meetings and interactions. Lawson (2001) debates that this has to do with the need for disguising your facial expressions. It becomes more difficult to read someone's mood. This is desired when we talk business and emotions are not needed.

### Public zone

The remaining area is the public zone. The final senses in this space are rapidly lost. This distance all belongs to the previously discussed flight zone. The space between people is wide enough to flee or take precaution when another person is seen like a treat. After about 7,5 meters people need to raise their voice to converse. Inside a 25 meter distance it is possible to determine the mood and recognize people (Goličnik & Ward Thompson, 2010). The maximum 'social field of vision' is reached around 100 meters, as details can be seen such as approximate age, how they walk, clothing. (Stevens, 2007).

Lawson (2001: 114) emphasizes that 'these distances are not absolutely precise, but [...]neither are they entirely arbitrary'. People's social zones and behaviour are different in a given setting. There are many situations which forces to overstep the social boundary, e.g. in public transport or elevators. We are more or less cramped in too small a space as we would really prefer, or crowded (Bell et al., 2001). Since the preferred social distance is intruded, we often try to cheat ourselves by making less use of what we can detect, e.g. avoid eye contact, keeping limbs close and stop talking.

**'Anyone who has travelled in the London underground would not be surprised by the finding that city dwellers tend to avoid eye contact with strangers.'**

**Cossidy (1997: 125).**

Also, in architecture this approach of reducing or removing the stimuli to make a space socially acceptable is used. Walls or vegetation can help to limit conversations to a certain space, but also break up the line of sight between to strangers.

ZONE	DISTANCE	INTERACTION	USED SENSES
Intimate	< 0,5 meter	Close contact (comfort, threaten, protect, love and fight)	See (detail), hear, smell, feel
Personal (close)	0,5 – 0,75	Very familiar (close friends)	See (detail), hear, smell
Personal (far)	0,75 – 1,2	Personal conversation (outside touching range)	See (detail), hear, smell
Social (close)	1,2 - 2	Non-personal conversation (impersonal business, colleagues)	See, hear
Social (far)	2 - 4	Formal conversation (negotiations)	See, hear
Public (close)	4 – 7,5	Human flight distance (no normal conversations)	See, hear
Public (far)	> 7,5		See

figure 7.6 Table of specific personal spaces.

### 7.2.3 Territory

Territories are relative stationary areas, often with visual boundaries, that regulate who will interact (Bell et al., 2001). Territories can be understood as personal spaces made physical and thus emphasizing social space. Territories can have clear boundaries, e.g. fences around a garden. In a freely public space, a person or group can (temporarily) claim a space. Markers, e.g. bags, clothing, books, are used to communicate a territorial claim. Territories can also be personalised to express self-identity, e.g. putting out pictures, planting a tree (Greenbie, in: Motloch, 2001 ; Bell et al., 2001).

### 7.2.4 Prospect and refuge

Appleton (in: Bell et al., 2001) developed the hypotheses of 'prospect and refuge'. Prospect is the ability to have an open unobstructed view of the environment. Refuge refers to a safe and sheltered place where hiding is possible. It is understood that people most appreciate a setting where both qualities are gained simultaneously. The theory refers to this as a way to survive. Prospect gives the ability to see what hazards is approaching, while refuge let us be hidden at the same time. Or as Lawson (2001) explains people seek to maximize their view and minimize the extent to which they are themselves overlooked. This explains the innate preference for high grounds and transitional spaces.

### 7.2.5 Spatial roles

The way we arrange ourselves in space has much to do with the relationship and the activity at hand. Sommer (1965) did a research on the way people position themselves. He distinguished four main roles in which people position themselves. These roles help to map out many of the common spatial situations in which people have to relate to each other in close proximity.

#### *Conversing*

People talking together often sit facing each other or around the corner. This improves the verbal and nonverbal communication and helps to focus on the conversation. Opposite sitting is often more private or intense conversation.

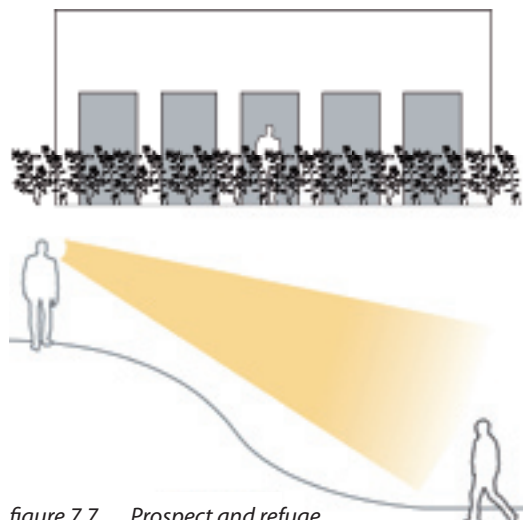


figure 7.7 Prospect and refuge.

### Cooperating

When working together people often sit alongside each other, e.g. colleagues looking over a document. Also, people who are on intimate terms or working together prefers to sit adjacent, so they share the same view (Stevens, 2007).

### Co-acting

People are co-acting when there is no relation with each other. People generally prefer to converse with strangers seated diagonally across from them, because this is less threatening (Hall 1966; Sommer 1969). This minimizes eye contact and gives the opportunity to see what the other person is doing. It is possible to ignore each other without being rude (Lawson, 2001). When one person has an unfair advantage the other can feel vulnerable or being watched.

### Competing

The role of competing or confronting can, for instance, be found in a formal negotiation or with a game of cards. People take in opposing positions. This gives the opportunity to view or 'read' the other while make notes or performing the task at hand. It is important that the two persons are equally seated. When one person has to face the sun, it gives a disadvantage.

## 7.3 Principals of behaviour on the plaza

The previous part has shown that our behaviour and spatial preferences is closely linked with the optimization of receiving the desired sensory information. Behaviour in the public realm can be explained using the mechanisms described above. As a final step to gain inside in the public behaviour, this part will discuss the main activities on plazas; walking, standing, sitting, interacting. This reveals the characteristics of common behaviour in the public space. Where do people prefer to walk? Where do people walk, stop, and sit? Are there specific aspects that stimulate people to meet and interact?



figure 7.8 Spatial roles (based on; Sommer, 1965).

### 7.3.1 Walking

**'Walking is more than a form of transport . . . Walking also lets people stop, change direction, and experience things.'**

**de Certeau (in; Gehl & Gemzøe, 1993: 51)**

The pattern of movement can tell a lot about a person's intention (Whyte, 2001). People passing through or going to a facility on the plaza have a direct or slightly curved path from the entrée to the exit point in a high pace. It is often related to necessary activity. Another pattern of movement is focuses on exploration. The person or group move indirectly, circulating or meandering.

Gehl (1978) states 40 to 500 meters is an acceptable walking distance for people. Goal oriented walking ways generally seek to minimize the distance (Lawson, 2001). Therefore cutting corners is very acceptable behaviour to come closer to the desired line. Also, 'people seem to seek to overcome perceived obstacles in their journeys as early as possible' (Lawson, 2001). There are factors that influence the walking pattern, e.g. routes that provide more safety or comfort, interesting sights or that require less effort. For that matter, height differences, loud traffic, rough surfaces are avoided. Windows, covered passage or shaded paths invite people closer to an edge (Stevens, 2007).

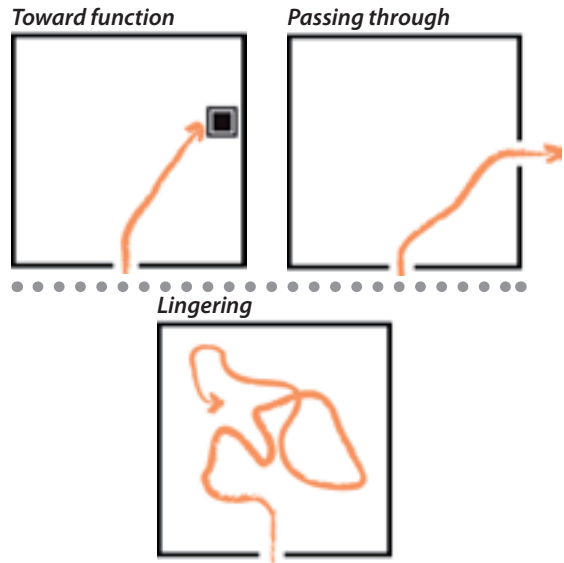


figure 7.9 Movement patterns

#### BOX 12.1 Walkway in the field

Spuiplein is flat without any change in height or pavement. The routes are straight forward between the points of entrance and exit. The pedestrian flows go across the open space.

The Schouwburgplein is risen by half a meter. Many pedestrians arrive at the north and leave at the south corner. However, instead taking the direct route crossing the platform, many go around it, staying at the same level.

The axial paths on the Museumplein do not relate to the desire walking line. As a result, the grass get trampled due to pedestrians cutting corners creating unofficial paths.





### 7.3.2 Stopping

In the public realm you often find people standing about. Short stops in the public space can be done out of necessity (waiting for a traffic light, to orientate oneself), recreational (to rest or watch people) or for social activities.

#### Waiting

People can stand and wait for different reasons, e.g. for a traffic light, in a waiting line or waiting another person (Whyte, 2001). Stevens (2007) explains waiting takes advantage of a time which must necessarily be spent at that location. It is a time to be killed. For that reason people are more likely to engage with others while they wait.

#### Encounters

People stop to talk when they encounter a friend or acquaint. Intersections and crossing pedestrian flows offer a high potential for this (Stevens, 2007). It is here where two can 'bump into' each other or where a group has to part ways. These short conversations often take place in the middle of the pedestrian stream. This may seem arbitrary, yet it enables the people conversing to easily break off the conversation and go separate ways (Stevens, 2007; Whyte, 2001).

### 7.3.3 Staying

When people are conversing for a longer period of time or when standing is for recreational purpose, people are more inclined to move out of the traffic flow and to a more comfortable place that offers better climatic and physical protection, like an edge or underneath a tree (Whyte, 2001). The most popular place for people to situate themselves is the edge, as it offers protection, while allowing controlled exposure to outside stimuli (Stevens, 2007). This is what is called the edge effect (also in 5.6). The edge provides a protected back and an open view in front. This can be explained with prospect and refuge. 'People walking in public space who want to stop and focus their attention on some point of interest typically back up to a boundary to avoid collisions with others' (Stevens, 2007: ).

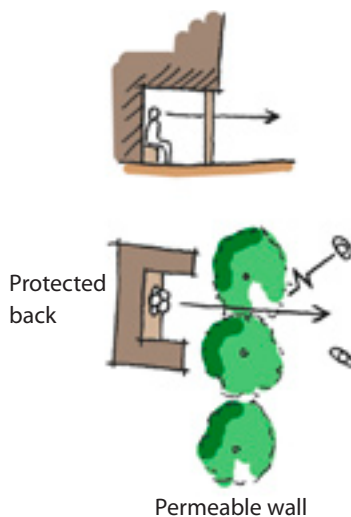


figure 7.10 Sitting space

Aside climatic influences, people generally seek well-divined places out of the pedestrian that offer security (Goličnik & Ward Thompson, 2010). Small objects, e.g. statues, trees, lamp posts, can also function as an edge. Large open spaces are avoided, these are considered too unpredictable and full of hazards (Stevens, 2007). Most attractive space to sit and to stay are, however, close by active areas or activity supporting facilities (Mehta, 2009), e.g. near active entrances, intersections, pedestrian streams (Whyte, 2001).

### 7.3.4 Interacting

**‘Environmental psychologists have long known that the form of public places increase or diminishes substantive human contact.’**

**Hester (2009: 32)**

Lastly, there is the matter of interaction. As discussed earlier the plaza is a plaza for interaction. People that seek a place to chat go and search for the best spot to sit. It might take a while to find it, but these interactions take place regardless. However, interactions with strangers need opportunities to take place. If the public space is not up for it another change is lost.

#### *Sociopetal, sociofugal and neutral*

As the previous paragraph already revealed, the positioning and the distance are key for establishing contact. In the public realm there are setting that encourages interaction and ones that discourages it. Sociopetal arrangements ‘tend to bring people together’ by an inward positioning that establishes eye contact. Sociofugal arrangements ‘tend to keep people apart’ by an outward orientation (Hall, 1966).

The social boundaries (see 7.2.2) are less clear and smaller to the sides and backs of a person, as the senses are frontal oriented (Stevens, 2007). Strangers can easily sit with their backs toward each other without feeling uncomfortable, yet a face-to-face position is considered confrontational (Goffman, 1980). Cavan (in; Stevens, 2007) shows that a side-by-side position is neutral. Both persons remain a great measure of control.

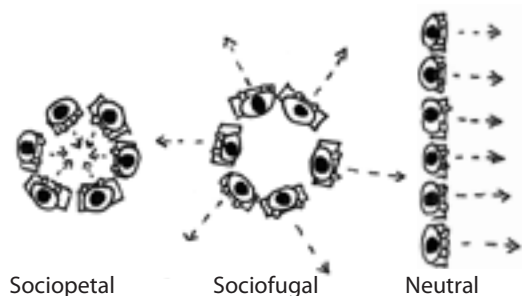


figure 7.11 Positioning to establish contact.

### **Triangulation**

Direct interaction between strangers does not happen automatically. People need to have the opportunity and a reason to connect with strangers. This only happens when both persons are at ease and engage in the same activity together (Gehl 1978; Goffman, 1980).

Whyte's concept of triangulation illustrates how strangers encounter each other in playful experiences. Triangulation is 'that process by which some external stimulus provides a linkage between people and prompts strangers to talk to each other as though they were not' (Whyte, 2001: 94). This can be an unusual person, a performance, music, an interesting object or a sight. This evokes people to feel that they have a commonality to base their interaction on. Triangulation provides a context where strangers initiate contacts. It does so in three ways (Stevens, 2007);

- The external stimulus causes people to spend more time in close proximity.
- The strangers position themselves not facing each other. Making it less confrontational to confront.
- The stimulus provides a commonality to base an interaction around.

#### **BOX 13.9 Triangulation in the field**

During one of the observations on the Rabbijn Maarsenplein a new build board had been put out by the municipality. It showed a bird's eye view of the square from a couple of decades ago. Even though the sign was not put into a specific obviated spot, many people stopped to look at it and discussed the angle the photo was shot and which of the old characteristics are still noticeable in the current day setting. Not only people that knew each other were discussing this also fellow city dwellers, strangers participated in the conversations that happen.





## 7.4 Reflection

The understanding of human perception and behaviour in the public space has given new inside in the designing of a plaza. Understanding the context of the spatial behavioural needs helps the designer to approach a space from the user experience. Theoretically, this can contribute in the making of a plaza that functions as an extension of the daily life and a node for interaction.

This chapter underlines the importance of the consideration of a (social) comfortable setting by taking into account not only physical or climatically comfort issues. Providing a protected setting in which a distant view helps to establish a psychotically safe zone for stay. The consideration of social distances and positioning together with the prediction of spatial use can help to facilitate interaction.

- \_BELL, G., RANDALL, E. & ROEDER, J.E.R. (1973) Urban environments and human behavior; an annotated bibliography Stroudsburg: s.n.
- \_BREBNER, J. (1982) Environmental psychology in building design. London: Applied Science Publishers Ltd.
- \_HALL, E.T. (1969) The hidden dimension. New York: Garden City.
- \_HESTER, R. T. (2006) Design for ecological democracy. Cambridge: the MIT Press.
- \_GEHL, J. (1978) Leven tussen huizen. Translated by J. van Beusekom. Zutphen: De Walburg Pers.
- \_GEHL, J. & GEMZØE, L. (2008) New city spaces. Copenhagen : Danish Architectural Press.
- \_GIFFORD, R. (2007) Environmental psychology; principles and practice. Colville: Optimal Books.
- \_GOLIČNIKA, B. & WARD THOMPSON, C. (2010) Emerging relationships between design and use of urban park spaces. *Landscape and Urban Planning* (94).
- \_GOFFMAN, E. (1980) Relations in public; microstudies of public order. New York: Basic Books Publishers, inc.
- \_MEHTA, V. (2009) Look closely and you will see, listen carefully and you will hear: urban design and social interaction on streets. *Journal of Urban Design* (vol. 14., no. 1).
- \_MOTLOCH, J.L. (2001) Introduction to landscape design, 2nd ed. Austin: John Wiley & sons, Inc.
- \_KNOX, P. L. & MARSTON, S. A. (2009) Human geography; places and regions in global context. Berkshire: Pearson Education.
- \_LAWSON, B. (2001) The language of space. Oxford; Architectural Press.
- \_LOIDL, H. & BERNARD, S. (2003) Opening spaces; design in landscape architecture. Basel: Birkhäuser.
- \_SAITO, Y. (2008) Everyday aesthetics. Oxford: Oxford University Press.
- SOMMER, R. (1965) Further studies of small group ecology. *Sociometry* (vol. 28, no. 4): American Sociological Association.
- \_SPELLER, G. (2006). A place of my own. *Green Places* (26).
- \_STEVENS, Q. (2007) The ludic city; exploring the potential of public spaces. London, New York: Routledge.
- \_SOMMER, R. (1965) Further studies of small group ecology. *Sociometry* (vol. 28, no. 4).
- \_WHYTE, W. H. (2001) The social life of small urban spaces. New York: Project for Public Spaces.



# PART C. DESIGN



The previous part provided various factors that are involved in the functioning of a plaza. The knowledge gained from the field of Environmental Psychology provided an inside in perception and behaviour. This knowledge can be seen as an extension of the designers scope. Yet, how can behavioural understanding be integrated in a plaza design that evokes public life?

This part will focus on the design case of the Spuiplein in the Hague. This will be an example design to demonstrate how urban design can benefit from behavioural understanding and improve the public space with it. The design part is set out in an extensive analyses, a design vision and the design itself.

## 8. Analyses

This chapter first gives a general introduction about the site, its location and the new plans for the place. The following seven paragraphs study the functioning of the plaza factors. In the reflection the main issues are visualized.

This analyse is created by combining different techniques. Various documents concerning policy design and research about the site were used. I have interviewed several facility holders (Boelens, 2011; van der Hengst, 2010; Raaijmakers, 2010), the steward of Spuiplein (Tonkes, 2010) and two involved landscape architects for the Ingenieursbureau Den Haag (Schipper, 2010; Röwekamp, 2011). I also conducted short and long term observation and talked with various people on the street to get a realistic image of the use of the site.



## 8.1 Site introduction

The Spuiplein together with the Nieuwe Kerk Garden and the Rabbijn Maarsenplein form the redesign project *Cultuurforum Spui*. This is one of the sub projects in the 'Den Haag Nieuw Centrum' (2010). The municipality wants to transform the plaza into 'a central meeting spot and a place to be' (Municipality the Hague, 2009).

The Spuiplein is one of the larger public spaces in the city of the Hague. It is located at the eastern edge of the city centre, in between the central station and the shopping district. The plaza was designed by architect Joan Busquets in cooperation with the Hague Municipality in 1996. Surrounding the Spuiplein are the city hall, the city library, a large hotel and two theatres, the *Lucent Danstheater* and the *Dr. Anton Philipszaal*.

Adjacent to the plaza lies the Nieuwe Kerk Garden, a walled-in pocket garden surrounding the old church. The Rabbijn Maarsenplein is a small neighbourhood plaza with primarily Asian restaurants.

### *The Hague*

The city the Hague is located in the West of the Netherlands on the coast. Other than most Dutch cities, the Hague is not originated as a trading city. However, the Hagues' origin can be traced back to the Medieval Times as it was a large forestry area that was interesting for the counts to hunt. Multiple manors were build in the time on the high and solid grounds of the old beach ridges. Later the city expanded and housing districts were build on the old beach plains. Therefore the Hague has developed itself based on the parallel old dune ridges, unlike the traditional Dutch cities with a radiant layout (Gemeente Den Haag, 1989).

The Hague has grown as a government city. It is not only the capital of the province of South Holland, but also houses the Dutch Parliament, the Royal Palace, and the International Court of Justice. This has attracted many Ministry offices and embassies in the city (Meyer, 2009)



figure 8.1 Spuiplein in city of the Hague.



Overall



figure 8.2 Spuiplein (GoogleEarth, 2011).



Spuiplein

Nieuwe Kerk Garden

Rabbijn Maarsenplein

### **Why the Spuiplein?**

The Spuiplein is one of the plazas that is planned to be redesigned. The municipality is currently working on a vision. Although the plaza has been discussed on ideas for development (XPEX BV & Queeste architecten, 2010), there is no final plan or decision made on the design. This makes it possible to approach the project differently. At one point, I feel free from the cities design discussion on creating a cultural focused plaza. I see the Spuiplein as a example to try out the approach of understanding and incorporating behavioural science into a design on public space.

When comparing the historic development of the Spuiplein to the general trends (see chapter 3) it shows a remarkable resemblance. The Spuiplein used to function as a lively city harbour until 1904. After is was filled up it became an intersection and parking space for trams during the '40s, turning it into a traffic invaded plaza. The tram routes were demolished around 1983 after which the theatres were constructed and the city hall. Yet, the plaza stayed an abandoned space, even after the redesign in 1996. The connectedness of the Spuiplein to the historic trends makes it very well suited to function as a design model in this thesis.

From a designers point of view, the plaza offers much potential to attract a differs public. It is located at a main pedestrian routes in the city, surrounded by various land uses and facilities, and it is near users with a different cultural or social backgrounds, ages and functional perspectives. The cultural and civil facilities operate on the large city scale.

### **Policy**

De Kern Gezond (1989) is the main planning policy of the municipality of the Hague that focuses on the improvement of the city centre. Creating a enjoyable pedestrian zone is central in the policy. The key aspects in this policy are;

- Improving maintenance,
- Reducing cars,
- Increase green,
- Stimulate multiple usage of public space,
- Improve the social safety, and
- Stimulate local economy.



figure 8.3 Spuiplein in Nota De Kern Gezond (Gemeente Den Haag, 1989).

In the policy, the Spuiplein is seen as an important link between the Central Station/Spuikwartier and the city centre. The space needs to be open for special events and must offer a place for large groups. The policy recommends to use only a few objects in the plaza. The green space of the Nieuwe Kerk Garden needs to be increased and the accessibility improved (Nota de Kern Gezond, 1989).

Resulting from the policy Nota de Kern Gezond is the project *Internationaal Cultuurforum Spui*. For this, the current theatres (*Lucent Dans Theater* and *Dr. Anton Philipszaal*) are being replaced by a new centre for dance and music. The municipal ambition is to turn the Spuiplein into a cultural heart. The Hague likes to become the European Cultural Capital in 2018. A second step in this project is to redesign and combine the Spuiplein, the garden of the Nieuwe Kerk and the Rabbijn Maarsenplein to form the *Internationaal Cultuurforum Spui*.

