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Front page: 'A birds eye view of Amsterdam', Jan Christiaanszoom Micker, around 1660
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1 Introduction

1.1 General

Before you lies the graduation thesis from the Faculty of Architecture, department Urbanism, belonging to the graduation project ‘reinhertance’. Between February 2011 and April 2012, this project was carried out in the graduation studio ‘Urban Regeneration in the European Context’ at the chair of Spatial Planning and Strategy. Subject is the design and planning task - and its opportunities and its impediments - for the historic city-centre of Amsterdam in particular, and European cities with historic city-centres in general.

1.2 Motivation

For as long as I can remember, I have had a great fascination for past times, and thus its tangible remnants have always captured my imagination. Increasingly though, the realisation how short our human history actually is, is dawning on me. What seems like forever ago might as well have been yesterday. Like a tunnel is dug by determining course through looking at the covered trajectory, people try to make predictions on what would be likely to happen, but also on what might be desirable (not) to take place, by looking at their history. For an effective and accurate interpretation, understanding the nature of things, not just the facts, is of paramount importance. To find out who we are and who we want to be, we should be simultaneously aware of our surroundings and our origins.

The city of Amsterdam is broadly considered to be of great cultural and historic value. For centuries, it has played a vital role in the development of The Netherlands and Western Europe as the centre of the Modern World. From very early on in the city’s past, the balance between government, freedom and trade was considered to be of paramount importance for the prosperity of this open society. The fact that the historic structure has escaped many potentially negative consequences of the city’s transition into a poly-centric regional metropolis is a testament to the cultural awareness of its citizens. However, for all the transformations the city has seen throughout the years, the city centre, as many cities’ historic centres in The Netherlands and Europe, has not remained entirely unaffected. Some radical changes to sections of the urban fabric - for instance the metamorphosis of the Jewish Quarter or the former harbour front, now Central Station - and the loss of culturally and historically important buildings and structures have brought about a process of urban regeneration in which cultural and social interests are in danger of being outweighed by economic interests.

Presently, the areas that make up the oldest part of the city are steadily being overrun by different kinds of visitors: tourists on holiday, business visitors, day-trippers on a shopping spree, festival-goers and so on. As a consequence of facilitating these groups, the ‘remarkable structure of the spatial pattern’ (Deben, Salet et al. 2004:4) and, more importantly, the directly related cultural and historic power of the area, is in danger of being compromised. The small, antiquated but characteristic buildings that have made up much of the popularity of the centre in the first place, are forced to give way to hotels, parking garages, department stores et cetera. Although these are important for the economic prosperity of Amsterdam, the often generic character of such structures undermines the uniqueness and authenticity of the city. On the other hand, too rigorous conservation policies can lead to deprivation, devaluation and stagnation as a result of lessening economic competitiveness.

This graduation project is aimed at regaining the balance between economic, cultural-historic and social interests when making planning and design decisions. In the exemplary design project, located along Nieuwendijk in the oldest part of the city, an impression is given of what a suitable approach to the issues at hand could potentially look like: to counteract some of the negative tendencies of ‘big city’ functions by attuning buildings to the ‘human scale’ on which the urban fabric evolved; to stimulate city life and the ‘power of place’ (Gehl 2011; Jacobs 1961; Montgomery 1998; Soja 2004) in the public domain by densifying the pedestrian network, increasing the amount of public space in the city-centre and fitting these for stationary recreational activities; and to provide opportunities for a durable balance between economic, cultural and social functions by creating small-scale, multi-functional units with the same properties that made Amsterdam’s heritage assets so much sought after: identity, diversity, flexibility, ownership and accessibility.

1.3 Structure

The graduation project can be divided into three parts, and this report is organised accordingly: Research, Design and Evaluation. The first part consists of an historic overview, an analysis of the most important issues concerning the further development of the city-centre, followed by a description of the problems, at which this project is aimed. In the last chapters, the research questions are discussed, as well as findings from the theoretical background of the themes.

Part two commences with an exploration of the design location, in the oldest part of the inner city of Amsterdam, at which point the theoretical findings are linked to the area by analysis and the formation of site-specific preconditions. This leads to the final definition of the design assignment. Lastly, the results of the design project itself are illustrated and discussed.

In part three, the results of the design project are evaluated based on the findings from the research phase. The combined results bring into focus the most important and relevant issues involved in planning and design assignments in Western European cities with historic centres in the twenty-first century.
1. TOP10 map of the preliminary research area
PART I: RESEARCH

“Exegi monumentum aere perennius.”
“I have reared a monument more lasting than brass.”
Horatio
2 Historic context

Introduction
Apart from being a general introduction to Amsterdam, the following chapter provides an historic overview of the most relevant developments from its genesis to the present-day transformation into a regional metropolis. The economic and political processes that have been involved with the spatial configuration of the city centre are briefly illustrated and provided with some examples of positive and negative results. The most relevant historic topics for the design location include the earliest origins of the settlement, with special attention for the rumoured remains of the legendary ‘Kasteel van Aemstel’ (Amstel Castle), the Golden Age with the construction of the canal belt, and urban transformations since the economic revival around 1850, after World War II and since the 1980s. Amongst them are infrastructural transformations due to the arrival of the railway and the car, and the rise of new building typologies as a result of new types of (economic) activity and changing spatial demands.

2.1 A short history of Amsterdam

The city of Amsterdam is a relatively young city. It originated at the end of the twelfth century from a group of buildings built on a layer of clay in the area known as ‘Amestelle’ (Mak 2000:10). Although recent discoveries report that the region of Amestelle must have been inhabited by people for much longer than previously assumed (since the late New Stone Age around 2500 BC and by the Romans since 15 AD) (Nu 2012, Parool 2010), its name is first mentioned in writings that date around the year 1270. It is one of the port cities that originated between 1270 and 1400, founded by rich citizens and lords that established the city through new economic opportunities (Rutte 2006:31). The primary structure of the original settlement consisted of a row of houses along what later became Nieuwendijk, which runs parallel to Amstel river. When a dam was built to prevent the hinterland from flooding, the settlement extended to the opposite side, now Warmoesstraat. From this basic H-shaped layout with ‘De Plaetse’, later Dam Square, at its core, it gradually evolved from a village into a small city (see Figure 3).

2.2 Kasteel van Aemstel

In 1994, building activities in the city-centre gave archaeologists the rare opportunity to study the sub-soil of the oldest part of the city, the area around Nieuwendijk. What they found was sensational: wholly unexpectedly, researchers discovered

“Amsterdam is the historic centre of overseas trade and culture. The uniqueness of Amsterdam’s attributes therefore lies not in pretentious buildings but in the remarkable structure of the spatial pattern (Deben, Salet et al. 2004:4).”
the brick foundations of an unknown structure. The size and type of building, and the year of construction, determined by dendrochronological research to be no later than 1300, soon suggested that this had to be the remains of a fortification of some sort. The city archaeologist immediately suspected this to be the remnants of the long-lost Kasteel van Aemstel (Amstel Castle), which is most famous for its role as the stage for the events in Joost van den Vondel’s tragic play and novel ‘Gijsbrecht van Aemstel’ (1638). However, the opinions are divided on whom the building must have belonged to - or whether it had been a castle at all (Toebosch 2011). Looking at the political situation of the time suggests that it never actually belonged to the lords of Aemstel. The structure was built somewhere around 1280, and written documents date its destruction back to no later than 1304. The ‘lords of Aemstel’ were actually ministeriali, servants of the bishop-elect of Utrecht since 1105, who governed the Amstel district as vassals on his behalf. They were not of noble descent, but managed to make the title hereditary to their family. However, after crossing the bishop by disadvantaging him, he called upon his count, Floris V, to swing into action. They did reconcile later. It is now believed that the fortification was actually ordered and owned by count Floris V who, between 1270 and 1290, had many defence structures built in North-Holland to fend off the West-Frisians, amongst which the well-preserved Muiderstoren at Muiden. Studies at Nieuwendijk, revealing similarities in construction, underpin this assumption.

After his assassination on June 27th of 1296, it is mentioned that the accomplice Jan, Gijsbrecht’s son, returned to Amsterdam, where he was welcomed by the citizens. However, he got chased away by people from neighbouring Haarlem and Waterland, who were seeking revenge for the murder on Floris V. To punish the people of Amsterdam for their betrayal, the castle was ordered to be broken down forever, in exchange for their city rights (De Roever 1995). This sensitive blow might explain why the castle has been literally buried in oblivion for so many centuries. But it also learns that Amsterdam as we know it would not have existed if this type of structure would have remained in place.

After regaining the count’s toll exemption rights for all goods traffic across the newly built dam around 1304, the city started to expand rapidly. In just over a century, the small fishing village developed into a major player in national and international trade, acting as an independent and progressive party on the market. Religious life also added to the impulse when a miracle occurred in a house on Kalverstraat in 1345. Amsterdam became a city of pilgrimage, to which many even referred as ‘the eighth wonder of the world’. Geert Mak (2000; 2004) describes this medieval town to have been an open society, never again dominated by lords or the church, but by private undertakings, citizenship and a pragmatic approach. This awareness of the need for a balance between government, freedom and trade is what set Amsterdam apart from other cities, and has shown to persist in the city we know today.

2.3 The ‘Golden Age’

The seventeenth century is also known as ‘The Golden Age’ (De Gouden Eeuw) for the Netherlands and large parts of Europe, although the term itself is disputable (Nijman 2000). An enormous immigration due to the growing wealth of the city resulted in the construction of the western half of the now famous canal belt from around 1580 to 1655 (Van der Hoeven & Louwe 2003). The radial pattern of the ‘port city’ (UNESCO 2011) was completed during the rest of the century. The most significant change in the oldest part of the city was the construction of the new classicistic town hall by Jacob van Campen between 1848 and 1665 at Dam square. This building is considered to be the historic pinnacle of the Golden Age in the Netherlands. When the superior position of the Dutch Republic at sea was taken over definitively by the English during the following period, population growth and the demand for space levelled; the parcels in the eastern part of the canal belt could not be sold, so they came in use as gardens, plantations and factories. Together with the French occupation until 1813, it would take until after 1850 before the city would undertake any significant building activities. Figure 6a-i and 7 on the following pages show the various expansions in the development of Amsterdam up to 1850.

2.4 Urban transformations 1848 - present

1876: Noordzeekanaal

The year 1876 heralded a turning point for the economy of the city. Since the Industrial Revolution was opening up new technical opportunities in industry, agriculture, transport etcetera, the hegemony of the British staple market got undermined. The construction of the North Sea canal now offered the opportunity for
6. a-i The different stages of growth of the historic inner city from 1350 to 1800.
7. The city's territory up to the first half of the nineteenth century
to re-establish Amsterdam’s position as the national capitol of overseas trade with the colonies. Moreover, the increasing unification of the Netherlands in economic sense pronounced Amsterdam the nation’s financial and trade capitol, with The Hague as the national (royal) residence and Rotterdam as port city (Wagenaar 1990; Brinkgreve 2004).

1877: Singelgracht, Plan Kalff
Not to be confused with Singel, Singelgracht is the name for the canal that was part of the seventeenth-century city’s line of defence. Constructed simultaneously with the canal belt, it was completed around 1665. In 1874, the Dutch cities received permission to tear down their fortification infrastructure (Ashworth 1984). As a consequence, the bends were taken out along parts of Singelgracht. At the same time, J. Kalff was preparing his plans for the first expansion project the city had seen in almost two centuries. The extension was based on the existing parcellation structure of the land; the connections with the centre were weak. The ramparts of the defence line were transformed into ring roads. Similar to former expansions, this plan was executed to accommodate the growing population, thus it was predominantly a residential neighbourhood.

1889: Central Station
In 1889, the new central railway station, a design by Dutch architect P.J.H. Cuypers, was opened for public. In the old harbour, which had been situated right opposite the medieval city-centre for centuries, three artificial islands were formed using the excavated soil from the 1876 North-Sea Canal. The decision to position the building opposite the old inner-city has had far-reaching effects on the dynamics of the centre. Figure 8 and 9 were taken from a jetty at Prins Hendrikkade before and after construction of the station islands and building.

1903: Beurs van Berlage
Construction on the Berlage Exchange finished in 1903. It replaced the 1842 Zocher Exchange which was positioned at Dam Square on a filled-in part of Damrak. It, in its turn, had replaced the Exchange building by Hendrick de Keyser from 1611, but had soon turned out to be too small, uncomfortable and an obstacle for traffic. To build the Berlage Exchange building, an additional section of Damrak was filled in in 1883, reducing it to under half its original length. In addition to the design of the building, the arterial road Central Station - Dam Square was rearranged to accommodate for the increased traffic. Figure 12 shows an unexecuted alternative design from 1893 by Jan Springer in which the entire Damrak would be filled in to make room for a stately boulevard. The design would furthermore have required a number of parcels on Warmoesstraat to be demolished in order to reach the desired square meters.

1934: Algemeen Uitbreidings Plan (General Extension Plan)
The A.U.P. was a large-scale effort to accommodate the growing population of Amsterdam in want of ‘light, air and space’. The plan was drawn up very systematically by predicting population growth,
calculating the required amounts of public and private space, distance to public transport and so on. It was the largest expansion the city had seen as a result of its transformation into a poly-centric city. Though commissioned in 1934, most construction took place after the Second World War. During this time, the surface area of the city doubled (see Figure 17), whilst the number of inhabitants remained roughly the same. The consequences for the inner-city were considerable: many of the original inhabitants moved away indifferently, dilapidation struck entire neighbourhoods (see Figure 13) and many driving forces of the economy and urban life settled in the new centres outside the centre (see also Figure 24).

1956: Plan Kaasjager
On the 20th October 1956, a police commissary called Hendrik Kaasjager launched a plan that would deal with the increasing car traffic and the worsening accessibility of the inner city. He proposed to have some fifteen canals filled in, including Singel, Singelgracht and the remainder of Damrak and Rokin (see Figure 14) to improve the street circulation system. Fortunately, the plan was rejected. Together with the rising squatter-movement, the resistance against the plan had a changing impact on the ideas about the city centre, sparking an awareness of the inherent quality and historic significance (Brinkgreve 1956).

1962: Slum clearance
By the second half of the twentieth century, many buildings in large parts of the inner-city - mostly residential neighbourhoods - had dilapidated to the point of collapse. It was an immediate consequence of the numerous expansions of the last decades. Those who could not afford to move were left behind in poor conditions. Finally, when plans were made for large-scale urban renewal projects, in the Jewish quarter, on the island Kattenburg behind the naval wharf, and in large sections of the Haarlemmerbuurt and Jordaan (see Figure 13), the run-down houses were demolished and replaced with modern dwellings. Sadly, with this wave of renovation, the unscrupulous modernist movements made their appearance in the city-centre, dispelling numerous landmarks and many original residents and altering parts of the urban fabric beyond recognition. Furthermore, the new house-prices meant that many residents were unable to return, triggering a process of displacement and gentrification.
1980: *Metro Oost*

The east metro line was executed as an attempt to connect Amsterdam’s latest expansion district, *De Bijlmermeer*, with the city-centre. In order to construct the last part of the line through the inner-city, many buildings had to be demolished, many of which were of monumental value. Despite fierce protests, the plan was carried out. The ‘scar’ of demolition is visible up to this day by the difference in building style and dating (see Figure 36 and 37). This project, too, strengthened the opposition in their resistance against detrimental urban renewal plans.

**20XX: Metro Noord-Zuid**

In sharp contrast with the construction of the east metro line, the north-south metro line is currently being constructed with the utmost care for the delicate urban environment. With the trajectory running along under the streets, no buildings have had to be demolished. The potential sagging of buildings is carefully and constantly monitored. Furthermore, the excavated soil is checked for archaeological artefacts that might have been buried along the trajectory, as a result of which, a vast amount of artefacts has been collected over the years, bringing new insights to the history of the city. Although residents, concerned for potential negative consequences, have persisted to object to it, the north-south metro project can be regarded as an example of how, with the help of technical innovations, modern facilities can be successfully implemented in the historic urban fabric without violating it (Figure 16).

2.5 Conclusions

Despite its young age, Amsterdam has managed to become the cultural and historical centre of the nation. Whilst much of this status was obtained during and by merit of its past as predominantly an economic capital, it has managed to retain the benefits of this status and grown out into a regional metropolis and a prominent player in the global economy. At the same time, its inhabitants have learned that if it was not for its fascinating past, the city would not have looked quite as unique as it does today. Its tangible remnants are more than a tribute to this past, they are intrinsically bound to the values that have made Amsterdam what it is today: “a specialized sanctuary for the reproduction of civil liberties, urban democracy, an specifically spatial justice” (Soja 2004:31-32).”
What should be preserved in the Centrum is not so much the physical presence of the past, but more so its dynamic and constantly evolving and adaptable, real and imagined, lived spaces, what one might call the “power of place” in shaping human life. We must remember the golden age that first built the global Centrum, but we must never forget that it was the distinctive Dutch mentality of tolerance and persistent preservation of residents’ rights to the city and its rich resources that originally made the global commercial hub of Amsterdam what it continues to be today, a specialized sanctuary for the reproduction of civil liberties, urban democracy, an specifically spatial justice (Soja 2004:31-32).
3 Problem description

Introduction
The centre of Amsterdam is among the most layered areas in the world in terms of diversity and representation of different eras. This functional and historical stratification (Meurs 2004:73) is among the best qualities about the centre, creating a high level of complexity of the different processes of urban life. Since it is virtually impossible to address all these different aspects in this graduate research, the choice is made to focus on the two most momentous issues at hand, as briefly introduced in Chapter 1: handling cultural heritage in a vibrant environment on the one hand, and dealing with the excrescences of the consumer industry in a ‘frozen environment’ on the other, or: the consequences of Amsterdam’s transition into a regional metropolis for the city centre. In the context of this graduation project, these two aspects will be quoted by the terms Monumentality - not to be confused with monumentalism - and Metropolisation.

Although nowadays, there is reasonable consensus about the importance of conservation (Provins et al. 2008:133), the objections from, for instance, an economic standpoint are not to be discarded. The consumption of culture has become a vital economic pillar in historic city centres. However, the tendency to displace other functions in the process poses a serious threat to the diversity of these areas. This observation of the need for a balance between the excrescences of monumentality and metropolisation is the main starting point of this graduation project.

3.1 Monumentality

Urban structure
The inner city of Amsterdam can be interpreted as the spatial manifestation of over seven centuries of social and economic developments. Ever since the Golden Age, Amsterdam has been subject to shifts in the social balance, economic expansion and various commercial endeavours. The construction of the triple canal belt in the seventeenth century, for instance, was driven by a leap in economic development resulting from overseas trade: a form of early-day globalisation, led by the first multinationals of which the ‘Vereenigde Oost-Indische Compagnie’ (V.O.C.) was the most successful and famous. Although Amsterdam has known periods of economic depression and deterioration in the eighteenth and nineteenth century, it never experienced shrinkage like some other Dutch cities have (Rutte 2006).

Looking at a map or aerial picture reveals that, above all, the original structure of the inner-city has scarcely changed ever since. The ‘design’ has proven to be greatly appreciated as well as usable in later times by merit of its flexibility. The inscription on the UNESCO list of protected heritage in 2010 was the ultimate acknowledgement of this (UNESCO 2011; Figure 21), and is a great aid to the further protection of the area. Although the original urban structure of the inner city has remained almost the same and the concentration of monuments is great (see Figure 19), most of the buildings that are protected by the Historic Buildings and Ancient Monuments Act have actually been altered in some way within the last hundred years (see Figure 20). The slow process of regeneration that set in over a century ago, and which obtained a firm footing during the economic ‘re-discovery’ of the centre in the 1980s (Wagenaar 2011:529), is exerting pressure on the historically significant buildings as well as the appearance of the street scene. With it, the perception of the cultural and historical significance (or the ‘power of place’) is impaired. Along Damrak and Rokin, many examples of late nineteenth and early twentieth century architecture have blended in with the existing monumental buildings, a great quality of the stratification of the city. However, many ground floor facades have undergone low-quality changes as a result of one-sided functional developments (Gemeente Amsterdam 2011b; Figure 22). Furthermore, an overflow of street signs, advertisements and street furniture pollute and confuse the image of the city. The same goes for the former harbour front. Here, tourist coaches, boat trip shacks,
barges and the busy traffic artery have caused a chaotic situation. The public spaces are in places unfit for this pressure bearing on it today. The enormous wear from intensive usage by pedestrians, cyclists and motorists is an ever-present problem.

Concluding, the flexibility of the urban fabric and the historic buildings have enabled them to sustain itself through the advances in time. However, the process of regeneration causes pressure on historic buildings and the street scene, which is a threat to the perceptibility of the cultural-historical significance and the authenticity of the centre as a whole.