In the vision plan on the Spuiplein a number of aims were set out (Municipality The Hague, 2009);

- Coherency in programming and functions.
- Facilities of cultural and recreational nature and intensive cultural programming of events.
- Spatial coherence in a high quality public space (materialization, walking lines, sight lines).
- Clear edges that emphasises the borders of the culture forum with attractive building facades.

A brief program list from the Nota van uitgangspunten *Internationaal Cultuurforum Spui* (Gemeente Den Haag, 2009);

- Connect the pedestrian stream on the Kalvermarktstraat and the Grote Marktstraat,
- Clear orientation from the Spuiplein to the Rabbijn Maarsenplein,
- Maintain the different identities of the three plazas,
- Increase underground parking with 140 places,
- Connect the public transport to the plaza,
- Make the garden public accessible,
- The St. Jacobstraat should be open and save,
- The Spuiplein needs to have daily activities and programming,
- Provide more green and sitting places, and
- Provide more comfortable public sitting spaces.



figure 8.4 *The Spuiplein in the Cultuurforum project (Gemeente Den Haag, 2009).*

## 8.2 Context

Every plaza has its own position in the urban landscape. The location of the plaza determines the function and the characteristic of the plaza. The Spuiplein forms an important stepping stone in the main pedestrian route between the centre and the central station. In this route the Spuiplein can be understood as the gateway to the centre, it forms a node where people have to direct themselves.

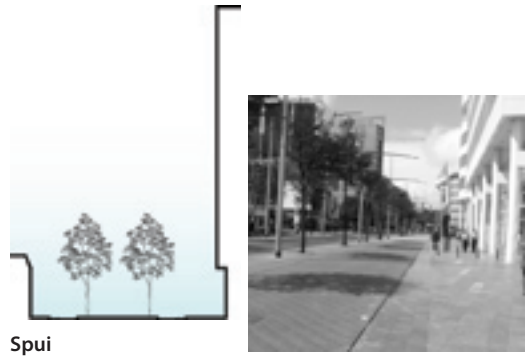
The map underneath shows position in urban network and the connection between other people places in one kilometre radius. The Hagues unique structure forms an intense network of small open spaces. Spuiplein is positioned outside this network without solid connections to other plazas. A strong link with these places would not only attract people to the plaza, but also helps people to orientate themselves.

On the north east side lies the office district Wijnhavenkwartier, with multiple office and ministry buildings in walking distance (500m) To the South is a residential district, to the west the city centre.

figure 8.5 Urban system.



Surrounding the Spuiplein are seven streets leading toward the plaza. The Spuiplein is located along the street the Spui, one of the major streets around the centre motor traffic and trams. The Spui has narrow pedestrian paths, car and bicycle lanes and tram routes. Along the street there are Tilia trees. These make the street aesthetically pleasant and reduce the strong wind on the street. However, the trees also block the view on the plaza. This is reducing the visual access of the Spuiplein.



Spui

The Turfmarkt is a pedestrian street to the train station. The large width, trees and mixture of amenities make it a lively street. There are many small stores e.g. café, kiosks and food vendors.



Turfmarkt

From the Spuiplein to the east there is a pedestrian path underneath the city hall, leading to the Kalvermarkt, a busy street for cars and trams. The tram stops where both streets meet. The alley is largely occupied by a guarded bicycle parking. This forms a physical and visual barrier.



figure 8.6 Paths leading to the plaza.

Toward the southeast a narrow alley is going to the Schedeldoekhaven. Across from this road there is a pedestrian gateway into a residential neighbourhood (to the street Lamgroen). A proper crossing both visually and physically is missing. This however, has great potential to attract local residents to the Spuiplein. The Schedeldoekhaven is a road focused on motorised traffic. At the end of the pedestrian pathway there is a bus stop. The alley consists out of blind walls.

The Bezemstraat connects the Rabbijn Maarsenplein to the shopping district. Open facades and stores enclosing the pedestrian street, yet facilities for resting are missing.

St. Jacobstraat ends onto the Wagenstraat, a narrow street with small local stores with housing above. The entrance into the street from the Wagestraat is missing.

From the pathway along the Nieuwe Kerk Garden starts the narrow Kranestraat. This is leading toward the Amsterdamse Veerkade and continues beyond into a housing district. However a safe pedestrian crossing is missing. The Kranestraat is located in between the side of a parking garage and the backside of a theatre. The facades are closed and lack facilities. Narrow sidewalks are separated by a car lane with parked cars along, leading to the parking garage. The street profile makes it physical and symbolical uninviting. At the end of the street lies the church, forming a clear visual landmark in the city structure and emphasising the plaza.

### 8.3 Place

The analyses of the sense of place discusses both the physical and symbol setting to understand the sense of wholeness and the identity of the public spaces.

Rabbijn Maarsenplein is strongly enclosed by buildings and the church wall. The large Platanus trees fragmentate the place into a human scaled plaza. Trees are also an important part for the identity as a comfortable introvert space. In the middle of the plaza lies a modern Jewish war monument revealing



to Kalvermarkt



to Schedeldoekshaven



Bezemstraat



St. Jacobstraat



Kranestraat



figure 8.7 Cross sections of the connecting streets



the Jewish origin of the district. Now the plaza is a part of the Chinese district. There used to be many Asian residents. The Asian restaurants, red lanterns above the crossings and the Chinese translation of the street signs show these roots. This gives the Maarsenplein an assemble of meanings instead of one clear identity.

The Nieuwe Kerk Garden provides a green space with a grass surface and a mixture of tree species. This green space or urban garden is unique, as park-like spaces are scarce in this part of the city. It is enclosed by one and the same brick stone wall. This makes the place a hidden spot that provides a calm and relaxed setting. The brick pavement fits the church and the wall. In the garden, a grave monument of historic Dutch philosopher Spinoza is located. This is not located in a dominant location.

The Spuiplein is less strongly enclosed by the surrounding buildings. The theatre together with the side of the city hall building provide the most

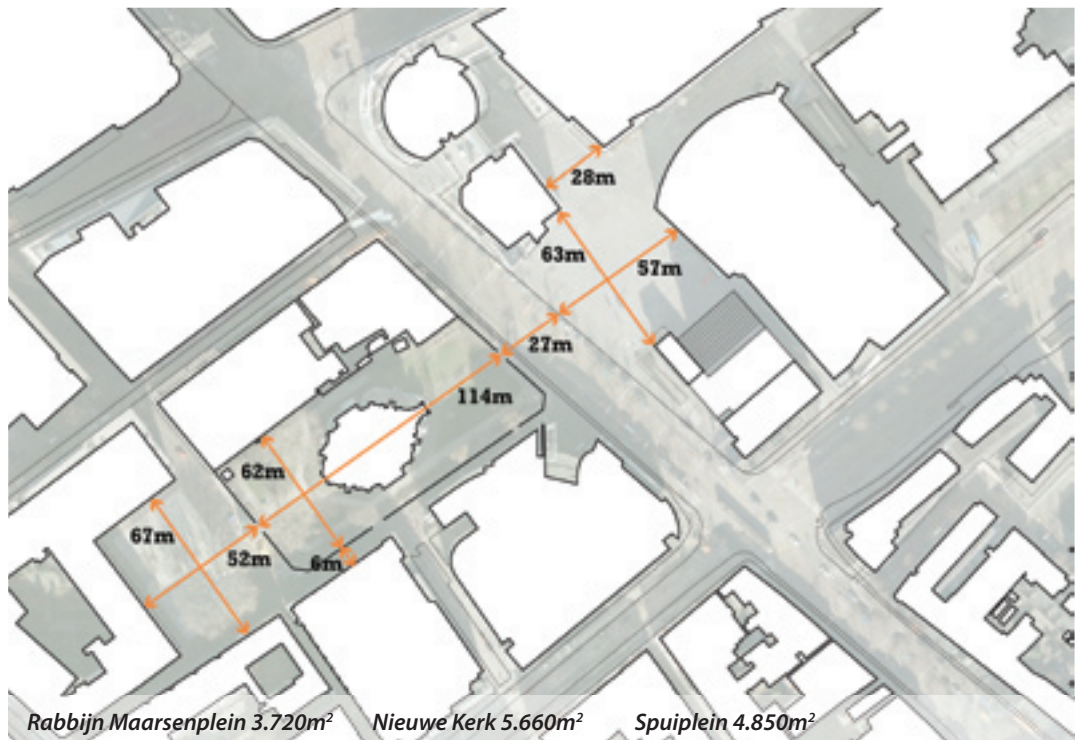


figure 8.8 Plaza scale.

clear edge. The stairs along the southeast side form a soft edge, whereas the remaining side of the plaza lies open to the street. The Spuiplein is one open space, without any dividing smaller experienced spaces. The pavement is uniform and has a subtle pattern that is used in the whole pedestrian area on the north. This does not strengthen the plaza as a unique space, however it is more integrated in its surrounding. The plaza is lacking social or historical references, apart from being a place for the skater community. The surround gives the plaza a modern ambiance.

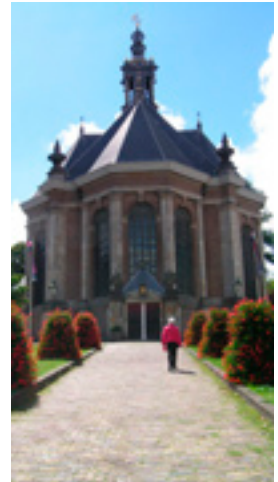
The next page shows a photo collage of the three spaces during my visits. I would like to use this to give an impression of what I understand as characteristics of the plaza. This contributes to the identity of the place.



figure 8.9 Enclosure.



**SPIJPLEIN**



**NIEUWE KERK**



**R. MAARSENPLEIN**

## 8.4 Orientation

The entry from the Turfmarkt at the northeast side show spatial change, going from closed to open. This gives a sense of arriving. Other entry points are less clear. The pavement stays the same on the entire plaza. This makes orientation difficult. The Turfmarkt entrance is the most intensely used. Most people arrive here and turn the right corner toward the city hall or the city centre. Next to the theatre lies an entrance to the underground parking garage. Currently people stepping out are faced toward the alleyway. This makes it hard to orientate oneself to the Spuiplein. At the Spuiplein mostly direct movement takes place. The wide and busy Spui street causes a problem for pedestrians. The two car lanes and the two tram routes form a boundary between the garden and the plaza.

The Nieuwe Kerk Garden can be entered at four gateways in the wall. Often however only the front and back gates were unlocked. All gates are closed between 18.00 and 8.00. R. Boelens (2010) explained this decision was made when drunks and

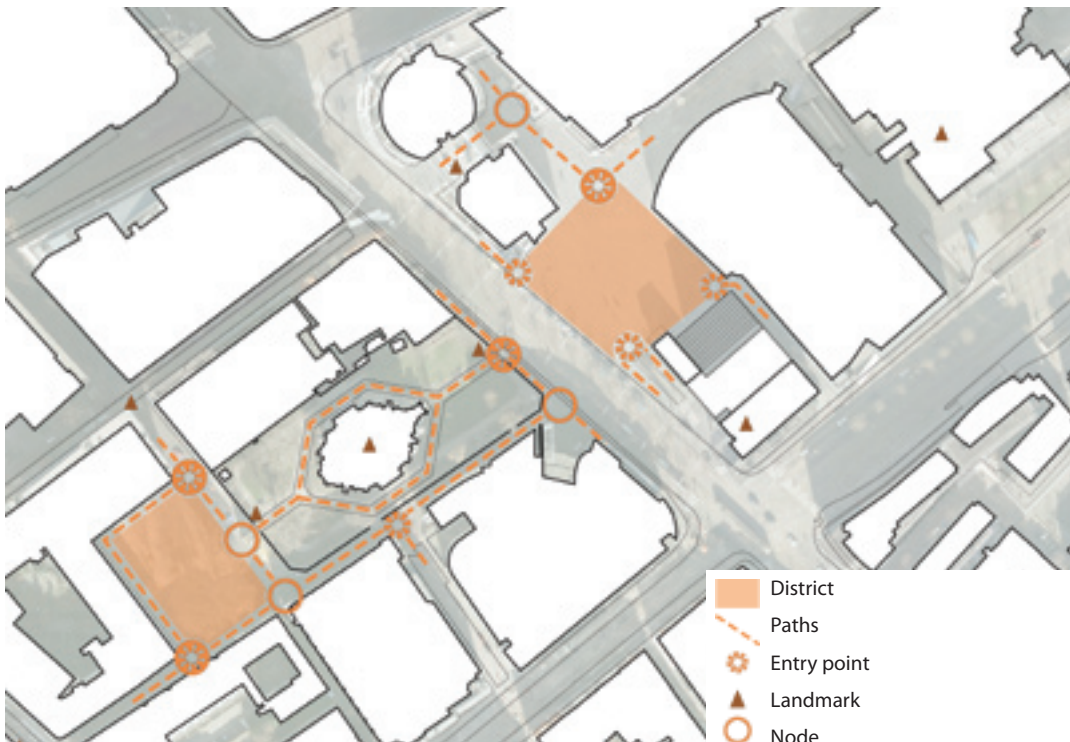


figure 8.10 Legibility.

homeless caused to much noise disturbance during the night as the garden became a place to hang out. Now this problem is dealt with. However, R. Tonkes (2010) noticed that this group has now moved to the stairs of the Spuiplein. The other side gates of the garden are located to the side wall. These and the back gate have steps that exclude disabled to enter the garden. Alongside the garden is a narrow pedestrian path. That is enclosed by the church wall and the *Theater aan het Spui*.

The Rabbijn Maarsenplein uses pavement to indicate paths at the edge of the plaza. Most people however cross the plaza diagonal. From the south of the Sint Jacobstraat to the Bezemstraat. There are three points of entry plus an entry from the parking building. All entrances include a change of scale. The movement on the Rabbijn Maarsenplein is much more characterised as lingering and strolling.



figure 8.11 Movement.

## 8.5 Function

The facilities are the driving force that bring people to the plaza. The dominant facility on the Spuiplein is the theatre *Dr. Anton Philipszaal*. This is the building that will be replaced for a new dance and music centre that will integrate the Royal Conservatory, the Dutch Dance theatre and the Residence Orchestra. Currently, the theatre attracts dance students during the day and visitors at night. The east side is occupied by a hotel and a restaurant. The hotel attracts mostly businessmen. Guests leave in morning and arrive during the afternoon and evening. There has regularly been complains from the guest of noise disturbance from the plaza (van der Henst , 2010). On the other side the city hall and the library provide a constant coming and going of visitors and workers during the day. The bistro on the corner of the city hall is quite popular with office workers. According to the owner, the interior store mostly attracts people that purposely go to the store. The Spuiplein has little functions during the day as their is a very minimal variety of functions.



figure 8.12 Facilities and amenities.

The monumental church is the sole function in the garden. It is no longer used for religious purposes, rather an event building, catering mostly to business and governmental congresses. The desire for the company using the building is to have an outside space available (Boelens, 2010). On the front of the garden is a small terrace on the side of a bistro located at the Spui. This attracts people during the day. On the other side of the eastern wall lies the *Theater aan het Spui*, the *Filmhouse* (an art house cinema). The cinema also has an included restaurant. This is all mostly used during the evening and attracts a diverse public (Raaijmakers, 2010).

Two sides of the Rabbijn Maarsenplein are occupied with seven restaurants. On the side of the Sint Jacobstraat are a Chinese goods and a well-being store that does not attract a lot of people. Across the plaza lies the *Markthof*. A small shopping mall, including amongst others a kiosk, a florist, a bakery and a butcher. These local stores are all well used in day time. Above the store there are apartments.

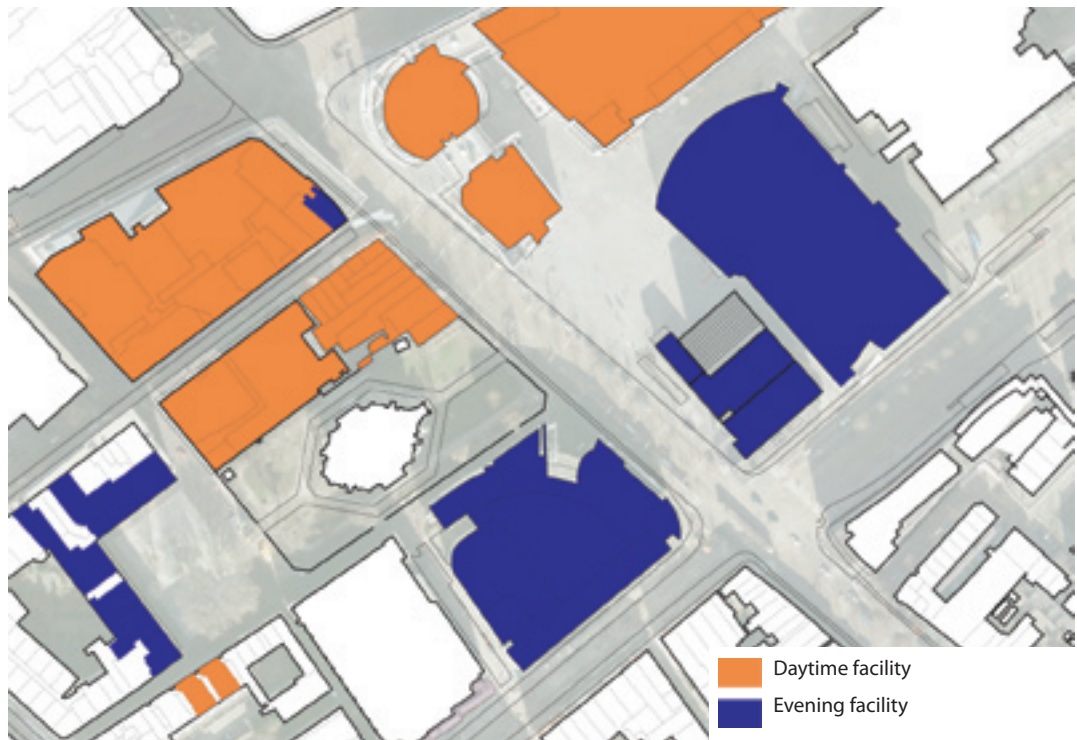


figure 8.13 Time spread

## 8.6 Edge

The Spuiplein is lacking in open transitional edges. The side of the interior store is a blind wall. The theatre and the restaurant are formed out of tinted glass, which at night during opening hours this offers a glimpse into the building. Yet, it become an empty facade during the day. The stairs on the east side create a soft edge. The theatre, the hotel, and the restaurant all do not use the outdoor space of the plaza. In an interview assistant manager van der Henst (2010) has shown interest to use the empty roof terrace for their restaurant. This can draw the hotel outward. The entrances to the facilities lie away from the plaza, with the exception of the theatre. This obstructs interaction between the facility. The library and the city hall both have good facades. Inside the facilities there are a lot of people waiting, sitting and reading at the windows. Although there is a transparency between in- and outdoor, the facilities do not use the outdoor space.

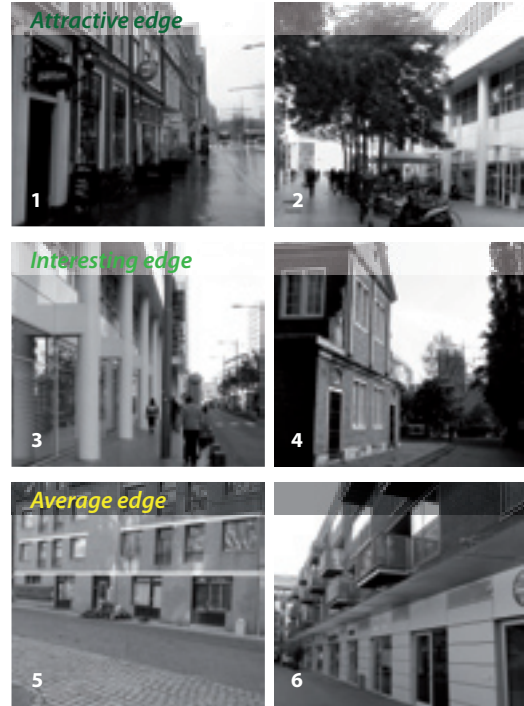


figure 8.14 Edge quality.



The edge of the garden consists out of a high brick church wall. Toward the Spuiplein this wall turns into a fence. The adjacent building has little windows. This causes a limited social control on the garden, which explains the concern of the undesired users. The church has no windows or open doors at ground level. The building includes a lot of details, this improves the quality and reduces the sense of an unattractive facade.

Rabbijn Maarsenplein makes more use of the public space. The restaurants already occupy the public space and their entrances are all logically oriented toward the plaza. The surrounding apartment have a good view on the plaza. The parking garage makes a transparent, yet uninteresting facade.



figure 8.15 Entrances.

## 8.7 Place of stay

Spuiplein has a surprisingly low availability of sitting places at hand. The most dominant element is the large steps next to the hotel. This integrated sitting space is well used by youth and skaters. The parallel steps make it into a neutral space. The city hall bistro has its own terrace protected by glass wind screens from the harsh wind coming out of the Spui street. This wind is very bothersome, especially strong in front of the city hall. Here the wind is blown into the building that basically forms a funnel. The overhang in front of the city hall is later placed to screen of from the wind and to shelter from the rain (Tonkes, 2010). The lack of places to stay makes people adapt. The save strip, repelling skaters, in front of the theatre is used as a sitting space. In general the plaza is quite noisy due to the traffic.



The bistro at the Nieuwe Kerk Garden offers terrace seating overlooking the garden. Public seating can be found in the form of wooden benches both in front and to the back of the church. The lawn is used on sunny days.

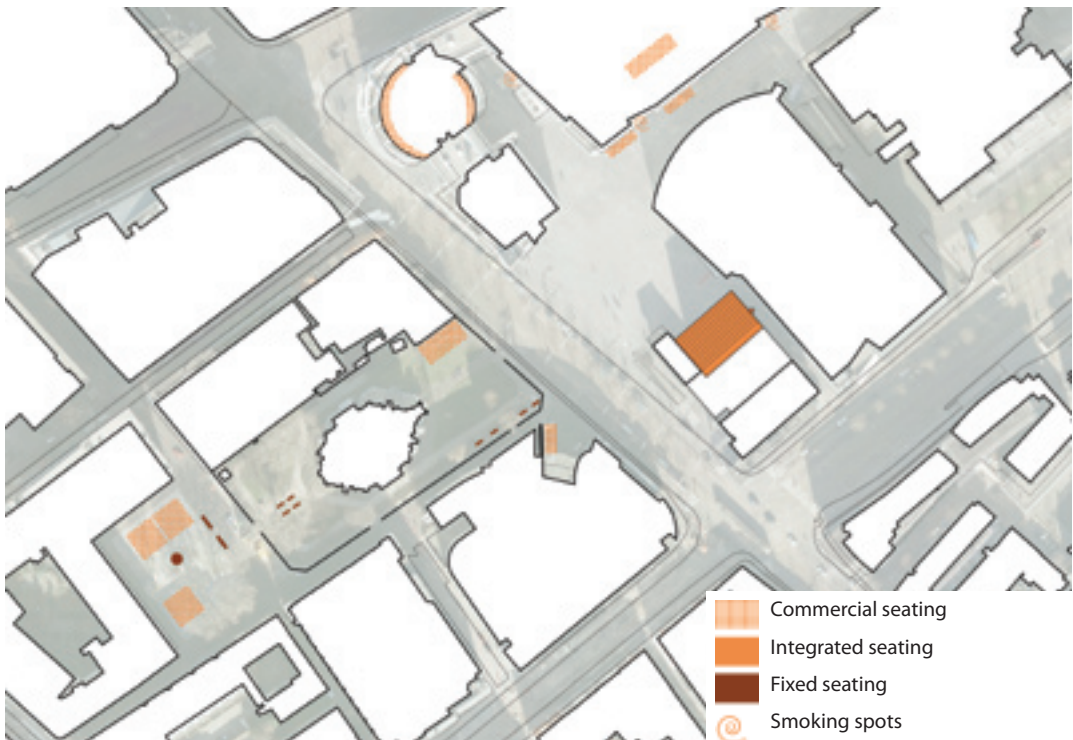


figure 8.16 Sitting places

There are plenty of commercial seatings at the Rabbijn Maarsenplein. The chairs and tables of the restaurants are however often stacked during the day and only in use during the late afternoon and evening in the summer. The Platanus trees provide a pleasant shade and wind protection. The amount of public seating is low here. There are two wide benches at the entry point of the Bezemstraat. These are intensively used due to its location and the possibility to sit back to back without any discomfort. Mostly residents and shoppers coming from the centre going to the parking garage stop here. In the middle we find the Jewish monument that consists of small metal seats positioned in a close circle. The material and the shape make this a very unpleasant sitting. The playground lacks comfortable places to stay. Parents often stand impatiently waiting until their child is done playing.



Appendix 1 provides an overview of plaza use during one of the long term observations on the plaza.



figure 8.17 Staying over.

## 8.8 Entertainment

The daily stream of pedestrians turning the corner at the Turfmarkt provides an interesting scene. Also, people skating and performing tricks on their bikes in front of the steps at the hotel forms entertainment for the audience on the stairs. At the plaza there are ten large potted plants that change position and vegetation during the year. However, in the large scale of the open space they are too small to make a clear statement of displaying seasonal change. The unplanned uses changes throughout the year. In December, during the analyses period, a dumpling stall was set on the plaza and decorations were put out, e.g. lighting, large snowman. In the city hall was a life nativity scene acted out by the homeless. Also, other events are held in the public space in the city hall, like music performances, art displays. In the centre of the plaza are built-in springing fountains that attract kids in the summer.

The Spuiplein hosts a number of events throughout the year, e.g. music event/festivals (Konninnenach, 5 Mei festival, Beatstad) and sport events. The stage



figure 8.18 Daily entertainment aspects.

for events is difficult to position (Tonkes, 2010). The buildings echo the noise and block the entrance of the theatre. Originally the steps in front of the hotel were created as a tribune. Unfortunately this causes a lot of noise disturbance on the hotel (van der Hengst, 2010). The noise needs to escape into an open space or adsorbed by vegetation. Events needs adequate escape routes and the possibility for heavy vehicles to set up. Large festivals are not suited for this location (Tonkes, 2010). Events larger than 5000 visitors are held elsewhere.

The Nieuwe Kerk Garden is a calm place. The church sometimes has set up some small tents or tables for their events, but this is often closed for the public. The strength for this space lies in seasonal change of the trees. Not much activities take part either as the sloped lawn makes sports difficult.

The Rabbijn Maarsenplein very occasionally has a planned event, like Chinese new year. This consists of market stalls and small scale performances. The main attraction are the passersby coming from the centre and activity on the playground.

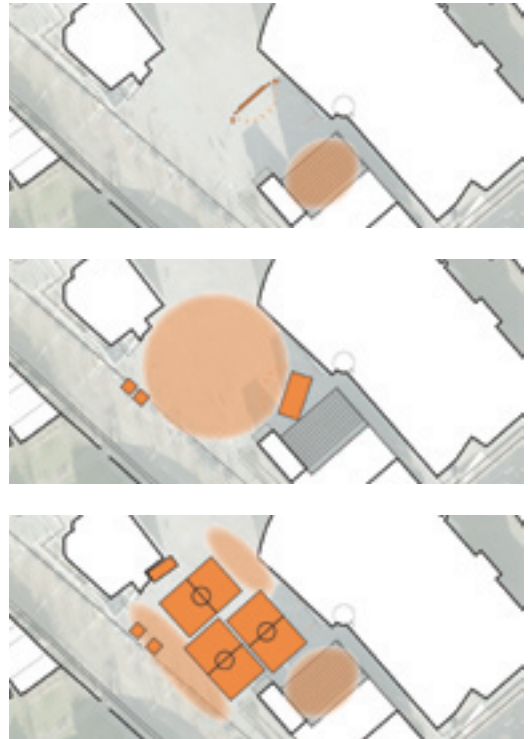


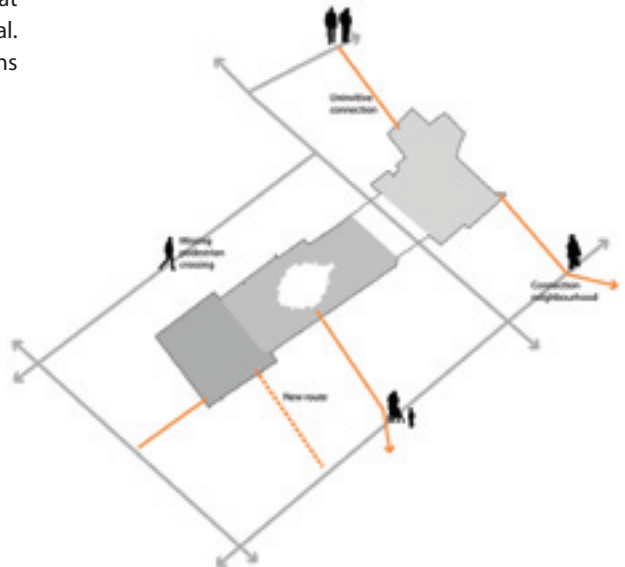
figure 8.19 Event us`e (open air cinema, music festival, basketball tournament)



figure 8.20 Koninginnenach 2010 (www.flickr.com)

## 8.9 Reflection

The analyses has shown that their are aspects that need improvement and that which show potential. The following maps show the key recommendations for the new Spuiplein.



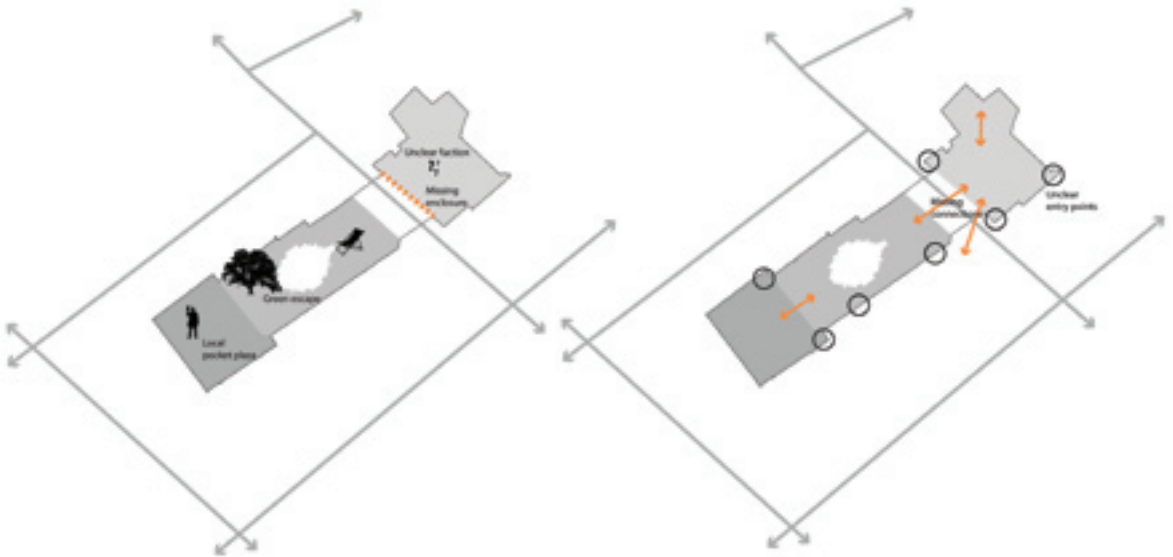
### **Connect**

The qualities of connections into the city lies in the main pedestrian route toward the central station and from the parking garage at the Rabbijn Maarsenplein to the city centre.

Yet, the plazas are insufficiently connected with pedestrians flows and neighbourhoods. Alleys with blind walls, busy motor traffic streets and narrow pedestrian routes has resulted to a place that lacks in connection.

Recommendations:

- Use the church as a focal point from the Turfmarkt and the Kranestraat.
- Replace the guarded bicycle parking.
- Provide safe pedestrian crossing at the Grote Marktstraat, Schedeldoekhaven, Gedempte gracht and Kranestraat.
- Connect the tram and bus stop to the paths leading to the Spuiplein.
- Connect to the Lamgroen and the second part of the Kranestraat.
- Transform paths to Schedeldoekhaven and Kranestraat into safe and attractive route.
- Create a new connection to the Rabbijn Maarsenplein.



**Place**

The main issue for the sense of place is the lack of a clear identity or function of the Spuiplein. It does not distinguish itself physically and symbolically from its direct environment. The other two places have unique qualities of a local meeting point and a restorative area. Even though these potentials are not optimally used, they form a solid base.

Recommendations:

- Expand on the identity of the Rabbijn Maarsenplein as an enclosed local plaza and on the garden as a green restorative place.
- Transform Spuiplein into a distinct place, by creating a fourth edge.
- Spuiplein does not express a clear image or identity or function.

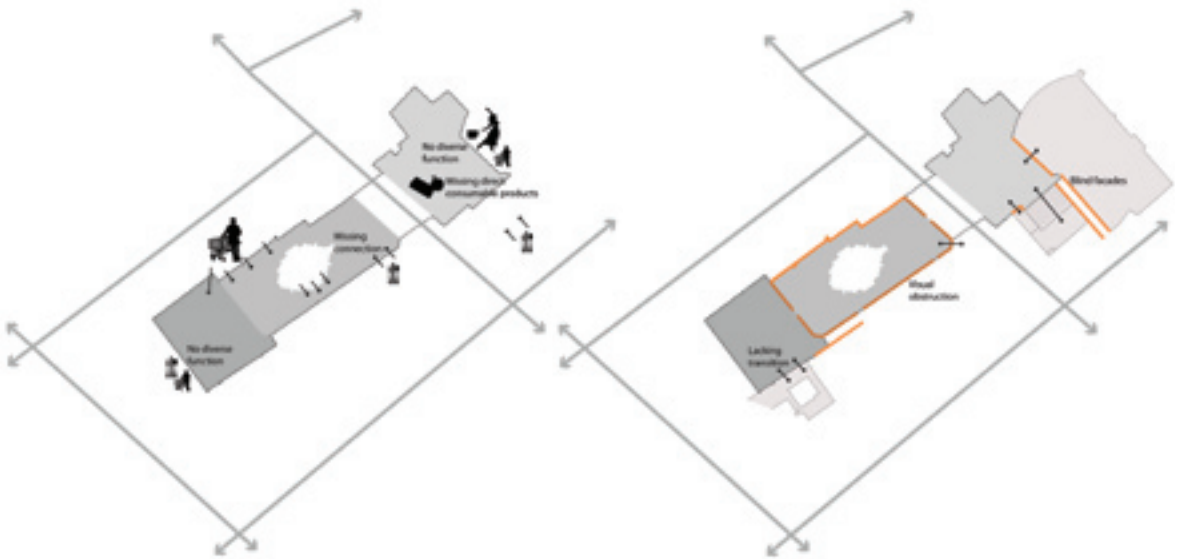
**Orientation**

The accessibility of the garden and clear sense of direction on the Spuiplein are the main concerns for the orientation. It is unclear where to go due to the absence of clear paths and entry points.

A good connection between the three plaza shows potential to form a clear attractive route to the city centre from the central station, something that is not yet established in the Hague.

Recommendations:

- Provide a clear pedestrian crossing over the street Spui.
- Create clear entry points on the Spuiplein.
- Improve the main entries of the garden by clearing the steps and widening of the gateway.
- Unlock the side entrances of the garden.
- Open the garden longer during the evening.



### Function

The lack of diverse functions and the connection to the plazas have reduced the use and significance of the public spaces. The garden has no functions at all. However, the existing facilities, e.g. event church, hotel and stores, provide a quality to the area. It can use the public space when linked appropriately. Also the new theatre is a clear opportunity to integrate a diversity of facilities to the Spuiplein.

Recommendations:

- Establish a facility that provide for people using the plaza, e.g. vendors, kiosks.
- Offer place for more diverse facilities at the Spuiplein and the Rabbijn Maarsenplein.
- Connect existing facilities to the plaza, e.g. the *Markthof* or restaurant *Spize*.

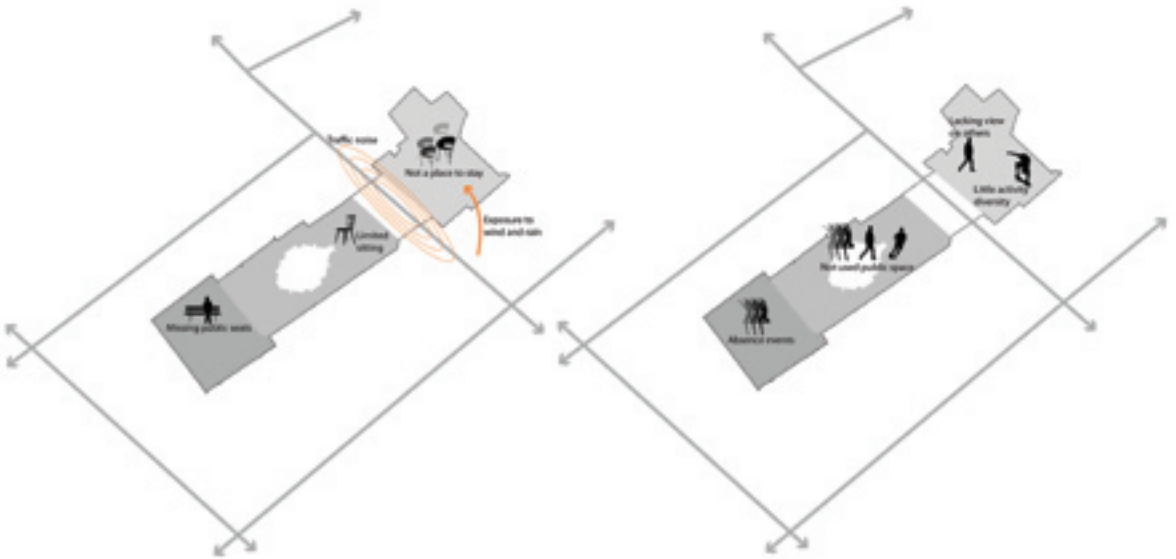
### Edge

The church wall is the main factor that visually separates the three public spaces.

Recommendations:

- Orientate the hotel to the Spuiplein with the use of the roof terrace.
- The new theatre should have clear windows and doors to the Spuiplein.
- Draw the city hall and library out.
- Make the church wall visually transparent.
- Extend the housing block outside onto the plaza.
- Aesthetically improve the garage frontage.





**Stay**

Maybe the main issue for the three plazas is the lack of public sitting. While the Rabbijn Maarsenplein shows great qualities for commercial sitting and the Spuiplein includes a sizeable tribune, it lacks sufficient and diversity of seats and sub places. The Spuiplein has the additional problem of noise and wind disturbance.

Recommendations:

- Protect the Spuiplein from wind and traffic noise.
- Increase places to stay to facilitate a wider diversity of user groups.
- The playground needs sitting for the parents.
- Illumination of the garden needs improvement.

**Entertainment**

The presence of the skating community is the greatest quality to create a form of entertainment on the Spuiplein. For the Rabbijn Maarsenplein this is the presence of the small playground and the endless flow of pedestrians. However, activities are lacking, especially in the evening. The absence of objects or settings that facilitate the activities, is the main reason for this.

Recommendations:

- Maintain smooth pavement to facilitate skating.
- Reduce echoing of noise against buildings.
- Maintain an open space at the Spuiplein to house events that relate to the place,
- Expand vegetation that reflect seasonal change and aesthetic beauty.
- Flatten the lawns at the Nieuwe Kerk Garden to enable use.
- Improve space for play and sport at the Rabbijn Maarsenplein.
- The Rabbijn Maarsenplein and the garden lack event possibilities




- \_BOELENS, R. (2011) Dialogue about the Nieuwe Kerk and the Spuiplein (Interview, 6 Januari 2011). The Hague: Nieuwe Kerk.
- \_DIENST OCW (2010) Resultaten enquête nieuwbouw dans- en muziekcentrum Spui. Den Haag: s.n.
- \_GEMEENTE DEN HAAG (2009) Nota van uitgangspunten Internationaal Cultuurforum Spui. The Hague: Gemeente Den Haag, Dienst Stedelijke Ontwikkeling.
- \_GEMEENTE DEN HAAG (1989) Nota de kern gezond. Available at: [www.denhaag.nl/web/file?uuid=88c17144-9bce-4006-a736-80358e839d23&owner=bfadc11e-971e-465e-b613-5da689f27cd0&contentid=6596](http://www.denhaag.nl/web/file?uuid=88c17144-9bce-4006-a736-80358e839d23&owner=bfadc11e-971e-465e-b613-5da689f27cd0&contentid=6596).
- \_HENGST, M. van der (2010) Dialogue about the Hotel Mercure Den Haag and the Spuiplein (Interview, 16 November 2010). The Hague: Mecure Hotel.
- \_MEYER, H. (2009) Het ontwerpen van de openbare ruimte. Amsterdam: SUN.
- \_RAAIJMAKERS, H. (2010) Dialogue about the Filmhuis Den Haag and the Spuiplein (Interview, 16 November 2010). The Hague: Filmhuis Den Haag.
- \_RÖWEKAMP, A. (2011) Discussion on the redesign of the new Spuiplein (Interview, 23 June, 2011). The Hague: Ingenieursbureau Den Haag.
- \_SCHIPPER, A. (2010) Dialogue on the current design of the Spuiplein (Interview, 29 July, 2010). The Hague: Ingenieursbureau Den Haag.
- \_STICHTING DEN HAAG NIEUW CENTRUM (2011) Den Haag Nieuw Centrum. Available at: [www.dhnc.nl/](http://www.dhnc.nl/)
- \_TONKES, R. (2010) Dialogue about the Spuiplein, use and maintainance (Interview, 16 December 2010). The Hague: City Hall.
- \_XPEX BV & QUEESTE ARCHITECTEN (2010) Het kloppend hart van Den Haag; inrichting Spuiplein, Spui & Rabbijn Maarsenplein. Den Haag: s.n.

## 9. Design vision

In the previous chapter, the Spuiplein, Nieuwe Kerk Garden and the Rabbijn Maarsenplein were analysed on its potentials and points of improvement. Again the factors of a place to stay and forms of activity and entertainment on the plaza needs improvement. In chapter 7 we gained inside in the environmental behaviour to understand how we arrange and perceive the public space. As discussed, this knowledge could help to create a space that is better fitted to the needs of the user.

The only remaining question is how this behavioural understanding can contribute to the public space. This chapter attempts to set out a strategy for the design example of the Spuiplein. A way of coming to a design from the viewpoint of behaviour in our daily life.



In the reflection on plazas we came to know that, above all else, it functions as a social node. Privatization, mono-functionalism and the occupation of the public space has diminished this traditional role. Now more than ever, the plaza needs reassess its role as an urban arena for social interaction, exchange and experience of others, to facilitate contacts, build a sense of urban community and become a source of inspiration (Karssenberg, 2010; Stevens, 2007; Gehl, 1978).

To Gehl (1978) the social activity in the public space is largely depended on the quality and the length of both necessary and optional activities. Thus, social activity is depended on the activities. While often referred to in general, there are many forms of interaction between two or more people. For this thesis, I distinguish physical, verbal and visual interaction. Physical interaction in the public space is present in active play. Visual interaction can be mutual, by having eye contact, or one-sided, 'people watching'.

Although, plazas cannot directly control these social interactions, it can provide the opportunities for them to take place (Stevens, 2007). Social interaction is the product of the possible, yet it can be triggered. I see it as the designers task to create these possibilities for interactions, like informal conversations with stranger.

**'These conversations can start when people are at ease, in particular when they are occupied with the same thing, such as standing or sitting side by side, or while engaging in the same activity together.'**

**Gehl (1978: 170-171)**

Based on this understanding of social contact, I have set out three facets that in totality stimulate interaction and exchange in the plaza.

## 9.1 The safe zone

**'People tend to relax and play only when and where environmental conditions suit their desires.'**

**Stevens (2007: 212)**

This first facet can be considered the preparation for creating a social active atmosphere. A safe zone is a sub place in the plaza that one or more people can temporarily occupy. The spatial qualities of the safe zone are fitted to the physical and psychological comfort needs of the potential users or uses. As this is often difficult to predict, adaptive settings can be created with movable elements (e.g. chairs, planters) or interpretive elements (multiple qualities in one). The challenge is to create varying spaces which is not limited to a single use, but which allows people to discover and modify their own setting to their own liking. This way, a person may sit or lie, converse or observe, sit close together or dispersed.

The activity on the plaza can safely be experienced from this comfortable setting among known companion. The safe zone forms a setting for contacts with friends, acquaintances or colleagues in the zone.

## 9.2 The opportunity

The opportunity relates the connection between people and the possibility to make contact. This facet does not attempt to actively stimulate interaction, but solely to provide the passive occasion for social activity between people sitting and pedestrians. Gehl (1978) claims this is based on the abilities and the limitations of our senses. Visual interaction it that sense can be promoted by creating clear eye contact (e.g. no obstructions, same eye level, inward orientation). Two distances are particularly significant for interaction with strangers in public spaces; 25 meter as the distance of recognition what is on in the public space, and 2 to 4 meter as the distance at which strangers first acknowledge each other.