**Heritage management**

Before active conservation became legislated in the Netherlands in 1961, heritage management consisted of the passive recording of monuments by the poorly financed *Rijkscommissie* (later *Rijksbureau* and *Rijksdienst*) since 1875 and private charity groups (Ashworth 1984:606). Besides known issues such as the distribution of responsibilities amongst the different governments, expulsion of original inhabitants and the burden of ongoing financial commitment, the threats of inadequate heritage management are two-fold. On the one hand, a conservation policy that is too strict will inhibit new endeavours from taking place in the historic centre, which will cause these to settle elsewhere; this could seriously undermine the competitive position of the entire city. Moreover, the past has shown what the effects of widespread displacement can be: the mass exodus to the suburbs in the twentieth century left the centre in dilapidation. On the other hand, an accommodating attitude when considering the use of monuments will ultimately result (and has already resulted) in the loss of valuable elements of the built environment and, consequently, affect the overall image of the city and thus its social, cultural and economic status. Urban planning tasks concerning historic city-centres such as Amsterdam should therefore focus on conservation through flexible reuse rather than dilapidation through rigorous preservation. Professor Edward Soja stated about the centre of Amsterdam:

> More than ever before, there are pressures to transform it into a quaint museum of past glories or to let it become a contemporary theme park for sex, drugs, and video arcades, a sensual playground for the rest of the world. These new pressures accentuate the need to be highly selective in what must be preserved and what can be replaced. Urban restructuring in Amsterdam must be steered and focused to identify and protect what is most distinctive and most worthwhile saving about the present-day Centrum (2004:27).

The processes of slum clearance, urban renewal and City-forming originated in an era when circumstances caused less protective attitudes towards conservation (Ashworth 1984). Although many of those measures did serious harm, reconstruction itself was not the cause of this, rather the (lack of) regard for the historic built environment when re-building. Today’s strict regulations could undermine the implementation of modern ‘big city’ functions, but these non-monumental structures do offer new opportunities for regenerative (design) projects in the future. Conversely, the demands of these functions could be better attuned to the ruling building characteristics of the location. The fact is, the original urban structure is based on a division into small parcels in larger urban blocks. Former large-scale functions such as monasteries, orphanages and hospitals often exceeded this parcellation size, resulting in complexes consisting of separate clusters of buildings organised around one or more semi-public courtyards. As a whole, the structure of the building block was maintained. New building plans also often exceed the original parcel size, introducing new typologies that through their form and size not seldom undermine the architectural unity of the inner-city. The difference, however, is that the older equivalents often enriched the city with additional public space - of which there was not much to go around within the city walls. Newer typologies were mostly realised for one or two specific purposes and lack the additional public space to be added to the public domain of the city. So, contrary to popular demand, the amount of public space per head is decreasing. Moreover, the average amount of floor space per establishment is rising, whilst the total amount of establishments is decreasing (Dienst Onderzoek en Statistiek 2007).

Summarising, although an accommodating attitude towards the use of monuments can result in the loss of valuable elements that contribute to the authenticity of the city, too rigorous conservation will reduce economic competitiveness. Big city functions are herein a threat to the public domain, but also offer opportunities for future regenerative developments.

### 3.2 Metropolisation

**The poly-centric city**

After the completion of the Noordzeekanaal in 1876, when Amsterdam’s economy started to take a turn for the better, the city was able to profit from its history as capital of trade and
financial service, and transformed these special qualities into dynamic growth sectors (Wagenaar 1990). From that period on, the population started to grow again and building activities were resumed once more - this time predominantly outside the historic centre. Other sectors such as the shipbuilding industry contributed to economic recovery. One of the effects of this transformation process in the late nineteenth and twentieth century was a spatial-functional shift from a mono-centric to a poly-centric city: many ‘big city’ functions - banks, businesses, hospitals et cetera - left the city centre and chose to concentrate in a number of newly established centres, mostly concentrated around public transport hubs. Figure 24 shows the city’s transit network; new economic centres have emerged around the World Trade Centre and RAI conference building, station Sloterdijk, Amstel and Blijmer, and Schiphol to the south. Reasons for this phenomenon can be found amongst others in an increasing demand for space, resulting from rising population numbers and a growing economy, as well as changing demands concerning the use of public and private space. The effects of these transitions can be found in cities all over the world, including Amsterdam (Ravetz, in: Stouten 2010:25):

- **Globalisation**: the integration of investment, production, trade and consumption;
- **Connectivity**: global networks achieved through information and communication technology (ICT), the media and international travel; the Amsterdam Internet Exchange is the biggest internet hub in the world, making Amsterdam a leading player in the field of communication and business services (De Rooij & Los 2008);
- **Post-Fordism**: the dissolution of earlier more stable economic, social and political structures (e.g. manufacturing, pillarisation);
- **Exclusion**: new patterns of polarisation, unemployment and dependency affecting large sections of the population.

### Functional balance

The main threat of the processes above for the centre is the tendency for a particular function to dispel the other(s) and gain the upper hand, turning the area into a predominant shopping district, an elitist residential neighbourhood or, to speak with Soja, a ‘contemporary theme park’ (2004:27). As long as the area’s functions are in balance (which requires a certain extent of active policy) and there is sufficient support in the economic, social and cultural sphere, they will also be able to exist together. But if one dominates the other, social and economic consequences follow. For instance, the main shopping axis Nieuwendijk-Kalverstraat is unattractive for non-shopping public. The displacement of other functions is resulting in an increasingly mono-functional, generic-looking area. After opening hours, the area transforms into an alternative pedestrian route along closed doors and shop-windows and the odd late-night souvenir shop (see Figure 23). Similarly, Warmoesstraat, Damrak and to lesser extent Rokin are too much focused on a single target group: day-trippers and (budget) tourists. It is known that for different activities and lifestyles to successfully coexist, clustering of similar functions is inevitable; however, this must happen on the smallest scale: the larger the cluster, the more negative is its impact. This phenomenon of displacement not only dispels functions related to residents, the increasing focus on drug-tourism and budget-tourism gives rise to low-quality and crimogenous businesses (see also Figure 55-12 and 57).

Summing up, under the influence of globalisation, post-Fordism and other societal changes, the effects of Amsterdam transforming into a poly-centric regional metropolis are causing the economic interests to outweigh the social and cultural interests. This results in ground prices to rise to unnatural heights and causes the functional balance of the inner-city and the consequent street activities to be disrupted. To counteract this trend, active planning and meticulous policymaking are required.
Urban life

Despite all odds, the delicate balance between dwellings, offices, industry and commercial functions that have shaped the city has more or less persisted until this day when looking at the centre as a whole. Now, a different threat to this balance presents itself, paradoxically resulting from the popularity of its own legacy: street activities are in places dominated by visitors, driving residents away from these places. Whereas the historic centre used to harbour all urban life, the functional balance that is key to a vital centre has shifted from a production economy to a consumer economy, facilitating for tourism and entertainment (Deben, Salet et al. 2004, Stouten 2010, Wagenaar 2011). It is now ‘just’ one of several centralities within the larger metropolitan region, but with a specialisation of its own. The distinction from the others is that it is the societal heart of the city and the region. When looking at the centre as a whole, the very high level of facilities, the highest mix of different functions and the highest ground prices can be ascribed to this status (see Figure 26 and 31). Apparently, ground prices, limited floor space and less-than-perfect accessibility are no match for its cultural status and the amount and diversity of facilities. This can be regarded as most distinctive for the inner-city of Amsterdam compared to other centralities in the region and other city-centres in Europe. But as elsewhere - think of Salzburg or Venezia - this could change relatively quickly.

The final reason why the pressure on the city-centre is so great is the ratio between the amount of people making use of the area and the available public space to be made use of. Van den Borg (1996:314) established the ratio visitors/residents to be 5,9 for Amsterdam, a relatively low value compared to other cities (Florence: 9,8; Salzburg: 36; Venezia: 89), but this takes into account the entire populace of Amsterdam, not just those who live in the city-centre. Dividing the estimated 4,5 million visitors by the inhabitants of the centre gives a ratio of 54,7 visitors per resident, a staggering difference of nearly 1000%. 2011 saw another rise in tourism of 14% compared to 2010 (Dienst Onderzoek en Statistiek 2010c). Whether domestic tourism is included in these figures is unknown, but it is clear that the rising trend of visits to the capital can be expected to continue for some time, adding to the pressure on the inner-city’s public domain.

To facilitate their changing and growing clientele, traditional shops that are relevant to the inhabitants are displaced by retail functions, souvenir shops et cetera, not in the last place because of the soaring rent prices. In general, Amsterdam ranks high among the world’s most popular cities regarding livability, prosperity, business climate and so on (Gemeente Amsterdam 2011a). The inner-city, however, is becoming less attractive for residents, as their public domain is more and more dominated by non-inhabitants as a result of the regionally facilitating character of the central shopping area (see Figure 27). The photos on Figure 28 a-c were taken on the corner of Nieuwendijk and Sint Nicolaasstraat and show the immediate results of the pressure exerted on the public space from the shopping streets. In the present situation, it is clear that the amount of visitors cannot be properly accommodated for.

The morphological map on Figure 25 reveals that the main structure of the inner-city is oriented from north to south with Damrak, Rokin and Nieuwezijds Voorburgwal as most important streets. These and Prins Hendrikkade have become busy traffic routes. Dam square, Nieuwmarkt, Beursplein and Spui are the only public squares, each with their own quality and functionality. In case of a large event like Queensday, the roads are closed off whilst the events mostly revolve around the canals and the
squares outside the medieval centre: Leidseplein, Museumplein and Rembrandtplein. The aforementioned mono-functional streets are then avoided altogether, or used as a pedestrian expressway at best. 

Local markets occur either on the available squares (Nieuwmarkt, Waterlooplein, Noordermarkt, Amstelveld) or along streets (Albert Cuypstraat, Westerstraat, Lindengracht, Dapperstraat) (see Figure 30). This is a direct consequence of the former delivery and overload of goods by barges in specific places along the canals (see Figure 29). The spoke pattern of outward running streets to surrounding city districts has therefore historically been secondary to the radial pattern of canals and former fortifications draped around the medieval city (see Figure 32). As a consequence, the inner-city is short on both small and large squares. This lack can thus be directly related to the historic use of canals over streets. An important part of the openness is also achieved by the dimensions of these canal streets. 

To sum up, street activities are dominated by visitors, with the lack of good quality public spaces inhibiting (stationary) street activities from taking place. This is due to the original layout of the inner-city, the urban transformations that have taken place, and its revival as the heart of the metropolitan region.

3.3 Conclusions

From the preceding, the following functional, spatial and social problems can be distinguished to manifest themselves in the centre of Amsterdam within the two themes of monumentality and metropolisation. Towards the formulation of design goals for the continuation of the project, these issues can be combined by topic into three main groups: Public space, Building stock and Functional balance:

Public space:
× Street activities dominated by visitors;
× Lack of public space for street activities

Building stock:
× Concentration of monuments;
× Pressure on historic buildings and street scene;
× Rigorous conservation reduces competitiveness;
× Accommodating attitude results in loss of valuable elements;
× ‘Big city functions are a threat to the public domain, but offer opportunities for future regenerative developments’;

Functional balance:
× Great flexibility of the urban structure;
× Functional balance under threat;

Each point is directly or indirectly concerned with a disrupted balance: between visitors and residents, private and public space, monumental and modern buildings, small and large building typologies, and between social, cultural and economic purposes. Whilst the issues under Building stock are mainly related to handling cultural heritage (monumentality), and those under Functional balance mostly to the consequences of Amsterdam’s

32. Outward spoke pattern and public spaces:
1. Dam
2. Oudekerksplein
3. Nieuwmarkt
4. Spui
5. Torenslius
6. Muntplein
7. Koningsplein
8. Rembrandtplein
9. Waterlooplein / Mr. Visserplein / Jonas Daniël Meijerplein
10. Westermarkt
11. Noordermarkt
12. Leidseplein
13. Amstelveld
14. Weteringschans
15. Frederiksplein
16. Haarlemmerplein
a. Stationseiland
b. Prins Hendrikkaade
c. Nieuwendijk
d. Damrak / Beursplein
e. Haarlemmerstraat / Haarlemmer Houttuinen
f. Zeedijk
g. Rokin
h. Nieuwezijds Voorburgwal / Raadhuisstraat
i. Jodenbreestraat
j. Kloveniersburgwal
k. Amstelstraat / Blauwbrug
l. Rozengracht
m. Leidsestraat
n. Vrijzijlstraat / Vrijzijlgracht
o. Utrechtestraat
p. Weesperstraat
q. Plantage Middenlaan
33. Diagram of the interrelationship between themes
transition into a regional and global metropolis (metropolisation), there is an overlap between the issues concerning Public space. This means these issues emanate from the monumental character of the environment as well as the demands put on this environment by a metropolitan society (see Figure 32). This puts public space to the front of the discourse of potential planning objectives, leading to the next statement:

“The solution to establishing a durable balance between economic, cultural and social interests lies in public space.”

**3.3.1 Public space**

Street activities are dominated by visitors, with the lack of good quality public spaces inhibiting (stationary) street activities from taking place. This is due to the original layout of the inner-city, the urban transformations that have taken place and its revival as the heart of the metropolitan region.

This lack of opportunities for stationary recreational activities is most pressing in the oldest part of the city. Stationary recreational activities require a certain amount of high-quality public space, as is further explained by the hand of relevant theory in Section 8.4.

The high density of the built-up area has resulted in a relatively small percentage of available public space with, overall, average quality: many are impractically shaped, dominated by traffic, fitted with mediocre street furnishing, many obstructing objects and covered by a jungle of advertising.

**3.3.2 Building stock**

The flexibility of the urban fabric and the historic buildings have enabled them to sustain itself through the advances in time. However, the process of regeneration causes pressure on historic buildings and the street scene, which is a threat to the perceptability of the cultural-historical significance and the authenticity of the center as a whole.

Although an accommodating attitude towards the use of monuments can result in the loss of valuable elements that contribute to the authenticity of the city, too rigorous conservation will reduce economic competitiveness. Big city functions are herein a threat to the public domain, but also offer opportunities for future regenerative developments. Although rigorous conservation policies could have a negative effect on the city centre in the long term in terms of economic competitiveness, the same restrictive policies have helped generate a lot of competitiveness (in the form of the tourist economy) by preserving the attractive image of the stratified built environment.

Many of the big city typologies that have made their appearance in the centre over the last one-hundred-fifty or so years have already left again and have been replaced by ‘newer’ typologies (of which more have persisted: think of the postal office, theatre, railway station, department store, but also the apartment building), not to mention the impact the coming of the car has had on the design of the canals and streets. Many of these have had a lasting effect on the urban layout and, to some extent, influenced the way today’s new typologies are implemented in the urban fabric: the average floorspace of new buildings in the centre is growing. Although in most cases, these more or less live up to the preconditions concerning the fit in the urban fabric, there are great differences in the way these interact with the surrounding public domain.

**3.3.3 Functional balance**

Under the influence of globalisation, post-Fordism and other societal changes, the effect of Amsterdam transforming into a poly-centric regional metropolis is causing the functional balance of the inner-city to be disrupted. The economic interests are outweighing the social and cultural interests.

One of the biggest problems discussed that threatens the historic centre is the disruption of the balance between many aspects of the city, driven by displacement. The cohesion between people and their activities is declining, reducing many of the activities that had been integrated into the urban fabric to independent assets of urban life. The resulting mix of different activity groups causes tensions through their respective claims on the public domain, which causes the ‘weaker’ function to become displaced by the dominating ‘stronger’ one - not seldom for economic reasons. In the oldest part of the city, this process is resulting in a mono-functional, generic-looking shopping area. Since there are no opportunities to perform stationary (recreational) activities, shopping and leisure-related activities are confined to taking place indoors. In other words, the interrelationship between the three factors that define a ‘sense of place’, built form, (public) activities and cultural-historical legibility (or meaning) (see Section 8.1) is getting imbalanced. In the following chapters, the importance of balance between economic, cultural and social interests and a strong cohesion between these factors in a highly urban environment is demonstrated in the following chapters.
4 Project aims

4.1 Main objective

The main problem field as described in Chapter 3 produced a number of issues related to the matter of monumentality and metropolisation. In the following, these issues are attended to in the same arrangement and supplied with general initiatives to deal with them. These are then concretised in specific design goals. The overall objective of this graduatory project is to:

Create a basis for a sustainable balance between economic, cultural and social interests, between the interests of visitors and residents, between old and new, in the form of an exemplary design project

This general objective addresses the relevant problems found in the inner-city as described before, and is expressed in these general aims:

- Reverse some of the negative effects of City-forming and free market operations on the historic built environment;
- Refurnish existing public spaces in favour of growing numbers of pedestrians and public transit;
- Improve the balance between residents’ and visitors’ activities;
- Re-distribute functions in mono-functional areas;

At the municipality of Amsterdam, special attention goes out to the social basis for a sustainable metropolis. It is argued that for Amsterdam to be(come) a sustainable metropolis, the social domain needs to be strongly embedded in the physical domain. In their ‘Socio-Spatial Ambition’ (Sociaal Ruimtelijke Ambitie), this is translated into the desire for encounters and interaction, since they attribute to important social developments such as emancipation, integration, involvement and responsibility. Five conditions are mentioned which should be met for a robust socio-spatial infrastructure:

- Identity: by creating a strong spatial and/or architectural identity, the place is easily absorbed in the mental map of the individual;
- Diversity: combined and mixed use of space can bring together living, caring, work and leisure, promoting interaction and (self-) development;
- Flexibility: since social developments occur at a much faster rate than physical developments do, an urban plan is only sustainable if it is capable of meeting changing demands over time without costly modifications;
- Ownership: Studies show that attractive city spaces can exist only by the grace of the attractiveness to its own residents. A positive relationship with one’s living environment promotes a sense of ownership and responsibility;
- Accessibility: buildings/functions that engage with their environment domain contribute to the liveliness of the public domain (Bromm et al. 2011:7).

These conditions feed the statement that the design focus should be primarily on the improvement of the quality and amount of suitable public space. In Chapter 8, the theoretical background of these conditions is substantiated with relevant literature on activities in city spaces, amongst others from Jan Gehl’s study of life between buildings and key criteria for good city spaces. Here, similar emphasis is put on the synergy between the social and the physical domain. As additional design criteria, these will also give direction to implementing the social component of the design project.

4.2 Public space

- Street activities dominated by visitors;
- Lack of public space for street activities.

The first part entails up-grading the existing streets and alleys. Only so much, however, can be done about this: streets can be re-paved and disturbing objects replaced, but it is much harder to change the appearance of low-quality shop-windows and rear facades. The approach here is to passively improve the visual quality and the usage of the alleys, activating these by making these the connecting elements in a dense pedestrian network of corridors, passages and small public squares. With this method, the network falls back on the scale the city structure was originally built for and the way it was used: the backs of the building blocks used to be freely accessible and historically exhibited more (semi-) public activities; of course, only by foot.

The observation in Section 3.2 that the desired amount of public activity in the area is (much) higher than the actual amount of...
public activities being exercised has directed the design goal to finding (new) ways to increase the amount of available public spaces where to perform these activities. Whilst doing this, the sharing of space by different activity groups like it occurred during traditional city life is desirable; simultaneously, preserving the unity of the building block is a precondition. Therefore, exploring the possibilities of the enclosed open spaces within the building blocks is a logical step in the design process.

- **Create a dense pedestrian network of corridors and passages with the alleys as main structuring elements;**
- **Increase the amount of public space suitable for stationary activities within the building blocks.**

### 4.3 Building stock

- **Concentration of monuments;**
- **Pressure on historic buildings and street scene;**
- **Rigorous conservation reduces competitiveness;**
- **Accommodating attitude results in loss of valuable elements;**
- **Big city functions are a threat to the public domain, but offer opportunities for future regenerative developments.**

Interventions concerned with renewal of the building stock should take into account two things: firstly, the building conditions of new building operations, regardless of the overall size of the project, should correspond with the scale of the surrounding buildings, which are characteristic for the historic urban setting. This includes, for instance, maximum parcel dimensions and building height. Not only does this do credit to the historic value of the urban pattern, it also aims to improve the relation between the use of the building (like traffic flows and number of users) and the type and amount of available public space that surrounds it.

To that extent, the second challenge with renewing the building stock is that of finding a spatial configuration in which both the demands of modern building typologies and the preconditions that come with the urban setting are met.

The advantage of the small scale of the buildings is a higher interaction with the surrounding public domain - their limited space ‘forces’ them to. Moreover, more establishments can be fit in the same space of a single, large parcel such as a department store. Lastly, this configuration approaches the original layout of the building block, which means that the original use of the block, i.e. the public character of the *insides* of the building block, is enabled; and with entrances on both sides, these also function as connecting spaces. The ‘big city function’ will become public property, rather than privately-owned space with limited interaction with its surroundings.

In determining suitable building locations for the exemplary project in Chapter 10, a value-assessment has been made of the historic significance of individual and groups of buildings, based on their status as a protected object, the fit in the urban fabric and the capacity to move with the times, notably by accommodating different types of functions.

- **Use traditional parcel dimensions to increase interaction with the public domain, activate the insides of the building blocks and increase the total number of establishments;**
- **Maximise flexibility with appropriate building typologies.**

### 4.4 Functional balance

- **Great flexibility of the urban structure;**
- **Functional balance under threat.**

Integrating different functions should first of all be aimed at the possibility to make use of the area over the entire time of the day - not just during opening hours - and for diverging reasons. Secondly, the variation of activity groups should be enlarged, not by just replacing retail functions with non-retail functions, but by creating possibilities for diverging types of commercial, non-commercial, cultural and social enterprises. Examples of possible participants are:

- **artist-in-residence**
- **bed & breakfast**
- **art studio or gallery**
- **small businesses**
- **health clinic**
- **day-care centre**
- **artisan's workshop**
- **deli-store**
- **specialised retail (music shop, foreign grocer, bar-bookshop, museum shop et cetera)**
- **creative industry branches: the Arts, media and entertainment, creative servicing**

The limited size of the parcels, as mentioned under *building stock,*
is intended to stimulate these developments, and counterweigh the dominance of powerful players in the shopping apparatus. Moreover, it must be possible to combine the ground floor spaces with the upper floors to function as housebound businesses; this can be achieved by using appropriate building access typologies. With the inside of the building blocks coming into (semi-)public use, it is intended to improve the relationship between public and private use and stimulate mixed use of the area, and thus to improve social cohesion (Identity and Ownership) of the neighbourhood. The sharing of activity space before the front door and the visual relationship between public and (semi-)private should encourage interaction and encounters (Diversity and Accessibility).