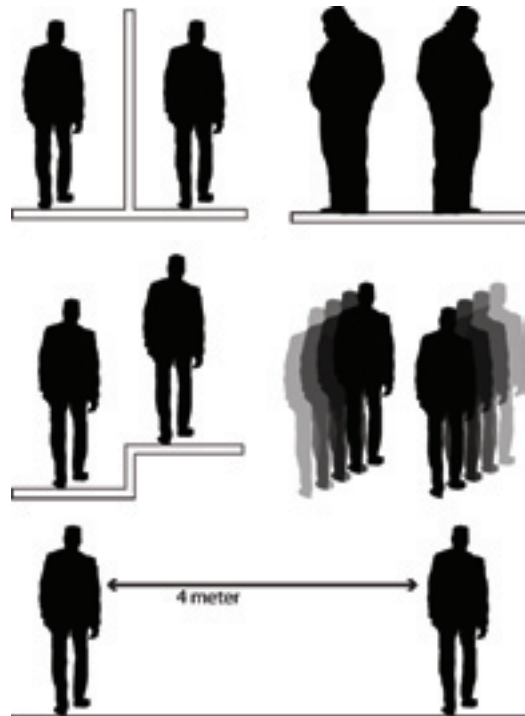


figure 9.1 The opportunity for contacts is linked to obstruction, configuration, eye levels, time spent together and distance.

### 9.3 The catalyst

To stimulate active informal interaction between strangers, Whyte's (2001) concept on triangulation comes into play. External objects or settings that stimulate activities form a catalyst to create encounters between strangers. This facet actively tries to establish contact between people. Social interaction in this is a byproduct of the necessary and optional activities. Necessary activities that involve encounters are often subtle, but necessary in the operation of our functioning. For example, talking to the storekeeper, asking the way, inquiring to lent a chair, unavoidable encounters between pedestrian flows. This can become a social tradition when these social activities start to happen on a more regular base (Hester, 2001).

Optional activities can encourage visual, verbal or physical interaction between strangers. However, this only happens when people feel at ease (Gehl, 1978). Stevens (2007) reacts to this concept with the idea of 'play' in the public space. In essence, play is spontaneous interaction, which might be social, physical, or mental. It is this spontaneous interaction which enriches public life and space. Play is about curiosity, it is about exploring and adventure, and is usually not purposeful. It involves activities through which people test and expand their limits.

Ways of entertainment in the plaza, that stimulate interaction, need to leave the opportunity for the visitor to participate or explore or to ignore it. This will offer a sense of safety and control. The catalyst must be placed in public ground, accessible for all as it functions as a mean to come in contact with people we would normally not meet in our confined lives. This should however be near to safe zones, so people can easily approach the catalyst and it is visual from the safe zone. It then also functions as a passive contact by seeing others.



figure 9.2 Street performance at Centre Pompidou, Paris.



figure 9.3 Public chess players at Pioneer Courthouse Square, Portland (PPS, 2004)



figure 9.4 Fountain at Place Clemenceau, Pau.



figure 9.5 Activities, events and elements triggering further exploration function as a catalyst for public interactions.

## 9.4 Reflection

Interactive settings have the potential to stimulate public interactions. It gives the plaza back its original role. The strategy of establishing a safe zone as a comfort place, the opportunity to enjoy and approach others, public activities and amenities that invite people to come together makes it possible to voluntarily break the daily routine and step out of their private bubble.

### OPPORTUNITY

To provide the possibility to come into contact with others.

- See others
- Hear others
- Encounter others

#### Tools

- Unify eye level
- Distance
- Seat configuration
- Stopping places
- Unify pedestrian flows



### SAFE ZONE

To establish a comfort zone with spatial qualities fitted to the psychological needs of the user(s)

#### Spatial qualities

- Physical comfort: intimacy, privacy, security
- Psychological comfort: sheltered

#### Tools

- Prospect (distant view of activities, people)
- Refuge (protected back, covered space)
- Configuration seats (social role)
- Social distance
- Functional amenities

#### Information

- On nearby functions and desired activities
- On social behavioural routine



## CATALYST

To stimulate informal interaction by providing a context to initiate contact

- Facilitating activities
- Intriguing elements or events

### *Spatial qualities*

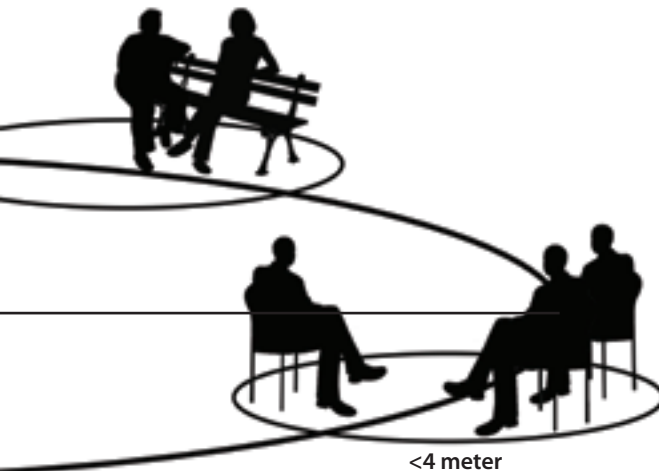
- Curiosity, exploring and adventure
- Being in control, choice
- Unpredictably

### *Social objectives*

- Time spent together
- Close proximity
- Not confrontational
- Common base
- Change mood

### *Position*

- Participate - distant observation
- Public ground, accessible for all
- Near safe grounds and pedestrian flows



## CONTRIBUTIONS

- Experiencing people
- Bases for new relations
- Maintain contact
- Source of local information
- Source of inspiration
- Restore level of trust
- Creating a social network or urban community

- Sustainable use
- Cultural expression
- Reflection of the urban identity

\_GEHL, J. (1978) *Leven tussen huizen*. Translated by J. van Beusekom. Zutphen: De Walburg Pers.

\_KARSSENBERG, H. (2010) Discussion on plaza design in the Netherlands (Interview, 9 November, 2010). Amsterdam: STIPO Amsterdam.

\_PROJECT FOR PUBLIC SPACES (2004) *Pioneer Courthouse Square; a vision for a year-round square*. Available at: [www.pioneercourhousesquare.org/April04\\_Portland\\_PCS\\_report.pdf](http://www.pioneercourhousesquare.org/April04_Portland_PCS_report.pdf).

\_STEVENS, Q. (2007) *The Ludic city; exploring the potential of public spaces*. London, New York: Routledge.

\_WHYTE, W. H. (2001) *The social life of small urban spaces*. New York: Project for Public Spaces.

## 10. Design

Based on the idea of a sociable plaza, this chapter will describe the design made for the Spuiplein. First, the steps towards the design are discussed to understand how the understanding of behaviour affected the spatial layout of the plaza. This is followed with the new design proposal, which will then be explained on a detailed level by going through the seven factors.

## 10.1 Overall design

The form in which the Spuiplein, Nieuwe Kerk Garden and the Rabbijn Maarsenplein are redesigned is largely subjective on the interrelation of the individual plazas. Currently, the plazas are separate places. However, the new Cultuurforum and the renovation of the Turfmarkt is expected to attract more people to the Spuiplein. The Municipality of the Hague seeks to transform the three plazas into one large public space as the facilities at the three places all contribute to the concept of a cultural plaza and the larger space can offer more place for activities and events. With this notion the plazas can either remain separated, become a whole or be connected.

As discussed in the analyses, all three plaza have their unique qualities, as a active, restorative and a local plaza. These qualities attract different users and activities. While the Nieuwe Kerk Garden is particular used a place for calmness and solitude, the Rabbijn Maarsenplein forms a gathering place for the local community. The separation of these places safeguards these distinct qualities and with that a diversity in sub places to stay.

Uniting the three plazas offers more space for performances and connects the facilities. This might benefit from more diversity of uses that attract different people at different times during the day. This also helps to establish a solid connection between the historic city centre and the pedestrian flow coming from the Turfmarkt. One large open public space, however, shows the same pitfall as discussed in 6.3. Although appealing, it reduces the amount of edges or save spaces. An empty open space can house large festivals, but lacks elements and settings that stimulate daily use and activities.

For this design it is chosen to connect the three plaza. These connections provides in a route to the city centre and makes interchange between visitors easier, while the individual quality of the plaza is maintained. The Nieuwe Kerk Garden actually consist out of a North and a South side. The four places are of similar scale that is compliant with the recognition distance. A plaza aiming for social interaction therefore becomes more in reach.



figure 10.1 What to do with three plazas; keep separated, unite them or link together?

### Final design

The final design (see figure 10.5-10.7) is not solely a product of problem solving, however also the understanding of existing behaviour is integrated in the design process. This entails a constant reflection on where people meet or stop, what is experienced and how people can casually approach others. This has resulted in a design that might seem random or unstructured, as it does not follow the traditional process of starting from large scale and work into detail. The space is designed from the perspective of the user.

The axis from the new *Cultuurforum* to the church forms the main axis on which the four spaces are positioned. The four places are designed as a sociable place, with sitting places at the edges, pedestrian flows coming by and in the middle a form of visual or participatory triangulation. The forms of sitting and triangulation (see 10.7 & 10.8) are adjusted to the role of the place; the Spuiplein as the cultural main plaza, housing the theatre, hotel guests, skating youth, and visitors and employees of the library and the city hall. The north side of Nieuwe Kerk Garden has a role as a green active place for sports and smaller performances, the south of Nieuwe Kerk Garden as a concealed restorative place used by residents and as a lunch place, and the Rabbijn Maarsenplein as a residential plaza. This character and potential use has influenced the behavioural settings.

The plazas are made more permeable by creating more visual and physical entrances. The main route from the city hall and Turfmarkt goes alongside the Spuiplein across the Spui and alongside the church to the Bezemstraat. New entrances are created in the church wall and the Spui is crossed with a pedestrian walkway to improve this walkway.

### Spuiplein

The centre of the Spuiplein is deepened in two levels. This provides a better view on the activities that take place in the centre of the plaza, provides the opportunity to clearly mark sub places and it subtly provides walking paths. The deepened space offers a place for events without obstructing the daily pedestrian flow and accessible for all with

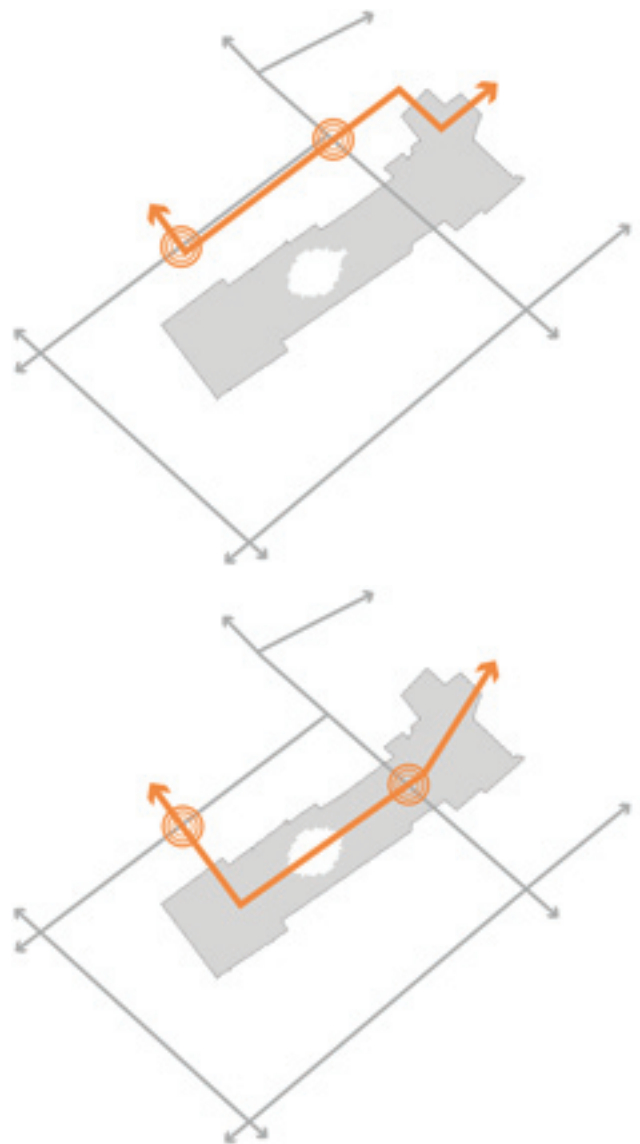


figure 10.2 The plazas as a new route to the city centre (top; current, bottom; new).

the sloped entrance toward the church. For larger events, the raised platform in front of the theatre can be used as a stage.

**North of Nieuwe Kerk Garden**

Originally the north of Nieuwe Kerk Garden had a sloped lawn divided in two by the path. To enable activities that acquire a soft surface, the lawn has been flattened to street level and the path has been repositioned. The height difference of the church has created a green amphitheatre with in front a small platform. This can be used for small performances and sitting. The *Theater aan het Spui* is connected to the garden with a new entrance point. All around the lawn sitting places are created, both public and commercial.

**South of Nieuwe Kerk Garden**

In the new design of the south Nieuwe Kerk Garden the backside of the *Markthof* is transformed to an attractive front. To increase the use of the place. The wall is opened up on several spots to create a more accessible place. However, the secluded character remains intact as the trees are maintained. The central area is a small open space with movable public seating to increase flexibility. This is located in front of an interactive fountain, integrating the *Spinoza* memorial. The green patches in between the sitting space and the paths can be used as allotment gardens. This will both trigger activity in the public place, form a source of triangulation and will increase residential commitment and care. Along the side of the church, the secluded quality is continued with the creation of a small quiet space under honey locust trees. This can be used in occasion by the church as an event space.

**Rabbijn Maarsenplein**

The Rabbijn Maarsenplein is formed around a new playground. This was already well used, but the position and seating was lacking. Now it takes a central position. Around are ledges and platforms that form a variety in public seats. The wooden platforms can also be used as a small stage. At the edge there are three terraces for the restaurants.

[continues on page 132]

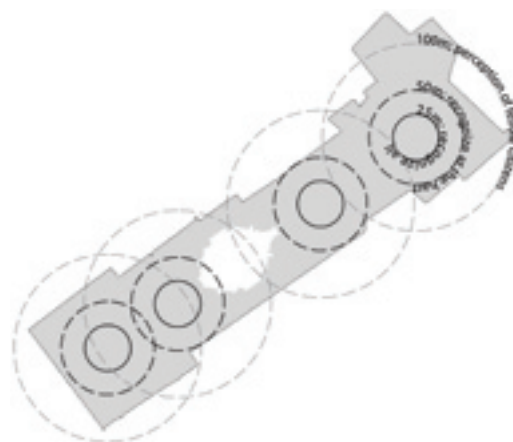


figure 10.3 Division for a sociable plazas.

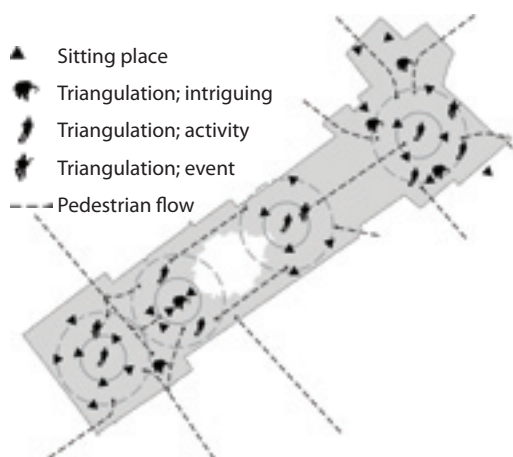
















figure 10.4 Integrating safe zones and catalysts.

# Legend

-  Terrace
-  Pavilion
-  Lawn
-  Fountain
-  Concrete floor
-  Brick floor
-  Roofed space
-  Roof terrace
-  Pillars
-  Ledges, steps
-  Seating
-  Honey locus tree
-  Platanus tree
-  Cherry blossom tree



0m 10m 20m 30m 40m 50m

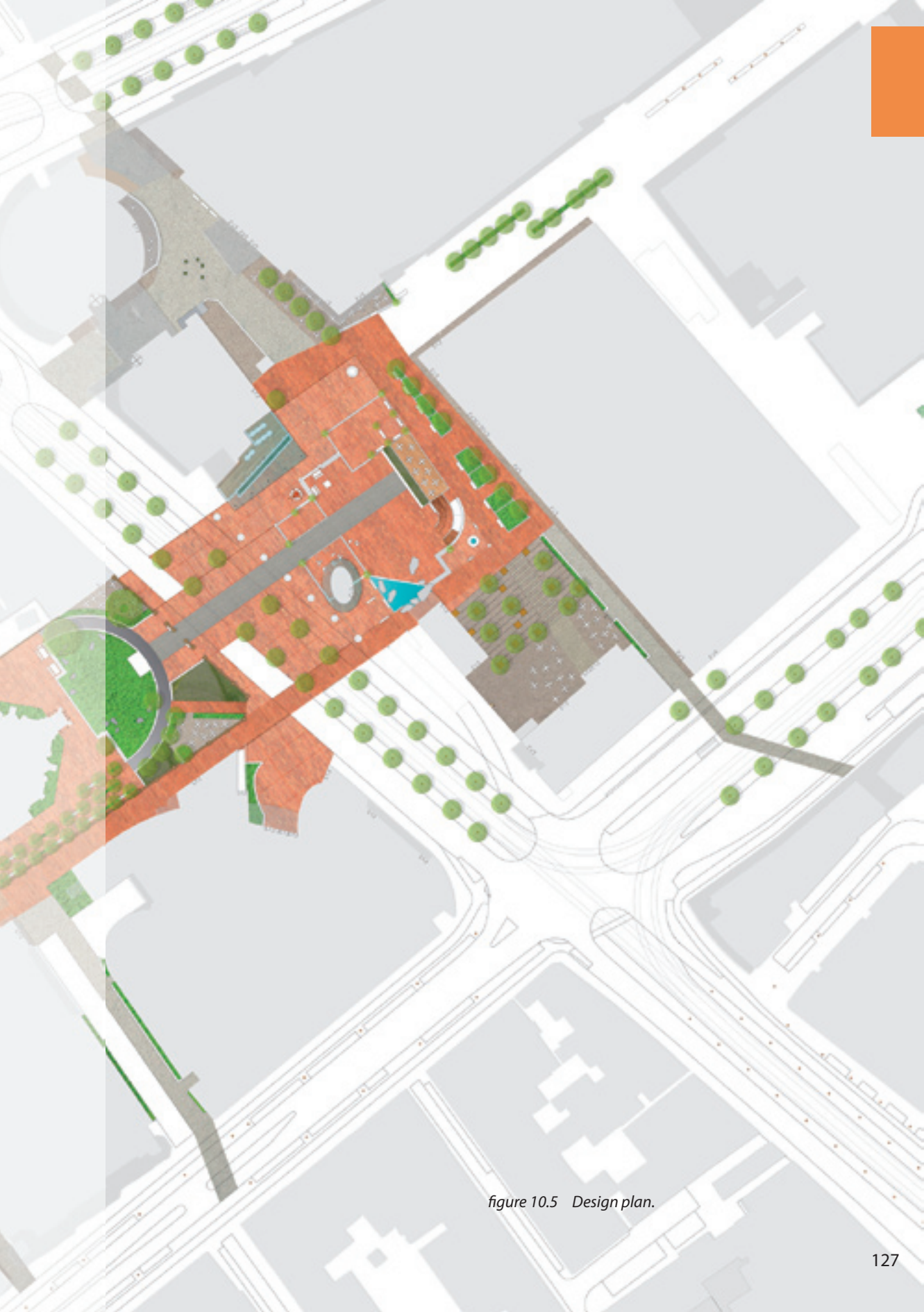


figure 10.5 Design plan.

## Legend

- |                             |                         |
|-----------------------------|-------------------------|
| ① Cafe terrace              | ⑫ Library platform      |
| ② Announcement pillar       | ⑬ Green amphitheatre    |
| ③ Theatre terrace/stage     | ⑭ Church event terrace  |
| ④ Parking entrance          | ⑮ Allotment garden      |
| ⑤ Chess area                | ⑯ Store facade Markthof |
| ⑥ Waterfall fountain        | ⑰ Spinoza fountain      |
| ⑦ News stand/kiosk          | ⑱ Playground            |
| ⑧ Event area/ (ice) skating | ⑲ Jewish monument       |
| ⑨ Sculpture                 |                         |
| ⑩ Work platform             |                         |
| ⑪ Guarded bicycle parking   |                         |

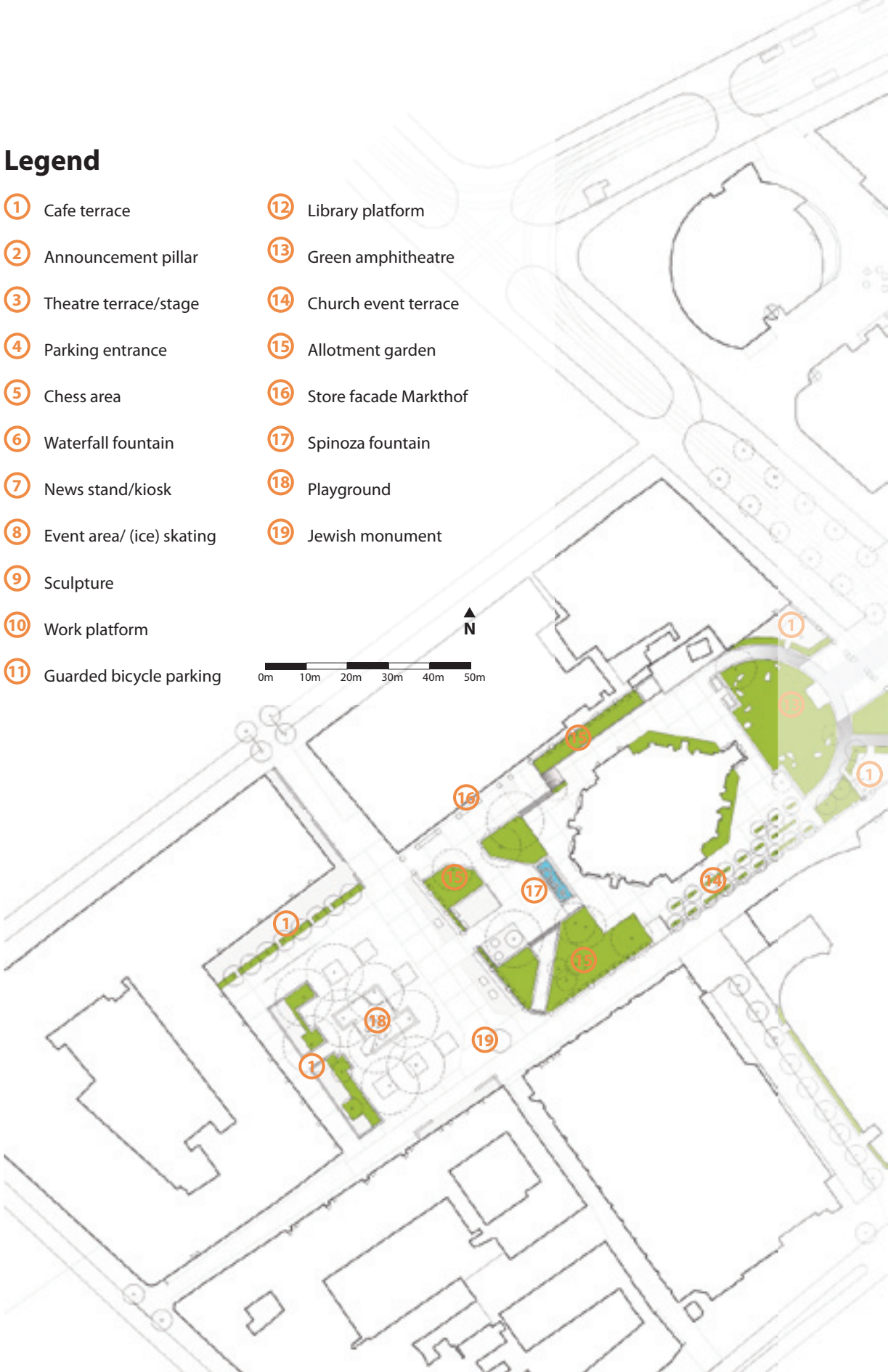
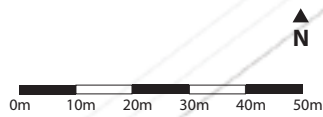






figure 10.6 Functional design plan.



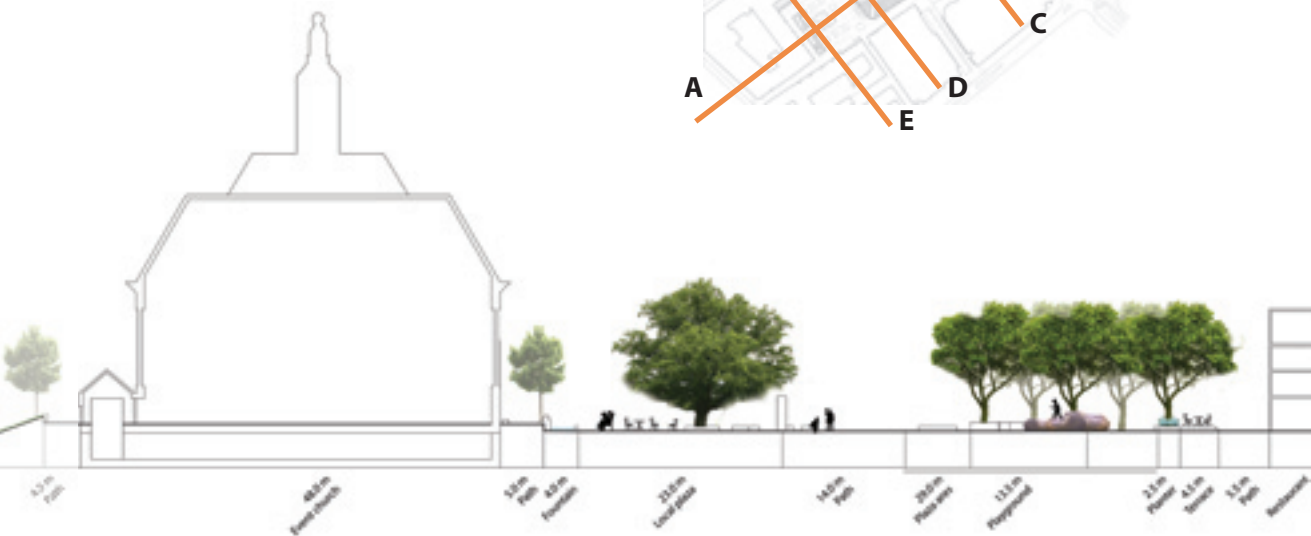
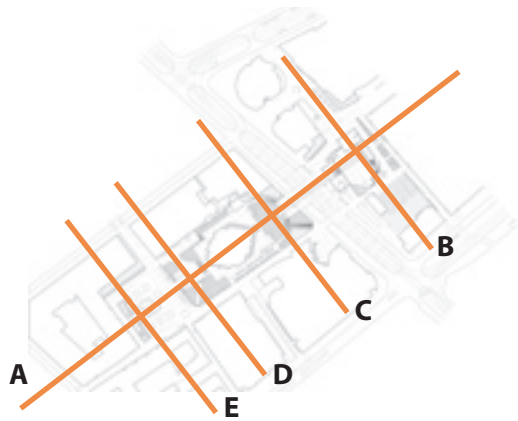
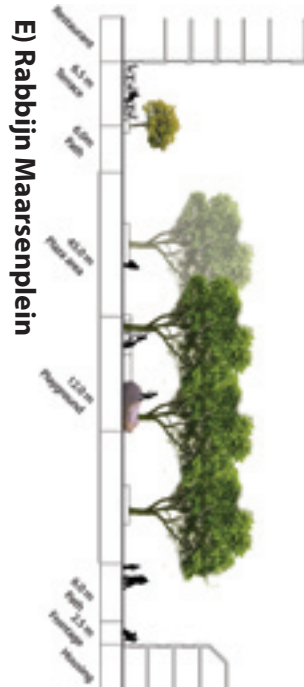
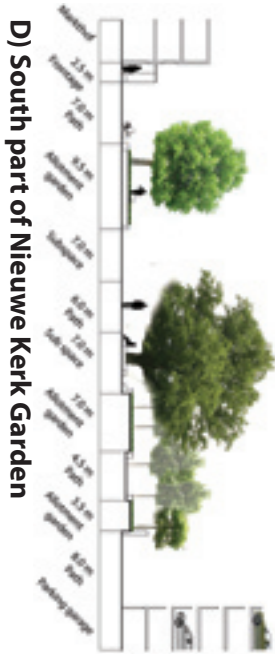


figure 10.7 Cross-sections of the design.

Alongside the intensively used path between the city centre and the parking garage are two long benches situated. This makes it possible to neutrally enjoy passersby. In front of the garage is an intersection of pedestrian flows. This place is emphasized with the presence of the Jewish monument.

### 10.2 Design detail; connect

In the new design there are six routes leading toward the plaza that need improvement. Some of them only need minor adjustments to make it visually, physically or symbolically accessible. Others, like toward the Schedeldoekstraat and the Kranestraat, need a lot of improvements. However, these streets show high potential in attracting visitors when designed correctly. The Spui and the Kalvermarkt are not changed outside the borders of the design area as they are already working properly.

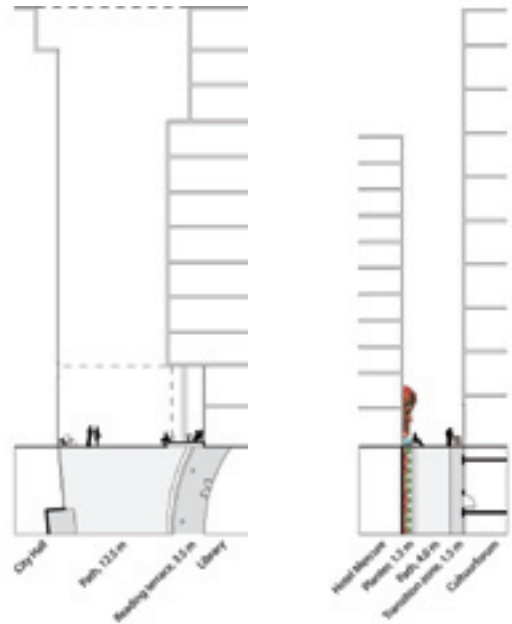


figure 10.8 Proposed design for the alley toward the Kalverstraat (left) and toward the Schedeldoekstraat (right).



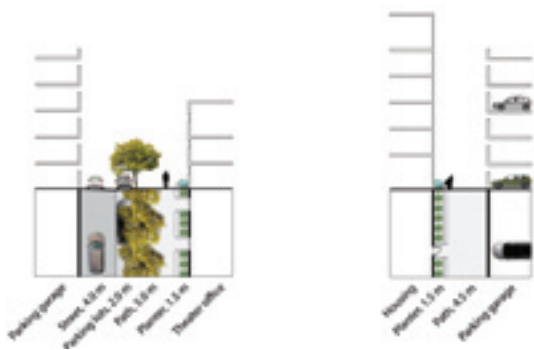
figure 10.9 Impression of the alley towards the Schedeldoekstraat.

### ***Towards Kalvermarkt***

The connection to the Kalvermarkt provides a link to the tram stops and to the pedestrian flow along the north side of the city hall. To link the passage to the tram stops, a raised pedestrian crossing is used. The guarded bicycle parking is moved from the underpass to the side of the interior store. This way the parking is still in the proximity of the library and the city hall and it is not blocking the path. The bicycle guard now has a view onto the plaza, making him a public figure that is a part of the social safety. The pavement and a sign are used to mark the entrance to the Spuiplein. The sitting from the library is proposed to extend outward to increase outside activity and an active façade. This is realized by a reading terrace, accessible from the library.

### ***Towards Schedeldoekstraat***

The alley towards the Schedeldoekstraat is connected with a pedestrian crossing to the Lamgroen at the opposite of the street. This links the plaza to the bus stops and the residential district. The alley needs to become more attractive.



*figure 10.10 Proposed design for the Kranestraat (left) and the new alley (right).*



*figure 10.11 Impression of the pedestrian crossing on the Schedeldoekstraat.*

Therefore the new *Cultuurforum* will need to become an open façades with space for small shops. Distinguishing the edge in the pavement will invite the shop keepers to use the street. The side of the hotel is made appealing with the use of climbing vegetation (*Parthenocissus*).

### **Kranestraat**

The Kranestraat now extends to the other side of the street with the presence of a pedestrian crossing. This reaches into a different residential district. The profile of the street has changed to improve pedestrian conditions. The two narrow sidewalks are merged into one walkway along the backside of the *Theater aan het Spui*. Vegetation and a sitting ledge are used to make the street attractive and comfortable to use.

### **New alley**

From the Rabbijn Maarsenplein to the Amsterdamse Veerkade a new access route can be established. The already existing passage is made public by removing fences and vegetation. This new connection brings route from a different direction to the Rabbijn Maarsenplein and it connects to a bus stop. Again vegetation is used to improve blind walls.

### **Sint Jacobsstraat**

The Sint Jacobstraat reaches onto the local shopping street Wagenstraat. The entrance is marked with two trees (*Gleditsia Triacanthos*). The North wall is currently closed by advertisement and lacks in store entrances. In collaboration with the storekeepers the front of the façade can be opened up. The pavement again provides a transition for the stores to use.

### **Bezemstraat**

The Bezemstraat is connected to the Voldersgracht with the help of a pedestrian crossing at sidewalk height. The crossing and entrance to the Rabbijn Maarsenplein is marked with trees (*Gleditsia Triacanthos*). This provides a clear crossing with low threshold. Along the side of the restaurant is a terrace with public sitting ledge. On the opposite side lies the entrance of the *Marthof*. This is marked in with pavement.

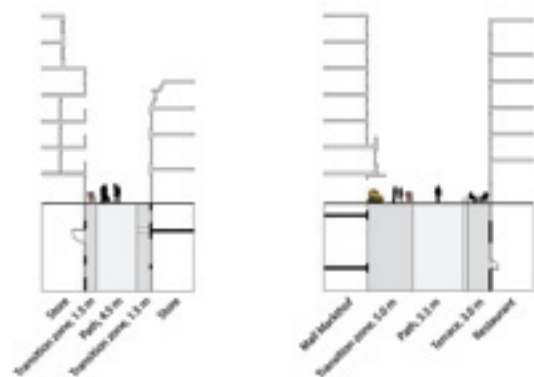


figure 10.12 Proposed design for the Sint Jacobstraat (left) and the Bezemstraat (right).

### 10.3 Design detail; place

The redesign focused on improving the sense of place in each of the three public space while at the same time linking the plazas together. To succeed in this the borders of the plazas were improved and unique features of the place were emphasized. With a consistency in pavement and materials the plazas create a sense of being part of each other.

#### Framing

The Spuiplein lacks in the sense of place due to the unclear framing of the plaza, as the municipal survey (Dienst OCW, 2010) and the analyses have pointed out. The redesign uses three on two sides to sharpen the edge of the future *Cultuurforum* and the steps in front of the hotel. The open side along the Spui is the predominate reason for the sense of an amorphous space. Seven large wooden pillars now define the border of the plaza. The pillars also integrate sitting space, illumination and distant visibility.

The wall framing the Nieuwe Kerk Garden was concluded to be too strong. It creates a high level of isolation. For that reason the wall is lowered and the top part is replaced by a fence. This still frames the space, but provides views beyond. Toward the Spuiplein this situation already exists. It is continued along the side and toward the Rabbijn Maarsenplein.

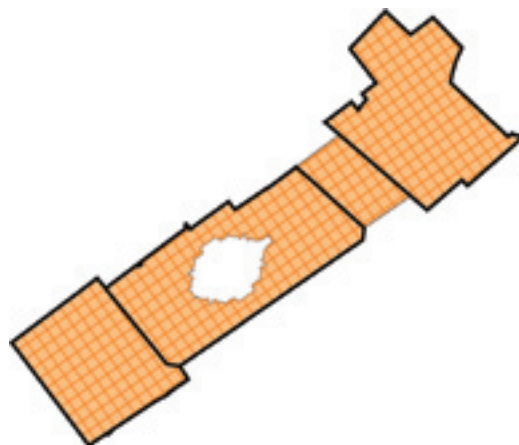


figure 10.13 The forming of a sense of place, individual framed places with a consistency in pavement.

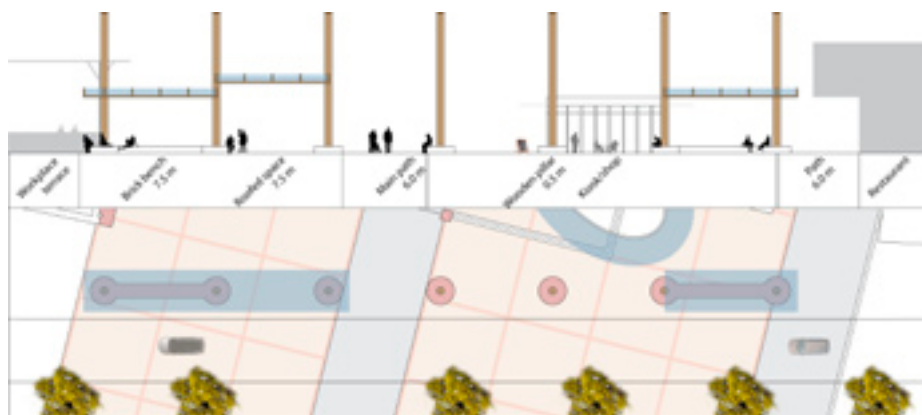


figure 10.14 Proposed design for the edge of seven wooden pillars.

### Expanding the identity

The Jewish monument on the Rabbijn Maarsenplein and *Spinoza* monument in the garden are moved to more visual locations. For the Rabbijn Maarsenplein it is placed on the main pedestrian crossing, near the entrance of the parking garage. The monument expresses a space for encounters and waiting. It invites people to hang about.

The *Spinoza* monument is located central to the South side of the garden and is part of a fountain. This fountain works as interactive and intriguing element. The stepping stones, ledge with quoting, and the monument together form an element of triangulation and play. The diversity of trees are maintained and the green aesthetic character is expended with newly added vegetation.

At the Spuiplein new activities are added to form an active Spuiplein (see 10.8), yet the current uses that form the identity of the plaza are taken into the design. The plaza offers space for the skating community with ledges and height difference to make skating even more appealing. The plaza also provides space for a variety in cultural activities.

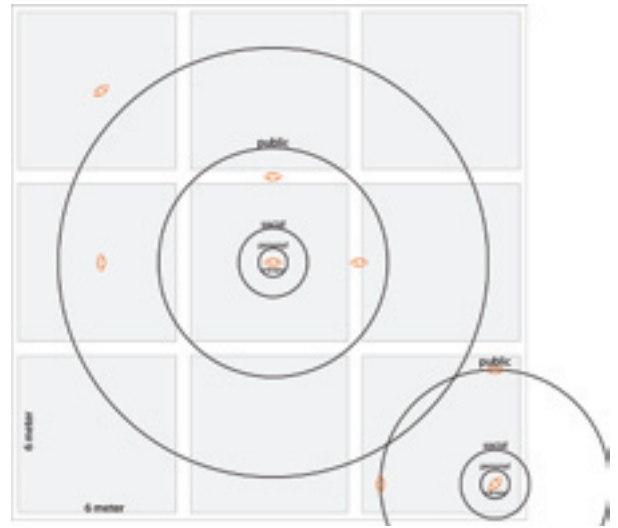


figure 10.15 Sociable proxemics on the pavement grid.

WIENE IS NIET DE AFWEZIGHEID VAN DOORLOP. DIT IS EEN NEMO. EEN HERSTELTENTONN. DIT IS DE DISPOSITIE WOOD WERDE DADEN. WENTROUWEN EN RECHT.

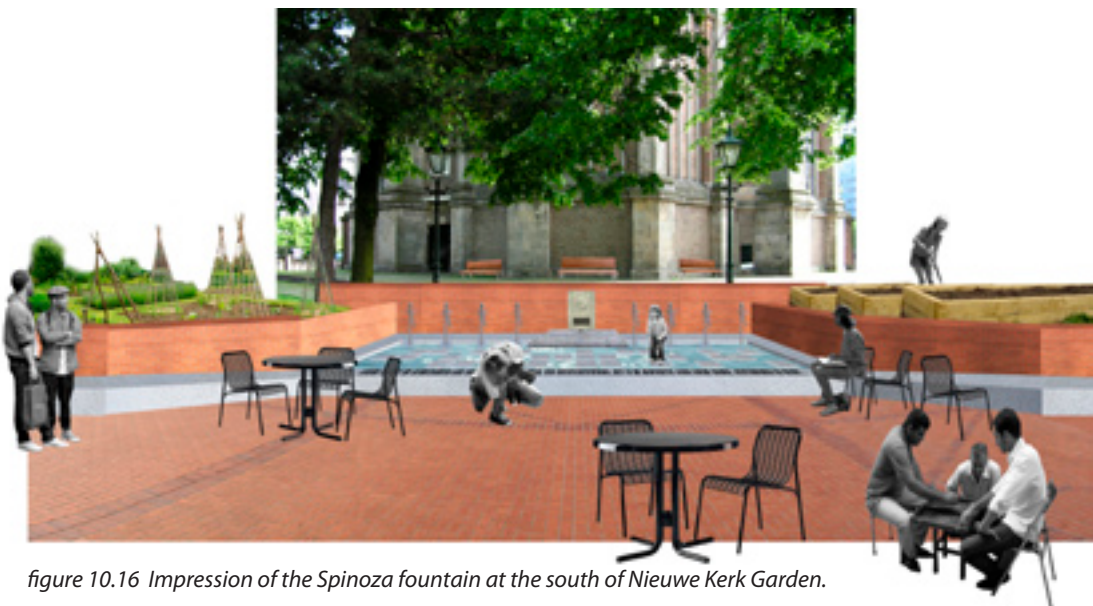


figure 10.16 Impression of the Spinoza fountain at the south of Nieuwe Kerk Garden.



### Materials

A consistent use in materials provides an understanding that the three public places belong together. It links them aside from a clear physical connection. The main pavement used in the plazas is red brick stone. This material is also used in the church, the wall and several buildings along the Rabbijn Maarsenplein. Hard concrete red bricks is durable material suitable for intense use, e.g. events and skating. The pavement is laid down with a pattern of a six by six grid, emphasizing the far social distance. For the main axis, the path around the church lawn and the steps, hard concrete is used. This stands in sharp contrast with the red brick stone. For sitting objects, e.g. benches and platforms wood and steel are used. Wood expresses a naturalness and comfort. The wood and bricks have warm colours generally preferred by people. Throughout the design, boulders are repetitively used as sitting and climbing elements.

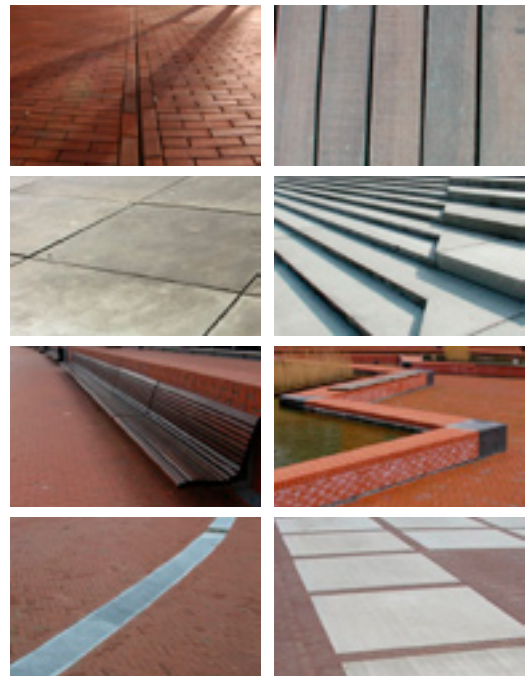


figure 10.17 Design materials ([www.doelbeelden.nl](http://www.doelbeelden.nl)).

### 10.4 Design detail; orientation

As discussed in the beginning of this chapter, the three plazas together form the new pedestrian route to the city centre. Starting from the corner from the Turfmarkt, crossing the Spui along the church and finally into the Bezemstraat, a wide path has been situated in the design. To provide a clear orientation in the design area, some measurements have been taken.

### Entry points

All plaza entrances provide a open view and space, so the visitors have the opportunity to enter, stop and orientate themselves. The main entrance is located at the crossing between the city hall and the Turfmarkt. At this place an announcement pillar and signpost are positioned. This creates an own sub place that offers a view on passersby, helps with way finding and attracts people closer to the plaza.

It is strongly advised that the side gates of the church garden are also open during the day. These are important entrances for visitors arriving from the south.



figure 10.18 Impression of the entry point from the city hall.

### Paths

The Spuiplein consists out of raised and sunken terraces based on the pavement pattern. These height differences are avoided by the pedestrian flow. Objects and height differences are ideal for steering the pedestrian flow and creating settings that stimulates encounters between people. The sunken Spuiplein merges the pedestrian flows around the preferred edge space.

The Spuiplein is extended onto the street the Spui. This creates a clear pedestrian connection between the Spuiplein and the Nieuwe Kerk Garden by removing height obstructions and a continuity in pavement. Now, trams and cars cross the pedestrian street, not the other way around.

The path around the church is slightly sloped due to the height difference of the church. No steps are use to enable a route for the disabled. Along the route are ledges and benches as resting places. The main route has a path which varies between four and seven meters in width. This is creating a comfortable social distance when passing each other, while they are in the proximity to interact with each other.



figure 10.19 Raised and sunken platforms merges pedestrian flows with unavoidable yet desirable encounters.



figure 10.20 Raised and sunken platforms on the plaza.