- create possibilities for diverging types of commercial, non-commercial, cultural and social enterprises through small, flexible building typologies;
- encourage interaction by physically and visually connecting and combining public and private activity spaces.

4.5 Conclusion

Summarising the intended project aims produces the following set of design goals:

- Create a dense pedestrian network of corridors and passages with the alleys as main structuring elements;
- Increase the amount of public space suitable for stationary activities within the building blocks;
- Re-introduce traditional parcel dimensions to increase interaction with the public domain, activate the insides of the building blocks and increase the total number of establishments;
- Maximise flexibility with appropriate building typologies;
- create possibilities for diverging types of commercial, non-commercial, cultural and social enterprises through small, flexible building typologies;
- encourage interaction by physically and visually connecting and combining public and private activity spaces.

In addition to these as an elaboration of the five themes Identity, Diversity, Flexibility, Ownership and Accessibility, a concrete goal towards promoting the cultural-historical significance of the area is to excavate the archaeological site mentioned in Section 2.2 and use it as a starting point for new developments around it. The proposal to combine the excavation site with a museum is covered in detail in Part II: Design.

5 Research questions

Introduction

In order to give direction to the research and to allow for lessons to be drawn from the examined matter in the concluding phase, the research questions below have been introduced. Since the design project has an exemplary or strategic character, not every question is as directly related to the design practice, but also to the more theoretical planning and policy-forming aspects.

5.1 Main research question

With the main themes established, the problem statement and the consequent aims of this research project can be captured in the following main research question:

**In what ways can urban planners and designers achieve a sustainable balance between economic, cultural-historic and social interests in the inner city of Amsterdam?**

The main question thus focuses on finding solutions that promote integrated regeneration of the city as opposed to urban development from the sole point of view of exploitation and economic potential. As the problem statement has shown, developments like these can be detrimental to the social and cultural success of the city. Within the studio Urban Regeneration, there is a strong emphasis on the simultaneous consideration of physical, social, economic and environmental aspects (see Section 7.2). This question approaches the assignment with the same mentality.

5.2 Subsequent research questions

In Chapter 3 and 4, it was already set forth that in order to achieve a balance between economic, cultural and social interests, the combined realisation of good quality public space, careful consideration of the building stock and a balance in functions and
activities needs to be pursued. Three of the following subsequent research questions are directed at one of these three themes. The fourth question is more specifically concerned with the conditions for good quality public space.

× Which economic developments have been leading in the city centre in the last hundred years?
The transition into a global city is the second in the lifecourse of Amsterdam: in the seventeenth century, it was one of the first cities that turned on a worldwide economy. The challenges for town planners forced them to come up with new ideas on how to manage urban life, as did the introduction of modern inventions during the nineteenth and twentieth century. Today’s design tasks face the integration of the excesses of globalism into a protected urban area that would seem least fit; it is up to planners and designers to notice the similarities of modern life in a global city now and back in the Golden Age, and to combine this transition with the opportunities that lie within this historic urban fabric; and restore some of the less successful attempts in the process.

× Which cultural heritage assets in the city centre could be utilised towards a design intervention?
In the heritage discourse, the object of conservation is to prolong the life of cultural property and, if possible, to clarify the historic and artistic messages therein without loss of authenticity (UNESCO as cited by Cidre, 2004). A major opportunity lies in cities with a strong cultural significance when dealing with the challenges of turning our cities into more sustainable ones. Preserving property and existing public spaces forces planners and designers to think about smart reuse, and can therefore be seen as a sustainable affair. Moreover, the cultural aspect generates affinity (Ownership) with the identity of the place, and thereby contributes to its social sustainability. The centre of Amsterdam should contribute to the identity of the entire metropolitan region by demonstrating how compact metropolitan cities are most viable when they become, besides functionally and economically, also historically and culturally stratified. Nevertheless, appointed heritage property has positive and negative effects: the impediments of construction activities are counterbalanced by the received subsidy and the flexibility. A review of the assessment criteria of the existing (protected) building stock and conservation areas is needed based on, as mentioned in Section 4.1, historic significance, flexibility/capability to accommodate different types of functions, and quality and fit in the urban fabric. Section 8.2 goes further into the criteria used in existing value assessment methods, as well as the method used to evaluate Amsterdam’s building stock for determining potential design locations for the exemplary design intervention.

× What social problems occur amongst visitors and residents and where do they occur?
A preliminary analysis of the nonresidential functional distribution in the different neighbourhoods (see Figure 31) has revealed the diverse character of the city-centre and also a few threats that seem to arise. The excrescences from the boom of the tourist industry along the Amstel axis, the infamous Red Light District, the prestigious but monotonous canal belt and the (former) working-class neighbourhood Jordaan are what make the complexity of the centre possible as well as sustainable: within the larger picture of the seventeenth century inner-city, different types of neighbourhoods and clusters of functions have been able to create a concentrated level of facilities that is vital to a healthy city-centre. Many different social groups have managed to coexist in cities in this manner. With it, however, some important locations are avoided by residents because they no longer have any business there, are overrun by tourists or have become generally unpleasant: (functional) segregation on one scale may enable coexistence, but may be cause for (social) segregation and/or displacement of functions on another, smaller scale. It is therefore important to detect and monitor this balance and find methods to prevent one urban activity to get the upper hand over the other in places where this is undesirable. Section 8.5 provides insights from a theoretical standpoint into social segregation and integration and where to look for solutions.
In public space, which conditions are needed to help promote interaction and stationary recreational activities?
The disrupted balance between economic, cultural and social interests is manifested in the public domain and the manner and extent to which these public spaces are then used. As pointed out in the previous chapters, many contemporary, commercially motivated developments have added to the problem by contributing to the pressure on existing city spaces without adding new ones - like many older ones did. The effects on these existing spaces are intensification of usage (as these functions generate more visitors) and more unilateral use of space (as the user groups become less diverse). On balance, this trend is lessening the quality of existing public spaces and increasing the need for additional spaces that are more suited to accommodate the needs of the different user groups, both visitors and residents. The importance of interaction and stationary recreational activities is substantiated in Section 8.4 by the hand of relevant literature. In addition, conditions are given which public spaces should meet in order to promote interaction and stationary activities.

6 Methodology

Introduction
This graduation project can be divided into two parts. The first part is a research project and the second a strategic design intervention. In order to structure the research and bring about an integral approach, a basic methodological framework has been put in place consisting of a (preliminary) analysis of the location and the problem field, a problem statement, a set of aims and a number of research questions. The methodological principles of urban regeneration given by Roberts (see Section 7.2) are guiding in every step of the process.

6.1 Methodological tools

- Great flexibility of the urban structure;
- Functional balance under threat;
- Which economic developments have been leading in the city centre in the last hundred years?
- What social problems occur amongst visitors and residents and where do they occur?
- Create possibilities for diverging types of commercial, non-commercial, cultural and social enterprises through small, flexible building typologies;
- Encourage interaction by physically and visually connecting and combining public and private activity spaces;
- Pressure on historic buildings and street scene
- Rigorous conservation reduces competitiveness
- Accommodating attitude results in loss of valuable elements
- Big city functions are a threat to the public domain, but offer opportunities for future regenerative developments
- Which cultural heritage assets in the city centre could be utilised towards a design intervention?
- Use traditional parcel dimensions to increase interaction with the public domain, activate the insides of the building blocks and increase the total number of establishments;
- Maximise flexibility with appropriate building typologies;
- Street activities dominated by visitors
- Lack of public space for street activities
- In public space, which conditions are needed to help promote interaction and stationary recreational activities?
- Create a dense pedestrian network of corridors and passages with the alleys as main structuring elements;
- Increase the amount of public space suitable for stationary activities within the building blocks;
6.2 Methodology diagram

**SUBJECT**

The future of the historic inner-city of Amsterdam

**THEORY**

Planning and design field
- Built form
- Activities
- Image

Value-assessment
- Recollective values
- Present-day values
- Added economic value

Criteria for city spaces
- Protection
- Comfort
- Enjoyment

Public activities
- Assemble / disperse
- Integrate / segregate
- Invite / repel
- Open up / close in

**REALISATION AND DESIGN PRODUCTS**

**THEORETICAL RESEARCH**
- Historical overview
- Value-assessment
- Exploitation
- Monuments and economic value
- Theory paper

**DESIGN RESEARCH**
- Location choice
- Criteria for city spaces
- Design tools for public activities

**STRATEGIC INTERVENTION**
- Large scale: Nieuwendijk area
  - Improvement of freedom of movement
  - Entry of high-quality functions
  - Perceptibility of historic significance
- Medium scale: building block
  - Spatial configuration
  - Functional organisation
  - Public-private
- Small scale: building unit
  - Relationship with public domain
  - Furnishing of public space

**CASE STUDIES**

Kalverstraat - Begijnhof
Binnengasthuisrterrein

**PROBLEM STATEMENT, SUBSEQUENT RESEARCH QUESTIONS, THEORY**

Monumentality
- SRQ: Which cultural heritage assets in the city centre could be utilised towards a design intervention?
- Theory: monuments’ value-assessment

Public space
- SRQ: In public space, which conditions are needed to help promote interaction and stationary recreational activities?
- Theory: Criteria for good quality city spaces

Functional balance
- SRQ: Which economic developments have been leading in the city center in the last hundred years?
- SRQ: What social problems occur amongst visitors and residents and where do they occur?
- Theory: Exploitation; public activities
7 Societal and scientific relevance

7.1 Societal relevance

When looking at earlier and present-day developments, both protective and offensive approaches have been applied in regenerative planning and design strategies. In the search for a (provisional) area of focus, two diverging examples took the attention: the Noord-Zuidlijn versus the first subway line, the Oostlijn as mentioned in Section 2.4. Whilst no expenses are being spared with the construction of the Noord-Zuidlijn to have its goal achieved without harming any buildings, the Oostlijn was constructed in the early seventies at the cost of a great number of historical buildings, which caused heavy rioting and even a bomb threat (see Figure 35). In the years after, the area was reconstructed with mostly apartment buildings – the ‘scar’ of postmodern apartment blocks is clearly visible in Figure 36. The events in the seventies and the way the new subway-line is built are two diverging examples of how ‘spatial justice’ (Soja 2004:32) manifests itself, and it continues to ask for a comprehensive approach towards the needs and rights of all involved parties. Perhaps more than in most other cities, the citizens of Amsterdam have shown through their actions against removal of their city’s artefacts that they are inextricably bound to the identity of those who make use of them every day, and they have always found a way to combine it with their modernised lifestyles. In fact, the growing interest for culture, descent and identity are a common phenomenon in many ‘advanced’ cultures.

7.2 Scientific relevance

The Chair of Urbanism, and especially the studio Urban Regeneration of the chair of Spatial Planning and Strategy, is primarily concerned with the task of the strategic adaptation of our existing built environment to the advances of time. Within the profession, large-scale city expansions to accommodate growth of the population and changes in lifestyle are more and more making place for transformations of existing degenerated or depraved areas. Tackling these issues is, in my view, one of the leading goals of urban regeneration and moves beyond the problems of urban renewal – which focus primarily on physical change. The main principles and methods have shifted, as Roberts (2000:17) describes:

- a basis of detailed analysis of the urban area;
- simultaneous consideration of the physical, social, economic and environmental aspects;
- use of a comprehensive, integrated strategy with clear, operational objectives and flexibility;
- sustainable development including making the best possible use of resources;
- ensuring consensus and participation.

Transformation projects have increasingly been involved in existing urban areas and historic landscapes that possess a monumental value and, consequently, are protected as such by law. The ‘conservation area’ is no longer an oddity to a municipality’s structural plan. In addition to that, the historic inner-city of Amsterdam, the largest in the Netherlands, is appointed World Heritage Site by UNESCO. Therefore, the problems, objectives and approach of urban planners dealing with heritage sites is different from other plan-making and design projects. This graduation project offers a contribution to the discourse on the guiding principles of strategic urban planning in conservation areas and heritage sites within global cities.
8 Theoretical framework

Introduction

This chapter provides the theoretical motivation for the main themes that were distinguished in the research phase, the literary background of the research questions and the underpinning of the most important design methods. Sections 2 and 3, on value-assessment and added economic value, go into the theory related to the building stock. The literature on public space discusses key criteria for good quality city spaces and the promotion of public activities in Section 4 and 5. The theory on functional balance is introduced below by linking to the main research question.

MRQ: In what ways can urban planners and designers achieve a sustainable balance between economic, cultural, historic and social interests in the inner city of Amsterdam?

As Section 4 and the conclusion reveal, Roberts, Gehl, the Municipality of Amsterdam and others plead in favour of social interaction and the mixing of activities and functions in order to improve the position of social and cultural interests compared to economic interests, both in the diversification of city life and in the sustainable development of the built environment. In this case, the term sustainability refers to two things. Firstly, the ability of the centre to sustain itself as a vital and economically competitive part of the metropolitan region. Compared to other centralities in the city, the inner-city has many spatial, infrastructural and financial limitations (space, accessibility and affordability). On the other hand, it shows a number of special qualities: a high level of facilities, proximity to consumers and a lively urban environment. Secondly, the term refers to the simultaneous consideration of physical, social, cultural, economic and environmental aspects of urban renewal, consensus and partnership (the main objective of urban regeneration). This thus includes: responsible reuse and renewal, maintaining social traditions, strengthening cultural(historic) profiles, ensuring economic competitiveness and improving the overall environment-friendliness of the city.

When speaking of diversity of the historic city centre, three different contexts can be distinguished: functional diversity, mix of activities and historical stratification. Functional diversity relates to the degree of mix between residential use and nonresidential use and the relative mix of nonresidential functions: retail, offices, leisure, social, companies and the catering industry (HoReCa). With the building level as ‘grain’ and the street or square, the quarter or neighbourhood or the district as ‘frame’ (De Jong & Van der Voordt 2002), mapping these functions produces different levels of functional mix for the various areas (see Figure 31). With parts of the centre becoming dominated by retail or HoReCa functions, inhabitants could get displaced by a shortage of appropriate housing conditions or an unattractive social environment. Local shops and social services that are less willing or able to pay the high rent prices move away with them, amplifying the metamorphosis into a mono-functional commercial leisure zone.

The degree of distribution of functions results directly in the second form of diversity, which is the diversity of people on the street and the sort of activities they are engaged in. The ratio of visitors per resident is almost 6 to 1 in Amsterdam. Compared to cities like Venice, Salzburg and Florence, this number is relatively low, but the pressure on the relatively small area is intense.

The third context is that of the physical layeredness of the city. The historical stratification of the inner-city (Meurs 2004:73) is one of its best qualities. The presence of both new and old buildings articulates the historic and cultural background as well as its present-day economic competitiveness and cultural status. A city that takes care of this balance promotes a sustainable future. At this point, the theory will show the importance of (functional) balance in all respects and the interrelationship between functions, activities and the built environment.

8.1 Functional balance

Although the problem statement discusses the direct relationship between the presence of facilities and public activities, and the term resonates in the main research question, ‘functional balance’ has remained a somewhat general term up to this point. One of the main statements of this graduation project is the need for balance in all respects as a prerequisite for a successful inner city (and successful city spaces): a balance of functions, interests, activities, building types, public and private space et cetera. But how can one start to achieve this? This question has occupied urban designers for a long time, and from it have arisen diverging theories. Montgomery (1998) has combined the classical view, emphasising the physicality of urban design, and the subjective view of the psychology of place with Jacobs’ notion that activity
both produces and reflects the urban quality of a place. Creating quality in all three of these fields: form, image and activity, therefore, is a determinant method for the quality of an (urban) place (Figure 38).

Activities
Vitality and diversity are mentioned as key components to sustaining a wide range of activities, and the two are interdependent. Vitality signifies the amount of people making use of a place. This is dependent on the variety of destinations (or: primary uses) offered in the area, in other words: the functional diversity. By rule, functionally diverse areas display more (public) activities than mono-functional areas. Reversely, a wide diversity of functions demands a sufficiently large group of people (or: population density) with diverging demands to sustain them, which is generally the case in city centres. Amongst the set of indices for diversity, Montgomery also lists: variety in primary land uses, the availability of spaces, patterns of mixed land ownership and the availability of differing unit sizes of property in order to support a transaction base that is as complex and varied as possible. Although no clues are given as for how to pursue complexity, the need for balance is implied in the term variation: without balance, variation is lessened.

Form
The question is how the physical appearance of the urban fabric can positively contribute to the image of the city and its activities to establish a sense of place. Montgomery mentions twelve physical conditions:

1. Development intensity: sufficiently high building density balanced by an appropriate amount of open space;
2. Mixed use: more than one primary purpose of an area and an overlap in spaces and facilities used by different groups;
3. Fine grain: small-scale establishments for small enterprises, who contribute more to the vitality of an urban area than large enterprises;
4. Adaptability: a mixed or highly adaptable built form to continue success in changing economic conditions;
5. Human scale: appropriate building height / street width ratio, distances and intimacy of spaces;
6. City blocks and permeability: short city blocks around central courtyards aligned to the street to generate city life;
7. Streets: as main structuring elements (as supposed to roads or squares), they must be activated (functions) and have permeable edges (visually and physically);
8. Public realm: success is determined by the relationship between built form and the variety of public spaces for walking, encountering et cetera;
9. Movement: measures to accommodate public transport and off-street parking;
10. Green space: to improve on recreation, health and setting;
11. Landmarks, Visual stimulation, detail: the furnishing of public space to improve its quality;

The image of the city is determined by its identity (based on its culture, history, activity and built form) and the perception of that identity. The extent to which an individual can ‘read’ the urban elements determines his understanding of its form and its functions, and thus the level of social involvement, cultural awareness and sense of ownership.
demonstrate the importance of complex variety for the success of an urban place and the indispensability of balance between all these aspects. Whereas all expressions of urban life occur in the public domain (the city comes to life in its public spaces), these activities are stimulated by a varied supply of facilities that can only keep existing by preventing one primary use from getting the upper hand over another: maintain balance.

8.2 Value-assessment

This section discusses the relevant literature concerning value-assessment to demonstrate the complexity of the problems faced by regenerative processes in historic urban environments. The impact of legislative protection of individual buildings and sections of the urban structure, and the influence on decision-making on new projects is revealed. The influence on the design project is limited to this decision-making process of defining the design location and typifying the more and less valuable characteristics of its surroundings. As an additional argument, the principle of ‘added economic value’ of an historic object is elucidated in Section 3 to ratify the decisions made in the design phase.

If Amsterdam wants to make the best use of the centre and its assets in the future, a value assessment of its cultural heritage is necessary. In other words: the expected usability and adaptability of the existing stock towards desired (future) usage needs to be established. The pursuit of objectivity is of paramount importance in this process, which gives rise to a few issues:

- An assessment based on whichever method cannot give complete or adequate information to make (design) decisions;
- Value assessment is context-based; apart from an analysis of physical factors and environmental conditions, the economic, cultural and political contexts also need to be taken into consideration;
- Values are created by people, therefore they are opinions. In an environment with many stakeholders, opinions will vary, so achieving consensus will prove difficult (Mason 2008).

The methodological tools for gaining contextual knowledge and expressing values concerning an object’s cultural significance are described by Mason:

- expert analysis: a professional analysis of cultural aspects;
- ethnography: characterising culture through interviews, surveys and observation;
- mapping: the most basic method for organising information;
- primary and secondary literature research: studies of historical and cultural context;
- statistical analysis: i.e. population growth, tourist numbers, and retail revenue;
- revealed-preference methods: valuation based on existing examples;
stated-preference methods: valuation based on hypothetical situations, often combined with a scenario strategy.
Considering the issues and the methodological tools that are put forward, it can only be said that an opinion on results or effects is extremely difficult if not impossible; Apart from the first and the last, all methodological tools above have been applied in one way or the other during this project.

Cultural heritage
Before discussing the criteria that are relevant for the assessment of a structure’s value, it seems convenient to give a description of the term ‘cultural heritage’, since the term does not specify what it is actually about. Cultural heritage can be divided into three separate elements. Archaeologists distinguish three elements, being ‘the archaeological heritage’, the ‘archaeological resources’ and ‘cultural resources’ (Schofield 2008:16). A distinction is made between, firstly, physical heritage: tangible monumental buildings, structures, the contents of museums, libraries et cetera; secondly, the recollection of the past: handed-down history, poems, music, inventions and techniques; thirdly the living collective cultural practice, which shapes the cultural identity of the community.

The physical stock, our tangible ‘archaeological heritage’, is thus what we often associate with first when speaking in terms of ‘monumental’, ‘historically valuable’ or ‘authentic’. However, without a consideration of the cultural context, structures that are less suitable to fit their purpose are being preserved and used anyway, because the power of the location, caused by the centre as an entity, has become stronger than the power of the object as a unit. This can be expressed in economic value (see Section 8.3).