## 10.5 Design detail; function

As was concluded in the analyses the Spuiplein is the place that lacks most in functional uses. This can largely be solved by improving the edge of the plaza, which is discussed in the next paragraph. Yet, the impact of new functions that can be added should not be underrated. The presence of facilities can not only a matter of design, but is mostly dependent on urban planning and the economic market. This factor in the design is, therefore, an advise to planning as well.

### Cultuurforum

The new culture centre for theatre and dance provides a new wall for the Spuiplein and with that the opportunity to create a diversity of facilities. It is therefore strongly recommended that the new building offers space for a mixture of small facilities on the ground floor to the plaza. This can be restaurants and cafés, but facilities that operate during the day would even be more advisable as the theatre attracts mainly visitors during the evening.

### Kiosk

A new café building is situated at the south side of the plaza. The kiosk is intended as anchor of activity for the entire plaza throughout the day and the seasons. Ideally the kiosk should provide for people on the plaza, e.g. offering food and drinks to take onto the plaza, a newsstand. The kiosk forms the entry point from the south and is placed to draw people from the city hall onto the plaza. The building has an open glass and wood structure with overhanging roof, so it offers a place to shelter from the rain.

### Mixed facilities

A few of the restaurant spaces are unused at the Rabbijn Maarsenplein. Currently, only catering facilities can use these spaces. Widening the policy to make these places available for local retail will enable the plaza attract people throughout the day. Also, allowing vendors with temporal carts and stalls onto the Spuiplein can add new functions to the plaza. The municipality and the plaza manager can experiment with regulation to encourage and organize this.

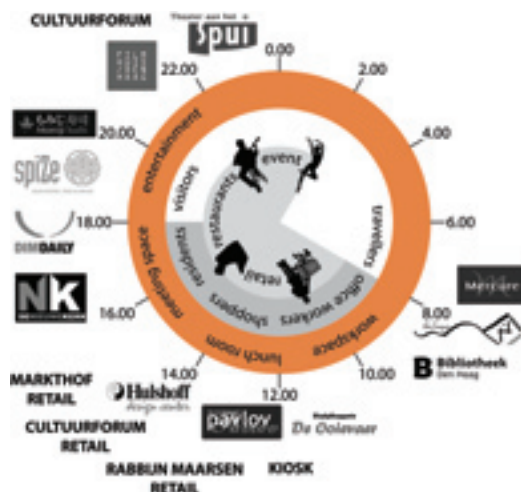


figure 10.21 Daily time laps of uses and facilities.

## 10.6 Design detail; edge

The redesign attempts to improve the connection with the surrounding buildings. Transitional zones and transparent facades help to draw the functions onto the plaza. Several buildings are in need for upgrading their façade, while in most cases this link between the in- and outside can be solved on the plaza itself.

### *Markthof*

The *Markthof*, on the northwest side of the Nieuwe Kerk Garden, is intensively renovated. The blind back wall of the shopping centre hidden with a narrow alley behind the church wall is transformed into a frontage orientated toward the Garden. On this side of the shopping centre a bakery, cheese store, a newsstand and a oriental supermarket are located. Currently, the stores are hidden from the public eye. Opening up the back side will provide the Garden with new function and public figures that keep an eye out. The blind wall is opened up and replaced by large windows and entrances to the stores and the centre to make the *Markthof* visual and physical connected. An arcade is created between the façade and the old pillars from the church wall. The wall itself is removed, with the exception of some parts that now function as place to sit or to stall goods.



figure 10.22 Proposed design for the Markthof facade.

The arcade creates unity in the building and a soft transition drawing people to the stores and from the stores out into the Garden. The coverage makes the edge a shelter from rain and harsh sun light and a save space for hiding and refuge.

**Transitional spaces**

Three buildings have been provided with new entrances. An additional entrance for the interior store, the *Hulshof*, is located at the end of the Turfmarkt and links toward the entrances of the new Cultuurforum and the city hall. The Asian restaurant has been given an entrance onto the Spuiplein. More transparency at the restaurant is created by the replacement of the tainted windows with clear glass. The restaurant *Spize* has been given a new side entrance across the gateway entrance of the church wall. This provides easy access to their new terrace in the garden. These minor alterations have a great impact in the use of the functions and the activity on the plaza.

In the design, places are divided along the edge by distinct pavement, which promotes the facilities to extend outside. The restaurants and the residential unit along the Rabbijn Maarsenplein have been given terraces. Also at the North Garden, commercial

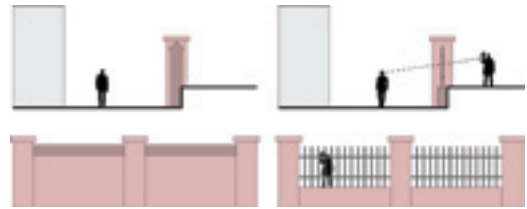


figure 10.23 The current Church wall (left), the proposed church wall (right).

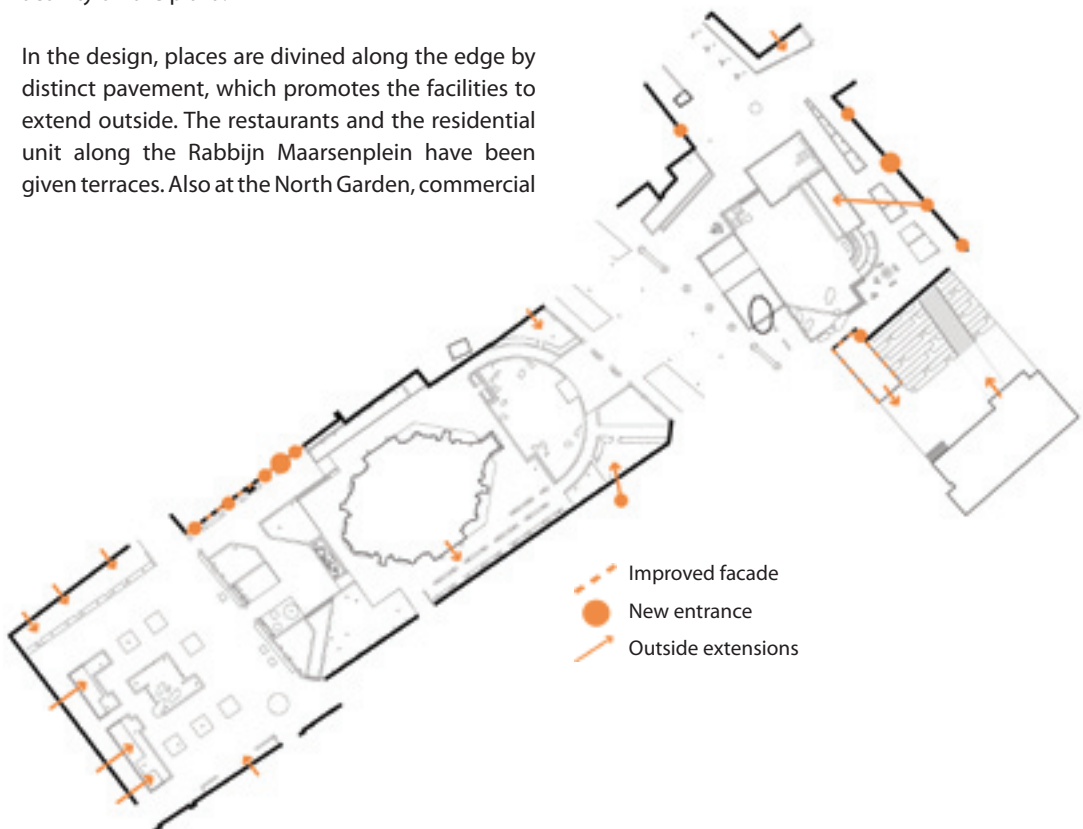


figure 10.24 Overview of edge improvements.

sitting has been given a place along the edges. The Nieuwe Kerk has been provided with a paved place for small occasions at the south side the church. That can be used for outside activities when needed. Unused, it functions as a calm sitting place. The threes (*Gleditsia Triacanthos*) on the small space reduce noise disturbance and create the sense of seclusion. Along the new theatre on the Spuiplein, these threes are also used to reduce noise. Here the threes create a safe space, according to the prospect and refuge theory. It offers view on the open plaza while remaining 'hidden' underneath the threes. The transitions between the functions in the theatre and the plaza is reduced with the help of pavement that emphasizes a transitional place for putting out goods, advertisement, and other amenities. The roof terrace is made available for the hotel and the restaurant. This will draw out the hotel guests both for dinner in the evening and for breakfast and lunch.

### 10.7 Design detail; sub places

Integrated in the design, there is a wide variety of sitting places. Intentional there are a large amount of ledges and steps, people can use as seats. Also distinct sub places have been created, as described in 9.1. Commercial and public sitting is mixed throughout the design. The variety of the settings in proximity, configuration and sense of safety aims to meet the different behavioural requirements.

#### *The workplace*

At the north side of the Spuiplein against the blind wall of the interior store, a sub place is created to stimulate working outside. This makes the plaza useful for the many office workers in the district and enlivens the plaza during working hours. The workplace is located nearby the city hall at the end of the Turfmarkt, where many office workers pass by. The place is created by a slightly risen platform behind a planter. This encourages eye contact while keeping the sense of safety. The platform is roofed to protect from rain. At the front of the platform are individual working places orientated side by side toward the plaza with the far social distance of 2 meters in between. At the back their is seating for groups. These are a bit more secluded



figure 10.25 Cross section of the workplace at Spuiplein (top; view across, bottom; side view).

to reduce distractions, orientated toward each other and maintain a distance around 1,5 meters. This is ideal for a small social distance, interacting with colleagues. The workplace is equipped with outlets and wireless Internet.

**Lunch space**

At the corner of the city hall, are five high tables with adjustable chairs located. These seats also are positioned high to stimulate eye contact. The threes (*Acer Rubrum*) behind the chair offer protection for both the city hall entrance as the sitting places. The intermediate distance of 5.5 meters creates a comfortable public distance.

**Hotel steps**

The steps next to the hotel have been slightly adjusted. At several places the steps have been risen with small wooden platform comfortable for sitting. The platforms creates an articulated edge that transforms the place from a neutral space to one that expresses the conversational role, a sociopetal space. The small threes on the steps give shade and block the wind.

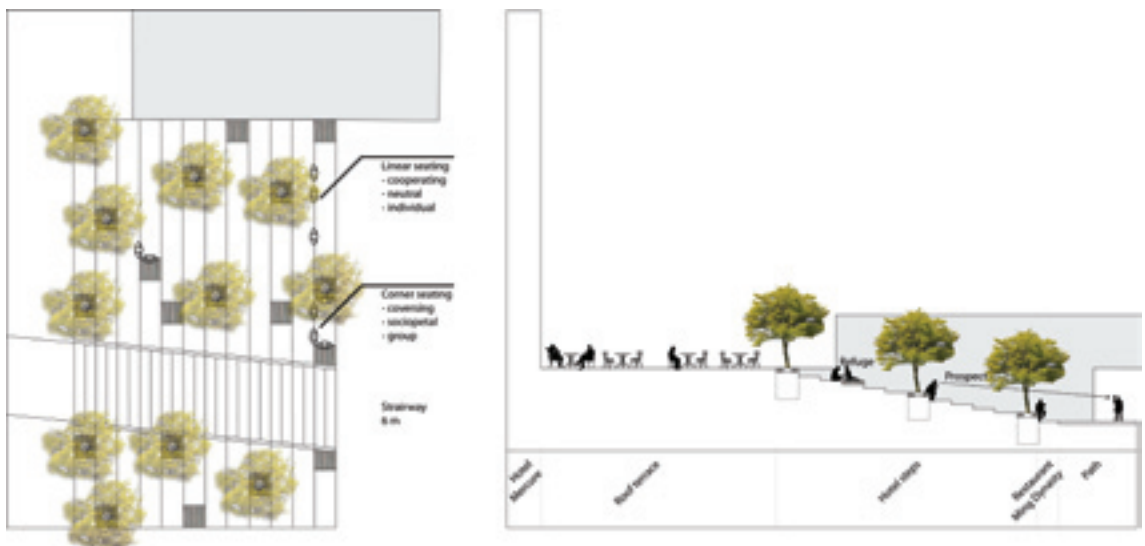


figure 10.26 Proposed hotel steps, more articulated steps for differs behavioural settings.

### ***Sunken sub places***

In and around the sunken Spuiplein there are different sub places for various active and passive tasks. Wooden benches and ledges form fixed sitting places. Surrounding the kiosk and in the sunken area there are movable chairs and tables, as in the south part of Nieuwe Kerk Garden. This movable furniture is adjustable to the needs of the users and offer choice in sitting locations. The increase in public figures, e.g. store keepers and a bicycle guard, will increase the social control on the plaza and makes it possible to put out furniture. At night this can be stalled in the plaza kiosk.

### ***Along the lawn***

Bordering the north side of the Nieuwe Kerk Garden is a wide ledge along the main path. Together with the benches across the path it creates a setting which visitors can use diversely. Next to the main entrance of the church there are sub places for group sitting, overlooking the lawn and with a view to the Spuiplein.



*figure 10.27 Impression of the diverse sitting places at the Spuiplein.*



### **Wooden platforms**

The terraces at the west side of the Rabbijn Maarsenplein are raised to have people sitting and passing by at the same eye level. The terraces are located behind a strip of planting to increase the sense of safety. Public seats are located at the edge of the raised commercial terraces. These ledges have integrated a relief that expresses multiple proximities and social configurations. Surrounding the playground are six wooden platforms of 4,5 by 4,5 meters with the same distance in between. This makes a sociofugal place where residents come together and are open to people passing by.

### **10.8 Design detail; entertainment**

The seating on the plazas are often oriented toward the pedestrian flows. Yet in the redesign also included various aspects that offer activity and visual enjoyment. The aspects seek to stimulate interaction and triangulation among the users on the plaza. The forms of activity are often related to the surrounding facilities or visitors and facilitate both temporal and continuous events.



*figure 10.28 Impression of the South corner of the Spuiplein.*

### **Activity zone**

The Spuiplein is the main public place for activities. The sunken plaza makes it easy for others to enjoy the activities going on in the centre. Intriguing activities make a catalyst for interactions among people. The open space and the many ledges and steps provide an improved and visual setting for the local skaters. The waterfall fountain with boulders creates an attractive space for children where parents can sit near. It promotes time spent together in close proximity with a common base. It therefore works as a catalyst for the children, the parents and people watching. On the concrete floor of the main axis quotes of famous writers from the Hague are engraved. As a mean to stimulate exploration and discussion on the plaza, is the sculpture on the north west entrance.

In front of the steps toward the hotel is a place for games. The chess and checker boards can function as tables. It is proposed that chess pieces and checker stones are for loan at the kiosk or the cultural centre. The space is located directly along a path, so people are drawn to watch. This makes the competition not a private match, but a public display.



*figure 10.29 Impression of the Rabbijn Maarsenplein*

The North side of the garden provides an open green field. This is flattened to enable sports, e.g. soccer or badminton. Also here the boulders and the sloped side provides a place for play. The rest of the green spaces in the garden is either planted or used as allotment gardens. The opportunity to offer allotment spaces for the residents will invite the use of the public space and stimulates other to see what is planted and exchange information. At the south side a gravelled space is available for games, e.g. petanque. The *Spinoza* fountain is the attractive element drawing people together forming the catalyst of this part.

The Rabbijn Maarsenplein focuses on the pedestrians passing by. Most of the furniture is oriented toward the main route. At the centre of the plaza is a children's playground with climbing object and a swing set connected to the trees.

### Activities

Temporal events should be stimulated despite that many forms of entertainment and triangulation are already included in the daily life on the plaza. An event manager for the plaza is therefore advised to organise temporal events by collaborating with



figure 10.30 Impression of the lawn of the Nieuwe Kerk Garden.

surrounding facilities and stimulate them to use the plaza as a display for their activities. Organizing book market, open air cinemas, dance and music performances and street theatre are valid options. Also, inviting artists to display temporary art exhibitions and vendors will help to create an active plaza. Extending the digital available newspaper from inside the library onto the plaza extends the library onto the plaza. Putting out a public piano that visitors can play is a way the theatre can extend their presence.

### Stages

On the Spuiplein, the north of Nieuwe Kerk Garden and the Rabbijn Maarsenplein are platforms usable as stage of different scale. The Spuiplein is the main place for venues as an activity plaza. A temporal stage is placed in front of the Cultuurforum. This is the most visual location from both the steps, the interior plaza and the city hall. As it is placed with



figure 10.31 Overview of forms of entertainment.

a distance from the theatre, it does not obstruct the entrance or the daily life on the plaza. When it is not in use as a stage it operates as a terrace. The stage is oriented to the sunken plaza. This lets the noise escape and together with the trees on the hotel steps and in front of the theatre, disturbance is reduced.

A concrete platform is placed at the north side of the garden, right at the entrance. This can be used for medium events. The public can be seated on the lawn and the slope back side, which forms a green amphitheatre where people can sit.

The small wooden platforms at the Rabbijn Maarsenplein can be used as small performance stands. This is intended for local musicians and intimate venues.

### ***Seasonal change***

The sunken part of the Spuiplein can be used as an ice skating rink in the winter time. This provides an active setting where people come together and the visual sunken location makes it a visual location for others to enjoy. Also, this passive enjoyment provides a setting where stranger interact by commenting. The sloped lawn in the garden makes sledding and winter play possible. The vegetation displays visual change throughout the year. On the Spuiplein are blossom tree and trees that change colour in autumn. This creates a aesthetic transition in the public space.



figure 10.32 Impression of the Spuiplein as ice skating rink.

## 10.9 Reflection

With the help of the design example of Spuiplein, it is shown in the last part of this thesis how the behavioural understanding effects the design and the design process. It was intended to find an answer to the sub question of this research; how can behavioural understanding be integrated in a plaza design that evokes public life?

The use of behavioural science is used integral to the process of the analyses and the design. It is not a separate aspect on which to reflect the design afterwards. Therefore it is difficult to clearly understand how this knowledge has a concrete contribution to the design. Yet, it gave insight to why certain behaviour took place and gave grip on creating places for stay and forms of entertainment. The knowledge is rather used as a constant reflection throughout the design process to understand what effect the measures have in the experience and the use of the plaza.

The problem for this particular case is the changing district in which it is located. While it gave an impulse to renovate the plaza, it is also obstructing from getting a clear prediction of future uses and visitors. The construction of new large offices, residential high rise buildings, a new cultural centre, a renovated train station and the Turfmarkt as a new pedestrian route to the centre, will have a great impact on the use of the plaza. Still flexibility and adjustability of the plaza helps to partly overcome this problem.

In an evaluative discussion on the design, landscape architect Röwekamp (2011) of the Ingenieursbureau Den Haag was positive over the design and saw it as an 'enrichment of the field'. Yet, is it possible to know for sure that public life will take part in this plaza and that it will operate as a space of interaction among citizens? As with most design, this can only be stated when put into practice. Even then, opinions vary greatly on realised plaza. Yet, when the new design is evaluated, based on the same sub factors as was done in the case study, all factors are taken into the design (see table). The field of environmental psychology is a social science, dealing with a level of unpredictably, as are public places. The strategy lies in creating changes on encounters and uses.

Factor	Sub factor	New additions
Context	<ul style="list-style-type: none"> <li>• Visible access</li> <li>• Physical access</li> <li>• Symbolic access</li> </ul>	<ul style="list-style-type: none"> <li>• Distant view of pillars and the church.</li> <li>• Pedestrian crossings, new pedestrian route, seating in surrounding streets.</li> <li>• Removal of obstruction, widening paths, opening blind walls or coverage with trees and vegetation.</li> </ul>
Place	<ul style="list-style-type: none"> <li>• Sense of wholeness</li> <li>• Identity of the place</li> </ul>	<ul style="list-style-type: none"> <li>• Pillars as fourth wall, continuity pavement and materials.</li> <li>• Visual location memorials, maintaining trees and expanding the presence of green.</li> </ul>
Orientation	<ul style="list-style-type: none"> <li>• Clear routing</li> <li>• Gateway</li> </ul>	<ul style="list-style-type: none"> <li>• Logic paths, sunken open space, pedestrian crossing Spui.</li> <li>• Clear entry points, more access points through church wall.</li> </ul>
Function	<ul style="list-style-type: none"> <li>• Diverse facilities</li> <li>• Time spread</li> </ul>	<ul style="list-style-type: none"> <li>• New Cultuurforum with mixed functions, kiosk, attracting the Markthof.</li> <li>• Adding more daily function as local shops.</li> </ul>
Edge	<ul style="list-style-type: none"> <li>• Attractive edge</li> <li>• Transition between public and private</li> <li>• Entrance interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Open edges at the Cultuurforum, restaurant and the Markthof, lowering the church wall.</li> <li>• Terraces and stalling places near the facilities.</li> <li>• New entrance of restaurants, interior store and shopping centre.</li> </ul>
Place to stay	<ul style="list-style-type: none"> <li>• Variety of sub spaces</li> <li>• Comfort</li> </ul>	<ul style="list-style-type: none"> <li>• New commercial and public seats, both fixed, integral, movable and different arrangements.</li> <li>• Roofed spaces, trees as wind barrier and shade spaces.</li> </ul>
Entertainment	<ul style="list-style-type: none"> <li>• Events and activities</li> <li>• Changing view and experiences</li> </ul>	<ul style="list-style-type: none"> <li>• Stages, elements of play and discovery, allotment gardens.</li> <li>• Seasonal green, view on pedestrian flows and seasonal activities.</li> </ul>

\_DIENST OCW (2010) Resultaten enquête nieuwbouw dans- en muziekcentrum Spui. Den Haag: s.n.

\_RÖWEKAMP, A. (2011) Discussion on the redesign of the new Spuiplein (Interview, 23 June, 2011). The Hague: Ingenieursbureau Den Haag.

# 11. Conclusion

This final chapter provides a conclusion to the research questions of this thesis project. At the end, a reflection on the research process and recommendations for future research will be given. This thesis on large scale public plazas centres around the following research question:

**In what way can the understanding of people's behaviour contribute to a public plaza design that enriches and enhances public life?**



## 11.1 Contemporary role

In an early stage of this research it became clear that the role of the plaza needed to be redefined. The historic development has led the public place from a vigorous pedestrian space to an invaded territory that discourages public use. The desolated public space created an imbalance between the sense of safety and the experience of a place. Since the public space is being reclaimed, it has been designed to impress and be representative, rather than to form an extend of the living space.

The reflection of the role of the plaza has clarified that a plaza is 'a representation of the city' and the traditional physical features of this element in the public realm do not give the place its meaning.

A plaza functions as a highly accessible public node, often a large open space, that brings people together for whatever purpose to stimulate meetings and experience fellow city dwellers. The reason people come together changes over time. It is the task of the plaza to not only provide the opportunity for interaction, but also to stimulate it. This leads to increased trust, social networking, local awareness and the possibility to experience the city.

## 11.2 Factors

Based on theoretical framework on creating a liveable plaza, seven main design factors were distinguished that contribute and enrich the use of a plaza. The functioning of a plaza as a node in the urban fabric is based upon connection and the creation of an own place that is worth going to and staying at. These key factors are;

- Context; the physical, visual and symbolic connection with the environment.
- Place; the sense of the plaza as its own place.
- Orientation; the ability for way finding on the plaza and for coming and going.
- Function; the facilities that form the essential attraction to the plaza.
- Edge; the facade which connect the indoors with the plaza.
- Place to stay; the possibility to comfortably settle at the plaza.
- Entertainment; the activities and elements which attract people to linger.

There are different ways to integrate these factors in a design. The combination of these design factors results in the activity on the plaza. The level in which this succeeds is depended on the presence and the quality of these factors.

## 11.3 Practical reflection

The case study research has evaluated various plazas on the design factors. It became clear that all do not completely integrate the factors into the design. Even the most exemplar cases partly succeed in meeting the factors. The criticised plazas show an absence of comfortable places to stay and suitable forms of entertainment. Detailed investigation of two redesign projects made clear that these aspects, while appearing in their analyses as an issue for improvement, are lacking in the redesign.

This can be explained by the division of the physical landscape and the (social) psychological landscape. Public space design misses the knowledge to understand the environment for the experience of the visitors. This can however offer grip during the design process.

## 11.4 Behavioural understanding

The theory of the field of Environmental Psychology provides a extensive source for improving the understanding of environmental perception and human behaviour in the public space. Behaviour is directly linked to the sensory experience of the environment which, includes the physical and social landscape. Behaviour tries to optimise preferred stimulus and minimize the disliked stimulus. This relates to the sense of experience versus the sense of safety.

The environment, or behavioural setting, offers qualities that can meet or disrupt the preferred level of different stimuli. The proximity of others, configuration of the orientation, view and boundaries can make a setting fitted for specific users or activities, e.g. talking, watching, working.

The physical structure of the plaza, e.g. entrances, edges, open spaces or pedestrian crossings, makes behaviour more predictable. It can be estimated where people will walk, stop, stay and where the chance of encounters with others are increased.

## 11.5 Spuiplein

To test and find out how the understanding of the design factors and the (social) behaviour can contribute in a plaza design, it is integrated in the design process for the project of Spuiplein in the city the Hague. The municipality of the Hague seeks to improve this plaza by combining the Spuiplein with two adjacent public spaces, the Nieuwe Kerk Garden and the Rabbijn Maarsenplein. The plaza needs to become a large scale and connected cultural hart that units the city and becomes a place for gathering and exchange. Thus, it is attempted to give the plaza back the traditional role of a plaza.

The analyses revealed that the plaza needs improvement for all design factors. To create a lively plaza, a connection with the two other public places is not sufficient. Therefore, the task for the new design was to improve the factors and create a setting that stimulates interaction between people whilst they can position themselves in a social comfortable behavioural setting.

The three public place were not merged into one whole, but designed as four separate areas that are strongly linked with another. This preserved the human scale of the spaces with the increased change on recognizing others. This also creates a larger edge zone in the design, the border space of a plaza that is in daily life preferred.

Each of the sub plazas are designed as an interactive setting. The Spuiplein, for instance, has gotten a sunken inner plaza with sub places with different spatial qualities to fit a diverse public and optimise the level of social safety and comfort. In the centre activities take place and elements are positioned that operate as triangulation.

Activities, like playing on public instruments or chess, stimulate the use of the public place. It forms a connection between the users and the public, it bring people close to explore, and it evokes commenting and teaching.

Another example are the communal allotment gardens in the south part of Nieuwe Kerk Garden these form a connection in the neighbourhood. They bring residents together to co-operate, stimulate the use of the public space and it triggers knowledge exchange.

The new design of the Spuiplein enriches the public live on the plaza by improving the connection and the functionality of the plaza. A sociable plaza for a diversity in uses is made with the help of providing opportunities to establish contact with others while being in a socially safe setting and by stimulating interaction with creative public activities. A plaza as a social space leaves room for coincidences and interpretation. This is not met by leaving a plaza unused, but by providing and facilitating for a range of activities. In time a social plaza has the potential to be a part of peoples everyday life. Only then it becomes a reflection of the urban society.

## 11.6 Reflection and recommendations

This thesis project is an explorative research, a first step for integrating behavioural understanding into the urban design. Despite my attempt to be thorough and give a comprehensive overview of the factors involved in public space design, the research still does not include all aspects. This is due to the complexity of the subject and the limited time frame in which this research is conducted.

This research focuses on the design and the perception of a plaza, yet the success of creating a livable plaza is influenced by many other aspects as well, e.g. financing of the project, acceptance of the plaza by the public or management. For future projects it is advisable to involve future users, e.g. residents, visitors and facilities, into the design process. This thesis has used interviews and short conversations with the users and prior research and surveys of the municipality.

The design factors for public place design is based upon widely accepted literature and interviews which I selected and summarized. Sometimes it was hard to combine the different views and theories in one overview even though these sources showed little inconsistencies. Involving other factors or the use of other sources might have resulted into different results on plaza design and the reflection of the case studies. Besides the fact that I am a student of landscape architecture which may also have had an influence in the research.

For the knowledge on human behaviour in the public space, I have turned to the basics of environmental psychology to get a clue of the theoretical foundation. There are much more aspects influencing people's perceptions and actions, e.g. colours, forms. In this thesis, the focus remained on the social aspect of behaviour.

The design example has included the knowledge in the design process. This integrative use is not always as clear from the outside as it evokes a constant inner design dialogue of consideration and reflection of the effect of the interventions on the use and the perception of the space.

In the thesis, I researched the involved factors of plaza design as well as the beginning of the understanding of the environmental perception and human behaviour. This exploration attempts to reveal the value of behavioural understanding in the urban design and how this can offer grip in the design and enliven the public space. More research into environmental psychology is needed to link behaviour with design.

For further research, I would recommend to focus on the different forms of triangulation to find out the concrete effects and efficiency for bringing together people from different backgrounds.

A next step continuing this research could be to use the different qualities of behaviour settings defined in the research and to systematically link the qualities to different users and activities to optimally match the behavioural setting to the people's needs.







# PART D. APPENDIX



- Case study evaluation
- Historic development
- Time table facilities
- Social mapping
- Photographs of public life at the Spuiplein

# 1. Case study evaluation

Based on Dordreghter (2003), Lenzholzer (2008), Melik (2008), Witman & de Haan (2010) and Project for Public Spaces (2011) fourteen plazas were selected. Eight of them were plazas that are heavily criticised and are in the planning to be remodelled. The remaining four plazas (Brink, Leidseplein, Pioneer Courthouse Square, Rembrandtplein) are praised by the users and stand as an example. Each plaza has a descriptive part, a critical evaluation (based on the factors) and illustrative images.



Cases in the Netherlands

1. *Location* refers to the position of the plaza inside the city. This description often refers to the position in reference to the city centre.
2. *Functions* describe the main intended role of the plaza. A plaza can focus on; retail (e.g. shops), culture (e.g. cinemas, theatres), civic (e.g. city hall, ), residents (e.g. playground, community centres), leisure (e.g. cafe, restaurants) or transport (e.g. bus or tram stops). A mixture of two or more functions is possible as well.
3. *These plazas* has recently or is in process of a redesign.



## Brink

**City** Deventer  
**Location<sup>1</sup>** City centre  
**Size** 6.000 m<sup>2</sup>  
**Year** 1994  
**Designer(s)** Friso Kramer en SVP Stedebouw en Architectuur.  
**Function(s)<sup>2</sup>** Leisure  
**Main facilities** Museum, tourist office, café, restaurants, stores

### Designers philosophy

‘During the redesign, it was kept in mind that a good plaza is never complex, yet it is the simple merging of daily processes and functions’ (SVP architectuur en stedenbouw, 1994).

### Description

The Brink is an historic plaza that consists out of multiple smaller squares. This has made the place into a stretched curved open space. The plaza is the extend of the main shopping street of Deventer. Enclosing the plaza is a great variety of historical buildings, with at the very end the monumental Waag-building. The floor is paved with brick stones and concrete elements to emphasizes different zones and paths on the plaza. The plaza is kept open in the centre, with the exception of a large traditional fountain. The open space is surrounded by trees. In this edge there are many terraces, benches and ledges hidden, as well as many landmark elements, such as an old water pump, sculptures and planters.

<b>CONTEXT</b>	Visual accessibility	+
	Physical accessibility	+
	Symbolic accessibility	+
<b>PLACE</b>	Wholeness	+
	Identity	+
<b>ORIENTATION</b>	Entry points	-
	Pathway	+
<b>FUNCTION</b>	Diversity of functions	+
	Time spread	+
<b>EDGE</b>	Attractive edge	+
	Transitional edge	+
	Edge entrances	+
<b>PLACE TO STAY</b>	Variety of stay	+
	Comfort	-
<b>ENTERTAINMENT</b>	Activities and events	-
	View	+



## Brinkplein

<b>City</b>	Hengelo
<b>Location<sup>1</sup></b>	City centre, entrance to the centre from the train station
<b>Size</b>	1700 m <sup>2</sup>
<b>Year</b>	1999
<b>Designer(s)</b>	Juurling en Geluk and Bolles Wilson architects
<b>Function(s)<sup>2</sup></b>	Leisure, retail
<b>Main facilities</b>	Cafés, stores, underground parking, markets

### Designers philosophy

'A robust hardened landscape and lack of furniture make the square festival and market proof' (Juurling en Geluk, 2011).

### Description

The trapezium shaped plaza is paved with wide horizontal stripes. Diagonally a path runs through. The plaza is mostly an open space. At the west side is a large construction of three poles connected with attractive illumination that changes in the evening. A modern Clock tower is situated at the southern a part. This consists out of a clock on top, information displays in the middle and a parking entrance at ground level. After the completion rows of trees where added on the north and west side, a few sets of wooden benches along the edge and many bicycle racks.

<b>CONTEXT</b>	Visual accessibility	+
	Physical accessibility	+
	Symbolic accessibility	+
<b>PLACE</b>	Wholeness	+
	Identity	-
<b>ORIENTATION</b>	Entry points	+
	Pathway	+
<b>FUNCTION</b>	Diversity of functions	+
	Time spread	+
<b>EDGE</b>	Attractive edge	+
	Transitional edge	-
	Edge entrances	+
<b>PLACE TO STAY</b>	Variety of stay	-
	Comfort	-
<b>ENTERTAINMENT</b>	Activities and events	-
	View	-



### Grote Markt<sup>3</sup>

**City** Almere  
**Location<sup>1</sup>** City centre  
**Size** 10.000 m<sup>2</sup>  
**Year** 1996  
**Designer(s)** Bureau B+B urban planning and landscape architecture  
**Function(s)<sup>2</sup>** Leisure  
**Main facilities** Casino, bank, café, restaurant, shops

#### Designers philosophy

The assignment was to create a flexible plaza for new recreational functions and events.

#### Description

The stretched shape is emphasised in the design by parallel rails in the floor. These belonged to a very large mobile stage, however this has been removed more recently. The plaza is enclosed by a closed wall of a diversity of buildings. Terraces stretch out of the cafes on the ground floor. At the beginning, middle and end are clusters of chestnut trees. Along the long edges are high light poles and a few benches. At the south is a sculpture.

<b>CONTEXT</b>	Visual accessibility	+
	Physical accessibility	+
	Symbolic accessibility	+
<b>PLACE</b>	Wholeness	+
	Identity	-
<b>ORIENTATION</b>	Entry points	-
	Pathway	-
<b>FUNCTION</b>	Diversity of functions	-
	Time spread	+
<b>EDGE</b>	Attractive edge	+
	Transitional edge	+
	Edge entrances	+
<b>PLACE TO STAY</b>	Variety of stay	-
	Comfort	-
<b>ENTERTAINMENT</b>	Activities and events	-
	View	+



## Grote Markt

<b>City</b>	Groningen
<b>Location<sup>1</sup></b>	City centre
<b>Size</b>	12.000 m <sup>2</sup>
<b>Year</b>	1997
<b>Designer(s)</b>	Mecanoo architects
<b>Function(s)<sup>2</sup></b>	Civil
<b>Main facilities</b>	Church tower, old town hall, cafés, markets

### Designers philosophy

The focus lies on unifying the plaza to the downtown public space and express its identity.

### Description

This large historical plaza has a rectangle shape. Central at the west side is the old city hall. The other three sides are framed by streets for motor traffic. At the other side of the streets are terraces and a close building edge with a variety of retail, restaurants and civil functions. With the exception of a bus stop and high light poles the plaza remains empty. Pavement is used to create three zones. To on each side of the city hall and one main tapestry down the middle. At the shoulders temporal booths are set up.

<b>CONTEXT</b>	Visual accessibility	+
	Physical accessibility	-
	Symbolic accessibility	+
<b>PLACE</b>	Wholeness	+
	Identity	+
<b>ORIENTATION</b>	Entry points	+
	Pathway	+
<b>FUNCTION</b>	Diversity of functions	-
	Time spread	+
<b>EDGE</b>	Attractive edge	-
	Transitional edge	-
	Edge entrances	+
<b>PLACE TO STAY</b>	Variety of stay	-
	Comfort	-
<b>ENTERTAINMENT</b>	Activities and events	-
	View	+



## van Heekplein

**City** Enschede  
**Location<sup>1</sup>** Southern part of the city centre  
**Size** 20.000 m<sup>2</sup>  
**Year** 2001  
**Designer(s)** Okra Landschapsarchitecten  
**Function(s)<sup>2</sup>** Retail  
**Main facilities** Casino, shops, department stores, underground parking, market

### Designers philosophy

The project underlines that the plaza should be kept open to markets and events, yet ‘... even when the shops are closed and the market is gone, the Van Heekplein should still invite people to linger awhile ...’ (Okra, 2001)

### Description

The five sided plaza lies in the pedestrian zone of the city centre and is enclosed by many stores. Two clusters of trees divided the plaza into three open zones. The space is paved with gray granite stone with small strips of dark granite going from east to west. The plaza is framed with a wide path from the same dark pavement. The trees are located on a distinct pavement and have wooden benches underneath. All around the plazas are electrical wells built into the floor for the markets and events. Along the south side runs a mist fountain. The underground parking can be reached via an artistic entrance with playfully bent metal pipes at the south east corner.

<b>CONTEXT</b>	Visual accessibility	+
	Physical accessibility	+
	Symbolic accessibility	+
<b>PLACE</b>	Wholeness	+
	Identity	-
<b>ORIENTATION</b>	Entry points	+
	Pathway	-
<b>FUNCTION</b>	Diversity of functions	-
	Time spread	+
<b>EDGE</b>	Attractive edge	+
	Transitional edge	-
	Edge entrances	+
<b>PLACE TO STAY</b>	Variety of stay	-
	Comfort	-
<b>ENTERTAINMENT</b>	Activities and events	-
	View	+



## Leidseplein

**City** Amsterdam  
**Location<sup>1</sup>** City centre  
**Size** 3.600 m<sup>2</sup>  
**Year** -  
**Designer(s)** Municipality of Amsterdam  
**Function(s)<sup>2</sup>** Leisure, traffic  
**Main facilities** Cinemas, theatres, cafés, stores

### Designers philosophy

The plaza not designed but formed over time.

### Description

The plaza is aggregation of traffic, recreation and activities. It has a rectangle shape and is enclosed by a small grain of facilities with on the west the historical theatre building. The plaza is crossed in the middle by a street of trams with stops along the way. This defines the plaza into two parts. The south part is the foyer of many cafes. This part has trees forming a canopy roof and a row of benches along the south edge. In the middle is a poster pillar. The north side is more enclosed. Along the building is the walking space and the middle is occupied by terraces underneath trees.

<b>CONTEXT</b>	Visual accessibility	+
	Physical accessibility	+
	Symbolic accessibility	+
<b>PLACE</b>	Wholeness	-
	Identity	+
<b>ORIENTATION</b>	Entry points	+
	Pathway	+
<b>FUNCTION</b>	Diversity of functions	-
	Time spread	+
<b>EDGE</b>	Attractive edge	+
	Transitional edge	+
	Edge entrances	+
<b>PLACE TO STAY</b>	Variety of stay	+
	Comfort	-
<b>ENTERTAINMENT</b>	Activities and events	+
	View	+



## Mercatorplein<sup>3</sup>

**City** Amsterdam  
**Location<sup>1</sup>** Residential district  
**Size** 6.000 m<sup>2</sup>  
**Year** 1998  
**Designer(s)** Stadsdeel West  
**Function(s)<sup>2</sup>** Resident  
**Main facilities** Police office, public library, community centre, cafés, shops

### Designers philosophy

The main goal of the redesign of the original design by Berlage was to improve the social coherence and to make the space into an active meeting place (Booi, 2005).

### Description

Motor traffic goes along three sides of the plaza. The building adjacent on the east side has passages at the ground level with various terraces stretching out. The parking garage can be reached from the south side. Here the plaza corner is lifted to form the entry from the street. On top this sloped space is a blue pillar marking the garage and fourteen individual fixed chairs. Next to it is a modest water fountain. The central part of the plaza is open and has paved a globe and names of explorers in the floor. The north part is covered by the canopy of cherry trees with underneath wooden benches. At the north west corner is a kiosk. Along the west side are a row of flower pots, benches and streetlights.

<b>CONTEXT</b>	Visual accessibility	+
	Physical accessibility	-
	Symbolic accessibility	-
<b>PLACE</b>	Wholeness	+
	Identity	+
<b>ORIENTATION</b>	Entry points	-
	Pathway	+
<b>FUNCTION</b>	Diversity of functions	+
	Time spread	+
<b>EDGE</b>	Attractive edge	-
	Transitional edge	+
	Edge entrances	-
<b>PLACE TO STAY</b>	Variety of stay	+
	Comfort	-
<b>ENTERTAINMENT</b>	Activities and events	-
	View	+



## Museumplein

**City** Amsterdam  
**Location<sup>1</sup>** In the residential district Oude Zuid  
**Size** (old south)  
**Year** 12.000 m<sup>2</sup>  
**Designer(s)** 1995  
 Sven-Ingvar Andersson  
**Function(s)<sup>2</sup>** Cultural  
**Main facilities** Concert hall, museums, underground parking

### Designers philosophy

The plaza is designed to emphasize the open-sky. The plaza forms a unique contrast to the small scale and the intimate ratio that shape the image of city of Amsterdam. (van der Werf, 2008)

### Description

The plaza is stretched with on the ends the monumental Rijksmuseum and across the concert hall both with a traffic street in between. The Museumplein consists out of two parts. The north part is a symmetrical gravel space with a pond on the axis and two rows of Platanus trees on both sides. This part houses a museum shop, a restaurant, a playground, a half pipe, and a strip of vendors. The rest of the plaza consist of a grass lawn framed with avenues of lime trees. The north west edge is occupied with the Stedelijk museum and the Van Gogh museum. The underneath the large sloping corner is a supermarket. Throughout the plaza are axial paths crossing paved with bricks, metal plates or natural stone.

<b>CONTEXT</b>	Visual accessibility	+
	Physical accessibility	-
	Symbolic accessibility	-
<b>PLACE</b>	Wholeness	+
	Identity	+
<b>ORIENTATION</b>	Entry points	-
	Pathway	-
<b>FUNCTION</b>	Diversity of functions	+
	Time spread	-
<b>EDGE</b>	Attractive edge	-
	Transitional edge	-
	Edge entrances	-
<b>PLACE TO STAY</b>	Variety of stay	-
	Comfort	-
<b>ENTERTAINMENT</b>	Activities and events	-
	View	+





## Pioneer Courthouse Square

**City** Portland  
**Location<sup>1</sup>** City centre  
**Size** 37.000 m<sup>2</sup>  
**Year** 1984  
**Designer(s)** Willard K. Martin  
**Function(s)<sup>2</sup>** Cultural, leisure, traffic  
**Main facilities** Travel office, café, news studio.

### Designers philosophy

The design on the Greek amphitheatre to merge 'stage and audience, function and fun'.

### Description

The plaza occupies one city block with streets surrounding. Each corner has been provided with a clear pedestrian crossing. The plaza consists out of two parts, an open low open space at the east and a high area in the west. These parts are connected by a half circle of steps and a ramp. In the middle of the ring is a large fountain emphasising the entrance toward travel office. At the high part are a kiosk and a café situated with a pergola. Along two opposite edges of the plaza are trees and large columns that integrating coverings and tram stops. The entire plaza is paved with red bricks and include many integrated sitting places set to form distinct sub places. Various elements create attractive assemble point, e.g. glass umbrellas, sculptures, and a chess board.

<b>CONTEXT</b>	Visual accessibility	+
	Physical accessibility	+
	Symbolic accessibility	+
<b>PLACE</b>	Wholeness	+
	Identity	+
<b>ORIENTATION</b>	Entry points	+
	Pathway	-
<b>FUNCTION</b>	Diversity of functions	+
	Time spread	+
<b>EDGE</b>	Attractive edge	-
	Transitional edge	-
	Edge entrances	+
<b>PLACE TO STAY</b>	Variety of stay	+
	Comfort	+
<b>ENTERTAINMENT</b>	Activities and events	+
	View	+



## Rembrandtplein

**City** Amsterdam  
**Location<sup>1</sup>** In a neighbourhood south of the city  
**Size** centre  
**Year** 6.000 m<sup>2</sup>  
**Designer(s)** 2003  
 Eric Nijhuis van Gelder  
**Function(s)<sup>2</sup>** Leisure  
**Main facilities** Cafés, restaurants, bank

### Designers philosophy

'The city district wanted to make the plaza public again' (Nijhuis, in; Rietveld, 2002) and a clear overview to promote safety were the two main ideas to create a place for recreation and events.

### Description

The plaza is a rectangular space surrounded by an edge of buildings and low intensity streets. The buildings house a small grain of leisure facilities with open façade and terraces. The outer circle is paved with granite stone and inside is an accessible lawn. Along both long sides of the plaza are a row of Platanus trees, street lanterns, and bicycle racks. Most details can be found at the east side. Here the centre of the lawn has a slight platform and features a large sculpture of Rembrandt van Rijn. There is a wide range of ledges, steps and benches accompanied with decorative lamp posts and trees.