Riegl
In general, an object with potential monumental value is assessed by its historic, artistic, scientific, aesthetic, ethnologic or anthropologic significance or a combination of two or more of these. Naturally, one is more objective to assess than the other.
In 1903, Alois Riegl was one of the first to formulate a range of criteria to assess an object’s value. He made a distinction between historic values and present-day values (Tillema 1975, Dolf-Bönekamper 2008):

Values of recollection
× Age value – highlights the traces left by time on a monument’s surface and in its substance, even where this involves deterioration or ruin;
× Historical value – refers to the monument’s value as a reflection of history or art history;
× Intentional commemorative value – concerns monuments and buildings which were intended from the outset to stand as an eternal testimony to the event or person represented.

Present-day values
× Use value – concerns safety and practical function;
× Newness value – requires a monument to have no traces of deterioration and be complete in form and colour;
× (Relative) artistic value – since there is no objective standard for all eras, artistic value can only be defined in relation to the artistic will of the curator’s time.

UNESCO
Founded in 1959, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) handles ten criteria for judging the universal value of a man-made or natural object, of which the first six assess the cultural value of an object. At least one of the criteria must be met; the Amsterdam canal belt meets three out of six criteria:

(i): The Amsterdam Canal District is the design at the end of the 16th century and the construction in the 17th century of a new and entirely artificial ‘port city.’ It is a masterpiece of hydraulic engineering, town planning, and a rational programme of construction and bourgeois architecture. It is a unique and innovative, large-scale but homogeneous urban ensemble.

(ii): The Amsterdam Canal District bears witness to an exchange of considerable influences over almost two centuries, in terms not only of
civil engineering, town planning, and architecture, but also of a series of technical, maritime, and cultural fields. In the 17th century Amsterdam was a crucial centre for international commercial trade and intellectual exchange, for the formation and the dissemination of humanist thought; it was the capital of the world-economy in its day.

(iv): The Amsterdam Canal District represents an outstanding example of a built urban ensemble that required and illustrates expertise in hydraulics, civil engineering, town planning, construction and architectural know-how. In the 17th century, it established the model for the entirely artificial ‘port city’ as well as the type of Dutch single dwelling with its variety of facades and gables. The city is testimony, at the highest level, to a significant period in the history of the modern world (UNESCO 2011).

By assessing monuments, groups of buildings and sites from the point of view of history, art, science, aesthetic, ethnology or anthropology, UNESCO attempts to be as thorough and as objective as possible. The degree of democracy of the assessment process has opened the discussion about the social value of cultural heritage. For that reason, many items have been linked to the social history of the city or the nation. In this way, the Amsterdamse Canon’ was put up in 2006, containing fifty themes from the history of the city that have had a profound influence on the identity and the collective memory of Amsterdam (De Rooij & Los 2008).

**ASPO**

The most relevant criteria for the evaluation of historic and cultural resources shown below were established by the American Society of Planning Officials in 1969 (Miner 1983:131-132). The questions in this document could be exemplary for a set of criteria for heritage assessment in this research:

**Historic considerations**
Is the structure associated with:
× the life or activities of a major historic person
× a major group or organization in the history of the nation, state or community
× a major historic (recurring) event
× a past or continuing institution which has contributed substantially to the life of the city

**Architectural considerations**
× Is the structure one of few of its age remaining in the city?
× Is it a unique example in the city of a particular architectural style or period?
× Is it a notable work of a major local or nationally famous architect or master builder?
× Is it an architectural curiosity or picturesque work of particular artistic merit?
× Has the integrity of the original design been retained or has it been altered?

**Setting considerations**
× Is the structure generally visible to the public?
× Is it, or could it be, an important element in the character of the city or the neighbourhood?
× Does it contribute to the architectural continuity of the street?
× Is the building on its original site?
× Is its present setting appropriate?

**Use considerations**
× Is the building threatened with demolition by public or private action?
× Can it be retained in its original or present use?
× Is it adaptable to productive reuse?
× Can the structure be adapted to a new use without harm to those architectural elements which contribute to its significance?

**Cost considerations**
× Is preservation or restoration economically feasible?
× Is continued maintenance after restoration economically feasible?

**Conclusion**

With so many factors to consider and many angles from which to approach the assessment procedure, determining which values come first has the priority: are they the artistic, historic or architectural, or cost and use values? And what does this imply for the urban context, and vice versa? As reasoned previously in this section, value-assessment is not an exact science; the incompleteness or inaccuracy of data, changing contexts and opinions make it a subjective activity. However, by defining criteria as clearly as possible and underpinning the valuation, the assessment process can be made as insightful and objective as possible.

It was argued before that the uniqueness of the inner-city of Amsterdam does not lie in ‘pretentious buildings’. As far as architectural considerations are concerned, the total collection of historic styles - from early manieristic to late neo-classicist
- outweighs the quality of a single individual building. The consideration whether a building ‘fits in’, in historic context and from the point of view of its setting, should thus be superior to aesthetic reasons. When it comes to usability, the typology and access to the premises have proven very flexible and thus reusable without radical measures. Together with high ground prices, renovations on monuments being subsidised and strict building regulations, the costs of preservation can match those of new building activities. Value-assessment could therefore also lead to the decision to build in the stead of relatively new projects, despite their economic value. In the next section, this long-term economic value of monuments that is generated throughout the city is emphasised.

8.3 Monuments and economic value

Generally, it is being considered desirable to preserve our historic buildings, since they can contribute to our social wellbeing. However, the decision to preserve is often made by considering a building’s economic value or its capacity to generate revenue for the owner. In most cases, if a building is no longer capable of generating this revenue, it is torn down and replaced with a new one that is, or renovated and/or occupied by a different function. According to Provins (2008:134), heritage assets are in essence economic goods, meaning “anything that generates flows of human wellbeing, for anyone and for whatever reason.” If we apply this definition to Amsterdam’s monumental assets, chances are that some of them will not be able to generate ‘flows of human wellbeing’ or revenue as well as a new building on the same location would. The logical step would then be to have the building altered so that it would once again generate revenue, either by renovating or replacing it altogether.

However, the special quality of Amsterdam’s monumental assets lies in their combined value. The entire ensemble of the inner-city generates an immense economic value in the form of touristic and cultural consumption that is far greater than the sum of its individual assets. Therefore, the total economic value of an individual building is also higher than can be assessed individually. As a result of this accumulation of heritage assets on one site, the added economic value of the inner-city is greater than that of city-centres that lack this quality. In conclusion, from an economic point of view, protecting this heritage is largely synonymous with protecting the economic position of Amsterdam.

8.4 Criteria for city spaces

The statement from Section 3.3 that “the solution to establishing a durable balance between economic, cultural and social interests lies in public space” leads to the literature on public life in cities. The essentiality of ‘life between buildings’ and the key criteria for good-quality city spaces to increase social control and public activities are set forth in order to apply on the design-related principles further on in the design project.

Protection, against:

1. traffic and accidents: feeling safe

Conflicts between traffic flows occur most often at intersections where slow and fast traffic meet. In stead of motorised traffic, cyclists are involved the most in accidents in the whole of Amsterdam (421 victims as opposed to 377 by scooter, 293 by car and 171 pedestrian victims in 2009 (Dienst Onderzoek en Statistiek 2010b:251)). Although the number of accidents with victims in the city centre (district A) has dropped substantially over the last twelve years, the intersections with the most accidents with victims - so-called black spots - are found right in the centre: the intersections Prins Hendrikkade-Nieuwezijds Voorburgwal and Prins Hendrikkade-Damrak have each had over eleven accidents with casualty between 2007 and 2009 (Dienst Onderzoek en Statistiek 2010b:253-255). Being right across the central station, the number of pedestrians and cyclists is of course higher than at most other intersections.

2. crime and violence: feeling secure

The feeling of security is enhanced when there is a lively public realm, ‘eyes on the street’, or: social control. In part, this social control is generated by local residents, the assumption being that an eye is kept on the public domain from the living room window and the legibility of this creates a sense of security. Another part of social control is achieved by the people on the streets themselves. A lively street feels more secure than a deserted street, that is why dispersion of people and activities over the public domain and over longer periods of time, i.e. in the evening and at night, is important for the protection against crime and violence.
3. unpleasant sensory experiences
Amongst the unpleasant sensory experiences are nuisance from (traffic) noise, smell (from garbage or public urination) and weather conditions such as wind and rain. Protection from the weather requires sheltering (roofs, arcades) or indoor spaces, whilst appropriate proportions of public spaces and the density of the built-up area can provide shelter from the wind (as well as the use of foliage). Conversely, large open spaces and long empty streets allow wind to pick up on ground level. Traffic noise is harder to protect from. Apart from setting up restrictive traffic policies and the hope of a future with quieter motor vehicles, orienting public spaces away from busy traffic streets is the most effective solution. The avoidance of smell nuisance in densely built-up areas requires strict regulations and innovative solutions in the field of garbage disposal, the availability of public lavatories and plenty of bins.

Comfort, opportunities to:
4. walk
In the first place, a comfortable street for walking is also a safe one: well-paved, well-lit and free of obstacles and fast traffic. In addition, a comfortable street needs to well-accessible for the less-abled and the elderly. They must be able to navigate the walking space without having to tackle kerbs or change level. Finally, factors such as the legibility of the structure of the walking area (does it take much effort to navigate through?) and the crowdedness (can one maintain one’s own pace?) are determining for the quality of a walking street.

5. stand/stay
Standing will occur if for instance someone wants to take a closer look at something, runs into an acquaintance or needs to decide on which direction to take. So, hotspots, intersections, food-stands, interesting sights et cetera are obvious and important places for people to stand. Because walking and standing often occurs in the same space, (groups of) standing people can become obstacles for pedestrians themselves. In squares, people tend to stand along the edges of the space to maintain survey of the area.

6. sit;
Besides good opportunities to walk and stand, the opportunities to sit are of influence on the quality of city spaces. Where there are places to sit, stationary recreational activities and social encounters can unfold. Often, bars and restaurants have seating, but consumption is mandatory. Public spaces need to be fitted with primary and secondary places to sit: benches or more elaborate seating facilities, and other objects that are fitted for sitting when the primary places to sit have been taken, such as ledges, walls, stairs, decorative objects and so on. This way, the area can function both when it is quiet and crowded. By rule of thumb, a pedestrian route should be supplied with primary places to sit at every 75 or so meters.

7. see;
At walking pace, the amount of information that can be picked up is higher than when travelling at higher speeds. To avoid an ‘overdose’ of information, it is helpful if the field of vision is limited by the urban structure into manageable portions, without losing the legibility of the area (being able to orientate and navigate in the area). Dense urban (commercial) environments project large amounts of positive and negative visual information: a wide, characteristic building variety on the one hand can enrich the experience, whilst excessive expressions of marketing on the other are detrimental to the authenticity of the place. The collected images of individual buildings in an area make up its visual meaning, and thus need to be assessed as such.

8. talk and listen;
This requires noise from traffic, machinery, music et cetera to be of an acceptably low level. On an average traffic street, it is difficult to comfortably keep an ordinary conversation. Additionally, the acoustics of a space itself are of importance: the level of echo and the distance sound carries in a space contribute to the suitability to talk and listen; hence these factors help determine the likelihood of social encounters to take place.

9. play and exercise;
Whilst exercises like jogging or cycling can occur on the street, playing activities require a certain amount of defined open, public space that is screened from traffic flows and larger elements of the urban fabric. This is, for instance, to allow children to be able to play safely. The absence of unsafe objects and the availability of play/exercise tools (slides, swings, outdoor fitness apparatus)
contribute to the suitability of public space to unfold playing or exercise activities, indicating that active measurements need to be taken to make this possible.

**Enjoyment, of:**

10. **scale**
Enjoyment of scale has everything to do with the ability to process the visual information as described under see. Furthermore, the proper scale allows greater diversity of amenities to occupy a single area, thus contributing to the overall richness and quality of the place.

11. **opportunities to enjoy the positive aspects of the climate**
These positive aspects include sun and shade, heat and coolness, and absence of sudden breezes et cetera. Apart from an entire range of technical criteria to improve the climate conditions (e.g. the absence of highrise or other large, wind-catching or shadow-casting buildings), chances of enjoying the positive weather aspects are improved by considering surrounding building height, orientation in respect to the sun, covering passageways et cetera when (re-)designing public spaces.

12. **positive sensory experience**
A positive sensory experience is a combination of the aforementioned absence of noise and smell, proper building scale and dosage of positive and relevant visual information (the ‘displayed space’), social control et cetera. Together, these factors define the ‘exposed space’ (Burgers 2003).

### 8.5 Public activities

**To assemble or disperse**
Assembly or dispersal is aimed at the concentration or spread of people and events from the primary level, intended to improve the use of public spaces and the relationships between different activities. Traditionally in old inner cities, at the large scale, functions are assembled along and oriented towards the public domain of streets, squares et cetera, as opposed to dispersal, which is found in the modernist, functionally and infrastructurally segregated suburbs. On the medium scale, people are dispersed when entrances to the buildings are far away or oriented...
away from each other, in stead of when the public domain is as compact, and walking distances as short as possible. At the small scale, the effect of assembly or dispersal is reached when the spaces for the public activities of a certain amount of people are either realistically dimensioned to the individual’s (sensory) range and required space to perform stationary activities, or overdimensioned. On each level of scale, the assessment has to be made what the desired effects must be of the space on the life in those spaces. For the design project, this entails a consideration of where people need to be assembled or dispersed, the expected and desired amount of people that will use a space for activities, the amount of people that will choose an inviting street with certain dimensioning and detailing to influence their behavior and - from another angle - the effect of a sequence of smaller and larger spaces to strengthen the spatial effect.

To integrate or segregate
Integration or segregation is concerned with the degree of mix of different types of people and activities, often related to surrounding functions. The effect of integration of activities and functions can be positive and stimulating, but can conversely produce nuisance. Gehl stresses again that the actual integration of events and people is determining for interaction and encounters, not the formal integration of primary buildings or city functions. Regarding the design project, he states:

An integration-oriented city plan can also be one in which large functions are used as an opportunity to fit many small units into a wider context (2011:103).

At the small scale, an individual function amidst different ones (like a school in a residential neighbourhood) is strongly embedded in its surroundings, yet perfectly capable to perform separately from the surrounding functions at the same time. At Nieuwendijk, this could mean that the dominant shopping functions could be successfully complemented with different types of functions and activity spaces without compromising the integrity of the shopping ribbon, but still contribute to greater diversity of the area as a whole.

On the topic of travel, it is argued that in areas with slow traffic, it is vital to integrate the traffic activities with the stationary activities, as almost all activity in these spaces is or emanates directly from slow traffic.

To invite or repel
The inviting or repelling character of a space is determined by physical and psychological aspects. Visual contact is an important psychological element of invitation. Man’s urge to interact and encounter asks for inviting spaces, and thus visual contact with one’s surroundings is more than a tool to exercise social control. Smooth transition zones between public spaces and public and private spaces are key physical conditions. In the design process, the emphasis on inviting spaces lies mostly on the relationship between public and private: visibility, smooth transition zones et cetera.

To open up or close in
Opening up two adjacent spaces - be they transition zones, equal spaces or an establishment and its surroundings, is for a large part dependent on visual contact, but also on distance. Only a few meters can make the difference between perceiving adjacent activities or perceiving just a building, or between observance of a person and actual social contact. Spaces that rely on high interaction with their surroundings, such as commercial and cultural functions, are generally opened up to the street; in case of Nieuwendijk, the pedestrian traffic passes right along the shop windows by reason of it being closed in between the two facades of the street. Private spaces are more complicated; their surroundings need to be opened up to these, but need to be closed in to some degree for privacy reasons. Design solutions need to take into account the desired degree of contact by regulating the openness or closeness of adjacent spaces.
9 Research conclusions

The theories discussed demonstrate the direction in which solutions to the planning and design problems are to be found. Without this study of literature, reports, legal documents and bulletins, it would have been impossible to make the translation from theoretical discussion to urban design. However, not all relevant literature is equally crucial for the design phase, or applied in different ways. This chapter provides the most important conclusions from the research phase towards the strategic intervention and the exemplary design project.

Main research question
The inner city of Amsterdam distinguishes itself from other Western European cities with historic centres by being economically competitive despite physical, infrastructural and financial limitations as a result of strict heritage management policies. However, social interests from both residents and visitors are under pressure as a consequence of both. To sustain a balance between economic, cultural-historic and social interests, attention to this matter is required from planners and designers. These findings are in line with the general principles of urban regeneration, which seek to integrate the physical, economic, social, cultural and environmental aspects of urban renewal. The municipality of Amsterdam also argue in favour of a strong embedding of social interests in the physical domain and mention Identity, Diversity, Flexibility, Ownership and Accessibility as key conditions for interaction and social encounters. Moreover, Gehl emphasises the importance of the actual integration of people and events rather than the formal integration of buildings and functions (2011:101). The strategy needs to attend to this on the large, the medium and the small scale:

× Large scale: improvement of freedom of movement through new routes and city spaces;
× Medium scale: the spatial (and functional) configuration of the building block;
× Small scale: the relationship between the individual building and the public domain.

Besides the need for a stratified cityscape, a framework on the medium and small scale in support of a variety of programme and the distribution of people and events over the public domain are the main strategies to this end.

Value-assessment
The assessment of the value of an individual object distinguishes two distinctive types of value: the recollective values of the object: the tangibility of the objects’ age as well as its known historical significance, and present-day values: the artistic value, but also the practical usability. However, the assessment of an individual building also involves the added value to the cityscape as a whole, and the resulting economic potential generated by this artifact of culture and history: at this point, the cultural and historical values can be expressed in economic potential by merit of revenue generated from touristic activities, branding/city profiling et cetera. With urban regeneration projects in historic inner cities, planners must be aware of this indirect potential and consider these equally valuable to their modern counterparts.

Besides the conservation of individual objects, the cityscape as appointed conservation area is aimed at protecting the urban structure. At the building block scale, this means preservation of visual and spatial unity of the block. Although visitors to Amsterdam are able to disperse themselves over a relatively large area, key areas are having problems with an overcrowded public domain. Within the dense structure of streets and canals, the lack of suitable public squares and courtyards can, after historic example, be compensated by creating new public spaces within the closed urban blocks.

Public spaces and activities
It has become apparent that the emphasis of this design project will lay on the (pedestrian) public domain and city spaces in particular. The theories on key criteria for good quality city spaces and the strategic means to assemble, disperse, invite or integrate people and events have been examined to determine which design principles can be derived from them. An important conclusion is the need for freedom of movement and suitable places for stationary activities, divisible in conditions for walking and wayfinding, standing, sitting, seeing, talking et cetera:

× Walking: people prefer direct routes, shortcuts, and will, in most situations, choose the lively street;
× Way-finding: it is important to ‘cut up’ the route in manageable pieces and enlarge the amount of ‘decision spots’ along the route;
× Standing, Sitting: public spaces must be situated on the ground floor, fitted with places to sit and enable enjoyment of the
positive aspects of the weather;

* Spatial effects: public spaces must be realistically dimensioned to the individual's sensory range and the required activity space; alternating larger and smaller spaces reinforces their spatial effect;

These principles offer key solutions at the large, medium and small scale for the promotion of stationary activities, and therefore should be at the basis of the preconditions of the strategic intervention and design project.

**Functional balance**

The scale of the individual building is decisive for the amount of interaction with its surroundings; hence the amount of street activity generated per establishment is greater, more dispersed in time and place, and more diverse in character, if the average floorspace per unit is relatively small. Directly related aspects are the number of entrances connected to a certain space, the increased number of different destinations in the same location and the consequent increased intensity of interaction between these destinations. More precisely, if the proper building scale is applied in relation to the scale of the urban structure, the resulting ratio between available public space and the exerted public activities is also more in tune. Therefore, the building scale at the design location must be made corresponsive with the scale of the urban structure. Being that of a fourteenth-century settlement, parcel sizes must be relatively small and building heights relatively low.

The population of Amsterdam is sufficiently dense to sustain a complex, varied offer of facilities in the historic centre. Despite this variation, certain areas in the centre display a disrupted balance as a result of the over-presence of one particular primary use, and therefore increasingly monotone activities. There are, however, more fields in which the balance, essential to a successful urban place, is threatened, amongst which the relationship public/private, the average building scale, architectural styles et cetera.
“Ik wilde dat ik niet in Amsterdam woonde, dan ging ik erheen met vakantie.”

“I wish I hadn’t lived in Amsterdam, then I would go there on holiday.”

K. Schippers

PART II:
DESIGN

43. The old City Hall of Amsterdam, Pieter Janszoon Saenredam, 1657
10 Design location

Introduction

Choosing a suitable design location was done by investigating where the problems formulated in Chapter 3 were most pressing, asking the questions: which places are dominated by visitors? Where is public space lacking and/or unsatisfactory? Where can you see big city typologies affecting the historical urban fabric and buildings, and the functional balance coming under threat?

The next sections describe the analysis of the occurrence of these issues and the decision-making process towards finding an appropriate site for re-development.

10.1 Zooming in

Dominance by visitors

According to the theory, social problems can arise if social control is lacking, or if an individual’s sense of identification with and ownership of his or her living environment is lessened. Amongst the reasons for lack of social control from residents are: a distorted relationship between the public and the (semi-)private domain, shortage of shared spaces, under-representation - or in this case: over-representation of the visitor. Between them, domestic day-trippers, shopping public, budget-tourists, business visitors and others can be distinguished. Many of them visit the same places: the shopping streets, museums, the Red Light District, the canal belt et cetera. The more attractions in one area, the more visitors and hence the less is the (relative) presence of local inhabitants.

Lack of public spaces

The sense of dominance by visitors is not unrelated to the lack of public spaces in the same area (Section 3.2). The urban structure, building regulations, land leasing and traditional city life (including for instance the use of the canals for transport) resulted in a highly built-up area which has been filled up more and more over the centuries. Although in general, this compact form of urbanisation can contribute to city life, the possibilities to unfold social activities are impaired by the lack of good-quality activity space, as the theory from Section 8.4 subscribes. This shortage is greatest in the oldest parts of the inner-city (Figure 32).

Big city functions are a threat to historic buildings and street scene

Figure 33 and 38 were vital images for zooming in on potential building locations, giving insight in the occurrence of big city topologies and monuments. Combining the information from these maps with the assessment map, belonging to the Nieuwendijk-
Kalverstraat land-use plan (DRO 2009, Figure 46) revealed that the greatest impact of big city functions is found around these shopping streets and main traffic arteries.

**Functional balance**
From earlier location analyses of the distribution of nonresidential functions throughout the centre, it had become apparent that the shopping facilities form a ribbon that runs from the westerly Haarlemmerplein in district A05 all the way to Leidseplein in district A07 in the south (Figure 31, 44). This shopping apparatus is a very important economic asset for the inner-city, drawing shoppers from near and far - clearly an important and valuable asset for Amsterdam. However, the association that I and many a person with me (Depuydt 2011:30-31) have from walking these streets is that they are quite unpleasant to be if you do not need to do any shopping - and indeed even if you do - which is a peculiar contradiction for such a successful attraction - and an intolerable one when considering the historical significance of the place.

The decision was made to zoom in on look further into the matter. How could this area attract certain people, but repel others at the same time? Studies among day-trippers have shown (Gehl 2006) that the main reasons for people to come to the city are, increasingly, the atmosphere and the public activity, before any specific goal connected to a certain amenity, such as shopping or a museum visit.

The seemingly effortless - but selective - mix of functions and activities as can be found in the oldest part of the city was of particular interest, especially the negative spiral of budget-tourist-oriented commercial activity (Gemeente Amsterdam 2011b; see Section 10.2) and the increasing average size of retail establishments.

Expecting that this area has the potential to produce the most relevant design case for this subject, the decision was made to focus on a single shopping street and its immediate surroundings, notably Nieuwendijk, the first street along which there is believed to have been building activities since the city was founded, and amongst the oldest shopping areas in the Netherlands. The area stretches from Prins Hendrikkade in the northeast to Dam square in the southwest and is enclosed by Damrak and Nieuwezijds Voorburgwal. It can be regarded as a single urban island made up of smaller urban blocks. All of the discussed problems and opportunities occur here:

- **Street activities dominated by visitors:** the overcrowded shopping street and monotonous (or tourist-oriented) offer repels residents, whilst visitors can find it hard to find a suitable spot nearby to take a rest;
- **Lack of public space for street activities:** Figure 66-c shows an analysis of the spatial structure of the Nieuwendijk area. Not so much the ratio built-up area - open area as the lack of public spaces causes the area to be unsuitable for unfolding stationary activities. There are three public squares in the area: Nieuwezijds Kolk with many catering facilities, Beursplein, which is poorly utilised, and the open Dam square. Neither is optimally fitted for stationary recreational activities, thus little used as such.
by visitors and residents alike. A missed opportunity, especially because the multitude of different activity groups in the area holds an extraordinary potential to create lively, thus pleasurable and safe streets, without being overcrowded.

× Pressure on historic buildings and street scene: In this area, more than any other in the old inner city, the historic character of the street scene is affected by modern typologies. The extensive stratification of building styles seems to be reaching a tipping point in which the commercial facilities define the image of the city and street scene, more so than the (historic) buildings themselves. Although many historic objects that have been removed were of lesser value, they certainly co-determined the cityscape of the area by their scale and building style.

× ‘Big city functions are a threat to the public domain, but offer opportunities for future regenerative developments: last centuries’ ‘modern’ big-city functions continue to feed the process of building programs becoming ever bigger and bigger, threatening the original architectural unity of the city-centre. Particularly De Kolk, the C&A, Hema and other department stores, and Crown Plaza and other large hotels result from and contribute to this phenomenon. Although these structures have proven the great flexibility of the urban structure, considering these structures for an exemplary regenerative project could both counteract this tendency of up-scaling and at the same time aid in the protection of monuments and strengthen their contribution to the cityscape.

× Functional balance under threat: the Nieuwendijk commercial shopping apparatus displaces other, less or non-commercial functions. Furthermore, a downward spiral of cheap, low-budget-oriented and criminogenous shops decrease the overall quality of the shopping function.

Conclusion
Studies among day-trippers have shown that the main reasons for people to come to the city are the atmosphere and the public activity before any specific goal connected to a certain amenity. However, the sheer number of people, due to the mono-functional character of the area, and the deteriorating quality of the cityscape as a result of commercialisation, make the Nieuwendijk area at times quite unpleasant to be. The lack of good-quality public activity spaces hinder the unfolding of stationary activities in the public domain, causing problematic relationships between residents and visitors. The economic potential is usually favoured over the historic value with new developments, further threatening the authenticity of the location. In short, this location is most relevant for this project and in need of a strategic intervention to address these issues.
10.2 Criteria for city spaces

Jan Gehl (2006) has established twelve key criteria for good quality city spaces. In this section, these criteria will be discussed for the design area. Figure 53 shows the valuation scheme for the city space of the Nieuwendijk area.

Protection, against:
1. traffic and accidents: feeling safe
The roads surrounding the area are busy traffic arteries. The intersections with the most accidents with victims border the location, the most important reason being the above-average amount of pedestrians, cyclists and motor vehicles utilising the same streets. Because the area itself, however, is a car-free pedestrian zone, the immediate threats of traffic accidents are limited. The dominance of pedestrians even keeps out cyclists. On the point of traffic safety, the area thus scores relatively high.

2. crime and violence: feeling secure
The Nieuwendijk area has a lively public domain during opening hours. In the evenings, at night and in some of the quieter alleys, however, this social control is lacking. This is partly due to the lack of diversity and dispersion of functions. After the shops’ closing hours, the area becomes deserted, save the odd pedestrian who finds himself on a meandering street with closed shutters (Figure 55-2). Moreover, the sense of ‘eyes on the street’ from local residents is missing.

3. unpleasant sensory experiences
The densely built-up area protects the pedestrian from the worst of the wind. However, shelter from rain/snow and cold/heat can only be sought in the stores (or under their canopies), for as long as they are open. Apart from that, the area offers no sheltered, publicly accessible areas. Furthermore, (garbage) pollution can temporarily cause problems (Figure 55-3), whilst ‘bad smells’ in the alleyways discourage people from entering them, and are inclined keep moving down the same street.

4. walk
Nieuwendijk area is well accessible for everyone: the differences in elevation - Nieuwendijk is still a dike - are subtle and the street is well-surfaced and free of obstacles. The same cannot be said about every alleyway, where bicycles, wheelie-bins and other temporary objects constantly block the way. The simple basic structure of streets and alleys makes it easy to recognize the junctions and navigate the area. On busy days, however, Nieuwendijk can become overcrowded with shopping public. The two-directional movement further reduces speeds to a slow ‘shopping pace’, rendering walking a tedious effort.

5. stand/stay
On busy hours, the aforementioned hotspots (intersections, food stands, interesting sights et cetera) on Nieuwendijk add to the feeling of crowdedness as they further narrow the walking space. With the additional lack of public squares to spread out, people are generally discouraged to stand/stay for longer periods of time (Figure 28 a, c, 55-5).

6. sit;
There are several clusters of catering establishments in the area with seating on the pavement, but there are almost no opportunities to sit in public space. The only public benches in the vicinity are on Damrak, Beursplein (see Figure 55-6) and Dam square just bordering the area. Indirectly, this also affects the overall accessibility for, for instance, the elderly.

7. see;
The dimensions of the Nieuwendijk area are well-tuned to the pedestrian. The layout of the urban pattern (curving, relatively narrow streets and alleys) limits the field of vision to manageable distances. At walking pace, there is ample time to soak up detailed information about the environment: information closest can be read in more detail, whilst the ‘bigger picture’ (i.e. the street one is on) helps to orientate on one’s position in the area. In many places however, especially Nieuwendijk and Damrak,

53. Valuation scheme filled in for the Nieuwendijk area: good conditions are marked in white, mediocre quality in grey and bad conditions in black
54. Location of photographs taken on site (see Figure 55)
most visual information is provided in the form of marketing, as a result of which the streets are now visually polluted by signboards, commercials and advertisements, another result of the commercialisation of the inner-city.

8. talk and listen;
Whilst the arterial roads surrounding the area are sources of traffic nuisance, the pedestrian area itself, by comparison, is relatively protected from traffic noise. Most noise is produced by music coming from the stores and the buzz of people on the street. From the perspective of noise levels, the now semi-private courtyards on the insides of the building blocks are best suited to be used as spaces for social encounters.

9. play and exercise;
Not only is proper space to play or exercise lacking in the Nieuwendijk area, the limited public space there is, in relation to the amount of people using the space and the amount of built-
up area, unfit for these activities or in use. Another opportunity is provided by the secluded character of the insides of the building blocks. Here in a well-defined space, in the absence of traffic and passers-by, playing children can be easily guarded.

**Enjoyment, of:**

10. **scale**
The buildings and spaces around the Nieuwendijk area have not been so much designed, as naturally evolved on a human (i.e. ‘pedestrian’) scale, and therefore most effective as a pedestrian area. That is to say that the area can be covered entirely on foot, and an average walking pace here is the right tempo for an individual to absorb and process the surrounding sensory information, without being over-exposed or under-exposed to the received information.

11. **opportunities to enjoy the positive aspects of the climate**
In the Nieuwendijk area, the ratio between built-up area and streets and alleys has limited the opportunities to enjoy the positive aspects of the climate to a few areas. Mainly on the streets around the edges, the width/height ratio is more appropriate. In addition, a number of larger building typologies further lessen these possibilities in the area itself. An opportunity lies in the insides of the building blocks, where surrounding building heights create openness to allow enjoyment of the sun.

12. **positive sensory experience**
On the whole, the Nieuwendijk area is not an unattractive environment, despite the lack of public space, trees, water, distant views and so on. However, the positive sensory experience (the scenic character of the place) is threatened by dominance and a slow decline of the shopping apparatus towards the lower-quality segments, budget-oriented amenities and criminogenous activity. As a result, a forest of advertising signs, lights, smells and noises veil many of the cultural, historic and aesthetic qualities of the built environment.

**10.3 Location elements**

10.3.1 **Spatial structure**
In Chapter 2, a brief description was given of the spatial origins

57. Nieuwezijds Armsteeg. Low-budget, often criminogenous businesses like exchange offices and call-stores flock the alleys and increasingly appear on Nieuwendijk as well.

58. View of Nieuwezijds Kolk from Nieuwezijds Voorburgwal in 1868 (Beeldbank Amsterdam 2011)
of the Nieuwendijk area. As main defence against water from Zuiderzee and Amstel river, this parallel structure has remained intact. Nieuwendijk is now the main street in the area enclosed by Damrak (formerly Amstel river) and Nieuwezijds Voorburgwal, a former canal and once edge of the settlement. This primary structuring element divides the ‘urban island’ into a western and an eastern part. It is linked to the two parallel streets by a series of alleyways, which further divide the urban blocks into smaller ones. The course of these two structuring elements has caused all buildings to be formally oriented and aligned along these lines. The rear sides of these blocks are less strictly defined and have a more informal organisation. Today, the insides of the building blocks are inaccessible to public, only to residents and employees. Without any other spatial elements save one small square, Nieuwezijds Kolk, users are closed in within these linear elements, hence are inclined to keep on the move; either along Nieuwendijk, or through one of the alleys, in which case the area visit comes to a swift end.

### 10.3.2 Functions

**Shopping**

In a larger perspective, the shopping street is an important asset of the inner-city. There are, however, a number of threats to it on a local scale. The aforementioned displacement of less commercial functions is one threat. In addition, a study of the Nieuwendijk area reveals that stores from the higher segment are having trouble maintaining their position and clientele. This is not so much the fault of large multi-nationals, as one might expect. The invasion of cheap stores conducive to crime is to blame here. Often, the higher segment shops are replaced by stores from a lower segment. They are predominantly focused on the tourist for their turnover and, increasingly, tourists with a limited budget who stay in hostels and hotels nearby. Cheap souvenir, sex and phone shops, exchange offices and casinos profit from impulse purchases from the steady flow of passers-by whilst the quality of the shopping street as a whole deteriorates. Where at first, this phenomenon was mainly seen in the adjacent, quieter alleys, they are now making their appearance on the main shopping streets as well.

**Catering service**

The marked areas in Figure 63 show catering clusters. They are small clusters of cafés, (snack) bars and restaurants. They are not necessarily supplying the demand of shopping public - who prefer the fastfood chains along Nieuwendijk - nor are they of great importance or reputation as a culinary destination in the centre. In any respect however, they offer good opportunities for both ends. Finding some sort of way to connect these areas with each other and integrate them better with the mono-functional offer of Nieuwendijk is an opportunity worth seizing in the design assignment.

### 10.3.3 Recent projects

The largest, most recent and influential project that has recently been carried out in the area is the 1994 Ben van Berkel project De Kolk. The area covers three building blocks between Sint Jacobsstraat and Nieuwe Nieuwstraat. The program contains an office building, a hotel with 235 rooms, 6500 m2 of retail and catering space on ground floor and first floor, a 400 space two-storey underground carpark, a fitness school and 38 apartments (Van Dijk 1996). The scale of the intervention and the demand for off-level parking facilities required an extensive, chiefly commercial programme that exploited the permissible space to its maximum. The floor plan shows the architect’s intention to introduce an additional branch to the shopping street, connecting Nieuwendijk with Nieuwezijds Kolk via an elevated covered passage with room for shops on either side. In reality, the elevation is ignored because a change in level of that sort is not perceived as a continuation of the public domain (Gehl 2011) but a transition to another (less public) space. The amount of continuous lettable floorspace has resulted in the entirety of each floor to be occupied by a single retail multinational. Whether Van Berkel has intentionally kept this possibility open or missed this flaw in his design remains unclear.
10.3.4 Landmarks and monumental buildings

Compared to other parts of the inner-city, the number of distinct individual landmarks in the area is relatively limited, as is the case for Amsterdam in general:

The uniqueness of Amsterdam’s attributes therefore lies not in pretentious buildings but in the remarkable structure of the spatial pattern (Deben, Salet et al. 2004:4)

The most notable historic landmarks are:

- *Het Korenmetershuisje* (1620), in the middle of Nieuwezijds Kolk. Its historic significance is sometimes forgotten, because it was the grain trade carried out from here that made Amsterdam the staple market of Europe;
- *De Nieuwe Kerk* (<1408), situated in the corner of Dam square adjacent to the former city hall;
- *Victoria Hotel* (1890) across the station on the corner of Prins Hendrikkade and Damrak;
- *Paleis op de Dam* (1665), the world-famous classicist city hall by Jacob van Campen;

Together with a few other extraordinary examples of monuments, such as ‘*t Makelaers Comptoir’ (1633) at Nieuwezijds Voorburgwal, most of these objects are situated at the edges of the area, thus less likely to be passed by. Besides these objects, the quality of the built environment can be distinguished in small clusters of monumental buildings. Here, the historic building scale is most in sync with the urban structure it is located in. Good examples of this can be found, amongst others, at Nieuwezijds Kolk, Nieuwe Nieuwstraat, Nieuwezijds Voorburgwal, Gravenstraat and Oude Braak.

10.3.5 Archaeological sites

Being the oldest part of the city, the area possesses some interesting archaeological sites, some of which have barely been explored. Figure 62 reveals the known archaeological locations that are present in and around the Nieuwendijk area. The most fundamental discovery of the last decades is the aforementioned discovery of the foundations of the old *Kasteel van Aemstel*, believed to date back the thirteenth century. The castle was made famous in the play and novel by Van den Vondel, *Gijsbrecht van Aemstel*, a tragic account of the siege of Amsterdam, but its existence was always disputed - until the 1994 discovery (see ...
Apart from excavations of building foundations and other historic structural elements, a variety of utensils, artefacts and other objects have been found here and, for instance, during the construction of the North-South subway line underneath Damrak. The Allard Pierson Museum, across Rokin, is the archaeological museum of the University of Amsterdam. However, it displays archaeological finds from many different eras and civilisations. The Amsterdam Museum in its turn does tell the (hi)story of the city, but has no archaeological department.

This given, plus the amount, nature and the antiquity of the found objects, would be a good ground to propose an archaeological branch of the Amsterdam Museum somewhere in the area - preferably right at the site of the finding place of the foundations of Kasteel van Aemstel. Making (parts of) the exhibition publicly accessible - similar to the Schuttersgalerij, could open up new incentives for different types of activities in the area and underscore the historical and cultural significance of the place.

10.4 Case quick scan

Kalverstraat-Begijnhof

On the opposite side of Dam square, the shopping street continues its way into Kalverstraat. Nieuwezijds Voorburgwal also runs on parallel to it, and Damrak changes into Rokin. Traditionally, Dam square was the endpoint for inland water transport as well as sea-going transport delivering goods into the city, functioning as a buzzing transfer point.

Despite the similarities between the surroundings of Nieuwendijk and Kalverstraat, the latter has an additional advantage (see Figure 66a): a secondary street running parallel to it. Called Gedempte Begijnensloot, this alleyway runs from Spui to Sint Luciënssteeg, connecting Kalverstraat with the Amsterdam Museum and Begijnhof (or: beguine court). This additional spatial element condenses the network of streets and alleyways further. Moreover, it increases the number of intersections between the various elements and thus increases the number of decisions pedestrians can make along the way; this also cuts the route up into smaller, more easily manageable pieces which, according to Gehl, psychologically shortens the length of the route for the pedestrian. Finally, the number of different ways the area can be crossed is increased, whilst the cultural facilities draw different types of activity groups into the area, and so the amount of different activities taking place. It seems that this increased network density adds tremendously to the activities and the experience of the quality of the area as a whole.

**Binnengasthuis**

The Binnengasthuisterrein is originally a monastery complex, which came in use later as a hospital (gasthuis), but today holds, amongst others, several university buildings. Most of the area is publicly accessible and the complex is fitted with several inner courtyards, which are connected by passages and existing alleys. Despite the size of the terrain and the relatively high amount of public activity space, the integrity of the larger urban structure has been preserved. Dating from the second half of the nineteenth century, the former hospital complex has utilised the traditional parcels-exceeding solutions of the monastery and gasthuis-plot and found a suitable function in the university to take office in this complex, whilst at the same time maintaining a public character.

10.5 Conclusion

Without any additional spatial elements to the main streets and alleys in the Nieuwendijk area save one small square, users are unable to unfold stationary activities and are inclined to keep on the move. Stores from the higher segment are having trouble maintaining their position and clientele, and experience competition from lower quality segments. Integrating the existing catering clusters with the mono-functional offer of Nieuwendijk is an opportunity worth seizing in the design assignment. The examples from Begijnhof and Binnengasthuis show some successful solutions to the problem of fitting large, parcel-exceeding functions in a dense urban structure, whereas modern attempts have not been quite as successful. The scale and cost of De Kolk intervention required an extensive, chiefly commercial programme that forced the permissible space to be exploited to its maximum, far from the prevailing building scale of the area. Although the number of distinct individual landmarks in the area is relatively limited, clusters of monuments still demonstrate the historic building scale that is most in sync with the urban structure. The discovery of the foundations of the old Kasteel van Aemstel, plus the amount, nature and the antiquity of archaeological artefacts gathered over the years would be good grounds to propose an archaeological branch of the Amsterdam Museum right at the site of the finding place of the foundations of Kasteel van Aemstel, to underscore the historical and cultural significance and counteract the commercial character of the place.
11 Assignment and preconditions

Introduction
This chapter discusses the objective of the strategic intervention, and the application of the theoretical principles in the design project.

11.1 Main objective

With the general problems of monumentality and metropolisation linked to their actual occurrence in the Nieuwendijk area, where these problems have shown to occur the most and to the highest degree, the project ambitions can be combined with the conclusions from the theoretical framework in a set of preconditions for design.

The theory has shown that the main focus of this strategy should lie on the actual integration of people and events rather than the formal integration of buildings and functions. Therefore, the establishment of a suitable physical framework for social and recreational activities in the form of diverse, sustainable public spaces is the main strategy of the design project towards reaching the main objective:

“To diversify the duration, spread, number and types of stationary outdoor activities in the Nieuwendijk area”

Planning throughout the highest to the smallest scale level demands a clear definition of which strategy is applied on which scale. In the design project, the highest scale is the Nieuwendijk area in its entirety (as defined in Section 10.1) and its immediate surroundings, from the perspective of the pedestrian. The surroundings include the Central Station area and the adjacent streets from which pedestrians approach the area. Focus point is the improvement of the freedom of movement through the area (form), the entry of high-quality and less commercial functions (activities) and the perceptibility of the historic significance of the area (image).