<b>CONTEXT</b>	Visual accessibility	-
	Physical accessibility	+
	Symbolic accessibility	+
<b>PLACE</b>	Wholeness	+
	Identity	+
<b>ORIENTATION</b>	Entry points	+
	Pathway	-
<b>FUNCTION</b>	Diversity of functions	+
	Time spread	+
<b>EDGE</b>	Attractive edge	+
	Transitional edge	-
	Edge entrances	+
<b>PLACE TO STAY</b>	Variety of stay	+
	Comfort	+
<b>ENTERTAINMENT</b>	Activities and events	+
	View	+



## Schouwburgplein

**City** Rotterdam  
**Location<sup>1</sup>** Just outside the city centre  
**Size** 13.000 m<sup>2</sup>  
**Year** 1996  
**Designer(s)** West 8 urban design and landscape architecture  
**Function(s)<sup>2</sup>** Cultural  
**Main facilities** Cinema, theatre, concert hall, underground parking

### Designers philosophy

The designer Adriaan Geuze designed the plaza both as an 'ode to the harbour' and as a 'city stage', consciously leaving the plaza empty as a 'void'.

### Description

The plaza is classified as an open raised platform. The platform is accessible via a few steps and ramps and consists out of a wide variety of pavement materials, like epoxy, wood and metal. On the east there are three large ventilation towers with four iconic red cranes in front. The cranes function as illumination that can be changed by the users. Between the cranes and towers is a linear line of benches. On the plaza there are two glass prisms that give access to the garage underneath. There is intergraded illumination and a fountain in the platform.

<b>CONTEXT</b>	Visual accessibility	+
	Physical accessibility	-
	Symbolic accessibility	-
<b>PLACE</b>	Wholeness	+
	Identity	+
<b>ORIENTATION</b>	Entry points	-
	Pathway	-
<b>FUNCTION</b>	Diversity of functions	-
	Time spread	-
<b>EDGE</b>	Attractive edge	-
	Transitional edge	-
	Edge entrances	+
<b>PLACE TO STAY</b>	Variety of stay	-
	Comfort	-
<b>ENTERTAINMENT</b>	Activities and events	-
	View	-



## ***Spuiplein***

**City** The Hague  
**Location<sup>1</sup>** Outside the city centre; link between the centre and the central station  
**Size** 4.500 m<sup>2</sup>  
**Year** 1996  
**Designer(s)** Architect Joan Busquets in cooperation with Den Haag Municipality  
**Function(s)<sup>2</sup>** Cultural  
**Main facilities** Theatre, city hall, hotel, restaurant

### ***Designers philosophy***

The Spuiplein forms an important link between the central station and the city centre (Municipality of the Hague, 2009).

### ***Description***

The Spuiplein is designed as a part of a pedestrian route. The plaza is rectangular with one side open to the street and across the plaza is the Dance theatre. The plaza, like the route to the station is paved Belgian limestone. In the middle is a fountain of spouts build into the floor. At the south east side is a 12 steps fixed tribune and at the north corner are terraces. Most striking is that plaza is left open without any street furniture.

<b>CONTEXT</b>	Visual accessibility	-
	Physical accessibility	+
	Symbolic accessibility	+
<b>PLACE</b>	Wholeness	-
	Identity	-
<b>ORIENTATION</b>	Entry points	+
	Pathway	-
<b>FUNCTION</b>	Diversity of functions	-
	Time spread	+
<b>EDGE</b>	Attractive edge	-
	Transitional edge	-
	Edge entrances	-
<b>PLACE TO STAY</b>	Variety of stay	-
	Comfort	-
<b>ENTERTAINMENT</b>	Activities and events	-
	View	-



- \_AALST, I. van & BOOGAARTS, I. (2002). From museum to mass entertainment: the evolution of the role of museum in cities. *European Urban and Regional Studies* (9, no.3).
- \_ARCHITECTENWEB (2011) [www.architectenweb.nl](http://www.architectenweb.nl).
- \_BLUNDELL JONES, P. (2001) Urban reconstruction, Hengelo, the Netherlands; symbiotic squares. London; *Architectural Review* (209, no. 1250).
- \_BOOI, H. (2005) Drie pleinen in Amsterdam: ontwerp & gebruik. Amsterdam; Dienst Ruimtelijke Ordening Amsterdam.
- \_DIEDERENDIRRIX ARCHITECTS (2011) [www.diederendirrix.nl](http://www.diederendirrix.nl).
- \_DOOREN, N. van (1999) Modern ambachtelijk. Wageningen: Blauwe Kamer (4).
- \_GEHL, J. & GEMZØE, L. (2008) *New city spaces*. Copenhagen : Danish Architectural Press.
- \_GEMEENTE DEN HAAG (2009) Nota van uitgangspunten Internationaal Cultuurforum Spui. The Hague: Gemeente Den Haag, Dienst Stedelijke Ontwikkeling.
- \_GEMEENTE DEN HAAG (1989) Nota de kern gezond. Available at: [www.denhaag.nl/web/file?uuid=88c17144-9bce-4006-a736-80358e839d23&owner=bfadc11e-971e-465e-b613-5da689f27cd0&contentid=6596](http://www.denhaag.nl/web/file?uuid=88c17144-9bce-4006-a736-80358e839d23&owner=bfadc11e-971e-465e-b613-5da689f27cd0&contentid=6596).
- \_GUINEE, A. (1997) De Tilburgse Heuvel. Wageningen: Blauwe Kamer (4).
- \_JUURLING EN GELUK (2011) Stadshart Hengelo. Available at: [www.jenj.nl](http://www.jenj.nl).
- \_LENZHOLZER, S. (2008) A city is not a building- architectural concepts for public square design in Dutch urban climate contexts. Wageningen: *Journal of Landscape Architecture* (1).
- \_MELIK, R. van (2008) Changing public space; the recent redevelopment of Dutch city squares. Utrecht, KNAG/Faculty of Geosciences Utrecht University.
- \_MELIK, R. van, WEESEP, J. van & AALST, I. van (2005) Spiegels van de samenleving; Pleinen door de eeuwen heen. In: BMC, ed., *Pleinenboek*. Leusden; BMC.
- \_OKRA (2011) [www.okra.nl/project.php?project\\_id=82](http://www.okra.nl/project.php?project_id=82).
- \_PANOMRAMIO (2011) [www.panoramio.com](http://www.panoramio.com).
- \_PROJECT FOR PUBLIC SPACES (2011) [www.pps.org](http://www.pps.org).
- \_PROJECT FOR PUBLIC SPACES (2004) Pioneer Courthouse Square: a vision for a year-round square. New York.
- \_RIETVELD, G. (2002) Het historisch Rembrandtplein vernieuwd. *Straatbeeld* (april), Available at: [amsterdam.nl/publish/pages/309702/straatbeeld-pdf-rembrandtplein.pdf](http://amsterdam.nl/publish/pages/309702/straatbeeld-pdf-rembrandtplein.pdf).
- \_SVP ARCHITECTUUR EN STEDENBOUW (2011). Deventer: de Brink. Available at: [www.svp-svp.nl](http://www.svp-svp.nl).
- \_UNIVERSITY OF IDAHO (2011) Community design and planning research: public plazas. Available at: [www.class.uidaho.edu/communityresearch/public\\_plazas.htm](http://www.class.uidaho.edu/communityresearch/public_plazas.htm).
- \_VEENENDAAL, K, ed. (2003) *Pleinenboek*. Utrecht: Hogeschool voor de Kunsten.
- \_WEST 8 (2011) Schouwburgplein. Available at: [www.west8.nl/projects/public\\_space/schouwburgplein](http://www.west8.nl/projects/public_space/schouwburgplein).
- \_WERF, J. van der (200) Plein, Park, veld?; een cultuurhistorische verkenning van het Museumplein en omgeving. Amsterdam: Gemeente Amsterdam & Stadsdeel Oud-Zuid.
- \_WIKIPEDIA (2011) [www.wikipedia.nl](http://www.wikipedia.nl).
- \_WILLEM, O. (2002) The new Heuvelplein in Tilburg. München: Topos; *European Landscape architecture magazine*, (1).
- \_WITMAN, B. & HAAN, H. de (2010) *Amsterdamse pleinen*, Amsterdam; Uitgeverij Valiz.

## 2. Historic development



*The Hague in 1652 (Municipality the Hague, 2009).*



1345 The construction of the canal Spui between the *Hofvijver* and the *Vliet* and the Jewish neighbourhood *de Buurt* at the south side.

1580 The *Turfmarkt* ('peat market') is dug out, flourishing the neighbourhood with new job opportunities, trade, and production.

1649 The construction of the protestant church *Nieuwe kerk*.

1900 In the 18<sup>th</sup> century the harbours lose their function. Ships became too large for the canal. The neighbourhood is left in decay.

1904 The Spui and the *Turfmarkt* canal are filled up. On the *Turfmarkt* a small park is created.

1940 New tram routes are constructed on the *Turfmarkt*.

1969 The *Nieuwe Kerk* is closed for reconstruction. Afterwards the church is a centre for cultural events.

1975 Jewish district is replaced by new houses, schools and the square *Bezemplein*. Mostly Chinese residents occupy the district.

1983 The tram routes are demolished.

1987 The construction of *Dr. Anton Philipszaal*, by architect Van Mourik, and *Lucent Danstheater*, by architect Koolhaas.

1995 The construction of the City Hall and City Library, designed by Richard Meier.

1993 The construction of *Theater aan het Spui*, by H. Hertzberger.

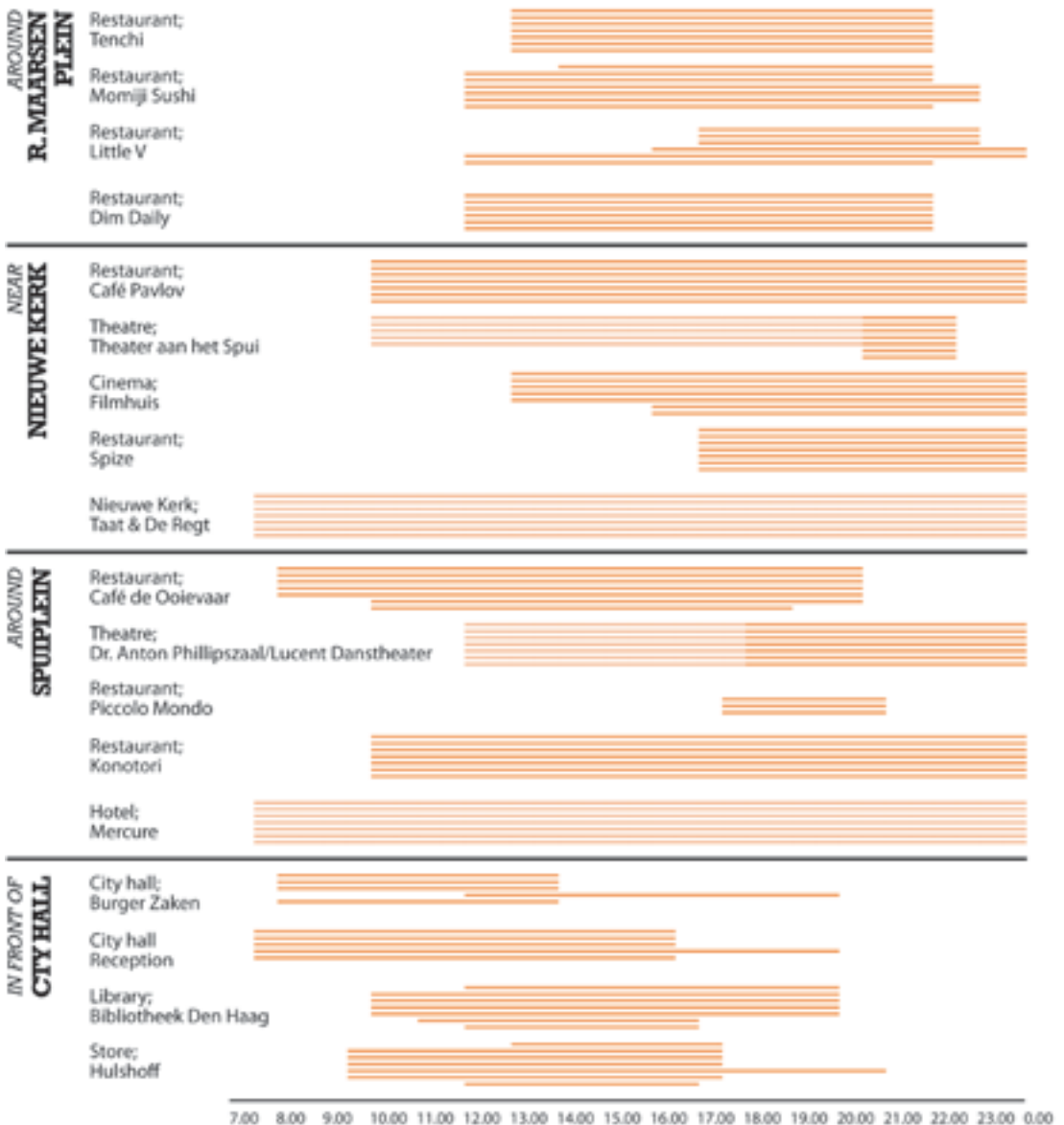
1996 *Spuiplein* is redesigned by Busquet and the *Ingenieursbureau Den Haag*.

2006 The *Bezemplein* is redesigned and renamed into the *Rabbijn Maarsenplein*.

2008 The start of the project *Wijnhavenkwartier*.

### 3. Time table facilities

The table underneath shows the opening hours of all the facilities directly adjacent to the Spuiplein, Nieuwe Kerk Garden and the Rabbijn Maarsenplein. Each line is a day in the week. The light colour indicates occasional use of the facility.







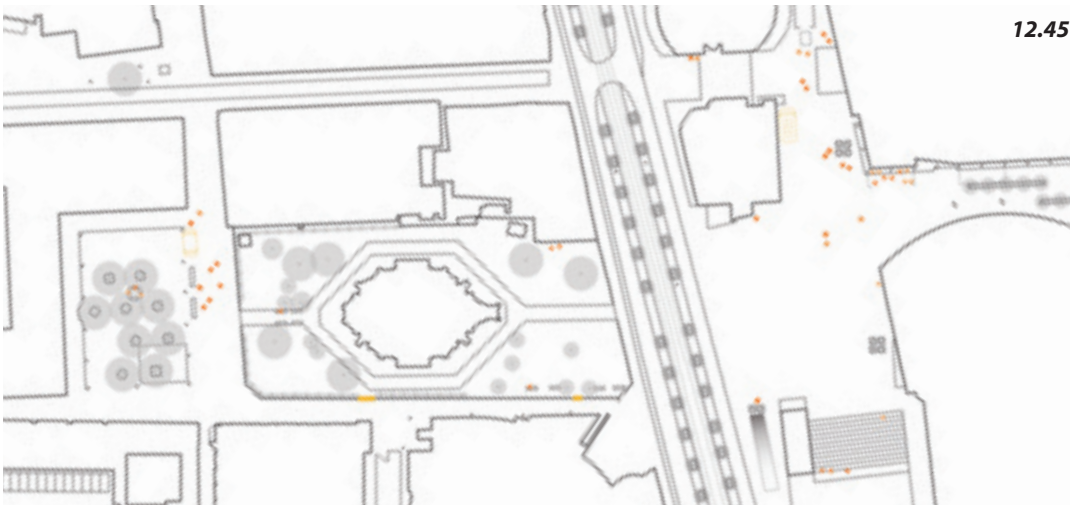
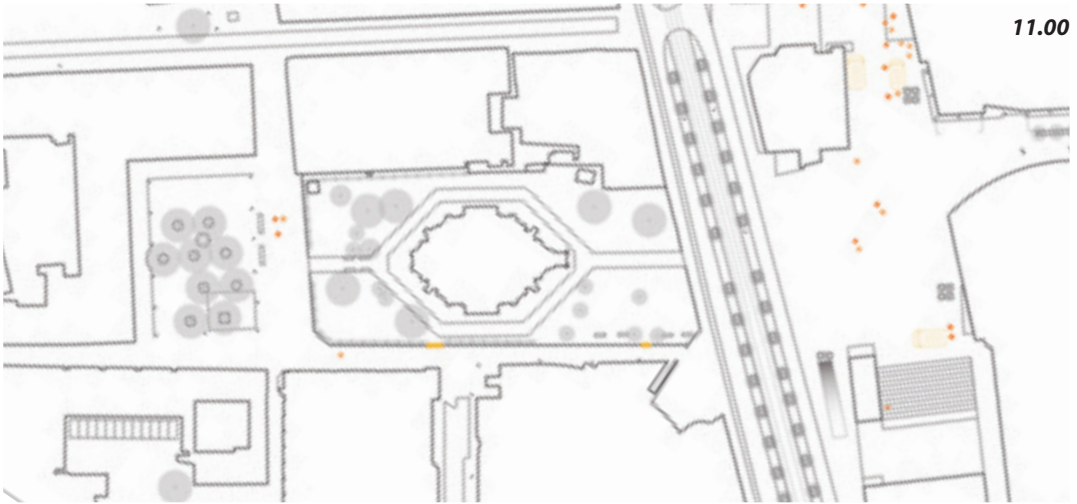
## 4. Social mapping

During the research a long term observations was made on an average weekday, Tuesday November 16th, 2010. Weather conditions were clear an sunny.

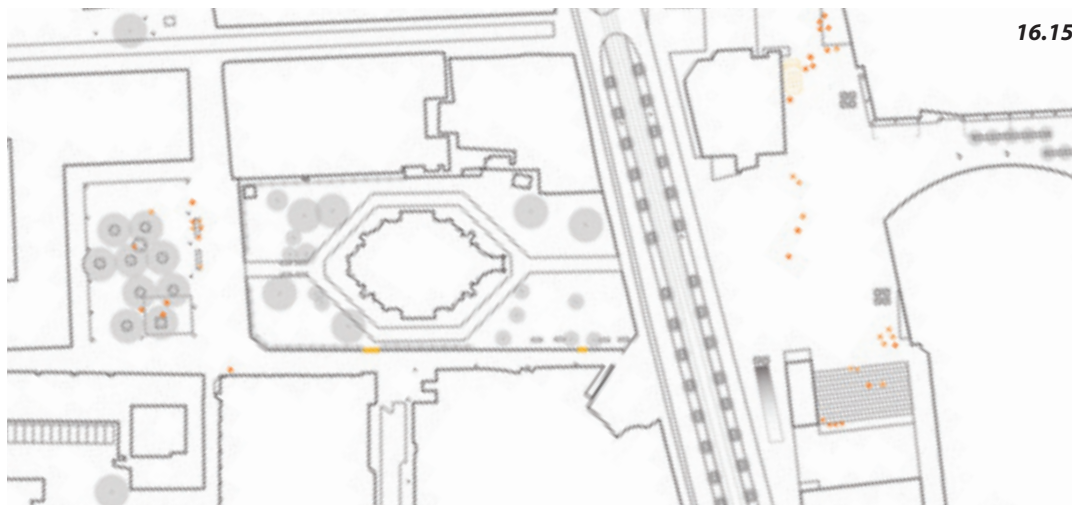
Observations were made on the plaza from 7.30 to 19.45. Every 1 hour and 45 minutes a quick observation was made where people stood still (circle), sat (triangle) and where involved in activities (square). The intensity and the routes of the passers by and the type of activities were observed, but are not illustrated in the maps. This observation was also followed in July.

Some of the main gates of the Nieuwe Kerk Garden were closed in the morning and the end of the day. There were now planned events taken place.

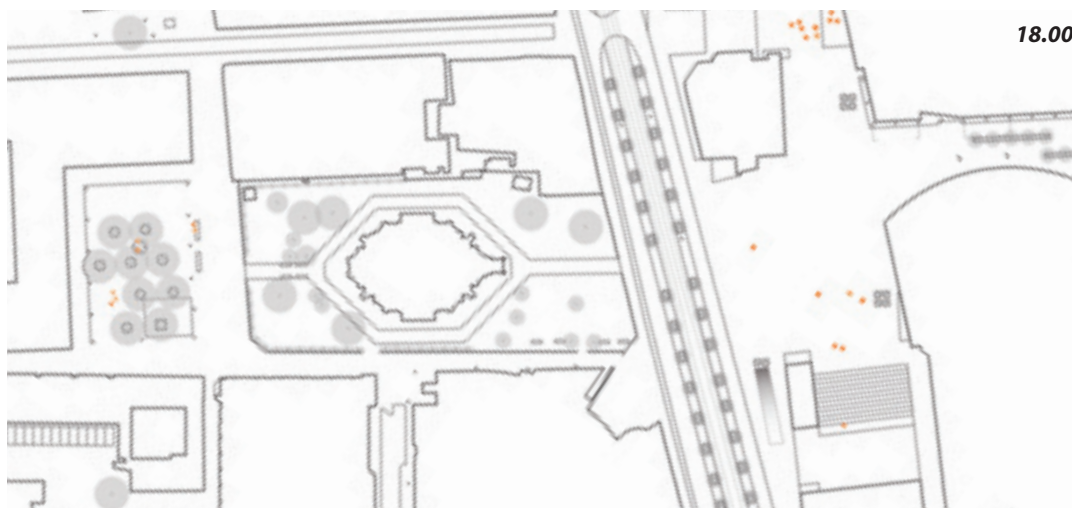




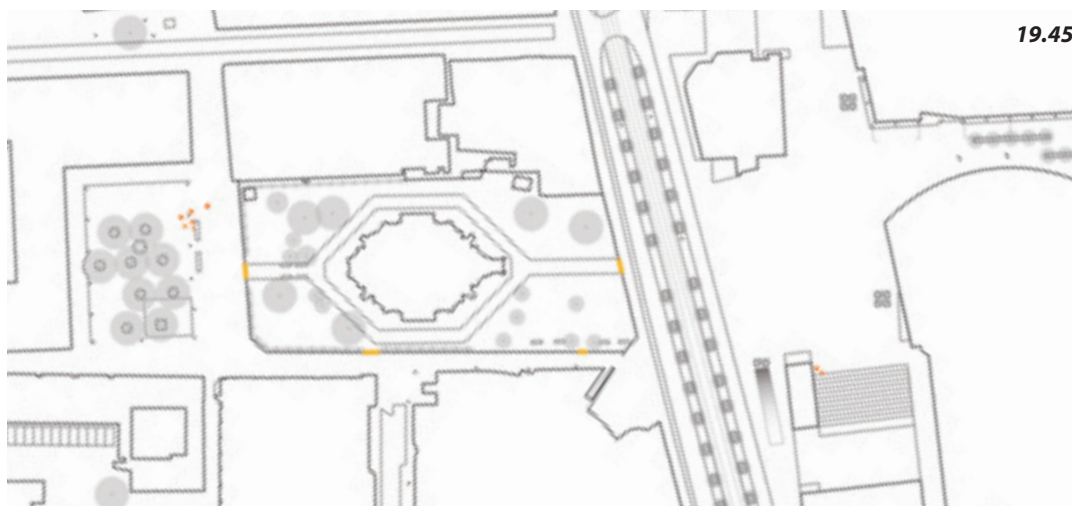
16.15



18.00



19.45





## 5. Photographs of public life at the Spuiplein

This collage shows a glimpse of the daily life at the Spuiplein. The pictures were taken during days of observation.