The configuration of the building block is the focus of the medium scale. Key conditions are the transformation of the spatial and functional relationship of the inside of the block with the adjacent shopping street and the alleyways, the relationship between public and private, the re-distribution of commercial and non-commercial functions and the relationship between traffic space and activity space.

The smallest scale “is where the battle for quality is won or lost” (Gehl 2011:130). This level concerns the smallest urban units, the individual building and the city space. The relationship of the building unit with the public domain is determined by the typological configuration of the unit and the positioning in relation to the public space (form). Small building units increase the total amount of interaction; moreover, the right access typology can improve flexible (re-)use. The stylistic properties of the building units combined are decisive for the overall image of the city space, whilst the furnishing of public spaces influences the types and amount of activities throughout. The theoretical conditions concerning the quality of public spaces from Chapter 8 are processed into the strategic and design principles below.

11.2 Strategic principles: theoretical foundation

Public space
(General aims: refurnish public space in favour of pedestrians; restore the balance between residents and visitors)

Routes and way-finding, walking
Strategy: create a dense pedestrian network of corridors and passages with the alleyways as main structuring elements:
× It must be possible to cross the area from north to south without having to walk predominantly on either Nieuwendijk or Nieuwezijds Voorburgwal (Disperse);
× The different routes through the area will lead past the most important landmarks of the area (Identity);
× The routes will disperse people over the area, creating liveliness in adjacent spaces and relieving some of the pressure on Nieuwendijk (Invite);
× The dimensions of the corridors and passages are secondary to that of the alleyways, strengthening the function of the alleyways and amplifying the scale effect of the inner courtyards (Close in);
× By not aligning the corridors and passages, the routes are (visually) cut up into manageable pieces, arousing curiosity and multiplying the number of ‘decision’ spots - where one decides
whether to take a turn, or not (see Figure 67a-c); 

Theoretical notes: 
× Most people in most situations will choose the lively street; 
× People prefer direct routes and shortcuts; 
× For every meter width of corridor, about 10-15 persons per minute can pass. 

Staying (stand, sit) 
Strategy: increase the amount of public space suitable for stationary activities within the building blocks; 
× Encourage longer stays and more intimate social interaction by physically and visually connecting and combining public and private activity spaces (Integrate); 
× Public courtyards should provide shelter from negative weather conditions and provide opportunities to enjoy the positive aspects of the weather: sun/shade, wind, precipitation; 
× All public space is situated on the ground floor to invite and achieve optimal accessibility; 
× Activity space should be provided with primary and secondary places to sit (Assemble). 

Building stock 
Strategy: reverse some of the negative effects of City-forming and free market operations on the historic built environment; 
Value-assessment strategy: monumental buildings with good use value are not considered for demolition, unless archaeological motives dictate otherwise; 
× Re-introduce traditional parcel dimensions to: increase interaction with the public domain, activate the insides of the building blocks and increase the total number of small establishments (this also promotes the potential variety in types of functions) (Figure 70); 

Theoretical notes: 
× The building block as a spatial unit is preserved; the layout of the urban pattern is appointed as a conservation area, therefore the alleyways must retain their original character (dimensioning, facades, alignment, height difference et cetera); building alignment should roughly correspond with the type of situation before 1900; 
× The architectural appearance must be that of individual or duplicate building units; to achieve this, the units are designed separately. Together, the horizontal facade lines need to alternate to limit horizontal continuity and accentuate vertical continuity. Ceiling heights on ground floor level are 4.00 meters minimum at Nieuwendijk. 
× The stylistic concept of the building units should correspond with, reflect, or be an interpretation of the prevailing building styles of the classic Dutch town residence. This means that both historicising designs as modern variants of the theme are accepted (this also allows for the use of modern materials), as long as the design meets the architectural, typological and morphological standards set forth in this Section. 

Functional balance 
(General aim: re-distribute functions in mono-functional areas: down-scaling and segmentation of the shopping route) 
Strategy: create possibilities for diverging types of commercial, non-commercial, cultural and social enterprises through small, flexible building typologies; 
× High-quality commercial retail functions in the establishments along Nieuwendijk; 
× High-quality (commercial) retail, catering, business and social service functions in the establishments along the alleyways; 
× Facilities supplemental to shopping activity: public toilets, food, benches et cetera; 
× All upper floors are appointed as residential floorspace. The access typology should enable use of ground floor and upper floors as a single unit as well as separate use.
12.1 General

For the strategic intervention, the area has been divided into three sectors. Each sector covers two building blocks. Together, these cover the length of the Nieuwendijk area from Central Station to Dam square. The large scale strategy, to increase the number of different routes through the area, results in varying degrees of intervening in each sector, depending on the possibilities produced locally, such as by the value-assessment, the occurrence of detrimental big scale typologies, and the potential and usability offered by existing spaces within the blocks. More concretely, Sector A sees the largest transformation due to the demolition of a large part of the sizable project De Kolk. In Sector B, the intervention is restricted to continuing the densification of the network via additional passages, whilst at the same time opening up existing open space to the public. Sector C is amenable for the placement of a small public space inside the building block. These three sectors make up the strategic intervention. The design project focuses in further detail on Sector A only.

**Sector A1: ‘Museum courtyard’**
- Demolition of Van Berkel project
- New, multi-functional courtyard within the block
- Exposing Kasteel van Aemstel excavation site: Amsterdam Museum archaeological annex on basement floor
- Adaptation of underground parking facilities
- Accessibility via passages and Nieuwendijk main entrance
- Room for mixed functions on ground floor
- Potential location for larger scale function (hotel, theatre or the like) right above excavation

**Sector A2: Public square & yard**
- Demolition of Van Berkel project
- Room for different types of commercial functions on ground floor
- Apartments from first floor up
- Accessibility through the stores (parcels face both the square and Nieuwendijk/Dirk van Hasseltsteeg)

**Sector B1: Small courtyard**
- Transformation of supply area into small courtyard along Nieuwe Nieuwstraat
- Breakthrough Nieuwe Nieuwstraat - Sint Nicolaasstraat using department store storage space

**Sector B2:**
- Opening up existing of open space and transformation into public sheltered spot
- Breakthrough Gravenstraat: new construction with small courtyard

**Sector C: Public garden**
- Demolition of low-quality apartment block on behalf of:
- Secluded semi-public garden free of functions
- Small forecourt along Nieuwezijds Armsteeg
- Additional ground-floor and apartment dwellings
- Opening of existing alley from Nieuwendijk
- Passage and back alley from Sint Jacobsstraat to Oude Braak
- Demolition and rebuild/reuse of two buildings along Nieuwendijk intended for high-quality retail or catering
12.2 Strategic intervention

Large scale: Nieuwendijk area

Freedom of movement
The increase of freedom of movement concerns the manoeuvrability and the navigability of the area as a pedestrian: the schematic representation given in Figure 67 b-c shows that the increase in decision spots exponentially increases the different ways the area can be crossed. From looking at Nieuwendijk area’s immediate surroundings, it has been revealed that the prevalent direction of pedestrians runs from the Central Station, typically via Damrak, Nieuwendijk or Nieuwezijds Voorburgwal to Dam square and the rest of the centre. The implementation of this denser network gives more options; moreover, traversing the area can now become an activity and a destination itself. Finally, the positioning within the regular pattern of parallel alleyways branching from Nieuwendijk to Nieuwezijds Voorburgwal keeps orienting and navigating simple (form).

Entry of high-quality and less commercial functions
Activating the alleyways as structuring elements in the pedestrian network increases the potential for more public entrances adjacent to a lively public domain. Here, the interrelationship between the large and the small scale (and between the building scale and activities) becomes apparent: the ‘human-scale’ urban network structure is best fit for, and simultaneously exists by merit of the arrangement of small-scale building units (as this part of the city was not pre-planned, but rather evolved from a group of houses into a natural urban pattern). As mentioned before, this affects the ratio between the total number of establishments, the available amount of public space and, most importantly, the resulting activities in the public domain - necessary, optional and recreational - and the amount of mutual interaction between these establishments. Furthermore, varying small enterprises can develop, and both benefit and compete with each other, in stead of facing direct competition from large multi-nationals and other stores that have a (financial) advantage over small entrepreneurs. In summary, the small building scale is a leading planning precondition for the promotion of functional diversity and stationary activities.

Perceptibility of the historic significance of the area
A number of features are present in the area that emphasise its notable history. Still perceptible are the original urban pattern and numerous monumental buildings. However, this legibility is in places impaired - for example at Nieuwendijk by the dominance of the shopping apparatus - or ‘hidden away’ in the under-used alleyways. The pedestrian network is intended to link up with these monuments and landmarks, increasing the legibility of this historic character by activating those spaces that possess these properties.

Medium scale: Building block

Spatial and functional relationship of the inside of the block with the adjacent shopping street and the alleyways
The spatial relationship between the inside and the outside of the building block is made by passages, on average 2,5 meters in width to allow for sufficient pedestrian circulation, and 4 meters in height, corresponding with ground floor ceiling heights, to retain a safe charachter. Passages cannot exceed these dimensions in order to preserve the visual unity of the building block and the alleyways as structuring elements. Moreover, the spatial effect of the inner courtyards is enhanced when approached via these relatively narrow connecting elements.

Functionally, the insides of the building blocks distinguish themselves as a place to stay by reason of being outfitted with primary and secondary places to sit and the dimensioning of the surrounding buildings, to form a closed courtyard in which to enjoy the positive aspects of the climate and find shelter. These spaces contrast with Nieuwendijk and the alleyways as predominantly linear traffic spaces.

Relationship between public and private
The strategy is to alter the organisation of public, semi-public, semi-private and private spaces. Presently, Nieuwendijk and the alleyways constitute the public domain, whereas the insides of the building blocks are private and semi-private spaces. In the new situation, the transition from public to private is more gradual (Figure 74). The first transition occurs on entering the block from Nieuwendijk. The courtyards are public, but under more scrutiny due to them being more than just traffic spaces (the action is ‘framed’ in space). The areas behind that are expected to receive
slightly fewer pedestrian flows, so residents can use this space and blend in with the public more easily. Additionally, each block contains an elevated semi-private space which is positioned adjacent to the courtyards. To make the transition between private and public space smoother, elevated galleries give access to the front doors of the dwellings surrounding the courtyards.

Re-distribution of commercial and non-commercial functions
The first planning condition concerning functions is the use of small plots to promote small establishments. The second condition and planning tool is appointing these establishments for high-quality commercial use, catering service or other high-quality public amenities. Figure 92 shows an example of a desirable division. Whilst in reality, this could be subject to negotiation with the owners, the criteria need to be well-recorded to prevent undesirable use: unilateral functions, the use of more than one parcel or upper floors, low-budget shops, chain stores et cetera are not permitted.

Small scale: city space & building unit

Relationship of the building unit with the public domain
Every plot can be accessed from the street or alleyway and from the courtyard inside the block. This is favourable for the amount of interaction and the permeability of the block. The typological configuration of each unit is aimed at maximum flexibility of use: either all storeys have separate owners / tenants, or the entire premises is used by a single owner or something in between. The buildings have individual portico staircases to access each floor.

Building position in relation to public space (form)
The conditions for building positioning are part of the land-use and image quality conditions, some of which are commonly in use by many municipalities with comparable historic urban areas. As Figure 75 and 76 show, all buildings must have their outer facade on the marked building alignment lines that constitute the circumference of the building block. Furthermore, the original parcellation pattern, obtained from the 1832 cadastral map, is largely determining for the position of the plot boundaries.

Architectural styles, typologies, aesthetics
The set of building conditions set out before is intended to secure the preservation of the building block as an individual urban unit, aid in the spatial definition of the public squares on the insides of the block and establish a building form that is suitable for exploitation by diverging types of small enterprises. The standard configuration of the single building unit is that of a commercially exploitable ground floorspace with a ceiling height of 4.00 meters at the level of Nieuwendijk, which
sits at roughly +2.00 m above N.A.P. (Normal Amsterdam Level) (further away from Nieuwendijk, the elevation is up to 1.00 meter lower). Above are a minimum of two storeys marked out for residential use, accessible via a portico from ground floor level (or from the first floor gallery where the entrances border the square). Subsequent ceiling heights are obviously subject to national building regulations. The ground floor surface of one unit ranges from 20 to 100 m², averaging at about 45 m². Upper floors range from 25 to 120 m², with the same average floor surface.

The initial occupants have a say in the final design of their property. To reflect the building program based on small individual plots, the architectural expression and style must differ with every facade, which is beneficial for the architectural stratification of the inner city. Moreover, the architectural unity of the premises must also be discernible from a staggered roof line (Figure 76-2), to be achieved by applying different roof types, and the maximum building height, which in total is limited to ground floor, three upper floors and an attic. In the last case of a fifth floor attic, measures must be taken to prevent loss of sunlight on the courtyards (for instance through a slanted roof). Together, the vertical continuity of the facades needs to be superior to the horizontal continuity (Figure 76-3). Furthermore, the use of materials needs to differ between adjacent facades (Figure 76-5). Apart from varying spatial demands such as ceiling heights, an additional fourth floor, window sizes et cetera, the architectural appearance can vary, depending on the owner’s preferences, from classic examples of the Dutch/Amsterdam house to later neo-styles, or any modern variations on these building themes (See Figure 79-1-9). Consequently, the combination of two adjacent facades into the appearance of a single, double-sized unit is also a stylistic option, as the examples type D1 through D4 below demonstrate. As with the original Western European building unit, the use of floorspace can vary from a different occupant per floor to occupation by a single owner.

Furnishing of public spaces
The primary goal is to fit out the new public spaces in favour of the most desirable and most likely stationary activities to take place there. Each of these spaces is thus further differentiated. Being on the smallest scale of urban design, this subject is demonstrated in greater detail in Section 12.3.
12.2.1 Sector A

The removal of the Ben van Berkel project produces a large area to be re-developed. Located at the heart of the Nieuwendijk area, this sector holds the majority of the programme to be realised throughout. The decision to remove the project is based on the value-assessment (Figure 81) and the intention to down-scale the average building scale to be more attuned to the scale of the urban structure. Section 12.3 goes further into the phasing of demolition and re-building.

The archaeological site of the Kasteel van Aemstel is made visible from street level. Now at an estimated 4 to 5 meters below level, its position along busy Nieuwendijk is meant to expose the cultural and historical significance of the area. The second advantage of this position is the interrupting effect on the Nieuwendijk functions, and in addition the inviting effect on its users to the museum courtyard behind it.

The parking facilities are partly removed (Figure 93) to make room for the museum annex in the basement floor. The remaining parking space is preserved, saving 350 of the 400 spaces. This strategy is chosen to enhance the economic feasibility of the plan. In addition, the entrances to the garage are integrated in the public squares of the new plan in order to maintain accessibility of the area by car.

The museum courtyard is accessible from six different directions and offers room for short to medium length stays, as the museum annex and the surrounding functions generate a lot of pedestrian traffic. As the central square of the area, the six directions offer considerable freedom of movement through its contribution to the densification of the pedestrian area.

The small floorspaces on ground floor level are marked out for high-quality mixed functions. All parcels rely on interaction with their surroundings as they offer accessibility to both the street/ alley and the space behind it. Moving away from Nieuwendijk, the programme has a more mixed character with more opportunities for other types of business and services. This strategy aims to disperse functions away from Nieuwendijk and provide the spatial basis for integration of non-retail functions within a monofunctional neighbourhood.

Since all public space is located on the ground floor, the upper floors are exclusively intended for residential use. In both building blocks, there is a semi-private outside activity space on the first floor visually linked to the public square on the ground floor to establish a relationship and improve the social involvement to their immediate living environment.
12.2.2 Sector B

Sector B sees the most concise intervention of the entire area towards the primary strategy, the continuation of the densified pedestrian network towards Dam square. Firstly, the now semi-private back alleys are opened up for use as pedestrian traffic space on behalf of the freedom of movement. Secondly, a narrow section of inside storage space of the department store is replaced with a passage with similar dimensions as the other passages and corridors in the area, to connect the area with Sint Nicolaasstraat. Presently, this open space is used as the supply area of a large, adjacent department store at Nieuwendijk. This small area is marked out for re-furnishing so that it can be included into the network and public domain (Figure 82). Thirdly, one building between 't Hol and Gravenstraat is replaced to produce an additional passage and a small enclosed courtyard inside the lot, promoting activities behind the facade. Lastly, the enclosed sheltered spot in the southern block is made accessible by utilising an existing passage to incorporate the area into the network, and transformed from existing private space into publicly accessible activity space.
12.2.3 Sector C

In Sector C, a more comprehensive approach is taken towards the buildings on site in comparison to Sector A. One apartment complex along the Nieuwezijds Armsteeg is removed by reason of down-scaling of the building scale, and replaced with a more suitably dimensioned structure and appearance. Here, as in all sectors, the upper floors are marked out for dwellings, with the option to combine them with the ground floorspace (either for dwelling or office, studio, workshop et cetera). The second motive for removal is the clearance of a minimum amount of suitable space within the building block. Whereas the other new public spaces are small squares or courtyards, the more secluded character and the absence of functions directly oriented to this space provide the opportunity to place a public garden here (as gardens are generally less suited to contain large numbers of people).

On the north side along Nieuwezijds Armsteeg, a small forecourt accommodates residents coming and going and invites visitors from this side of the area into the block - and the beginning of the route towards Dam square.

The connection to Nieuwendijk is made by re-opening the existing alley and replacing or adapting two non-monumental buildings to enable more interaction with the garden behind it. An additional non-monumental building along Sint Jacobsstraat is removed, as well as the buildings behind it up to Oude Braak, to connect the block with Sint Jacobswarsstraat and ultimately to Nieuwezijds Kolk and Sector A; until now, Oude Braak had been a dead end for decades.
12.3 Design project

Sector A is spread over two building blocks and is bordered by Nieuwendijk, Nieuwe Nieuwstraat, Nieuwezijds Voorburgwal and Nieuwezijds Kolk/Kolksteeg. As mentioned before, the larger part of the Van Berkel project will be demolished and replaced by the design project, as shown further on in Figure 99. The area is divided in two by the Dirk van Hasseltsteeg. For explanatory purposes, the block north of Dirk van Hasseltsteeg shall be named Sector A1, the one south of it Sector A2.

Archaeological site

Sector A1 is also the location of the archaeological site containing the foundations of the Kasteel van Aemstel, discovered in 1994. The choice is made to utilise this ‘buried opportunity’ as a (non-commercial) starting point for the development of new activities in this area. To relieve the relative functional monotony of the shopping street, the excavation site, fully exposed behind a glass facade, will mark the entrance into the building block (rather than the ‘usual’ department store), where the visitor finds an open courtyard directly behind the Kasteel. Simultaneously, it emphasises - and is the main attraction of - the new annex to
the Amsterdam Museum, for the basement floor will exhibit archaeological artefacts and other historic objects that have been found right here and in other excavation sites in the vicinity, telling the story of the early days of Amsterdam. The entrance can be reached by crossing the courtyard and descending the open staircase, which also provides an access point for the underground parking garage (see Figure 93b, 97a).

Public-private
The multi-functional courtyards provide opportunities for small public events and other social activities. These are further supported by the ground-floor parcels, intended for high-quality mixed use and catering services. From the first floor up, new apartment dwellings are oriented towards the small courtyards, contributing to social control, whilst the semi-private terrace on the first floor still provides residents with the necessary seclusion (Figure 95, 96a). The remainder of public ground floor space is contracted from fragmented private spaces into a semi-public garden (Figure 94). Although this garden is part of the network of routes, the majority of pedestrians will be naturally steered past it at the ‘decision spot’ next to the museum entrance.

Parking garage
The underground parking garage, accessible via Nieuwezijds Voorburgwal, contains two storeys and provides around 400 parking spaces (Figure 93a). It was whilst excavating the east edge of the garage when the archaeological foundations were found. To accommodate the museum floorspace around the site underneath ground level - on top of which the new building programme is built - a portion of the garage’s mid section is removed. This will cost around 40 to 50 parking spaces; the remainder of the garage will remain in use (Figure 93b).

In addition, the fusion between the parking garage as a valuable modern facility on the one hand, and historic parcelisation lines on the other, requires a customised constructional solution, as Figure 99-g demonstrates. By placing support beams on top of the column structure, the surface level is prepared for the new building activities above ground.

Functions
The ground floor rentable spaces nearest to Nieuwendijk offer room for small-scale commercial activity, aimed at both visitors and residents. The establishments along the alleys are designated for mixed use: retail, catering, business and social services and facilities for the public: access to the parking garage, public toilets, small eateries et cetera (Figure 92, 98).
Building typology
The criteria for choosing the right building typology are based on the interaction of the individual building with, and the orientation of upper floor dwellings on the public domain, and especially the flexibility provided by the access typology. The division into single units is the starting point. The first variants were based on access to dwellings by elevated walkways. This produced a spatial configuration where, although there might be visual contact, the actual public and private activities were still segregated. Moreover, adaptation to combined use of lower and upper floors was not possible in these alternatives. Furthermore, the buildings would be too dependent on these walkways, causing difficulties with phasing and flexibility in a later stage. Ultimately, the solution was found in a combination of portico access from the ground floors and, around the most intensely used parts, the squares, a(n additional) portico typology accessible from the elevated walkways. With this configuration, each lot functions as an individual building unit, with the possibility to be utilised as a single unit or as three separate ones.

Activities
In Figure 98, the potential activities are mapped out for Sector A1 and A2. The green lines represent the most used pedestrian traffic routes that cross the inside of the block. The zones in yellow show primary and secondary places to sit around the edges, though clear from the walls by the paths circumscribing the courtyards. The museum annex generates a relatively high amount of traffic around the entrance. Next to it, a zone is reserved as outdoor cafe space, adjacent to the catering functions that facilitate both the courtyard and Nieuwezijds Kolk. The slightly calmer character of the zones marked green offer a less tumultuous place to stay. Residents with, for instance, playing children, a barbecue or other outdoor activities can also go about it here. Sector A2 offers an additional paved section adjacent to a collective or public amenity.
Phasing

The *Kolk* complex in the present situation consists mainly of shops, a hotel, and dwellings. In particular the hotel makes it difficult to attempt to phase demolition and reconstruction, as it covers both building blocks.

In the first phase, the shops that are not part of the *Kolk* complex are demolished. The three monumental buildings at Dirk van Hasseltsteeg are supported with a new construction. The castle foundations can now be fully excavated and encased. Lastly, the upper floor dwellings (or alternatively a public building). The first short cut through the building block can now also be made via the adjacent existing passage.

Lastly, the upper floor dwellings (or alternatively a public building) are built over the foundations. This is the only part of the project that needs to be designed and built as a single building. The first short cut through the building block can now also be made via the adjacent existing passage.

The second phase concerns the demolition of the shops and dwelling above that make part of the *Kolk* complex. By removing this part first, the hotel can stay operative longer.

The parcels on the southeastern edge of the building block can be filled in, re-closing the building block and establishing the relationship with the inside of the block through the ground floor and the two passages. The largest part of the courtyard can already be built to accommodate the first stationary activities. In the time before the next phase, the Kolk complex can also be accessed from here.
For the final stages of the project, the remainder of the complex has to be demolished. By this time, the remaining plots have ideally been sold, so that the building block is not left with ‘openings’ for too long.

To prepare for building above ground, the parking garage construction needs an adaption to carry the new load. By placing reinforcing beams over the column structure behind each other in stead of parallel next to each other, the carrying beams, and thus the plot boundaries, can be placed in any desired position. The surface level of Sector A2 can be fully finished.

The middle part of the parking garage is largely removed. The remainder is still in use to go to and from the southern part. The entrance is moved to the adjacent basement floor, which can now be completed.

With the underground construction work complete, the surface level of Sector A1 can also be furnished and the individual plots filled in. These privately owned plots could be worked out individually, or, if this is favourable, multiple plots could be done by a single property developer, provided that the regulations for building are honoured.

There are three elevated walkways, intended for semi-private use. The first is an integrated part of the ‘castle building’. The other two connect the plots around the courtyards. These are designed corresponding to the public spaces ground level and constructed simultaneously with the first plots.
There is a minimum and maximum building enveloppe, between which the programme can be realised. Determining the definitive footprint is decided before building activities are started.

The completed situation. A mixed programme of functions facilitates the public domain on ground floor level, which is now part of the larger densified pedestrian network. Each plot distinguishes itself further by its own architectural appearance.
Building programme

<table>
<thead>
<tr>
<th>Floor spaces (m²)</th>
<th>Min.</th>
<th>Max.</th>
<th>S</th>
<th>A1</th>
<th>S</th>
<th>A2</th>
<th>Des.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public ground floor space</td>
<td>4044</td>
<td>3354</td>
<td>1864</td>
<td>1790</td>
<td>3654</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross ground floor space</td>
<td>1612</td>
<td>2302</td>
<td>808</td>
<td>1194</td>
<td>2002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total area (m²)</td>
<td>5656</td>
<td>5656</td>
<td>2672</td>
<td>2984</td>
<td>5656</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net ground floor space</td>
<td>*</td>
<td>*</td>
<td>638</td>
<td>1117</td>
<td>1117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Museum floor space</td>
<td>1944</td>
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<td>1944</td>
<td>0</td>
<td>1944</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-private floor space</td>
<td>*</td>
<td>*</td>
<td>225</td>
<td>401</td>
<td>627</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dwellings</td>
<td>1698</td>
<td>3470</td>
<td>1205</td>
<td>1191</td>
<td>2396</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dwellings</td>
<td>1698</td>
<td>3470</td>
<td>1406</td>
<td>1191</td>
<td>2596</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total floor space (m²)</td>
<td>6951**</td>
<td>11186**</td>
<td>5418</td>
<td>3900</td>
<td>9318</td>
<td></td>
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<td>Parking spaces</td>
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<td>350</td>
<td>350</td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>2,0</td>
<td>2,03</td>
<td>1,31</td>
<td>1,65</td>
<td></td>
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</table>

* Not calculated
** Semi-private floor space not included

In the situation as designed and discussed, the total amount of floor space that is made available is over 9000 m²; this includes public space and upper floors. The gross lettable (ground) floor space is around 2000 m². In comparison to the KoK complex, commercially exploitable space would then decrease by two thirds (presuming the hotel floor space is not included; this is unclear). However, the ‘product’ to be marketed with project relInheritance is not primarily commercially exploitable space. This would make it difficult to find investors. However, marketing goes beyond ‘selling’ a plan: it “is a way to harmonize the needs and wants of the outside world with the purposes, the resources and the objectives of the institution” (Kotler in: Van der Schoot 2011:2).

In this context, the ‘needs and wants of the outside world’ are to emphasise the cultural and historic significance of the area by accommodating visitors and residents alike, and to diversify the number of activities taking place in the public domain. The ‘purposes, the resources and the objectives’ to achieve this are brought together in the design project: the area is re-configured by densifying the pedestrian network, adding public spaces, commercial and non-commercial spaces and new dwellings. The ‘institution’, then, is made up of a multitude of actors. Participation should give all involved partners assurance of their investment.

If the plan turns out to be unfeasible and a stronger economic commitment is required, the floor space can be increased to 11200 m². Moreover, the surface for dwellings more than doubles in this ‘starting position’, with two upper floors and dwellings above the castle foundations. In case necessary or desirable, the latter can become public building as well, such as a hotel.

Ownership

First of all, the municipality; it is the landlord of most surface area. It has the greatest interest in the swift continuation of the ground lease, but also preservation of the archaeological findings on site, safe and clean public space, decent housing and so on. Public investors like businesses will want to benefit mainly from the economic potential, whilst residents are driven to the area for diverging reasons, but are generally especially keen to live in a central part of the city. Finally, for the Amsterdam Museum, archaeologists and historians, the opportunity of opening an annex on this site is a strong motivation to take part. At this point in time, there is no reason to assume that there will be difficulties selling the plots.

Social and cultural revenue can only be expressed in money by calculating the potential economic revenue that could have been generated. So, in financial terms, relInheritance on itself could be regarded as a step back from Van Berkel. However, the broad support of a varied public-private partnership under direction of the municipality must ensure that economic interests are not the decisive factor for this project. In the very long term, then, this more sensible balance between interests will produce a more successful centre than if no action had been taken and, consequently, a more vital, livable (and thus economically attractive) city.

Reference

’t Sas is a preceding project in which a closed building block within the historic inner city of Breda has been opened up to the public, and now connects the surrounding areas with each other. Like project relInheritance, the inner courtyards provide users with the opportunity to perform stationary activities. High-quality commercial functions and dwellings above make up the building programme. The quality of space and the surrounding buildings connects them to the existing urban environment. ’t Sas shows the difficulty of launching a plan of this nature. Unlike relInheritance, this project was executed by a single project developer. As a result, the buildings have a uniform appearance, which seems to emphasise the unity of the project in its entirety. However, this might prove disadvantageous with future alterations in terms of flexibility and adaptability.
PART III: EVALUATION

“The Centrum must prepare itself to last another five centuries as the evocative symbol of the lasting power of the polis in its fullest sense, perhaps the world’s primate city of democratic urbanism as a way of life.” (Soja 2004:28)
13 Research evaluation

General
The argument of this project has been that many aspects of modern city life in the twenty-first century display similarities with aspects of traditional city life as it occurred in the centuries before the Industrial Revolution. Amongst them are the visible presence of day-to-day life in the public domain, the mixing of all different sorts of activities in the same space, the influx of all different kinds of cultures by foreign visitors, and all driven to the centre by the ‘power of place’; the cultural and historic significance of the city, embodied by the visible, physical environment.

If the built environment is regarded as a testament to that age, or to the ones that created it, then some of the urban transformations that have taken place over the last one-hundred-fifty years can be seen as harmful to that environment. Measures to accommodate modern traffic, new infrastructures, or to position new building typologies in the medieval fabric did not always serve the city’s best interests, although these were merely answering to the ideas and the needs of that time. What is striking, is that the urban fabric has been able to take in all these alterations without losing its original functional quality.

The transition into a global city is the second in the life course of Amsterdam: in the seventeenth century, it was one of the first cities that turned on a worldwide economy. The challenges for town planners forced them to come up with new ideas on how to manage urban life, as did the introduction of modern inventions during the nineteenth and twentieth century. Today’s design tasks face the integration of the excesses of globalisation into a protected urban area that would seem least fit on paper; it is up to planners and designers to notice the similarities of modern life in a global city now and back in the Golden Age, and to combine this transition with the intrinsic opportunities that lie within this historic urban fabric; and restore some of the less successful attempts in the process.

It is my conviction that the future of the city-centre of Amsterdam and cities alike lies in its historic tradition. It has become the intention of this project to demonstrate my personal understanding of what these values of traditional city life - or life in a traditional city - mean concretely, which opportunities lie in the urban structure of historic inner cities and which threats to these delicate areas should be taken seriously - and which not as much.

Process
At the end of this project, it is helpful to evaluate the process of development of this graduation project itself. Although a design is amongst the studio final products, the initial focus of the research phase was not primarily design-oriented. Although the realisation of the power and importance of design is there, also within Urbanism and the studio Urban Regeneration, the conviction that design should be a means to an end as opposed to a goal in itself still stands.

As a consequence of this view, the presentation of the preliminary research conclusions in June 2011 was too little oriented on this next step and too much on the definition of the issue itself. Therefore, the decision was made to zoom in more explicitly on a particular design area, the reason being that the project scale - or frame - that was being handled up to that moment appeared to be too large in comparison to the multitude of factors to be taken into account. The expected character of the project needed to be better specified - will it be a strategic design proposal, an elaboration exemplary of the discussed problems, or otherwise - along with the proposed design location(s) and, finally, the most important design aspects the project would be dedicated to.

The complexity of the matter shifted the methodological structure of the design project into an exemplary form within a strategic intervention for the larger area. In hindsight, this construction has proven well-suited to the nature of the project: the link between the research conclusions, the theoretical background and the elaboration on an - almost - architectonic level needed a gradation of scale levels and last but not least, feedback to the strategic principles.

However, the switch to orienting on the design could have been made earlier in the process. Since the intention was to evaluate the examined theories by the hand of the results from the design project, the last phase could have been given more time than it has. Moreover, the initial design stage could have been better used for the study of a wider range of (spatial) alternatives. Although the present design is a detailed elaboration of the strategic principles, deeper investigation of the variability (the margins) of the plan could have produced a better founded answer to the questions of development and exploitation. Here, however, the project had reached its boundaries as to what is achievable within a graduation period, since this touches upon the overlap with the disciplines of architectural design and real estate management.
Research questions

In what ways can urban planners and designers achieve a sustainable balance between economic, cultural-historic and social interests in the inner city of Amsterdam?

A profound fascination for the intrinsic qualities of Western European cities with a well-preserved historic inner core led to a first question and the starting point for this graduation project: what makes it that these centres-of-age, admittedly after decades, sometimes centuries of dilapidation, have undergone such tremendous revitalisation that they now typically make up the most vital and successful parts of the city? Part of the supposed answer lies in the intrinsic qualities of the urban fabric. Early twenty-first century Europe is an individualising society with a growing urge for social encounters, of which social media are a well-known by-product. But social media cannot replace physical encounters in the public sphere, not only with acquaintances, but with strangers as well. The layout of the inner city evolved by the accommodation of all types of activities sharing the same space. It is therefore well-suited to accommodate the variety of activities that is demanded from high-quality urban centres by today’s society. Many planners have recognised these qualities before and have attempted to reproduce these in entirely new projects, none of which have - until now - been anywhere near as successful as their original counterparts. It seems that something is missing: authenticity. Historic cities do possess it, but what produces that sense of authenticity? Whilst some argue that monumental buildings or the urban fabric produce a sense of authenticity, and others argue in favour of the liveliness of the public domain, the answer lies in a combination of these aspects: the (physical) built form, the (social) activities in the public domain and the perceived image of the city (including legibility of its history and cultural developments) together give it its identity. If the city of Amsterdam is to sustain itself in the long term as an urban centre with these qualities, there can never be a single factor of urban life more important than another. Both historical events and comparable cities have shown that the over-presence of a certain element can bring the city closer to a tipping point. For instance, the dominance of low-income housing in the twentieth century caused an exodus to the suburbs, whilst those areas, in their turn, were often unsuccessful as a result of their monofunctional character. The present-day dominance of tourists and day-trippers is slowly tipping the perception of the inner-city to a ‘modern theme park for sex, drugs and shopping’, and although this view might be wrong, this belief is firmly-rooted in many Amsterdammers’ minds. This project has been an attempt to demonstrate that authenticity is the most valuable asset of historic inner cities, and that proactive planning is needed to protect it from getting lost by the tendency of different societal processes to become more dominant. Amongst them, economic interests: the average building scale damages the architectural unity and relationships with the urban pattern, whilst at the same time eliminating the competition by driving up ground prices. Consequently, commercial establishments and low-budget enterprises threaten the functional diversity, which in turn is vital to a lively public domain. With ‘balance’ as key word toward devising successful strategies for the sustainable regeneration of historic European city centres in years to come, project reinheritance has elaborated on the unification of public space, the building stock and urban functions in an exemplary urban design challenge.

14 Design evaluation

Public space

Instead of overcrowding our historical city centres with more and more exploitable floor space, another, more balanced approach could be considered: to facilitate spaces for social and recreational purposes in the public domain, or: to attune the public domain and the functions that facilitate it to the desired, potential and actual activities that its users unfold. When conditions are good, people will always seek out the more lively place over the more deserted one. Ultimately, this approach would answer to every human being’s most basic need: contact. Human interaction can give the individual information about society and his position in it, stimulate new relationships and maintain established ones (Gehl 2011: **) That is, in my opinion, part of the success of the city-centre: the manifestation of life in all its aspects. To manage or design such activity space upholds more than suitable places for stationary activities; these places must visibly and audibly support activities, or rather the notion that certain activities are expected (or intended) to take place in them. A square or courtyard with relative short distances to the edges makes it possible to make eye-contact, whilst the openness, in contrast to narrow streets, alleys and corridors, captures the action, brings the activities into the centre of view. By anticipating
the intensity of use, the degree of interaction and behaviour can be determined.

In my view, the strong urge to densify our cities is driven by this instinct to seek out human contact. Cities are the ultimate testament to this, and historic cities have the unique capability to distinguish themselves as connectors of modern city life with the traditional values and cultures from which it evolved through the integrated consideration of the physical, economic, social and cultural aspects of urban regeneration.

**Building stock**

In the search for new ways to densify the modern cities with a historic centre, there are limits to what can be achieved by adding more and more building program. In most cases, an increase of the program of the built environment will have a significant impact on the way the adjacent streets are used. Many modern building typologies are good generators of public activity, but the disadvantage is that the activities exhibited are often of a monotonous nature or unevenly spread throughout the hours of the day. Furthermore, a strong presence of one particular activity can start a clustering of functions, which can eventually lead to displacement of others. Lastly, deviation from the prevalent building styles with generic-looking designs can lead to further loss of authenticity of the image of the city.

Fortunately, cultural heritage management is well-established in cities with an historic centre such as Amsterdam. Both the Historic Buildings and Ancient Monuments Act (Monumentenwet) as the protected cityscape (beschermd stadsgezicht) provide a strong legal base for the protection of valuable objects and urban fabric. Besides municipal and national protection, there is international recognition for (groups of) objects and sites that are “of outstanding universal value” from a historic, cultural or scientific point of view (UNESCO 1972). However, appointed heritage property has positive and negative effects: the impediments of construction activities are counterbalanced by the received subsidy and the general flexibility of the object. Besides clear building conditions for new projects, a review of the assessment criteria of the existing (protected) building stock and conservation areas is needed based on historic significance, flexibility/capacity to accommodate different types of functions and quality and fit in the urban fabric before engaging in an urban renewal project.

In the design process, this assessment was used to determine the necessity of a building needing to be preserved or not as objectively as possible. Conclusion: the added value of a small (group of) monumental building(s) is greater than that of a roomy department store.

On the matter of sustainability, this principle has also shown its advantages. For, the larger the building, the higher the exploitation and maintenance costs are whilst in use, and the less occupants will have the means and the use for such a space; a clear sign of inflexibility. Moreover, with the three sections of varying degrees of intervention throughout the Nieuwendijk area, project reinheritance has revealed that the complexity of a project increases exponentially along with the costs and feasibility - and ultimately the potential of the built environment to adapt easily to the ever changing demands of society: an unsustainable development for the city centre as a whole, which springs from the growing disharmony between the scale of the building and the urban fabric which was set in over one hundred fifty years ago. Since dynamic historic urban areas will also have to continue to renew parts of their building stock in order to stay dynamic, it is up to planners and designers to contribute to the regeneration of these areas in a sustainable way by breaking this cycle and apply the idea of fine-grained building activities on a human scale, and that this does stand a chance against powerful conflicting interests.

**Functional balance**

That which was hypothesised in the research phase, namely the need for a balance in functions to secure the continued sustainable existence of Amsterdam, has appeared to be valid for the entire spectrum of planning, design and policy aspects of regenerating the inner city of Amsterdam. The balance in functions has turned out to relate directly and indirectly to the built form, the activities in the public domain and the image of the city, including external appearance features of the combined building stock and the legibility of the urban structure and its historic development. As difficult - if not impossible - as planning and designing activities or a city image, is planning and designing the functions of a dynamic urban environment. However, it can be concluded that this is in fact not desirable, not from a planner’s point of view, nor from the user’s perspective. If and as long as the proper physical framework is provided, a balanced supply of functions will emerge from its own according to the universal principles of supply and demand. Under the condition that undesirable uses are strictly recorded and monitored, historic city centres offer the perfect platform for the further development of a dynamic, globalised society that is in touch with its physical, economic, social and cultural inheritance.
Conclusion

Dynamic urban areas, including city centres with a substantial cultural and historic heritage, will have to continue renewing parts of their building stock in order to maintain the qualities that a dynamic urban society poses on it. This has been a leading principle of urban renewal and regeneration. Such transformations from the past have shown that the urban fabric of Amsterdam's inner city has the quality to adapt to such demands time and time again, thus sustaining the development of its citizens. However, interventions have taken place in the past that are now identified as detrimental to the urban environment. This has caused the ideas on urban planning and design to develop into a stand alone discipline covering many related fields of expertise, with an emphatic awareness of the need for the simultaneous and balanced consideration of the physical, economic, social and cultural aspects of urban life. Now, this development is opening up the door to successful regeneration strategies for historic city centres for years to come, in which yesterday’s goals of the ‘modern city’ and today’s goals in creating dynamic compact cities are pursued and achieved in this historic equivalent of a global, compact city.
**Nolli in Amsterdam**

The 1748 map of Rome by Nolli showed for the first time the distinction between private and publicly accessibility. By including public buildings, inner courtyards and covered passages morphologically with the public domain, its actual extent was demonstrated to be far greater than when drawn according to traditional mapping methods. The technique has been adopted in many analytical drawings to connect the physical built environment with the actual use of city spaces. A similar map has been produced for Nieuwendijk in the present situation (Figure 105) and in the desired final situation (Figure 106) using Nolli’s technique of morphologically distinguishing all publicly accessible space in white, all built-up space in black and privately accessible space in grey. By comparing the two, the potential increase in public space becomes clearly visible.

106. Morphological Nolli-map of the Nieuwendijk area during opening hours in the potential new situation
72. Structural vision for the metropolitan region in 2040

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15.2 Images

Front  ‘A birds eye view of Amsterdam’, Jan Christiaanszoon Micker, around 1600

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2. The Amsterdam region around 1850

3. Amsterdam around 1300

4. ‘Gezicht op Amsterdam’, Cornelis Anthoniszoon, 1538.

5. Fragment of Cornelis Anthoniszoon’s 1544 bird eye view

6. The open harbour front around 1861-1871

7. The same area with the new station island around 1890-1897

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25. Policy directions to foster an urban sense of place
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40. Value-assessment methodology in the planning process

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107. Structural vision for the metropolitan region in 2040


Self-produced

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Appendix A: review paper

Simultaneously with the graduation project and thesis plan, a review paper was written in which the leading literature on a subject of choice was discussed. Closely related, some of its content may overlap with the theoretical background of this report.

Historically modern: reviewing approaches towards cultural-historical inheritance of a Dutch metropolis in the making

Abstract
Since several decades, Amsterdam is transforming from a mono-centric city to a poly-centric metropolis. Many industrial, residential and business activities are moving from the monumental city centre to more peripheral locations, for instance around the ring road. The effects of globalisation, growing connectivity, Post-Fordism and exclusion are taking place continuously and in many cities all over the world (Ravetz, as cited by Stouten 2010). The demand for space is increasing, resulting from rising population numbers and a growing economy, as well as changing demands concerning the use of public and private space. In the mean time, the city centre has seen significant changes: the functional balance that is key to a vital centre has shifted from a production economy to a consumer economy facilitating for tourism and entertainment (Deben, Heinemeijer et al. 2000; Deben, Salet et al. 2004; Stouten 2010). However, the city’s cultural-historical inheritance, rewarded with inscription on the World Heritage list in 2010 (UNESCO 2011), threatens to prohibit future developments from taking place. As this process unfolds, questions arise: what will become of the city centre? What is it exactly that gives the city its historical value (Meurs 2004)? What should the centre of a historically modern Dutch metropolis look like?

In earlier developments, both protective and offensive approaches have been applied in regenerative planning and design strategies. Although nowadays the importance of protecting our inheritance is widely agreed upon, there are many views on cultural appreciation and the dependence on original ancient sites and objects, or in other words: authenticity (De Swaan 2004; Holtorf 2008). The seeming impossibility of an integral approach resulting from the growing tension between preserving and adapting, old and new, is the leading motive for exploring this subject. This paper discusses the origins of the conservation movement and the development of legislative power in the European context in the light of the historical and theoretical background against which these processes have taken place. In particular, the different attitudes towards heritage management in the United Kingdom and France are discussed by reason of their influence on legislation in the Netherlands. The Dutch case is illustrated by a review of the tendencies of several urban transformations in Amsterdam. This paper aims to touch on the perceived importance of an integral framework for historically valuable town centres in and outside the Netherlands. Consequently, the recommendations in the closing argument point towards finding solutions that provide room for future developments, whilst dealing responsibly with the historical, social and cultural context.

Key words – cultural-historical inheritance; urban regeneration; Dutch city centre; metropolis Amsterdam;

1 Introduction

Why conserve? There is no short answer to this question. Ever since the rise of the ‘conservation movement’, which has its origins in the ‘romantic and historic philosophies’ (Kain 1981b:1) of the eighteenth century, the motives for conserving have varied widely, from reasons of saving costs or of physical or psychological well-being to cultural and historic consciousness and appreciation. However, the fact that countless much older buildings have been handed down for centuries before must suggest that some sense of the value of preserving monumental buildings must have existed for at least as long. The following section of this paper puts the different attitudes toward cultural heritage in a historical perspective up to the emergence of the first legal documents that regulated the protection of heritage property in Europe. In particular, the origins of the conservation movement in France and England are discussed, since they have been the most influential on policy and legislation development in the Netherlands. Despite the emergence of early forms of heritage legislation towards the end of the eighteenth hundreds, protection and maintenance remained an affair of mainly private investments and charities until the nineteen-sixties. Furthermore, the focus on the building level would cause major alterations of the layout of the
urban fabric, predominantly as a result of the increase in car-use and the emergence of new building typologies. Section 3 covers the main influences on and the leading attitudes towards heritage management in the twentieth and twenty-first century.

In support of my graduation subject, Section 4 provides a closer look at conservation tendencies in the history of the city of Amsterdam. The inhabitants have always been very protective of their historical urban fabric and monumental buildings. Not only is this famous city known for its characteristic step gable houses and imposing estates, its canal belt is the world’s most famous testimony to historic city planning and the ingenuity and technical skill of Dutch civil engineering in the Golden Age. In 2010, this fact was acknowledged by being inscribed by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) on the list of World Heritage Sites (see Illustration 1) (UNESCO 2011). The city is now one of the best preserved examples of a medieval town in Europe. But, by account of its authenticity and irreplaceability, the city-centre itself has become a public consumer-good, almost a kind of attraction park within the living city (De Swaan 2004; Van de Ven 2004).

2 Origins of conservation

Although the terms ‘conservation’ and ‘preservation’ are often used as interchangeable terms, the words have a slightly different meaning. Both ‘conservation and ‘preservation’ stand for ‘keeping’ or ‘saving’, but ‘conservation’ could also signify ‘making sustainable’ (verduurzamen in Dutch).

2.1 The meaning of heritage

The word heritage (in Dutch literally translated to erfenis or nalatenschap) originally refers to physical property or an intellectual or spiritual legacy handed down from one generation to the next (Davison 2008:31). In a similar way, we speak of national heritage as a basis for a national identity; in a physical sense, it refers to the valuable aspects of our (built) environment that we want to keep from disappearing or decaying, regardless of whether or not they possess any historical significance. More than that, the word is now used for almost any kind of commodity that contains some kind of style from the past, from art to cuisine. Davison (2008) discusses the distinction between history and heritage. Despite the assumption that history on the one hand is supposed to be objective, accurate and detached of judgement, and heritage on the other hand is subjective, chauvinist and concerned with the potential for its proprietor, he argues that, in reality, the two have a far more complex relationship: history is always written from a certain point of view, so it can never be fully objective. The heritage movement in its turn is very much concerned with objectification of the process of heritage assessment. One of the bodies realizing this ambition is UNESCO. In article 1 of the 1972 Convention of Paris, the definition of cultural heritage is described as follows:

- monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;

- groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;

- sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view (UNESCO 1972:2).

By assessing monuments, groups of buildings and sites from the point of view of history, art, science, aesthetic, ethnology or anthropology, UNESCO attempts to be as unambiguous and as objective as possible. The degree of democracy of the assessment process has opened the discussion about the social value of cultural heritage. For that reason, many items have been linked to the social history of the city or the nation. The 2006 Amsterdamse Canon is a set of fifty themes from the history of the city that have had a profound influence on the identity and the collective memory of Amsterdam. According to its composers, the purpose of a canon then is to:

- contribute to a shared citizenship by promoting a shared knowledge of the environment that one lives and works in (De Rooij & Los 2008).

In the context of conservation and planning, heritage refers to seven different types of tangible elements of building activities that have taken place over the centuries. These are:

- Religious buildings and complexes such as temples, churches and monasteries;

- Burial shrines: tombs, gravestones, mausolea et cetera;
its roots in the late nineteenth century when the first modern conservation movements emerged. They were a reaction to the reconstruction and modernisation projects that took place in many nineteenth-century European cities, in which thousands of historic buildings were destroyed (Hamer 2000). One of the most famous examples is the destructive legacy of Paris’ master-planner Baron Haussmann. His vision of the modern city was based upon the successful combination of the practical, the beautiful and the symbolic. Many of the urban design aspects were inspired by classicist city planning ideas of the seventeenth and eighteenth century of symmetry, perspective, long, straight (sight)lines leading to formal squares and parks, all in a cohesive geometric order (Stelter 2000). But the downside of this utopian vision, apart from the rigorous destruction, was the displacement and social segregation – effectively ‘covering up the mess’ – that was necessary in order to create the image of the ‘ideal city’. Moreover, the practice of ‘disenumbering’ (Hamer 2000) was applied to clear the spaces around historic monuments in order to re-design them in the ‘Haussmannic’ tradition.

Some have regarded ‘his’ Paris to be not just as a city containing artefacts, but as a single artefact; one that should be preserved (Evenson 1981:177). Strict laws had been in force, particularly for public space, and wear on buildings, resulting in many of them to disappear altogether. Several preservationist movements existed during this period, but it was not until after Morris had founded the Society for the Protection of Ancient Buildings in 1877 that the protection of monuments was first constitutionalised with The Ancient Monuments Protection Act from 1882 (Boulting 1976; Kain 1981b).

2.3 France
Although in France, there has been a system for the protection of individual buildings in cities since the eighteen-thirties stimulated by the doctrine of Viollet-le-Duc (Kain 1981a; Dupont 1983), the relation between urban planning and heritage management has

2.2 The United Kingdom
The origins of preserving historic buildings in the British Kingdom can be traced back to the late Middle Ages. Although historicism did not play any role in medieval society, Henry Yevele showed his awareness of the historic importance and architectural significance of the church where Henry III was coronated. When commissioned to complete the construction of the ancient Westminster Abbey in 1375, he finished the original design without any significant changes. In the fifteenth and sixteenth century, interest in (pre-)historic civilizations, buildings and relics grew, reflected by for example Queen Mary’s decree forbidding the ‘breaking or defacing of Monuments of antiquity’ in 1560 or the survey held at Stonehenge around 1620 (Boulting 1976).

The seventeenth, eighteenth and nineteenth century were centuries of technological progress and economic development, which posed a serious threat to the ancient heritage. The growth of the population caused an increase of traffic, thus greater need for public space, and wear on buildings, resulting in many of them to disappear altogether. Several preservationist movements existed during this period, but it was not until after Morris had founded the Society for the Protection of Ancient Buildings in 1877 that the protection of monuments was first constitutionalised with The Ancient Monuments Protection Act from 1882 (Boulting 1976; Kain 1981b).

2.4 The Netherlands
Until the French Revolution of 1795, for as long as the economic situation allowed it, funding the maintenance costs of Dutch monuments was no big problem. However, during the following
period of economic slump, the proprietors could no longer count on the financial support of the government and became dependent on private donations and charities. During the annexation by the French Empire led by Napoleon Bonaparte in 1810, the request was made to report back all (governmental) buildings of historic importance. This remained the only form of legislation until 1875 when the Rijkscommissie (State Committee) was founded, although the small department wielded with little power.

3 Conservation in the twentieth and twenty-first century

3.1 Modernism
The twentieth century saw a decline of the heritage movement, before picking up again towards the end of the millennium. One of the causes for this was a change in ideas about the lifespan and social development of cities. In general, the ideas about (the future of) the twentieth-century city have been a reaction to threats and problems that existed in those cities. The modern planning movement feared the decline of the city after it would reach the limits of its growth, similar to what had happened to many ancient civilisations like the Roman Empire in the past. Moreover, the assumption that the city would not be able to adapt to new technologies such as the car had many planners convinced that the only way to save the city was to ‘help’ it by starting over – erasing the ‘irrelevant’ old city (Hamer 2000). The Garden City movement was one of the carriers of this body of ideas, as was Le Corbusier with his Plan Voisin.

3.2 Wars and cars
A devastating force in which much heritage got lost was the Second World War and the post-war rebuild. Bombardments and combat destroyed both allied and axis cities like Dresden and Rotterdam. The subsequent reconstruction programmes were chiefly concerned with clearing the war damage and the dilapidated slum housing. Many of these urban renewal projects continued the ideology of pre-war modernist movements, such as the Garden Cities in the UK. This period meant the end for the traditional producer city and ushered in the era of the poly-centric consumer city. The redistribution of the population in new towns and suburban neighbourhoods also required a redistribution of jobs outside the ‘old’ city. Simultaneously, the car became a widely available and affordable commodity: perfectly suited for use in the suburbs, but the old cities had difficulty accommodating this boom in traffic. The management of traffic flows became an integral element of urban design, but since no protective legislation existed for the urban fabric itself, many historic city-centres in Europe were completely transformed to accommodate highways, ring roads, parking lots et cetera.

3.3 Tourism
Van den Borg (1996) discusses in the Annals of tourist research journal the impact of tourism on seven ‘art cities’: Aix-en-Provence, Amsterdam, Bruges, Florence, Oxford, Salzburg and Venice. To establish the pressure of tourism on the city societies, the visitors/residents ratio was calculated. With a ratio of 5,9 visitors per residents, Amsterdam scored the lowest value, followed closely by Aix (8,0) and Florence (9,8). Salzburg scored a 36 and Venice has an incredible 89 visitors to one inhabitant. There is some inaccuracy about this comparison, namely the fact that he does not work with the amount of residents living in the tourist areas, nor with the number of residents that utilize the tourist areas themselves, but the entire city populace. Of course, this would be quite impossible to measure or calculate. He argues that, although tourism and ‘excursionism’ (day-tripping) are important economic pillars of Amsterdam, it is not as dependent on it as other cities are. According to him, the city has a sufficiently large residential population to accommodate the social impact, and this ratio merely represents that capacity. This would indicate that larger cities with popular tourist city-centres are better capable of handling with this pressure, but the results do not touch on the added pressure, in absolute sense, of being the cultural heart of a global metropolitan region.

3.4 Conservation policies in Europe
Changing urban planning policies in the twentieth century are described by Peter Roberts (2000) to have evolved from reconstructive approaches after the Second World War, through revitalisation and renewal policies in the sixties and seventies to redevelopment and regeneration strategies in the eighties and nineties with emphasis on decentralisation, the role of partnerships and a consideration of all aspects of urban planning. The year 1961 was a milestone for conservation legislation in the Netherlands. One year sooner than France and six years sooner
than the UK, the Monumentenwet was passed. The Act consisted of two main parts: the protection of individual listed buildings and the conservation of areas (beschermde stadsgezichten). This meant that the objects in question were considered for subsidy and protection from damage (Dobby 1978; Ashworth 1984). The transformation process from passive enlisting to legislative action had taken almost eighty-five years. Now, after several decades of practicing the Historic Buildings and Ancient Monuments Act, six areas of difficulty arose (Ashworth 1984:607-608):

- There can be a lack of clarity about the responsibility of designation and subsidy since there are three levels of government and two ministries involved;
- Sharp boundaries between conserved and non-conserved buildings have resulted in a search for more gradations and zoning;
- The shift in emphasis from the individual building to the parcellation pattern is cause for difficulty implementing new functions that require a large footprint exceeding the original lots;
- Speculation by private parties has generated profit from public investments in protected property and expelled those who are less willing to pay the increased costs of living in renovated property.
- Preventing undesirable use has proven far easier than attracting desirable functions;
- Monitoring and maintenance have turned out to be a financial commitment with an open end.
- Despite the downsides to heritage management and the burden that maintenance brings about, the added value in cultural, social and economic sense outweighs the costs, as is nowhere better demonstrated than in Amsterdam.

4 Conservation in Amsterdam

Amsterdam is the historic centre of overseas trade and culture. The uniqueness of Amsterdam’s attributes therefore lies not in pretentious buildings but in the remarkable structure of the spatial pattern (Deben, Salet et al. 2004:4).

4.1 A short history of Amsterdam

The city of Amsterdam is a relatively young city. It originated at the end of the twelfth century from a group of buildings built on a layer of clay in the area known as ‘Amestelle’ (Mak 2000:10). It is first mentioned in writings that date around the year 1270 and is one of the port cities that originated between 1270 and 1400, founded by rich citizens and lords that established the city through new economic opportunities (Rutte 2006:31). The primary structure of the original settlement consisted of a row of houses along what later became Nieuwendijk, which runs parallel to Amstel river. When a dam was built to prevent the hinterland from flooding, the settlement extended to the opposite site, now Warmoesstraat. From this basic H-shaped layout with the De Plaats – later Dam Square – at its core, gradually turned from a village into a city (see Illustration 3).

After receiving the count’s toll exemption rights around 1275 for all goods traffic across the newly built dam, the city started to expand rapidly. In just over a century, the small fishing village developed into a major player in national and international trade, acting as an independent and progressive party on the market. Religious life also added to the impulse when a miracle occurred in a house on Kalverstraat in 1345. Amsterdam became a city of pilgrimage, to which many even referred as ‘the eighth wonder of the world’. Geert Mak (2000; 2004) describes this medieval town to have been an open society, never dominated by lords or the church, but by private undertakings, citizenship and a pragmatic approach. This awareness of the need for a balance between government, freedom and trade is what set Amsterdam apart from other cities, and has proven to persist in the city we know today.

The seventeenth century is also known as ‘The Golden Age’ for the Netherlands and large parts of Europe, although the term itself is disputable (Nijman 2000). An enormous immigration due to the growing wealth of the city resulted in the construction of the western half of the now famous canal belt from around 1580 to 1655 (see Illustration 4) (Van der Hoeven & Louwe 2003). The radial pattern of the ‘port city’ (UNESCO 2011) was completed during the rest of the century. Because the superior position of the Dutch Republic at sea was taken over definitively by the English during the following period, population growth and the demand for space levelled; the eastern part of the canal belt became in use by plantations and factories. Together with the French occupation until 1813, it would take until after 1850 before the city would undertake any significant building activities (see Illustration 5).

The year 1876 heralded a turning point for the economy of the city. Since the Industrial Revolution was opening up new technical opportunities in industry, agriculture, transport et cetera, the
hegemony of the British staple market got undermined. The construction of the North Sea canal now offered the opportunity to re-establish Amsterdam’s position as the national capital of overseas trade with the colonies. Moreover, the increasing unification of the Netherlands in economic sense pronounced Amsterdam the nation’s financial and trade capital, with The Hague as the national (royal) residence and Rotterdam as port city (Wagenaar 1990; Brinkgreve 2004).

4.2 Urban transformations 1850-2011

The centre of Amsterdam derives its wealth primarily from its historical stratification (Meurs 2004:73)

Since the shift from a production-oriented city to an industrialised city with a consumer-based centre in the nineteenth and twentieth century, the distribution of functions throughout the city has seen far-reaching changes; most industrial activity has moved outside the centre along with many residents; financial and business services have taken office in the centre as well as the retail, leisure and entertainment industry. The continued increase of traffic after WWII and dilapidation of old buildings led to far-reaching slum clearance, the filling in of several canals and widening of streets. New construction methods allowed new typologies of taller, large-scale buildings to be built that exceeded the original parcel structure. Illustration 6 is an inventory of buildings with respectively confirmed, suspected or unknown building-historic values shown in red, blue and yellow, and buildings built after 1850 shown in grey. The traces of ‘City-forming’ can be found especially along the main artery Damrak-Rokin, and west of the former city hall where the Spui en Nieuwezijds Voorburgwal canals were filled in and a broad street was cut through the fabric of the canal belt westwards.

4.3 Social interference

Unlike in Paris, Amsterdam’s inhabitants were living in an egalitarian and, in some respects, conservative city (Mak 2004). It was because of their fierce protesting and action committees from the second half of the twentieth century that many reconstructive plans were rejected, like for instance the Plan Kaasjager or Plan Jokinen (Brinkgreve 1956; De Haan & Haagsma 1985; Pistor, Van Beek et al. 1994). This social interference contributed to the awareness of the importance of the city’s heritage in respect of its social and cultural identity.

Apart from an active, socially supported policy, the World Heritage Centre voted in 2010 for inscription of the seventeenth-century canal belt surrounding the medieval city, giving the account:

The Amsterdam Canal District illustrates exemplary hydraulic and urban planning on a large scale through the entirely artificial creation of a large-scale port city. The gabled facades are characteristic of this middle-class environment, and the dwellings bear witness both to the city’s enrichment through maritime trade and the development of a humanist and tolerant culture linked to the Calvinist Reformation. In the 17th and 18th centuries, Amsterdam was seen as the realization of the ideal city that was used as a reference urban model for numerous projects for new cities around the world (UNESCO 2011).

The restrictive consequences of this declaration (see Illustration 1) seems to have the city encounter a double paradox: on the one hand, it wants – and is now internationally obliged – to keep its beloved city-centre intact, on the other hand it needs to maintain its competitive position in the ranks of global cities with excellent commercial, cultural and business facilities. Moreover, it seeks to remain an attractive living environment for its residents. To achieve any of these goals in this ‘frozen environment’ (Van de Ven 2004:177) without one getting the upper hand over the other, it will need to focus on those criteria of heritage management that affect all sectors by advocating historical stratification, spatial balance of functions and a diverse balance between housing, leisure and entertainment, culture, business and services.

5 Conclusions

The reasons for conserving our cultural-historical heritage have varied over the past centuries from preserving ancient relics by reason of religious worship and commemoration in the Middle Ages and the imposed monumentality of re-built Paris in the nineteenth century to the treasuring of objects that portray a universal value by account of their artistic, scientific, cultural, aesthetic or even anthropological significance by UNESCO today. The emphasis of heritage assessment has thereby shifted from an approach on the level of the individual building to a consideration of the larger context of the urban layout and the social, political and cultural layering.

The views on heritage management from the nineteenth to the twenty-first century have exhibited many parallels with the changing contexts and tendencies in urban planning in historic city-centres in Europe. After urban renewal, the emergence of
urban regeneration in the nineteen-eighties and nineteen-nineties heralded a shift in emphasis from physical change to an integrated, strategic approach of the main principles of urban planning. Similarly, heritage management has evolved from passive, unilateral administrative policies concerned with individual assets to an integral conduct in the assessment and legal protection of buildings and conservation areas with due observance of social aspects and, increasingly, global relevance. Although nowadays, there is reasonable consensus about the importance of conservation, the objections from for instance an economic standpoint are not to be discarded. The consumption of culture has become a vital economic pillar in historic city-centres. However, the tendency to displace other functions in the process poses a serious threat to the diversity of the centre. Urban planning should therefore be aimed at conservation through flexible reuse rather than dilapidation through rigorous preservation.

Amsterdam’s uniqueness came about through a combination of free trade, (economic) liberty and an open democracy. The social and cultural standards that helped shape the city have been translated into its physical appearance and operation: the inherited historic stratification, functional mix and social balance would not have been achieved without the dedication and sense of responsibility of its citizens. Thus, Amsterdam as a liveable city with a global reputation might be its greatest heritage. In any case, it has shown that a sustainable and diverse city can exist within a modern metropolitan region and in a historic context, rendering this a historically modern city.

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Appendix C: Sections

Section a-a'
Section b-b'
reINHERITANCE
Shaping the future of the historic inner city of Amsterdam